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Impact of Foreign Direct Investment (FDI) in Economic Growth of India

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Abstract - The purpose of this abstract is to offer a high-level summary of the causes, trends, and consequences of foreign direct investments effect on India's economic development. Increased capital formation, technical progress, job creation, and productivity growth are all outcomes of India's success in attracting foreign direct investment (FDI). India's infrastructure and technological prowess have greatly improved thanks to foreign direct investment. Foreign direct investment (FDI) has also helped India's employment market expand. Moreover, FDI has benefited domestic businesses via positive spillover effects. Foreign direct investment (FDI) in India has opportunities, but there are also concerns that should not be disregarded. Foreign direct investment has been a key driver of development in India's economy. Increased industrial growth, more jobs, higher productivity, and greater competitiveness are only some of the benefits of increased access to foreign money, technology, and knowledge.

Keywords - FDI, Impact, India, Economic growth

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INTRODUCTION

Driven by boondocks advances, robotization and computerized progresses, the new industrial upheaval has improved overall investment and creation, more economical and quicker than previously. This has offered immense open doors for sustainable turn of events and economic growth. For more than three and a half many years, the world economy has seen a fast increase in foreign direct investment (FDI). Singh et.al (2012) explains that the growing and spreading FDI among nations is one of the critical commitments of globalization previously, contributing essentially to the beneficial outcomes on the work efficiency of homegrown organizations. The Heckscher-Ohlin-Samuelson model proposes that, under the supposition that work and capital can move unreservedly among nations and no transportation costs apply, FDI and international exchange can be substitutes. This recommends an indirect link between the two elements of international exchange and trade creation, as explained by Liu (2001). FDI is viewed as a significant wellspring of funding by most emerging economies and those in the change stage. FDI is considered as a supplement to insufficient homegrown capital by Miteshi and Stefanova (2017). They think FDI finances both the adjustment in possession and the development of capital. Simultaneously , it assists with replacing the tremendous volumes of obsolete capital gathered experiencing significant change economies during long stretches of focal planning.

According to the findings of a research that was carried out on Bangladesh by Rehman, A. and Chakraborthy, S. (2015), foreign direct investment (FDI) has a favorable influence on development via managerial and technical improvement. According to research carried out by Silajdzic and Mehic (2015), foreign direct investment contributes significantly to the development of the economy of the host nation by way of bringing with it new technologies and innovative business practices. Foreign direct investment (FDI) and the cultivation of human capital are both necessary for the progress of the country (Fadhil & Almsafir, 2015). (Raj & Pahwa, 2018) It was said that foreign direct investment plays a significant part in economic development, and suggestions were made on how to attract even more FDI in order to make the most of the benefits obtained via it.

His research on 23 Asian nations led him to the conclusion that foreign direct investment (FDI) is a connecting variable between technological advancement and economic progress. He also went on to describe the function of human capital in the process of a host country absorbing the benefits given by FDI to that country. (Sokang, 2018) According to the findings of his study on the influence of foreign direct investment (FDI) on the economic development of Cambodia from 2006 to 2016, the author found that FDI introduces technology and benefits the host nation via learning that arises from spillover of human capital and technology. Foreign direct investment in India has a beneficial effect on the country's economic development owing to an increase in total factor

productivity brought about by spillover. (Choi & Baek, 2017)

Foreign Direct Investment (FDI) implies an investment through which a non-occupant investor can begin another organization and a foreign organization can get a compelling interest in an existing organization in India with the particular goal of carrying on an industrial or business movement in India.

Foreign Direct Investment

In international business, Foreign Direct Investment (FDI) plays an amazing and increasing job. It can give a wellspring of innovative advances , new marketing and marketing channels, authoritative strategies, capital, items, less expensive creation offices, the board aptitudes and financing for the host nation or the foreign organization receiving the investment and, thusly, can gain solid ground towards economic turn of events. FDI surveys the foreign responsibility for homegrown resources, for example, land, plants, and associations. The main economic driver of globalization has become Foreign Direct Investments, accounting for the overhead of all cross-outskirt investments.

