



Causal relationship between FDI and Economic growth in India

Dr. Priti Kumari

Assistant Professor, Department of Economics, Patna Women's College, Patna University, Patna, Bihar, India

Abstract

For many major nations, including India, foreign direct investment (FDI) has been a key factor in the process of economic expansion. For a long time, it has played a significant role in the expansion of the Indian economy, and India continues to view FDI as only driver of the Indian economy and continuously modifies FDI policy to reap the rewards of economic expansion. Thus, the study uses Granger causality and the cointegration approach to examine the causal relationship between foreign direct investment (FDI) and economic development as well as its long-term correlation in India for the years 2000–2020. The cointegration results show that, at the 0.05 percent significance level, GDP and FDI are cointegrated. The study found that cointegration is present in the short time period not in the long and the granger causality test suggests that there is the uni-directional relationship between the studied variables. FDI inflows in India affects to the economic growth but the GDP (Measure of Economic Growth) doesn't affect to FDI inflows within India. The results show that there seems to have been uncertainty throughout the study period, which is why there is a negative correlation between the factors that are currently in place. Because the coefficient value of FDI is negative. The study suggests that this negative relation is not permanent India may need to strategically target FDIs in order to increase and improve their quality, even though it focused on reforms to attract FDI. This can be achieved by maintaining an investor-friendly environment and highlighting infrastructure, tax breaks, and sensible trade policies, among other things, to attract more FDI.

Keywords: GDP, FDI, Economic growth, cointegration, correlation

Introduction

The relationship between Foreign Direct Investment (FDI) and economic growth has been a critical area of research and policy interest, especially for emerging economies like India. FDI serves as an important channel through which capital, technology, managerial skills, and access to international markets flow into the host country. In the Indian context, the liberalization of the economy in 1991 marked a significant shift, opening various sectors to foreign investment and triggering structural changes in economic development.

India has consistently attracted substantial FDI inflows, driven by its large consumer market, robust services sector, and improving investment climate. Economists and policymakers often argue that FDI stimulates economic growth by enhancing productivity, generating employment, and fostering innovation. However, the causality between FDI and growth—whether FDI leads to economic growth or growing economies attract more FDI—remains a subject of empirical investigation.

FDI

Foreign direct investment is the term used to describe an investment made by a company or individual from one country into companies in another. As stated by the Department for Promotion of Industry and Internal Trade (DPIIT) and the Reserve Bank of India (RBI), "FDI is the investment through capital instruments by a person resident outside India in an unlisted Indian company or in 10 percent or more of the post-issue paid-up equity capital on a fully diluted basis of a listed Indian company." Foreign direct investment is an ownership stake in a project or business established abroad by a government, corporation, or other organization. Foreign direct investment is a large,

continuous investment made by a government or business in a foreign company.

FDI investors frequently take on executive roles and actively oversee domestic companies or joint ventures. The two countries that have benefited the most from foreign direct investment in recent years are China and the US. FDI encompasses more than just financial inflows; it also includes the entrance of technology, expertise, knowledge, and skills. The entry of foreign enterprises has introduced advanced technologies and management practices, fostered innovation and improved productivity across various sectors. FDI has also played a pivotal role in employment generation, creating numerous job opportunities and contributing to skill development among the Indian workforce. India had a sharp rise in foreign direct investment (FDI) inflows after the global financial crisis of 2007–2008, which was essential in helping to fund its current account deficit. In order increase economic activity and enhance the general infrastructure, foreign investors may put money into industries including urban development, energy, transportation, and telecommunications. This paper aims to provide a comparative analysis of India's FDI performance and assessment of FDI trends.

Economic Growth

Economic growth refers to the increase in the production of goods and services in an economy over a period of time. In the case of India, economic growth is a crucial indicator of the country's development, reflecting improvements in infrastructure, industry, agriculture, and the services sector. India has experienced significant economic transformation since the economic liberalization of 1991, which opened up the economy to foreign investment, deregulated industries,

and encouraged private sector participation. These reforms contributed to higher growth rates, with India emerging as one of the fastest-growing major economies in the world.

The Gross Domestic Product (GDP) is the most widely used measure to assess a country's economic growth. GDP represents the total market value of all final goods and services produced within a country during a specific time period. It is a comprehensive indicator that helps evaluate the overall economic performance of a nation.

