

# Navigating Economic Growth: Unravelling the Influence of FDI, Exports and GDP Deflator in India through VECM and Granger Causality Analysis

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**Abstract:** The primary goal of this research is to thoroughly investigate the relationship between Economic Growth, Foreign Direct Investment (FDI), Exports, and GDP Deflator in the Indian context. The research utilises data from reliable sources such as Statista, Macro Trends, and the Reserve Bank of India (RBI) from 2001 to 2022. It employs advanced econometric techniques like the Johansen Cointegration Test and Granger Causality Test to analyse the dynamics of these economic variables. The results of the Johansen Cointegration Test reveal a strong and long-lasting connection between Economic Growth and the combination of Foreign Direct Investment (FDI), Exports, and GDP Deflator over a prolonged

period of time. Nevertheless, the Granger Causality Test results provide a contrasting depiction, suggesting a lack of statistically significant causal connections between these variables. These contradictory results highlight the intricate nature of economic processes and stress the need of implementing comprehensive approaches in the formation of economic policies. It indicates that policies designed to encourage Economic Growth, attract FDI, and promote Exports should include wider aspects such as domestic investment, human capital development, and institutional quality. Furthermore, placing a high priority on improving exports and strategically attracting foreign direct investment (FDI) in industries with technology gaps are crucial methods for promoting economic growth in India. Overall, this research enhances our comprehension of the relationship between Economic development, Foreign Direct Investment (FDI), Exports, and the GDP Deflator in India. It emphasises the need for comprehensive strategies to promote long-lasting economic development in the nation.

**Keywords:** VECM, Economic Growth, FDI, Exports, Granger.

**Jel Code-** F21,C32,E31.

### **Introduction**

Economic growth stands as a pivotal aspect of national development, reflecting the collective aspirations and endeavours of a nation towards prosperity and welfare enhancement. Within the context of India, a burgeoning economy with a diverse array of challenges and opportunities, understanding the intricate dynamics governing economic growth becomes imperative. In the complex tapestry of India's economic landscape, the threads of economic growth, foreign direct investment (FDI), exports, and the GDP deflator are interwoven, shaping the nation's trajectory towards prosperity. Against the backdrop of a rapidly evolving global economy and domestic imperatives for development, understanding the dynamics of these variables becomes paramount. This paper embarks on a meticulous exploration of

their relationships, employing sophisticated econometric tools to unravel the intricate web of influences and causations that define India's economic journey. India's economic narrative over the past few decades has been one of transformation and transition. From the era of planned development to the landmark reforms of the early 1990s, the Indian economy has undergone a paradigm shift towards liberalization, globalization, and market-oriented policies. These reforms unleashed a wave of dynamism, opening up the economy to foreign investment, trade, and technological advancements. Consequently, FDI emerged as a potent force driving economic growth, bringing in capital, expertise, and technology to fuel various sectors of the economy. The significance of exports in India's growth story cannot be overstated. As a large and diverse economy, India possesses a vast reservoir of human capital, natural resources, and entrepreneurial energy. Export-oriented policies have enabled the country to leverage these strengths, tapping into global markets and enhancing competitiveness across sectors. However, challenges such as infrastructural bottlenecks, regulatory hurdles, and global market volatility have necessitated a strategic approach towards export promotion. Meanwhile, the GDP deflator, as a measure of inflation, serves as a critical barometer of macroeconomic stability and purchasing power. Inflationary pressures can erode the real value of output and disrupt consumption patterns, posing challenges to sustainable economic growth. Against this backdrop, understanding the dynamics of the GDP deflator and its interaction with other economic variables is essential for policymakers in crafting effective monetary and fiscal policies.

As of the current period, India finds itself at a crossroads, grappling with a myriad of challenges and opportunities on the economic front. The COVID-19 pandemic has inflicted significant disruptions, disrupting supply chains, dampening consumer demand, and stalling economic activities. While the Indian economy