Importance of FDI in India

Foreign direct investment (FDI) is where an individual or business from one nation, invests in another. This could be to start a new business or invest in an existing foreign owned business. The Indian government's greatest test is the way to accomplish strong economic growth and, all the more significantly, how to sustain it.

Investments in the public area have been essentially decreasing since 1985. This is expected to the ever-increasing financial shortfall at both focal and state levels, leaving basically no assets accessible to the states for any monstrous investment required in the nation.

Role of Foreign Direct Investment

An investment made by a multinational enterprise (MNE) or a non-resident in a host (beneficiary) country venture over which it exercises control and receives a private return is referred to as a foreign direct investment (FDI). The distinction among Direct and Indirect Foreign Investment is significant. Indirect investment covers portfolio investment, the obtaining of a venture 's shares, medium-tenn and long-tenn advances from financial institutions and undertakings, and investment in new issues relating to public advances , bonds and debentures.

FDI also helps a company lower its production costs by giving it access to cheaper resources or by letting it go straight to the source of raw materials instead of getting them from a third party. When a company does FDI, it often gets a variety of tax benefits. This can happen when the home country lets foreign income be taxed less or when the country receiving the FDI lets companies that invest there get tax breaks and other benefits. This can also happen when the country where the money is going has a better tax code than the country where the money is coming from. Foreign Direct Investments (FDIs) lead to gains on production through good effects that help the economy grow in a healthy way (Sukhadolets, et al., 2021).

Relationship between FDI and Economic Growth

Sustainable economic growth is generally determined by the investment rate, which, in turn, is principally determined by the inflows of foreign direct investment. The main wellspring of capital for linking the hole among savings and the necessary degree of investment is Foreign Direct Investment.

METHODOLOGY

A research design is a plan for the study or hypothesis. It depicts the loop necessary to get the data the system needs to fix the problem. "An exploration configuration is the procedure of information collection and analysis conditions in a way that intends to combine pertinence with the end goal of examination with economics all at once," says the American Institute for Economic Research. Exploration is predicated on a number of suppositions, both practical and philosophical, and methodologies are hypotheses about how those hypotheses need to be tested. The objective of a strategy is to detail the steps used to answer an exam question and the resources tapped throughout this process. Since there are many facets to exploration philosophy, the path taken must be picked from a pool of possibilities. Evaluation of goals, guesses, and linkage with other possibilities all help to arrive at the most appropriate method. This study takes a methodical approach, with the purpose of evaluating the impact of foreign capital inflows on economic development using a variety of complex econometric models. The study sets out to empirically evaluate FDI's impact on India's economic development.

Collection of FDI Data

The study used Secondary Data for analytical purposes.

Statistical Tools Applied

This study uses a percentage analysis to identify the top 10 sources, countries, and states/locales of foreign direct investment in India. Methods are used to ascertain the typical expansion of FDI into India. Foreign direct investment growth is measured using standard deviation to highlight the inherent variability in this trend. A diversity coefficient is calculated by dividing the normal rate of FDI influx by the standard deviation percentage. Skewness quantifies the

degree to which an otherwise normally distributed random variable exhibits asymmetrical dispersion with respect to its usual Foreign Direct Investment outflows. Kurtosis When compared to the normal allocation for Foreign Direct Investment, the data is either above or at the average. Foreign Direct Investment (FDI) growth rate during a time period is calculated using the Compound Annual Growth Rate (CAGR). Linear multiple relapse analysis identifies the effect of exogenous variables on a dependent one. Ranking Analysis is used to rate the rationale for choosing each individual development element. Related variables are evaluated using Karl Pearson's correlation coefficient.