In India, GDP is calculated and reported by the Ministry of Statistics and Programme Implementation (MoSPI). It is measured in two main forms:

Nominal GDP: Measured at current market prices, without adjusting for inflation.

Real GDP: Adjusted for inflation, providing a more accurate reflection of the economy's true growth over time.

Review of Literature

One of the most important factors influencing a nation's growth and economic advancement is foreign direct investment inflows. Numerous articles that provide empirical Analysis how exports and foreign direct investment affect economic growth. Using a variety of econometric models, approaches, and techniques, researchers have examined the impact of each variable—FDI, exports, and imports—on economic development in numerous nations across a range of time periods. The rise of neoclassical growth theory led to the development of the idea that FDI promotes economic growth. The "neoclassical growth theory" of Harrod, Domar, and Solow states that FDI encourages economic development in the same manner as short-term domestic investments. "FDI promotes economic growth by integrating new technology and knowledge spillovers," according to Lucas' endogenous growth hypothesis. "FDI accompanied by management practices, human capital, exports, and technology transfer, aids in generating growth momentum," claim research by Borensztein and Lee and Lim and Maisom. Lipsey and Weiss assert that "trade flows and industry FDI have a positive association." In their study of "the link between FDI and GDP in Greece from 1945 to 2003, Alexiou and Tsaliki show that FDI-led growth strikes in the long run." The relationship between foreign direct investment (FDI) and GDP in six developing economies—Chile, India, Mexico, Malaysia, Pakistan, and Thailand—is examined by Miankhel *et al.* Katircioglu uses the ARDL-Bounds test to examine "the long-run and short-run links between FDI inflows and economic development in Turkey from 1970 to 2005." The findings of the analysis imply a connection between real GDP and FDI. Belloumi uses the ARDL Bounds test to examine "the relationship between FDI, trade openness, and economic development in Tunisia from 1970 to 2008." The results of the analysis show the elements cooperating over time. Using the VECM Granger causality test, Sunde found "unidirectional causation between economic growth and foreign direct investment, confirming the FDI-led growth theory for South Africa." In light of this, this article uses the Autoregressive Distributed Lag approach (ARDL-Bounds test) to investigate the dynamic

relationship between FDI inflows, exports, imports, and GDP in India from 1991 to 2018.

Chowdhury and Mavrotas (2005) ^[10] demonstrated that their findings were conflicting about the causal relationship between economic growth and foreign direct investment. Additionally, according to Pais' paper "Foreign Direct Investment: Impact on Indian Economy," there are positives effects of foreign direct investments on the Indian economy. Furthermore, according to Pradeep's theory on foreign direct investment and industrial development in India, there is a strong association between approved foreign direct investments and actual inflows.

Malhotra (2014) ^[11] examines how foreign direct investment affects the Indian economy. Analyses the difficulties in establishing a favourable position in the global competition for foreign direct investments, especially following twenty years of economic improvements.

Sultana, Kagdiyal, Goyal, Chakkala, and Parmar (2019) investigated how FDI affected Indian growth indicators as well as other elements including the population and the human development index. According to the study's findings, FDI significantly affects HDI.

Har and associates (2008) investigated the connection between foreign direct investment and economic expansion. Researchers examined the connection between foreign direct investment (FDI) and economic growth in Malaysia from 1970 to 2005 using time-series data, and they came to the conclusion that FDI had a direct impact on real GDP.

Ek's 2007 study attempts to evaluate how FDI affected China's economic growth between 1994 and 2003. The theoretical framework states that FDI promotes economic growth by acting as a channel for the transfer of new technology across nations, increasing output and GDP in the recipient nation. In order to interpret the results, prior studies on the topic were also reviewed.

Adewumi *et al.* (2006) use statistical methods and visualizations to investigate how FDI affects African economic growth. Data from eleven different countries on the continent as well as data from the entire continent were included in the econometric study. The information covers the years 1970 through 2003. It was demonstrated that the majority of countries believe that foreign direct investment has a positive but insignificant impact on growth. Majagaiya *et al.* (2010) examine the relationship between foreign direct investment (FDI) and economic development in Nepal from 1980 to 2006 using the Granger Causality Test, Unit Root Test, and Co-integration Test. The results indicate a long-term link between the variables, with FDI to GDP being the direction of causality.