exhibited resilience in weathering the initial impact of the pandemic, the road to recovery remains fraught with uncertainties. FDI continues to play a pivotal role in India's economic resurgence, albeit amidst shifting global dynamics and evolving investment patterns. The government's push for 'Make in India' and initiatives to improve the ease of doing business have bolstered investor confidence, attracting FDI inflows across various sectors. However, structural impediments such as bureaucratic red tape, regulatory inconsistencies, and infrastructural deficiencies pose challenges to realizing the full potential of FDI inflows. On the export front, India has made significant strides in diversifying its export basket and tapping into emerging markets. Sectors such as information technology, pharmaceuticals, and automotive components have emerged as export powerhouses, contributing substantially to foreign exchange earnings and employment generation. Nevertheless, the looming spectre of protectionism, trade disputes, and supply chain disruptions underscores the need for a strategic reorientation of export policies. Amidst these dynamics, the GDP deflator assumes renewed significance as policymakers navigate the delicate balance between inflation management and growth promotion. The Reserve Bank of India (RBI) has adopted a prudent approach towards monetary policy, balancing the imperatives of supporting growth while ensuring price stability. However, persistent inflationary pressures, fuelled by supply-side constraints and global commodity price fluctuations, pose challenges to the central bank's mandate. In light of these developments, the analytical framework adopted in this paper assumes heightened relevance. By leveraging advanced econometric techniques such as the Vector Error Correction Model (VECM) and Granger causality analysis, the study seeks to disentangle the complex relationships among economic growth, FDI, exports, and the GDP deflator. The VECM facilitates the identification of long-term equilibrium relationships and short-term dynamics among the variables, offering insights into

their interdependencies and adjustment processes. Similarly, the Granger causality analysis provides a deeper understanding of the directional causality between the variables, shedding light on the temporal precedence and predictive power of one variable over another. In doing so, it elucidates the pathways through which FDI, exports, and inflationary pressures influence economic growth and vice versa. This paper endeavours to deepen our understanding of the intricate nexus between economic growth, FDI, exports, and the GDP deflator in the Indian context. Against the backdrop of a rapidly evolving economic landscape and the imperatives of sustainable development, unravelling these relationships assumes critical importance. By leveraging advanced econometric techniques and drawing insights from the current economic scenario, the study seeks to provide actionable insights for policymakers, stakeholders, and practitioners. In doing so, it aims to contribute to informed decision-making and the formulation of policies that foster inclusive and sustainable economic growth in India.

### **Review of Literature**

Understanding the intricate dynamics that underpin economic growth is essential for gaining insight into India's economic landscape. This comprehension particularly focuses on the multifaceted relationships among foreign direct investment (FDI), exports, GDP growth, and inflation, as gauged by the GDP deflator. A comprehensive literature review seeks to delve deeply into these connections, drawing from a wide array of studies to offer a holistic understanding. Foreign Direct Investment (FDI) has garnered recognition as a pivotal driver of economic growth in India over the years. The correlation between FDI inflows and economic growth is established as positive and enduring. The influx of FDI capitalizes on various fronts, bolstering productivity, catalyzing technological advancements, and augmenting export competitiveness. Consequently, it serves as a linchpin for overall economic expansion. The imperative here lies in fostering an

attractive investment environment to lure FDI, which injects not just capital but also crucial technology and managerial know-how into the economy's fabric (Kumar and Pradhan 2020). Equally significant are exports, which wield considerable influence on economic growth dynamics. Their contributions extend beyond generating foreign exchange to encompass expanding market horizons and stimulating domestic production. The relationship between exports and economic growth in India is a complex one, characterized by bidirectional causality. Policies tailored to boost exports are deemed instrumental in fostering sustainable economic development by propelling economic growth and broadening export markets (Mishra and Sahu 2019). This underscores the necessity for strategies such as trade liberalization, export promotion schemes, and targeted investments in export-oriented sectors. Inflation, gauged through the GDP deflator, emerges as a critical determinant of economic growth. Elevated inflation rates can impede economic expansion by eroding purchasing power and distorting investment patterns. Hence, adept management of inflation assumes paramount importance to uphold price stability and sustain the momentum of economic growth through judicious monetary and fiscal measures (Banerjee et al. 2018). The interplay among FDI, exports, GDP growth, and inflation adds layers of complexity to India's economic dynamics. While bidirectional causality exists between FDI and economic growth, as well as between exports and economic growth, the relationship between inflation and economic growth is less straightforward. Studies suggest that inflation, as proxied by the GDP deflator, may not exert a significant direct causal impact on economic growth in the Indian context (Chakraborty and Das 2021). Furthermore, long-term cointegration among these variables underscores a stable relationship over time. The consensus among studies highlights the affirmative influence of FDI and exports on India's economic growth trajectory. However, the interplay between inflation and economic growth appears

nuanced and context-dependent (Ghosh et al. 2017). These insights offer policymakers invaluable guidance in crafting strategies for fostering sustainable economic development. This entails prioritizing measures to attract FDI, promoting export-oriented policies, and adeptly managing inflationary pressures. By grasping the intricate dynamics among these variables, policymakers can formulate targeted interventions to nurture inclusive and sustainable economic growth in India. In sum, the synthesis of various scholarly perspectives elucidates the complex tapestry of factors that shape India's economic landscape. Each element – FDI, exports, GDP growth, and inflation – plays a distinct yet interconnected role in driving economic progress (Chakraborty and Das 2021). Acknowledging the interdependencies and nuances within these relationships is crucial for devising effective policy frameworks that steer the nation towards sustained prosperity. Through meticulous analysis and strategic foresight, policymakers can navigate the intricacies of India's economic dynamics and chart a course towards inclusive growth and development.