ANALYSIS OF FDI AND ECONOMIC GROWTH

Impact of Independent variables (GDP) on Dependent factorForeign Direct Investment

- **Influence of GDP variable on Foreign Direct Investment**

A linear regression models are utilized on the dependent factor Foreign Direct Investment and independent variable of Gross Domestic Product. In the section, the researcher applied linear regression analysis to relate the variable.

Foreign Direct Investment = β0 (Constant) + β1 (Gross Domestic Product).

The influence of independent variable on the dependent factor is clearly presented in the following table,

Table 1: Model Summary of GDP factor on FDI [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.810[a]	0.655	0.612	0.30892	2.394

a. **Predictors:** (Constant), Gross Domestic Product.

b. **Dependent Variable:** Foreign Direct Investment.

From the above table 1, it is apparent that R = 0.810, R^2 = 0.655, Adjusted R^2 = 0.612 are statistically significant. This analysis shows that the Gross Domestic Product is create 65.5% variance over the FDI.

- **Influence of Trade variables on Foreign Direct Investment**

A linear multiple regression models are applied on the dependent factor Foreign Direct Investment and independent variables namely, Balance of Trade, Terms of Trade, Gold Reserves and Gross Domestic Product. In the section, the researcher applied linear multiple regression analysis to relate the variable.

Foreign Direct Investment = β0 (Constant) + β1 (Balance of Trade) + β2

(Terms of Trade) + β3 (Gold Reserves) + β4 (Gross Domestic Product).

The influence of independent variables on the dependent factor is clearly presented in the following table,

Table 2: Model Summary of Trade factor on FDI [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.921[a]	0.848	0.726	0.25980	3.287

c. **Predictors:** (Constant), GDP, Terms of Trade, Gold Reserves and Balance of Trade.

d. **Dependent Variable:** Foreign Direct Investment.

The above table 2, it is ascertained that R = 0.921, R^2 = 0.848, Adjusted R^2 = 0.726 are highly significant. This analysis indicates that the Balance of Trade, Terms of Trade, Gold Reserves and Gross Domestic Product are creates 84.8% variance over the Foreign Direct Investment.

Impact of Independent variables (GNP) on Dependent factor (Foreign Direct Investment)

- **Influence of GNP variable on Foreign Direct Investment**

A linear regression models are utilized on the dependent factor Foreign Direct Investment and independent variable Gross National Product. In the part, the researcher used linear regression analysis to relate the variable.

Foreign Direct Investment = β0 (Constant) + β1 (Gross National Product).

The influence of independent variable on the dependent factor is clearlypresented in the following table,

Table 3: Model Summary of GNP factor on FDI [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.681[a]	0.464	0.397	0.38526	1.799

e. **Predictors:** (Constant), Gross National Product.

f. **Dependent Variable:** Foreign Direct Investment.

From the above table 3, it is familiar that R = 0.681, R^2 = 0.464, Adjusted R^2 = 0.397 are significant. This analysis shows that the Gross National Product is

create 46.4% variance over the Foreign Direct Investment.

- **Influence of Trade variables on Foreign Direct Investment**

Export, Balance of Trade, Terms of Trade, Gold Reserves, and Gross National Product are used as independent variables in a linear multiple regression model with Foreign Direct Investment as the dependent variable. In this part, the researcher established a correlation between the variables by linear multiple regression analysis.

Foreign Direct Investment = β0 (Constant) + β1 (Export) + β2 (Balance of Trade) + β3 (Terms of Trade) + β4 (Gold Reserves) + β5 (Gross National Product).

The influence of independent variables on the dependent factor is clearly presented in the following table,

Table 4: Model Summary of Trade factor on FDI [b]

Model	R	Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.953[a]	0.908	0.793	0.22598	2.947

g. **Predictors:** (Constant), Gross National Product, Terms of Trade, Balance of Trade, Gold Reserve and Export.

h. **Dependent Variable:** Foreign Direct Investment.

