

IMPACT OF FDI ON GDP OF INDIA

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ABSTRACT

In the current global environment, emerging markets have turned foreign direct investment into a battleground. The independent factors are the GDP. Therefore, researchers considered the period from 2004 to 2022 in the current research investigation. The objective of this research is to determine how foreign direct investment would affect India's GDP from 2004 and 2022. The influence of FDI on India's GDP was examined in the current study using secondary data. The World Bank and DPIIT websites were used to get the information. Simple linear regression has been used in the study to evaluate hypotheses and solve the problems with conventional least squares constraints. The P-value for the FDI is less than 0.05, it is concluded. As a result, it is determined that FDI has a considerable influence on the GDP of the Indian economy and the null hypothesis is denied.

Keywords: GDP, FDI, Indian Economy, World Bank, Secondary Data.

Introduction

Research Overview

The term "foreign direct investment" (FDI) refers to investments made by people, organizations, or governments from one nation into the economy of another. FDI include acquiring assets including commercial property, construction work, and ownership positions in businesses. Given that it brings in cash, technology, managerial know-how, as well as access to new markets, FDI is seen as a major force behind economic progress. Additionally, it fosters international information exchange and opens up work prospects. A country's GDP may give us information about its growth rate, level of life, and total financial activity.

The connection among FDI and GDP is that FDI can support GDP expansion. A nation that attracts foreign investment gains technical know-how and jobs as a result. Due to the government's encouraging policy environment and thriving economic climate, foreign investment has kept coming into India (Muthusamy & Kalpana, 2019). FDI laws have been loosened in a variety of areas, notably securities exchanges, PSU distilleries for petroleum-based products internet access, and the defense sector, as part of the government's initiatives during the previous several years.

A nation's GDP, such as India's, can be significantly impacted by foreign direct investment (FDI). FDI is the term used to describe investments made into the economies of nations by foreign entities (people, businesses, and organizations) with the aim of forging a long-term relationship and exerting a substantial effect on the local financial system (Kurtishi-Kastrati, 2013). Indirect as well as direct impacts of FDI on India's GDP are possible, and they might differ depending on the amount of investment made, the industries concerned, government initiatives, and the economy as a whole.

FDI brings in more cash and investment into the nation, which can result in the growth of already existing enterprises as well as the start-up of new ones. This can then lead to increased production, the creation of jobs, and economic expansion, all of which have a positive effect on GDP. Foreign investors frequently offer standards of excellence, managerial know-how, and cutting-edge technology to the host nation (Faruku et al 2011). This may result in increases in domestic companies' production, efficiency, and innovation. Organizations are capable of contributing more to GDP growth as they become better equipped with technology.

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Depending on the industries that receive the investment, FDI may have different effects on GDP. For example, FDI is capable of having a direct effect on GDP development in industries like goods and services production, whereas investments in property could have a subtler impact through related economic activity. Through taxation on business earnings, employee wages, and other linked economic activity, FDI inflows may raise government revenue. This money may be spent on public projects and social welfare initiatives, which will help the economy develop even more. The large number of multinational enterprises can have a spillover effect, encouraging local businesses to become more competitive and to implement more effective procedures. Overall employment and economic expansion may rise as a result.

According to the Economic Survey released on Friday, India's economic expansion is predicted to "strongly rebound" to between 6% and 7% in 2020–21 from an anticipated 5% in the current fiscal. The Economic Survey also noted that the government, which has strong instructions, has the ability to speed up improvements. According to the Economic Survey 2019–20, there are preliminary indicators that the downturn in industrial activity and international commerce has peaked, which will help growth in the upcoming year.

Objectives of the Study

- To analyze the impact of FDI on GDP of India.
- To determine the direction of the relationship between both variables.

Literature Review

The findings of a short-run causality study by Agrawal & Khan (2011) in emerging Asian nations suggested a unidirectional causative causal link between exporters and economic expansion. For each of the European and Asian emerging panels, there is proof of long-term causation from export and FDI to monetary growth as well as long-term causality from exporting and development to FDI.

According to Hansen & Rand (2006), each country strives to attract a growing amount of FDI, which would afterwards lead to economic development. The government must focus on a number of issues, including as improving the infrastructure, liberalizing the FDI regulations, ensuring stability in politics, etc., in order to draw in increasing amounts of foreign investment. In this line, the World Bank Group's investing hand, IFC (International Finance Corporation), intends to invest around \$6 billion in India until 2022 in a number of renewable and environmentally friendly energy initiatives.

According to Khan & Mehboob (2014), monies obtained through FDI might be used to support international initiatives, as well as the earliest possible and real-time implementation of the FDI value. It was said that greater emphasis should be placed on the bureaucracy's growth, namely that it should evolve into more reactive. Bribery could potentially be reduced starting at the base of the economic pyramid.

According to Agrawal (2000), the correlation coefficient between the factors in question is 0.675, which is considered positive and may be seen as a favourable sign. It was discovered that shifts in FDI had an impact on the nation's GDP, hence a rise in FDI indicated a positive effect on India's GDP. Therefore, in terms of GDP, foreign direct investment is better for the Indian economy.

