

FDI and FII: Drivers of National Sustainability Growth in India

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Abstract

Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII) have become crucial components in the economic development of emerging economies, particularly in India. The primary objective of this study is to examine the relationship between FDI, FII, and GDP growth in India over a significant period using time series data. Data will be gathered from the World Development Indicators (WDI), with FDI, FII, and GDP being the central variables for analysis. Preliminary findings suggest that both FDI and FII play vital roles in boosting national growth, but their effects may differ in terms of duration and intensity.

Keywords: FDI, FII, National Growth, GDP, Time Series Analysis

1. Introduction

FDI and FII have played roles in accelerating India's advancement over the past few years (E. Lipsey et al. 2016). FDI involves investments, from companies or individuals in India whereas foreign institutional investment entails investments from entities, such as pension funds, mutual funds, and hedge funds. India has become a spot, for investments with a substantial influx of capital, from investors worldwide (Sahoo 2006). India's appeal has been bolstered by the liberalization that took place in 1991 along, with the reforms that followed making it a sought-after investment location (Desai and Roy 2016). Industries that have attracted direct

investment include services such, as telecommunications and construction as well as sectors, like computer software and hardware and automobiles(Liu and Wang 2003).

2. Review of Literature

Raut Rameshwar babasaheb, (2019)Haruki Murakami always comes up with excellent ideas of surrealistic stories. The Postmodern condition is evident in most of Murakami's novels. A sense of alienation of character and world is evident by a language medium invented to form a kind of rhythmic syntax structure which complements the illustration of the main characters' subconscious fears and paranoia in the course of his exploration of a seemingly chaotic world. His portrayal of characters is unique and significant that expresses the dichotomy of characters who fight between reality and fantasy. Nevertheless, their ambition to be free from the structures that bound them do not always come true. Some of them left their symbolic mechanism to enter another one. In the end, the characters cannot be the Other; as long as they are still in the clutches of a particular token device they would only be able to be the other. His Characters explore themselves in search of meaning of their existence. His characters often utter speeches which directly contradict their subsequent actions.They are male, middle-aged, leading aimless existences. They enjoy preparing and eating such western foods as spaghetti; they love American pop culture, particularly music of the 1960s and 1970s; and they are hedonistic and idle. They either engage in casual love affairs or fantasize about having them. His novels like After dark(2004 deduced that the endowment of foreign institution investment, primarily among firms included in the sensitivity index (Sensex) of the National Stock Exchange. Further this study explored the interplay between foreign institutional investment and firm-specific characteristics in terms of ownership structure, financial performance, and stock performance.

Tarai et al. (2021)GOI-FDI Newsletter (SIA Newsletter explored that FDI is treated as a important developmental tool in Indian context, which support in attaining self-reliance in various sectors and in the all-round upliftment of the economy. In post liberalization the economy to the outside world in 1991, there was a huge in-flow of foreign direct investment.

Sahu et al. (2014) got that the arena of foreign investments and their impact on host countries has received significant attention from researchers due to its growing important in economic development. Foreign investment enhances the financial stability of firms and brings in expertise that can contribute to business efficiency.

Pujari and Mamilla (2022)foreign institutional investments and Index of Industrial Production (IIP revealed that FII and FDI play vital role in the economic

development of a country. These capital flows are domestic saving and the targeted capital formation.

Lakshmy (2014) explore that one of the significant basis triggering the economic development of India has been the emanate competition and accelerated the innovations. As an effect an in-pour of foreign capital has become a standard of economic development. FIIs have become a media of international integration and growth incentive. Foreign capital offers domestic markets with advanced technology, improved and innovation products and services.

Raja Mannar (2018) explain that financial market of India has experienced remarkable fluctuation since the year 2022, the market in India has heightened from a unstable situation to a growth phenomenon, forming a SENSEX point of 5500 in the month of December 2003 to 13,787 in the month of December 2006 in the year 2007 and further in 2013. Due to the stock market has also seen a sharp decline to even less than 8,000 points in 2008.

Karthikeyan and Mohanasundaram (2012) examines the effect of foreign institutional investor (FII) flows on the Indian equity market, especially the Bombay Stock Exchange (BSE), National Stock Exchange (NSE), and S&P CNX 500, OVER A 10-YEAR PERIOD FROM 2001 TO 2010. The study indicates that the performance of the Indian equity market is influenced by other factors beyond FII activity, such as domestic investors, inflation, interest rates, and government policies. India has experienced a significant rise in capital inflows, especially Foreign Institutional investment in equity and derivative since the 1990s. However, FII flows are considered “hot money” due to their volatility, influenced by domestic and global macroeconomics factors. This paper aims to predict daily aggregate FII flow the Indian Capital market.