From the above table 4, it is indicates that R = 0.953, R^2 = 0.908, Adjusted R^2 = 0.793 are significant. This analysis indicates that the Export, Balance of Trade, Terms of Trade, Gold Reserves and Gross National Product are creates 90.8% variance over the Foreign Direct Investment.

Impact of Independent variables (FDI) on Dependent factorEconomic Growth (GDP)

- **Influence of FDI variable on Economic Growth (GDP)**

GDP growth is the dependent variable and FDI is the independent variable in a linear regression model. Here, the author explains how linear regression analysis was utilised to establish a link between the variables.

Gross Domestic Product = β0 (Constant) + β1 (FDI).

The influence of independent variable on the dependent factor is clearly presented in the following table,

Table 5: Model Summary of FDI factor on Gross Domestic Product [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.810[a]	0.655	0.612	0.12468	1.376

a. **Predictors:** (Constant), FDI.

b. **Dependent Variable:** Gross Domestic Product.

The above table 5, it is found that R = 0.810, R^2 = 0.655, Adjusted R^2 = 0.612 are statistically significant. This analysis shows that the Foreign Direct Investment create 65.5% variance over the GDP.

- **Influence of Consumer variables on Economic Growth (GrossDomestic Product)**

Gross domestic product growth (the dependent variable) is modelled using a linear multiple regression analysis, with consumer spending, prime lending, and FDI (the independent variables). Linear multiple regression analysis was used to establish a correlation between the variables in this section.

Gross Domestic Product = β0 (Constant) + β1 (Consumer Spending) + β2 (Prime Lending) + β3 (Foreign Direct Investment).

The influence of independent variables on the dependent factor is clearly presented in the following table,

Table 6: Model Summary of Consumer factor on Gross Domestic Product [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.992[a]	0.984	0.976	0.03079	2.184

c. **Predictors:** (Constant), FDI, Prime Lending and Consumer Spending.

d. **Dependent Variable:** Gross Domestic Product.

From the table 6, it is viewed that R = 0.992, R^2 = 0.984, Adjusted R^2 = 0.976 are highly significant. This analysis found that the Consumer Spending, Prime Lending and Foreign Direct Investment are creating 98.4% variance over the Gross Domestic Product. This leads to verification of regression fit as describe in thesucceeding analysis of variance table,

Impact of Independent variables (FDI) on Dependent factor Gross National Product

- **Influence of FDI variable on Economic Growth (GNP)**

Economic growth (GDP) serves as the dependent variable, while Foreign Direct Investment serves as the independent variable in a linear regression analysis. Here, the author explains how linear regression analysis was utilised to establish a link between the variables.

Gross National Product = β0 (Constant) + β1 (FDI).

The influence of independent variable on the dependent factor is clearlypresented in the following table,

Table 7: Model Summary of FDI factor on GNP [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.681[a]	0.464	0.397	0.07173	0.833

e. **Predictors:** (Constant), FDI.

f. **Dependent Variable:** Gross National Product.

Table 7 reveals that the values R = 0.681, R2 = 0.464, and Adjusted R2 = 0.397 are statistically significant. This study demonstrates that FDI accounts for 46.4% of the variation in GDP.

FDI flows to India

Foreign direct investment (FDI) into Vietnam has increased dramatically over the last five years, as reported by the "FDI Information Sheet" published by the Department for Industrial Promotion and Internal Trade (DPIIT), Ministry of Trade and Industry. lengthy periods of time. India has received around $312 billion in foreign direct investment (FDI) between 2015 and 2020, which is 59% greater than the total FDI of approximately $197 billion obtained between 2010 and 2014. Number represents foreign direct investment into the nation. Education gained during 2010–2011. Foreign direct investment (FDI) inflows have increased significantly, from below 50 billion USD year before 2015–16 to around 55 billion USD annually after that.