Objectives of the study

Examine the relationship between FDI inflows and GDP growth using statistical and econometric tools.

Research Methodology

The current study is based on secondary data taken from different sources that include yearly observations from 2000 to 2020. We have used current GDP data as a dependent variable and net FDI inflow as an independent variable. The augmented Dickey-Fuller unit root test has been used to test the stationarity of data, and the ARDL model or bound test

has been applied to find out the long-run relationship between the examined variables. To find out the bidirectional relationship between variables, the Granger Causality test has been applied. To make the variables linear logarithmic values of the variable has been applied.

Model

The following regression model is used to know the impact of net FDI inflow on economic growth of India. Variable GDP is used as a proxy for economic growth of India and is used as a dependent variable of the model. The Regression model is:

$$GDP_t = \beta_0 + \beta_1 GDP_{t-1} + \beta_2 Net FDI_t + \beta_3 Net FDI_{t-1} + \beta_4 Net FDI_{t-2} + \mu_t \quad (I)$$

$$LGDP_t = \beta_0 + \beta_1 LGDP_{t-1} + \beta_2 Net LFDI_t + \beta_3 Net LFDI_{t-1} + \beta_4 Net LFDI_{t-2} + \mu_t \quad (II)$$

For the regression purpose second model is used, in which distributed lag model has used one-year lag has taken for dependent variable and two years lag are taken for

dependent variables. β_0 is constant term of model and $\beta_1, \beta_2, \beta_3, \beta_4$ are the coefficients of the model. For this empirical study annual data on examined variables are taken from World Bank database. This empirical study includes different steps: -

1. Check the stationarity of the examined variable
2. For the linearity variables are transferred into logarithmic form
3. Calculation of one-year lag value for dependent and two years lag value for independent variables.
4. ARDL model and Bound test has used to know the long run causality between examined variable.
5. To know the Bidirectional relationship between GDP and Net FDI inflow Granger Causality test has applied.