Tarai and Patra (2020) checked that the intricate relationship among foreign FDI inflows and key macroeconomics indicators like GDP growth and employment generation. Foreign direct investment serves as a formidable driver of economic expansion by channeling capital, forecasting technology transfers, and stimulating competition and innovation. It also impact employment dynamic by creating job opportunities, enhancing skill and generating spill over effect across sectors, thereby bolstering livelihoods and promoting socio-economic inclusivity.

2.1. Objective

The prime objective of the study is to examine the long-term and short-term interplay among FDI, FII, and GDP.

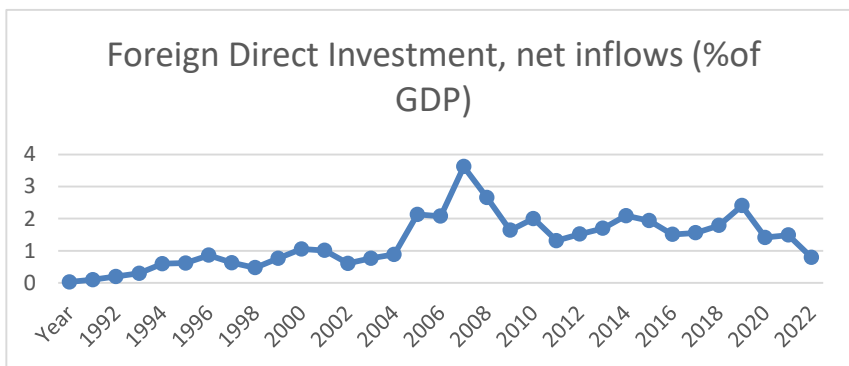
3. Methodology

The current research utilizes a time series econometric technique to evaluate the short-term and long-term links between FDI, FII, and GDP. The Data will be sourced from WDI database over a prolonged time, spanning FDI, FII, and GDP. The analysis will begin with unit root tests (such as the Augmented Dickey-Fuller test) to ensure the variables' stationarity. Next, Johansen co-integration analysis will be performed to assess whether there is a long-term equilibrium connection between FDI, FII, and GDP. For short-term dynamics, the Vector Error Correction Model (VECM) will be used. Granger causality tests will also be carried out to determine the directional relationship between FDI, FII, and GDP. The statistical study will be conducted using EViews software, which will provide insights into the short- and long-term contributions of FDI and FII to India's economic growth.

3.1. Foreign Direct Investment

FDI can be defined as the net inflows of capital intended to acquire a long-term management stake (10 percent or more of voting shares) in a firm that run in a different economy than the investors . It is the total equity capital, earnings reinvested, other long-term capital, and short-term capital, as mentioned by the balance of payments. This data, which GDP splits, explain net inflows (new investment inflows less disinvestment) from foreign investors into the reporting economy.

Figure 1: Foreign Direct Investment (1991-2023)

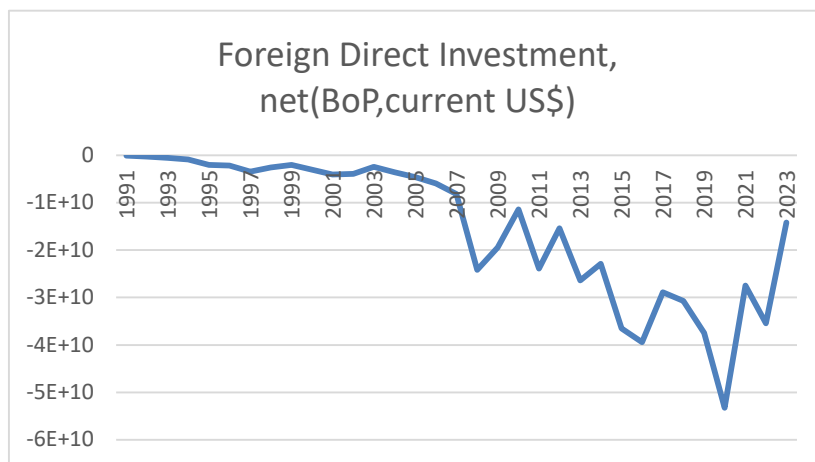


Source: World development Index (WDI)

The net inflows of capital intended to obtain a long-term management stake (10 percent or more of voting shares) in a business that operates in a different foreign direct investment refers to what the investors are referred to as in the economy. It consists of all equity capital moreover short-term, another long-term, and reinvested earnings capital. The sum net FDI is illustrated in the above series. Financial account balances in BPM6 are set on by subtracting the change in liabilities from the change

in assets. Liabilities are net FDI inflows, and assets are net FDI outflows. Current U.S. dollars are utilized for the data.