As of the first half of 2020 (April–September), foreign direct investment (FDI) inflows into India were around $40 billion. dollars, the highest level ever recorded in the year-over-year period. This number is expected to increase further in 2020–21. For example, in the first half of 2020–21, the software and hardware industry drew FDI inflows of USD 17.55 billion. The fact that around 70% of India's total FDI received in 2019 - 2020 is in the form of equity, rather than debt, is another encouraging development.

When looking at the breakdown of foreign direct investment by industry, non-production industries continue to play the most crucial role in India. Finance, banking, insurance, outsourcing, research and development, courier services, etc. accounted for almost 17% of the total FDI equity obtained by the nation as of March 2020 (Table 1). This was followed by developments in telecommunications, trading, and production—which include things like townships, housing, etc.—as well as computer software and hardware (software being the primary ingredient). More than 46% of India's total cumulative FDI equity to March 2020 went to these top 5, mostly nonproduction industries. Automobiles, chemicals, and the pharmaceutical and medical device industries all placed among the top 10 FDI receiving sectors. The metallurgical, food processing, electrical, and commercial equipment industries are just a few of the others that consistently rank in the top 20 recipient sectors.

From March 2015 (when they were $248.6 billion) through March 2020 (when they are projected to be above US$470 billion), total cumulative FDI equity inflows have increased at a CAGR of 13.6%. From 2013 to 2017, the amount of foreign direct investment (FDI) equity flowing into the infrastructure production sector increased from $3.44 billion to $16.8 billion, a compound annual growth rate (CAGR) of 37.4%. Commerce (27.1%), IT services (24.5%), alternative energy (20.6%), media and entertainment (18.3%), health care (18%), infrastructure (17.3%), utilities (16.9%), telecommunications (15.4%), and consulting services (15.4%) followed. Automobiles (14.4%), hotels and tourism (14.1%), and services (13.9%) are other major industries that have garnered FDI inflows at higher prices than the total FDI fairness. Non-production sectors have once again dominated FDI inflows during the last five years in terms of growth, as was the case with the total amount of FDI flows. Despite a significant increase in typical FDI inflows within the immediate past, flows into production are still below the required level, despite the widespread emphasis on elevating India's manufacturing capacity and competitiveness. Foreign direct investment (FDI) enters into the automotive and electrical systems sectors at a rate higher than the average FDI inflow rate.

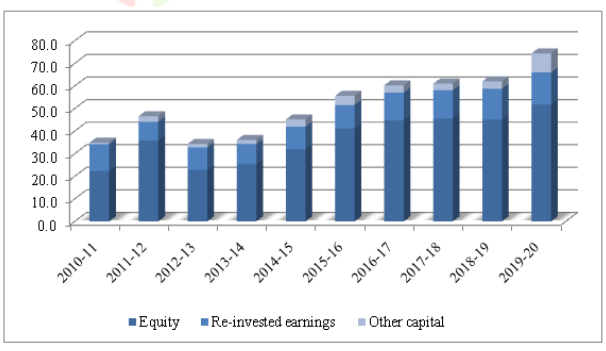

Figure 1: FDI flows to India

CONCLUSION

FDI has emerged as a significant catalyst for India's economic growth. The inflow of foreign capital, technology, and expertise has not only accelerated industrial development but also contributed to

employment generation, productivity enhancement, and competitiveness improvement. Continual efforts to attract and retain FDI, along with supportive policies and a conducive business environment, are essential to harness the full potential of FDI and drive sustained economic growth in India.