Results and Discussion

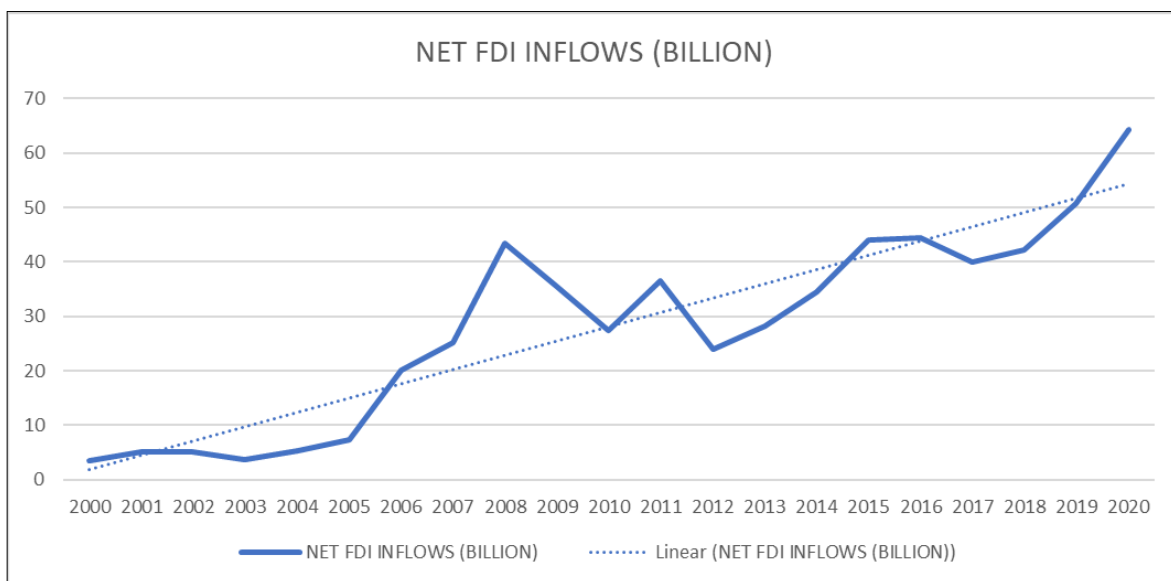


Fig 1: Net FDI inflows (billion) and its trend line

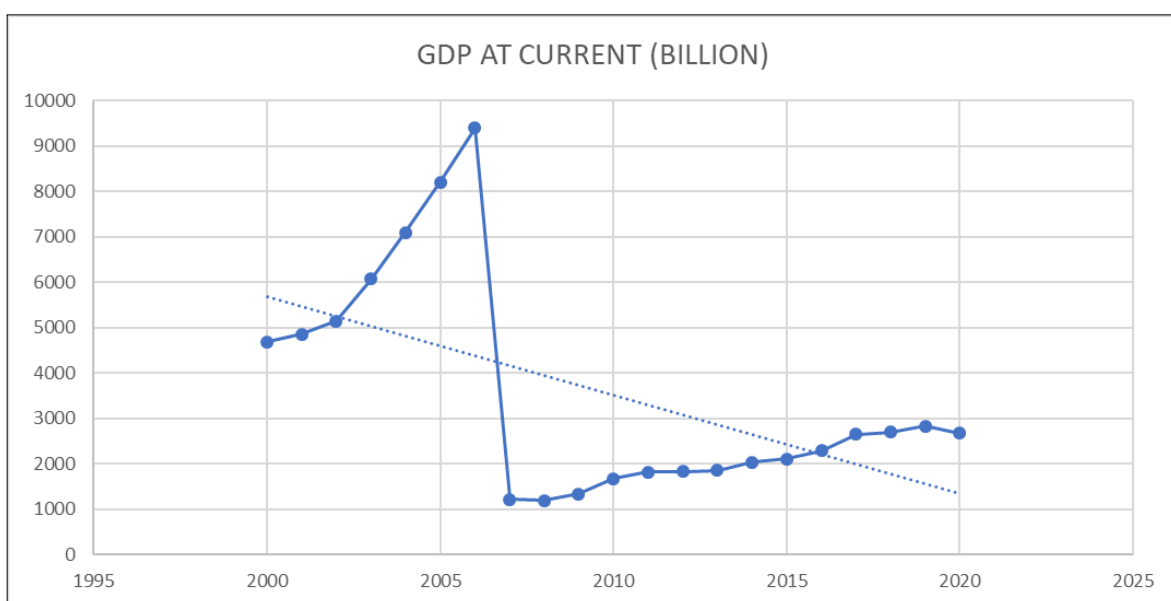


Fig 2: Current GDP (billion) of India and its trend line

Figure 1 represents the net FDI inflows from 2000–2020, and it also shows the trend of net FDI inflows in India. According to the figure, the trend of FDI inflows is linear during the study periods, but the actual amount has not been continuous; it shows fluctuation due to external and internal factors.

Figure 2 displays India's current GDP from 2000 to 2020, indicating growth prior to the 2008 global financial crisis and after the crisis. The current GDP had significantly decreased during the crisis years, but thanks to government assistance, the decline has halted and the GDP has recovered from the effects of the crisis.

Table 1: Augmented Dickey Fuller Unit Root Test Results

Variables	Intercept	Trend & Intercept
LGDP	Stationary at 1 st difference	Stationary at 1 st difference
LNET FDI INFLOWS	Stationary at 1 st difference	Stationary at 1 st difference

EViews Results

Null Hypothesis: D(LGDP_AT_CURRENT__BILLION_) has a unit root					
Exogenous: Constant					
Lag Length: 0 (Automatic - based on SIC, maxlag=4)					
			t-Statistic	Prob.*	
Augmented Dickey-Fuller test statistic			-4.241124	0.0043	
Test critical values:					
	1% level		-3.831511		
	5% level		-3.029970		
	10% level		-2.655194		
*MacKinnon (1996) one-sided p-values.					
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 19					
Augmented Dickey-Fuller Test Equation					
Dependent Variable: D(LGDP_AT_CURRENT__BILLION_,2)					
Method: Least Squares					
Date: 07/12/25 Time: 22:39					
Sample (adjusted): 2002 2020					
Included observations: 19 after adjustments					
	Variable	Coefficient	Std. Error	t-Statistic	Prob.
	D(LGDP_AT_CURRENT__BILLION_(-1))	-1.027836	0.242350	-4.241124	0.0006
	C	-0.032104	0.116462	-0.275662	0.7861
	R-squared	0.514107	Mean dependent var		-0.004954
	Adjusted R-squared	0.485525	S.D. dependent var		0.706680
	S.E. of regression	0.506880	Akaike info criterion		1.578216
	Sum squared resid	4.367765	Schwarz criterion		1.677630
	Log likelihood	-12.99305	Hannan-Quinn criter.		1.595041
	F-statistic	17.98713	Durbin-Watson stat		2.006661
	Prob(F-statistic)	0.000551			