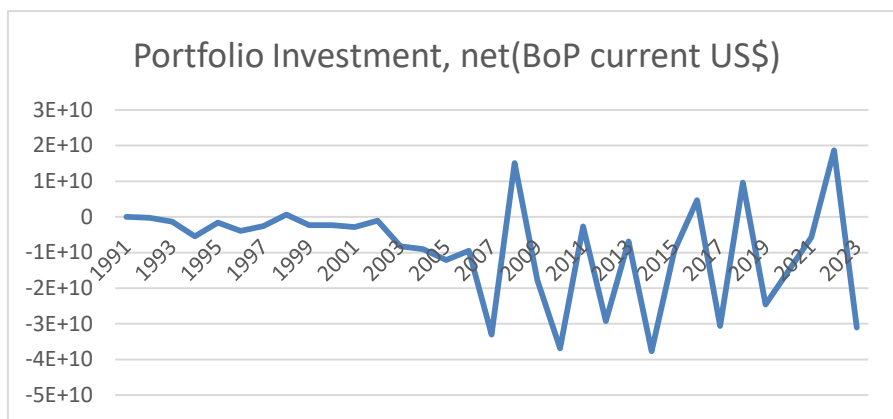
Figure 2: Foreign Direct Investment (1991-2023)



Source: World Development Index (WDI)

Portfolio Investment: Investments in debt and equity instruments are included in a portfolio. Current U.S. dollars are used for data.

Figure 3: Portfolio Investment (1991-2023)



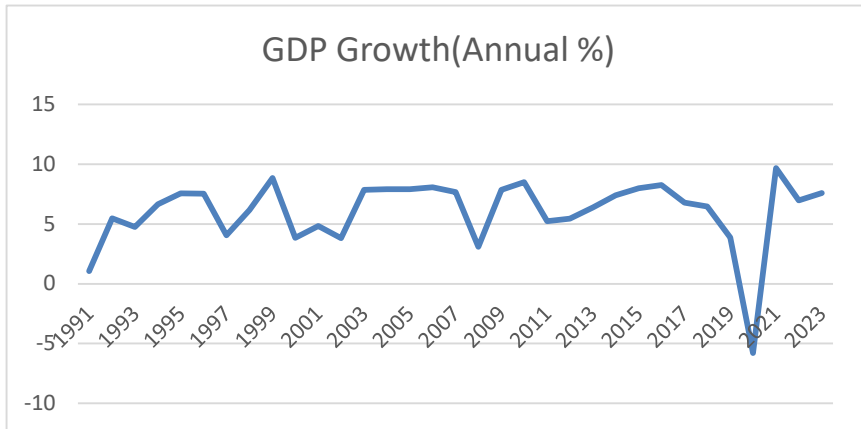
Source: World Development Index (WDI)

3.2. Gross Domestic Investment

The yearly percentage rate of GDP growth at market prices expressed in constant local currency. The aggregates are provided in US dollars and are based on constant prices from 2015. GDP is the total gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the

value of the products. It's estimated without taking into account the wear and tear on natural resources or the depreciation created by human assets.

Figure 4: Annual % growth rate of GDP (1991-2023)



Source: World Development Index (WDI)

4. Results

This section summarizes the findings of a time series econometric study undertaken to examine the link between Foreign Direct Investment (FDI), Foreign Institutional Investment (FII), and GDP of India. Two major statistical studies were carried out: co-integration analysis to investigate long-term relationships and a Vector Error Correction Model (VECM) for short-term dynamics. Granger causality tests were also utilised to analyse the directional relationships between FDI, FII, and GDP.

Table 1: Johansen Co-integration Test Results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5% Critical Value	p-value
None	0.65	45.23	29.68	0.0003
At most 1	0.37	18.78	15.41	0.027
At most 2	0.10	3.56	3.76	0.081

Source: Computed by Authors using Eview Software

The Johansen co-integration test findings, presented in Table 1, reveal the presence of at least one co-integrating vector between FDI, FII, and GDP, implying a long-term equilibrium link between these variables. The trace statistic (45.23) surpasses the crucial value (29.68) at the 5% level, indicating a substantial co-integrating connection. This suggests that, while FDI and FII may fluctuate in the near term, their fluctuations are consistent with long-term growth tendencies in GDP.