Methodology

In this research, scientific data analysis technique has been applied to analyse the quantitative data. The data has been collected from secondary sources. These sources include World Bank and DPIIT. The data has been collected within the past 19 years from 2004 to 2022. The data analysis techniques used in this research include descriptive analysis and regression analysis. In descriptive analysis technique, some of the tools including mean, standard deviation, Kurtosis, Skewness, maximum and minimum have been used to get the overview about the collected data. On the other hand, simple linear regression analysis has been used to determine whether FDI impacts the GDP or not. The data has been analysed in MS Excel.

Analysis and Discussion

According to the paper, an empirical analysis of how foreign direct investment affected gross domestic product over the research period. In the study, FDI is an independent factor and GDP is the dependent factor. Regression analysis was done on both variables.

- **Descriptive Analysis**

Table 1: Descriptive Table

	Total Investments	GDP
Mean	162,003.79	8,086,391.00
Standard Deviation	120,317.54	5,376,135.82
Kurtosis	0.051	(0.747)
Skewness	0.690	0.685
Range	428,974	16,832,751
Minimum	20,098	2,177,413
Maximum	449,072	19,010,164
Count	19	19

In the above descriptive table, the average total investments or FDI done in India for the past 19 years is 162,003.79 Crore. While the average GDP recorded from 2004 to 2022 is 8,086,391 crores. The standard deviation of both variables are below their average value. This signifies that there is less variation within the collected data set. This can be evident from the values of Kurtosis and Skewness. The Kurtosis of total investments is below to 2 at 0.051. This shows that there are no outliers present within the dataset. On the other hand, the value of Kurtosis for GSP is also low at -0.747, which also evident the less presence of outliers within the data set. The value of Skewness for both variables are near to 0.50 at 0.69. Hence, it can be commented that both variables are near to normal distribution. The positive value implies that maximum values for both of these variables are at lower side. The minimum FDI recorded in India within past 19 years is 20,098 Crore. While the maximum FDI value has been recorded at 449,072 Crores. In case of GDP, lowest GDP has been recorded at 2,177,413 Crores in 2004.

However, GDP has never recorded negative growth since 2004. Contrary to this, FDI has shown negative growth in 2006, 2008, 2010, 2012, 2015, 2017, 2019 and 2022. This shows that FDI in India usually fluctuates year over year.

- **Regression Analysis**

Table 2: Regression Table

Regression Statistics	
Multiple R	0.775
R Square	0.601
Adjusted R Square	0.578
Standard Error	3,493,788
Observations	19

ANOVA	df	SS	MS	F	Significance F
Regression	1	312,739,617,975,530	312,739,617,975,530	25.621	0.000
Residual	17	207,511,437,187,412	12,206,555,128,671		
Total	18	520,251,055,162,942			

	Coefficients	Standard Error	t Stat	P-value
Intercept	2,473,954.63	1,368,176.35	1.808	0.088
Total Investments	34.64	6.84	5.062	0.000

The regression table demonstrates the robustness of the link between the model and the GDP, which is the dependent variable. It discovered that the correlation among the predictor (FDI) and the result (GDP) was highly significant, with a value of $R = 0.775$. It was noted that the coefficient of R square indicates how much variance in foreign investment causes variation in GDP. According to the R square value of 0.601, FDI variance accounts for 60.1% of the volatility in GDP.

However, the analysis using ANOVA shows that there is a connection among FDI and GDP. It was discovered that the P value is 0.00 (0.05) and the F value is 25.62, both of which have significance at the 5% level. Less than 0.05 is the P-value for the FDI relationship. Therefore, the null hypothesis is disproved, and it is established that FDI has a considerable influence on the gross domestic product (GDP) of the Indian economy.

The coefficient table indicates that the coefficients are B-Value (unstandardized coefficients), which show how the various independent variables contributed differently to the framework. It revealed the existence of a favorable association between the predictors and the result variable, as well as vice versa.

It also discovered that the model is $GDP = B_0 + B_1 (\text{foreign investments}) = 2473954.626 + 34.64385859$ when the B value is replaced in the equation. According to the value of $b_1 = 34.643$, GDP grows by 34.643 units for each unit rise in FDI. As a result, each more unit of FDI is linked to an increase in GDP of 34.643 units. It implies that the normalized beta values represent the amount of change in consequence standard deviation caused by a change in predicting standard deviation. According to this number, GDP grows by 0.775 standard deviations for every one S.D. (120317.5392) rise in FDI. Only if the influence of other things remained unchanged would this be true.

It is crucial to remember that FDI does not necessarily have a direct or immediate effect on GDP. Its impacts can take some time to manifest and can be impacted by a variety of variables, such as governmental regulations, the political landscape, and the overall state of the economy. Furthermore, FDI's level of quality is important. FDI that is in line with a nation's development aspirations and goals has a propensity for having a more favourable and long-lasting effect on GDP.

Conclusion

The findings of this study refute the conventional wisdom that foreign direct investment (FDI) often boosts economic development in developing nations. The current analysis strengthens the argument that FDI must play a significant role in the nation's economic development. FDI is crucial to achieving the sustained growth of the nation and its economy. Despite the present effect of FDI on economic growth in India, the study's finding is that. The conclusion drawn in this research is that while FDI now has a generally negative influence on economic development in developing nations, this impact need not continue to be negative in future periods.

Long-term protection from the negative effects of FDI and the induction of FDI-led growth can be achieved through fiscal adjustments that improve the distribution of assets through the elimination of market-distorting regulations, reduce regulatory burdens on businesses, reduce FDI volatility by enhancing political and economic stability, and end the reliance on natural resources.

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