Null Hypothesis: D(LGDP AT CURRENT BILLION) has a unit root					
Exogenous: Constant, Linear Trend					
Lag Length: 0 (Automatic - based on SIC, maxlag=4)					
			t-Statistic	Prob.*	
Augmented Dickey-Fuller test statistic			-4.157620	0.0204	
Test critical values:					
	1% level		-4.532598		
	5% level		-3.673616		
	10% level		-3.277364		
*MacKinnon (1996) one-sided p-values.					
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 19					
Augmented Dickey-Fuller Test Equation					
Dependent Variable: D(LGDP AT CURRENT BILLION .2)					
Method: Least Squares					
Date: 07/12/25 Time: 22:41					
Sample (adjusted): 2002 2020					
Included observations: 19 after adjustments					
	Variable	Coefficient	Std. Error	t-Statistic	Prob.
	D(LGDP AT CURRENT BILLION (-1))	-1.037591	0.249564	-4.157620	0.0007
	C	-0.132589	0.269054	-0.492798	0.6288
	@TREND("2000")	0.009112	0.021863	0.416762	0.6824
	R-squared	0.519325	Mean dependent var		-0.004954
	Adjusted R-squared	0.459241	S.D. dependent var		0.706680
	S.E. of regression	0.519667	Akaike info criterion		1.672682
	Sum squared resid	4.320859	Schwarz criterion		1.821804
	Log likelihood	-12.89048	Hannan-Quinn criter.		1.697919
	F-statistic	8.643266	Durbin-Watson stat		2.011839
	Prob(F-statistic)	0.002850			

The LGDP (logarithmic version of GDP) data are stationary at the first difference, both intercept and trend, according to the EViews finding. The probability value is less than

0.05% in both situations. It is 0.0043% in the intercept and 0.0204% in the trend.

Null Hypothesis: D(LNET_FDI_INFLOWS__BILLION_) has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 0 (Automatic - based on SIC, maxlag=4)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-3.880872	0.0342
Test critical values:				
	1% level		-4.532598	
	5% level		-3.673616	
	10% level		-3.277364	
*MacKinnon (1996) one-sided p-values.				
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 19				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNET_FDI_INFLOWS__BILLION_,2)				
Method: Least Squares				
Date: 07/12/25 Time: 22:52				
Sample (adjusted): 2002 2020				
Included observations: 19 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNET_FDI_INFLOWS__BILLION_(-1))	-0.975131	0.251266	-3.880872	0.0013
C	0.201821	0.193093	1.045203	0.3115
@TREND("2000")	-0.006551	0.014998	-0.436787	0.6681
R-squared	0.487143	Mean dependent var		-0.006182
Adjusted R-squared	0.423036	S.D. dependent var		0.461317
S.E. of regression	0.350408	Akaike info criterion		0.884502
Sum squared resid	1.964572	Schwarz criterion		1.033624
Log likelihood	-5.402768	Hannan-Quinn criter.		0.909739
F-statistic	7.598896	Durbin-Watson stat		1.945583
Prob(F-statistic)	0.004786			

Null Hypothesis: D(LNET_FDI_INFLOWS__BILLION_) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=4)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-3.969516	0.0075
Test critical values:				
	1% level		-3.831511	
	5% level		-3.029970	
	10% level		-2.655194	
*MacKinnon (1996) one-sided p-values.				
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 19				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNET_FDI_INFLOWS__BILLION_,2)				
Method: Least Squares				
Date: 07/12/25 Time: 23:01				
Sample (adjusted): 2002 2020				
Included observations: 19 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNET_FDI_INFLOWS__BILLION_(-1))	-0.952550	0.239966	-3.969516	0.0010
C	0.126613	0.085287	1.484549	0.1560
R-squared	0.481028	Mean dependent var		-0.006182
Adjusted R-squared	0.450500	S.D. dependent var		0.461317
S.E. of regression	0.341966	Akaike info criterion		0.791092
Sum squared resid	1.987997	Schwarz criterion		0.890507
Log likelihood	-5.515375	Hannan-Quinn criter.		0.807917
F-statistic	15.75706	Durbin-Watson stat		1.970439
Prob(F-statistic)	0.000991			

The findings of EViews show that the data on LNET FDI inflows are stationary, with both an intercept and a trend at the first difference. Probability values are less than 0.05% in both situations. It is 0.007 for the intercept and 0.03 for the trend.