REFERENCES

1. Alam, W., Ikram, F., Kumar, P., Haseeb, M., & Ali, N. (2021). Asymmetric Effects of Foreign Direct Investment on Economic Growth: Fresh Evidence from India Using NARDL Simulation. *Millennial Asia*, 09763996221122205.
2. Bildirici, M. E. (2021). Terrorism, environmental pollution, foreign direct investment (FDI), energy consumption, and economic growth: Evidences from China, India, Israel, and Turkey. *Energy & Environment*, *32*(1), 75-95.
3. Hamid, I., & Jena, P. K. (2020). Linear and non-linear Granger casuality between foreign direct investment and economic growth: evidence from India. *Copernican Journal of Finance & Accounting*, *9*(2), 25-44.
4. Ibrahim, M. S., & Muthusamy, A. (2014). Role of foreign direct investment (FDI) in India's economic development—An analysis. *Journal of International Relations*, *2*(2), 101-113.
5. Jacob, T., & Jiji, N. A. (2021). Impact of Foreign Direct Investment on Economic Growth of China and India: An Empirical Analysis. *Asian Journal of Economics, Finance and Management*, 16-26.
6. Jana, S. S., Sahu, T. N., & Pandey, K. D. (2019). Foreign direct investment and economic growth in India: a sector-specific analysis. *Asia-Pacific Journal of Management Research and Innovation*, *15*(1-2), 53-67.
7. Jana, S. S., Sahu, T. N., & Pandey, K. D. (2020). How far is FDI relevant to India's foreign trade growth? An empirical investigation. *Journal of Economic Structures*, *9*, 1-19.
8. Lodhi, G. S. (2014). Foreign Direct Investment in India: A Critical Analysis on FDI. *International Journal of Core Engineering & Management*, *1*(4).
9. Malhotra, B. (2014). Foreign direct investment: Impact on Indian economy. *Global Journal of Business Management and Information Technology*, *4*(1), 17-23.
10. Merajothu, D. N. (2020). An empirical study on foreign direct investments impact on economic growth of India. *Available at SSRN 3598037*.
11. Miteski, M., Dijana J. Stefanova (2016) The Impact Of Sectorial FdI On Economic Growth In Central, Eastern and Southeastern Europe, National Bank of the Republic of Macedonia Working Paper No. 1/2017
12. Pradeep ,(2013), " Foreign Direct Investment and Industrial Development in India" , Thesis submitted to Maharshi Dayanand University Rohtak for the degree of doctor of philosophy in Department of Commerce
13. Rozas, E. V., & Vadlamannati, K. C. (2009). Direct foreign investments in India: Potential & performance of FDI inflows from United States as strategic major investor. *Applied econometrics and international development*, *9*(2), 209-224.
14. Sarkodie, S. A., & Strezov, V. (2019). Effect of foreign direct investments, economic development and energy consumption on greenhouse gas emissions in developing countries. *Science of the Total Environment*, *646*, 862-871.
15. Sharma, S., Kaur, M., Sharma, P., & Sandhu, S. (2020). A study of relationship and impact of foreign direct investment on economic growth rate of India. *International Journal of Economics and Financial Issues*, *10*(5), 327.
16. Singh, S. (2019). Foreign direct investment (FDI) inflows in India. *Journal of General Management Research*, *6*(1), 41-53.
17. Singh, Shikha, Chauhan, A. Kumar & Pandey, Nikhil (2012), Foreign Direct Investment (FDI) in Bric Countries: A Panel Data Analysis of the Trends and Determinants of FDI, European Journal of Economics, Finance and Administrative Sciences, Issue 53, pp. 48-58.
18. Sukhadolets, T., Stupnikova, E., Fomenko, N., Kapustina, N., & Kuznetsov, Y. (2021). Foreign direct investment (FDI), investment in construction and poverty in economic crises (Denmark, Italy, Germany, Romania, China, India and Russia). *Economies*, *9*(4), 152.
19. SULTANA, M., KAGDIYAL, V., GOYAL, V. M., CHAKKALA, S. P., & PARMAR, R. (2019). IMPACT OF FDI ON INDIAN ECONOMY. *Journal of Critical Reviews*, *6*(6), 115-119.
20. Teli, R. B. (2014). A critical analysis of foreign direct investment inflows in India. *Procedia-Social and Behavioral Sciences*, *133*, 447-455.

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