### **Objective of the Study**

The objective of the study is to investigate the long-term relationship and dynamic interactions among Economic Growth, Foreign Direct Investment (FDI), Exports, and GDP Deflator in the context of the Indian economy.

### **Methodology**

The methodology portion of this article provides a clear outline of the analytical framework used to study the link between Economic Growth, Foreign Direct Investment (FDI), Exports, and GDP Deflator. It describes the sequential processes required to conduct the investigation. The approach involves the use of diverse econometric tools, such as ADF, cointegration analysis, Vector Error Correction Model (VECM), Vector Autoregression (VAR), and Granger Causality Test. The data utilized in this study is sourced from reputable institutions including Statista,

Macro Trends, and the Reserve Bank of India (RBI), covering the period from 2001 to 2022.

The Augmented Dickey-Fuller (ADF) approach is a commonly used econometric technique used to evaluate the stationarity of a time series variable. The foundation of this approach is that time series that are not stationary have trends or random fluctuations that make meaningful analysis difficult. The ADF test determines if a particular variable exhibits a unit root, indicating non-stationarity, or whether it is stationary. The enhanced version of the Dickey-Fuller test incorporates autocorrelation and lagged data in the analysis, hence improving its robustness. The test entails doing a regression analysis where the variable is regressed on its previous values and potentially on the variable itself after differencing. The aim is to assess the significance of the coefficient linked to the delayed variable. If the coefficient is statistically significant, showing a value that is not zero, it means that the null hypothesis of the existence of a unit root cannot be rejected. This suggests that the data is non-stationary. On the other hand, if the coefficient is not statistically significant, we accept the null hypothesis of stationarity. If the variable is determined to be non-stationary, taking the initial difference may make it stationary, making it easier to do additional research. Hence, the ADF approach serves the purpose of assessing the stationarity of the variable and providing guidance on the necessary transformation for further econometric modelling. According to analysis (Table 1), the ADF test verifies that our variable achieves stationarity when taking the first difference. This enables us to conduct a legitimate and dependable examination of its behaviour and its interactions with other variables.

**Table 1 Augmented Dickey-Fuller Unit Root Test Analysis**

Variables	Augmented Dickey-Fuller Unit Root Test			
	At	Level	and	First

		Difference
Economic Growth	T stat	-4.500603(I1)
	Prob value	0.0023
FDI	T stat	-4.120306(I1)
	Prob value	0.0051
GDP Deflator	T stat	-4.322019(I1)
	Prob value	0.0033
Exports	T stat	-3.605281(I1)
	Prob value	0.0153

Cointegration pertains to the stable and balanced connection over a long period of time between variables that do not exhibit a stationary behaviour. In economic and financial settings, this means that although individual variables may show trends or random changes, there is a consistent link between them across time. Cointegration analysis seeks to find stable correlations that are crucial for comprehending the underlying economic dynamics and generating significant predictions. A commonly used method for cointegration analysis is the Johansen Cointegration Test, which assesses the stationarity of linear combinations of the variables.

The Vector Error Correction Model (VECM) is a frequently used multivariate time series model for the analysis of cointegrated data. This approach expands on the idea of cointegration by considering both the immediate changes and the long-term balance between the variables. In a Vector Error Correction Model (VECM), the variables are represented in terms of their deviations from the equilibrium level, as well as the rate at which they return to equilibrium after a shock.

$$\Delta \text{Economic Growth}_t = \alpha + \Gamma_1 \Delta \text{Exports}_{t-1} + \Theta_1 \Delta \text{FDI}_{t-1} + \Lambda_1 \Delta \text{GDP Deflator}_{t-1} + \varepsilon_t$$

The coefficients  $\Gamma_1$ ,  $\Theta_1$ , and  $\Lambda_1$  capture the long-term relationships between Economic Growth and each of the independent variables. Specifically,  $\Gamma_1$  signifies the impact of one-period lagged changes in Exports on Economic Growth,  $\Theta_1$  signifies the impact of one-period lagged changes in FDI on Economic Growth, and  $\Lambda_1$  signifies the impact of one-period lagged changes in GDP Deflator on Economic Growth. These coefficients represent the adjustment of Economic Growth towards its long-term equilibrium level in response to changes in Exports, FDI, and GDP Deflator. A positive coefficient indicates that an increase in the respective variable leads to a corresponding increase in Economic Growth in the long run, while a negative coefficient indicates the opposite.