ARDL and Bound Test Result

H₀: There is no significant long run causal relationship between net FDI inflows and current GDP of India.

H₁: There is a significant long run causal relationship between net FDI inflows and current GDP of India.

Table 2: Conditional Error Correction Regression

Variables	Coefficients	Std. Error	t- statistic	Probability
Intercept	4.818	2.22	2.16	0.04
LGDP (-1)	-0.490	0.23	-2.09	0.05
LNET FDI	-0.287	0.15	-1.82	0.08
LNET FDI (-1)	0.037	0.28	0.13	0.89
LNET FDI (-2)	-0.615	0.30	-2.03	0.06

Source: Author’s calculation, calculated by EViews software.

EViews Results

ARDL Long Run Form and Bounds Test Dependent Variable: D(LGDP_AT_CURRENT__BILLION_) Selected Model: ARDL(1, 2) Case 2: Restricted Constant and No Trend Date: 07/09/25 Time: 21:06 Sample: 2000 2020 Included observations: 19				
Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.818138	2.221322	2.169041	0.0478
LGDP_AT_CURRENT...	-0.490656	0.234722	-2.090367	0.0553
LNET_FDI_INFLOWS...	-0.287104	0.157521	-1.822634	0.0898
D(LNET_FDI_INFLOW...	0.037138	0.285208	0.130215	0.8982
D(LNET_FDI_INFLOW...	-0.615780	0.302367	-2.036533	0.0611
* p-value incompatible with t-Bounds distribution.				
Levels Equation Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNET_FDI_INFLOWS...	-0.585142	0.212799	-2.749736	0.0157
C	9.819786	0.721854	13.60355	0.0000
EC = LGDP_AT_CURRENT__BILLION_ - (-0.5851*LN <small>ET</small> _FDI_INFL <small>OWS</small> __BILLION_ + 9.8198)				
F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic k	1.918106 1	Asymptotic: n=1000		
		10%	3.02	3.51
		5%	3.62	4.16
		2.5%	4.18	4.79
		1%	4.94	5.58
Actual Sample Size	19	Finite Sample: n=35		
		10%	3.223	3.757
		5%	3.957	4.53
		1%	5.763	6.48
		Finite Sample: n=30		
		10%	3.303	3.797
5%	4.09	4.663		
1%	6.027	6.76		

The bounds test's F-statistic value is 1.918. is less than the I (0), where I (0) is the lower limit and I (1) is the upper bound, at the 5% level of significance. Since I (0) and I (1) have values of 3.62 and 4.16, respectively, we are unable to

reject the null hypothesis because there is neither a long-term association nor cointegration between the variables. Results show that applied variables are statistically significant.

Table 3: Ganger Causality Test Results

Null Hypothesis	Probability
2. Current GDP is not granger cause of Net FDI inflows.	0.0697
1. Net FDI inflows is not a granger cause of Current GDP.	0.0099

Source: author's calculation based on data collected from World Bank.

Pairwise Granger Causality Tests			
Date: 07/19/25 Time: 11:54			
Sample: 2000 2020			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
LNET_FDI_INFLOWS_BILLION_ does not Granger Cause LGDP_AT_CURRENT_BILLION_	19	6.53687	0.0099
LGDP_AT_CURRENT_BILLION_ does not Granger Cause LNET_FDI_INFLOWS_BILLION_		3.24027	0.0697

Applied Model

$$LGDP_t = \beta_0 + \beta_2 \text{Net LFDI}_t + \mu_t$$

$$\text{Net LFDI}_t = \beta_0 + \beta_2 LGDP_t + \mu_t$$

Granger causality test result is showing that in 1st condition we are in the condition to reject the Null hypothesis because p value is less than 0.05, that's mean net FDI inflows is granger cause of current GDP of country. But in 2nd condition p value is slightly greater than 0.05, that's mean Null hypothesis is accepted and we can say that GDP of country is not a granger cause of net FDI inflows in India. So, it is clear that there is no bidirectional causality relationship between Net FDI inflows and Current GDP. FDI inflows will influence the country's GDP. But change in GDP will not influence FDI inflows in India.

Conclusion

The study attempts to investigate the causal connection between FDI and India's GDP growth is taken as a proxy for economic growth for the period 2000 to 2020. During the study period, both the variables were affected by the 2008 global financial crisis and the 2019 Covid pandemic. Firstly, the study estimates the trend of the examined variable; the results say the trend is linear. and for the linearity of variables, it has transferred in logarithmic form. Secondly, to check the stationary Augmented Dickey-Fuller Unit Root test, apply it. According to the result, both the variables are stationary at the 1st difference, not at the level. After that cointegration between variables has been tested for short and long time periods, results say that cointegration is present in short periods, but in longer periods there is no existence of cointegration between GDP and FDI. For the longer cointegration, the ARDL model has been applied, and the bound test has been used to check the integration. Additionally, the Granger causality test, which looked at the relationship between FDI and GDP, revealed that FDI contributed to India's GDP growth, according to comparable findings from the study (Srinivasan, P., Kalaivani, M& Ibrahim). The study period encompasses the detrimental effects of the global financial crisis of 2008 and COVID-19. As a result, there is an inverse relationship between FDI and India's GDP and Bound test results also indicates that no longer presence of casual relationship between examined variable. Results of the study shows that all considered variables are statistically significant for the model. So finally, the study concludes that any fluctuation in international economies will create such atmosphere that will not be favourable for the country.

References

1. Shaikh M, Pandey RK. A study of foreign direct investment in India with special reference to pre-post COVID regime. *Social Science Journal for Advanced Research*, 2024, 4(3).
2. Mehta N, Gupta S, Maitra S. Exploring determinants impacting foreign direct investment in the real estate sector. *A study on the Indian economy. Property Management*, 2024.
3. Kaddouri N, Benelbar M. The impact of foreign direct investment on economic growth: Empirical evidence. *Financial Markets, Institutions and Risks*,2024;8(1):123–132.
4. Vision IAS. Foreign direct investment FDI. [https://visionias.in/current-affairs/monthly-magazine/2025-01-22/economics-\(macroeconomics\)/foreign-direct-investment-fdi-2](https://visionias.in/current-affairs/monthly-magazine/2025-01-22/economics-(macroeconomics)/foreign-direct-investment-fdi-2)
5. Department for Promotion of Industry and Internal Trade (DPIIT). FDI statistics. <https://dpiit.gov.in/publications/fdi-statistics>
6. Shuchi D. Foreign direct investment FDI in India & its impact on industrial development. Sankalp Publication. ISBN 939072015X.
7. Moon H-C. Foreign direct investment. A global perspective. World Scientific. <https://doi.org/10.1142/9088>
8. Moosa IA. Foreign direct investment. Theory, evidence and practice. Palgrave Macmillan London. <https://doi.org/10.1057/9781403907493>
9. Borensztein E, De Gregorio J, Lee J-W. How does foreign direct investment affect economic growth *Journal of International Economics*,1998;45:115–135.
10. Chowdhury A, Mavrotas G. FDI and growth: A causal relationship. *JOUR*, 2005.
11. Malhotra B. Foreign direct investment Impact on Indian economy. *Global Journal of Business Management and Information Technology*,2014;4(1):17–23.
12. Silajdzic S, Mehic E. Knowledge spillovers, absorptive capacities and the impact of foreign direct investment on economic growth *Empirical evidence from transition economies. Procedia-Social and Behavioural Sciences*,2015:195:614–623.
13. Zhang K. Does foreign direct investment promote economic growth *Evidence from East Asia and Latin America. Contemporary Economic Policy*,2001;19(2):175–185.
14. Zhang K. How does foreign direct investment affect economic growth in China *Economics of Transition*,2001;9(3):679–696.
15. Alfaro L, Kalemli-Ozcan S, Sayek S. Foreign direct investment, productivity and financial development. *The World Economy*,2009;32(1):111–135.