After verifying that the variables are individually non-stationary yet cointegrated, study use the VECM model to represent the long-term equilibrium linkages among Economic Growth, Foreign Direct Investment (FDI), Exports, and GDP Deflator in our research. By including the initial change of the variables into the model, guarantee that they achieve a state of stability, enabling accurate estimate and interpretation of the VECM parameters. The VECM model incorporates both the interdependencies among variables and guarantees that the model's assumptions, such as stationarity, are satisfied for valid analysis and inference.

The Granger causality test is a statistical hypothesis test used to determine whether one time series is useful in forecasting another. It is based on the idea that if a variable X Granger-causes another variable Y, then the past values of X should contain information that helps in forecasting the future values of Y. The test involves regressing Y on its own lagged values and the lagged values of X, and then testing whether the coefficients of the lagged X values are statistically significant. If they are, it suggests that X Granger-causes Y, meaning that the past

values of X provide useful information for predicting the future values of Y. This test is widely used in economics and finance to analyse the causal relationships between time series variables, but it has limitations, such as not accounting for latent confounding effects and not capturing non-linear relationships.

$$GDP_t = \delta_0 + \sum_{i=1}^k \delta_i GDP_{t-1} + \sum_{j=1}^k \gamma_j X_{t-j} + \varepsilon_1$$

$$X_t = \beta_0 + \sum_{i=1}^k \beta_i X_{t-1} + \sum_{j=1}^k \gamma_j GDP_{t-1} + \varepsilon_2 t$$

The research employs a wide range of econometric tools to thoroughly examine the correlation between Economic Growth and the combination of Foreign Direct Investment (FDI), Exports, and GDP Deflator in India, objective is to give strong empirical evidence and significant insights.

### Results and Discussion

The findings of the Augmented Dickey-Fuller (ADF) Unit Root Test analysis for several variables, such as Economic Growth, Foreign Direct Investment (FDI), GDP Deflator, and Exports, are shown in Table 1. The analysis is performed using both the levels and first differences of the variables. The test statistic (T stat) for Economic Growth is -4.500603 at the first difference (I1), with a corresponding probability value (Prob value) of 0.0023. This suggests that the stationarity of Economic Growth is statistically significant when considering the first difference level, with a high degree of confidence. Similarly, the T statistic for FDI is -4.120306 (I1) with a probability value of 0.0051, suggesting strong stationarity at the first difference level. The GDP Deflator has a T statistic of -4.322019 (I1) with a probability value of 0.0033, indicating considerable stationarity at the first difference level as well. These findings suggest that these variables have an

integration order of one (I(1)), suggesting that they are non-stationary in their original form but become stationary after being differenced once. However, in the case of Exports, the T statistic is -3.605281 (I1) and the corresponding probability value is 0.0153, is not statistically significant.

**Table 2 Johansen Cointegration Test Results: Economic Growth and FDI, GDP Deflator & Exports**

Hypothesized no. of CE	Test Statistics	0.05 Critical Value	Probability Value
Trace statistic			
None	159.4207	63.87610	0.00
At most 1	85.17361	42.91525	0.00
At most 2	39.79895	25.87211	0.0005
At most 3	11.41553	12.51798	0.0759

Table 2 displays the results of the Johansen Cointegration Test, specifically examining the correlation between Economic Growth and a composite of Foreign Direct Investment (FDI), Exports, and GDP Deflator. The test evaluates the existence of cointegration, which signifies a persistent connection between the variables over a lengthy period of time.

The table presents the test statistics for various hypothesised numbers of cointegrating equations (CE), together with the critical values and probability values at a significance level of 0.05. The Trace statistic is used to assess the null hypothesis that there is no cointegration.

The hypothesis of no cointegration (None) is rejected since the Trace statistic of 159.4207 greatly exceeds the critical value of 63.87610. The probability value associated with the test is 0.00, which strongly supports the rejection of the null hypothesis and suggests the existence of cointegration.

When examining the hypothesis that there is at most 1 cointegrating equation, the Trace statistic reduces to 85.17361, which is still higher than the critical threshold of 42.91525. The probability value stays unchanged at 0.00, providing more evidence to support the rejection of the null hypothesis.

In the case of the hypothesis that there are at most 2 cointegrating equations, the Trace statistic drops to 39.79895, which is higher than the critical limit of 25.87211. The likelihood value, however low at 0.0005, nonetheless presents compelling evidence against the null hypothesis. However, after examining the hypothesis that there are at most 3 cointegrating equations, the Trace statistic significantly decreases to 11.41553, approaching the critical threshold of 12.51798. The probability value associated with the data rises to 0.0759, indicating that there is less strong evidence against the null hypothesis compared to earlier occurrences.

**Table 3 Johansen Cointegration Test Results: Economic Growth and FDI, GDP Deflator & Exports**

Hypothesized no. of CE	Test Statistics	0.05 Critical Value	Probability Value
Maximum Eigen Statistic			
None	74.24709	32.11832	0.00
At most 1	45.37466	25.82321	0.00
At most 2	28.38342	19.38704	0.0019
At most 3	11.41553	12.51798	0.0759

Table 3 displays the results of the Johansen Cointegration Test, specifically using the Maximum Eigenvalue statistic. This test investigates the correlation between Economic Growth and a mixture of Foreign Direct Investment (FDI), Exports, and GDP Deflator. This test assesses the existence of cointegration, which suggests a durable connection between the variables over a long period of time.

The table presents the test statistics for various hypothesised numbers of cointegrating equations (CE), together with the critical values and probability values at a significance level of 0.05.

The Maximum Eigenvalue statistic for the hypothesis of no cointegration (None) is 74.24709, which is much higher than the critical value of 32.11832. The probability value associated with the test is 0.00, which strongly contradicts the null hypothesis and suggests the existence of cointegration.

Similarly, when examining the hypothesis that there is at most 1 cointegrating equation, the Maximum Eigenvalue statistic lowers to 45.37466, which is still higher than the critical value of 25.82321. The probability value stays at 0.00, which provides strong evidence to reject the null hypothesis.

When considering the hypothesis that there are at most 2 cointegrating equations, the Maximum Eigenvalue statistic reduces to 28.38342, which is still higher than the critical value of 19.38704. The likelihood value, however modest at 0.0019, offers evidence against the null hypothesis.

Nevertheless, when examining the hypothesis of having a maximum of 3 cointegrating equations, the Maximum Eigenvalue statistic stays at 11.41553, which is in close proximity to the critical value of 12.51798. The probability value associated with the data rises to 0.0759, indicating that there is less strong evidence against the null hypothesis compared to earlier occurrences.

In general, the results from the Maximum Eigenvalue statistic support the findings from the Trace statistic, suggesting substantial evidence of cointegration between Economic Growth and the combination of FDI, Exports, and GDP Deflator, especially when fewer cointegrating equations are included. This highlights the existence of a durable correlation between various economic factors.

**VAR**

$$\text{GDP}(-1) - 12.08269 + 1.509606 * \text{EXPORTS}(-1) - 6.609084 * \text{FDI}(-1) + 9.725969 * \text{GDPDeflator}(-1) = 0$$

So now, reverse the signs,

$$\text{GDP}(-1) = 12.08269 - 1.509606 * \text{EXPORTS}(-1) + 6.609084 * \text{FDI}(-1) - 9.725969 * \text{GDPDeflator}(-1)$$

With the sign reversal, both Exports and GDP Deflator exhibit negative coefficients, indicating that increases in their respective lagged values are associated with decreases in GDP at the current time period. Conversely, the coefficient for Foreign Direct Investment (FDI) shows positive sign, indicating that an increase in FDI at the previous time period continues to be associated with an increase in GDP at the current time period.

**Table 4 Results of the Granger Causality Test**

Null Hypothesis	Obs	F statistic	P-values
Exports does cause not Economic Growth	20	3.38076	0.0614
Economic Growth does cause not Exports	20	0.18501	0.8330
FDI does cause Economic Growth	20	0.68454	0.5194
Economic Growth does not cause FDI	20	0.10809	0.8982
GDP Deflator does not cause Economic Growth	20	2.10218	0.1567
Economic Growth does not cause GDP Deflator	20	0.23165	0.7960

The Granger Causality Test findings between Exports and Economic Growth suggest that there is insufficient evidence to reject the null hypothesis, which states that Exports do not affect Economic Growth. The F statistic is 3.38076 and the p-value is 0.0614. This indicates a lack of substantial evidence to substantiate the idea that Exports Granger directly leads to Economic Growth. On the other hand, when investigating the hypothesis that Economic Growth does not lead to Exports, the analysis produces a F statistic of 0.18501 and a significant p-value of 0.8330, which supports the conclusion that Economic Growth does not have a causal relationship with Exports. Similarly, when analysing the link between FDI (Foreign Direct Investment) and Economic Growth, as well as between Economic Growth and FDI, the null hypotheses remain unchanged. The p-values, which are above 0.05, indicate a lack of sufficient evidence to support the existence of causal relationships in either direction. The analysis of the GDP Deflator and its possible causal association with Economic Growth, as well as the reciprocal relationship, likewise produces non-significant p-values, indicating that neither indicator has a causal influence on changes in the other. These results highlight the lack of statistically significant causal relationships between the variables investigated in the analysed time series data.

In this study, the emphasis is placed on understanding and contextualising the findings gained within the framework of economic theory and the consequences for policy. The research begins by combining the primary results, highlighting the substantial evidence of cointegration between Economic Growth and the combination of Foreign Direct Investment (FDI), Exports, and Gross Domestic Product (GDP) Deflator. Although there is a consistent correlation between these variables, the Granger Causality Test shows that there is no statistically significant causal link between them. This disparity emphasises the intricacy of economic

dynamics and emphasises the need for sophisticated analytical methods when studying the interactions between variables in economic systems.

Upon comparing these findings with the current body of research, it becomes evident that whereas several studies may have reported comparable outcomes, others may have established distinct causal connections among economic indices. This variance highlights the diversity of economic situations and emphasises the need of taking into account the unique circumstances of individual countries and historical periods in economic research. Furthermore, the results of the research enhance economic theory by emphasising the relationship between cointegration and causation in comprehending the dynamics of Economic Growth, FDI, Exports, and GDP Deflator.

The results have several ramifications for economic policy. Although cointegration indicates a long-lasting link between economic variables, the lack of strong causal links shows that policymakers should take into account a wider range of elements when developing economic policies. For instance, while encouraging exports and attracting foreign direct investment (FDI) are crucial goals for economic development, policymakers may also need to consider other factors that influence economic growth, such as domestic investment, the development of human capital, and the quality of institutions.

### **Conclusion**

This research offers a thorough examination of the correlation between Economic Growth, Foreign Direct Investment (FDI), Exports, and GDP Deflator in the specific context of India. By using the Johansen Cointegration Test and Granger Causality Test, study obtained significant knowledge on the dynamics of these economic variables.

The findings of the Johansen Cointegration Test suggest a durable relationship between Economic Growth and the combination of Foreign Direct Investment

(FDI), Exports, and GDP Deflator over a period of time. This implies that these variables exhibit a positive correlation over a prolonged period, indicating their interconnectedness within the Indian economy. Nevertheless, the Granger Causality Test findings indicate the absence of statistically significant causal connections among these variables, underscoring the intricate nature of economic processes and emphasising the need of meticulously considering various aspects.

These results have significant ramifications for economic theory and policy. Although cointegration indicates a long-lasting link between the variables, the lack of substantial causation emphasises that economic strategies targeting Economic Growth, FDI, and Exports should include other aspects outside these particular variables. When designing policies for sustainable economic growth, policymakers should take into account the wider economic environment, which includes factors such as domestic investment, the development of human capital, and the quality of institutions. The policy implication is to focus on improving exports by eliminating obstacles in the production process, increasing competitiveness, and promoting free trade might play a crucial role in promoting economic development. In addition, the attraction of more Foreign Direct Investment (FDI) to sectors that have technical disparities may lead to the spread of technology and the transfer of knowledge, which in turn enhances labour productivity and output growth. Crucial methods to do this include maintaining a clear and predictable framework for foreign direct investment (FDI) policy, liberalising FDI limitations in important industries, and enhancing the general business climate. India can increase its position in the global market and accelerate economic development by prioritising export promotion and strategically attracting foreign direct investment (FDI).

Ultimately, this research enhances our comprehension of the intricacies surrounding Economic Growth, Foreign Direct Investment (FDI), Exports, and GDP Deflator in India. By emphasising the intricate interaction among various

factors, it emphasises the need of embracing a comprehensive approach to economic research and policy development. These results have significant implications for policymakers, scholars, and stakeholders, highlighting the need of implementing comprehensive measures to foster sustainable economic growth in India and other regions.

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