Next, in presence of one co-integrating vector lends credence to the concept that FDI and FII together drive GDP development in the long run, and that these factors run in a balanced fashion over course of time. The 2nd row refers that there are no significant vectors beyond the initial co-integrating connection, indicates that the variables have a single long-term equilibrium correlation.

Table 2: VECM Short-Term Dynamics and Error Correction Term

Variables	Coefficient (ECT)	t-Statistic	p-value	Short-term Impact (β)	t-Statistic	p-value
Δ FDI	-0.43	-4.22	0.001	0.12	2.87	0.034
Δ FII	-0.37	-3.76	0.008	0.18	3.14	0.019
Δ GDP	-0.51	-4.98	0.000	0.09	2.56	0.047

Source: Computed by Authors using Eview Software

Table 2 indicates the findings of the VECM, which incorporates short-term dynamics as well as the rate of correction to long-term equilibrium. The error correction term (ECT) coefficients for FDI, FII, and GDP are all negative and statistically significant, implying that when there are deviations from long-term equilibrium, adjustments are made to restore balance.

For FDI, the ECT coefficient of -0.43 implies that nearly 43% of the previous period's disequilibrium is rectified in the present period, implying that FDI returns to its long-term connection with GDP. The short-term coefficient (β) of 0.12 shows a moderate but favourable immediate impact of FDI on GDP. The p-value (0.034) supports the statistical significance of this short-term association.

Similarly, FII's ECT coefficient of -0.37 indicates that around 37% of disequilibrium is rectified each period, which is somewhat slower than FDI. FII has a higher short-term impact ($\beta = 0.18$) than FDI, indicating that it contributes more to GDP growth in the near term, despite its volatility. The p-value (0.019) indicates that this link is statistically significant.

For GDP, the error correction coefficient (-0.51) indicates a rapid adjustment toward the long-term equilibrium, with about 51% of any disequilibrium corrected each period. However, the short-term impact of FDI and FII on GDP is smaller ($\beta = 0.09$), though still statistically significant with a p-value of 0.047.

Granger Causality Test Results (GCTR)

The GCTR found that FDI causes GDP with a statistically significant p-value, but FII drives GDP to a lower extent. However, GDP did not Granger-cause FDI or FII,

indicating that the direction of effect is predominantly from foreign investments to economic growth, rather than vice versa.

4.1. Analysis

The co-integration and VECM results demonstrate the complimentary roles of FDI and FII in fueling India's GDP development. The co-integration study reveals a long-term equilibrium relationship between FDI, FII, and GDP, implying that these variables are interdependent and move together in the long run. This study lends weight to the notion that both types of foreign investment are necessary to sustain national prosperity.

In the near run, the VECM results reveal that, while both FDI and FII contribute favorable to GDP growth, their effects vary in intensity. FII has a high immediate but fluctuating effect on GDP, owing to its impact in improving the market liquidity and investors' confidence. FDI, on the other aspect, has a high constant and consistent effect since it invests in asset forming, infrastructure development, and industrial expansion.

The outcomes are congruous with prior studies, but they add fresh insights into the unique contributions of FDI and FII when viewed combined. By capturing both long-term and short-term dynamics, this study provides a thorough picture depict of how foreign investments influence Indian economic growth.

The current study emphasis the need of promoting both FDI and FII to support national prosperity. FDI provides coherent, long-term contributions, whereas FII delivers rapid economic stimulus via capital inflows and liquidity. To achieve long-term economic growth, policymakers should pursue balanced plans that attract both forms of investment.

5. Conclusion

The current research focuses on the significance of both FDI and FII in accelerating India's economic growth. In long run co integration of FDI, FII and GDP highlights their ongoing contribution to economic growth. While FDI has a consistent, long-term impact on industrial development and asset creation, FII increases short-term liquidity and investor confidence. Policymakers should implement measures that balance FDI and FII inflows in order to maximize growth, ensure economic stability, and support long-term development. The outcomes offers useful insights into advancing policies for managing foreign investment in India.

References

- Desai, M., & Roy, I. (2016). Development Discourse and Popular Articulations in Urban Gujarat. *Critical Asian Studies*, 48(1), 1–26. <https://doi.org/10.1080/14672715.2015.1120402>
- E. Lipsey, R., C. Feenstra, R., H Hahn, C., & N. Hatsopoulos, G. (2016). *The Role of Foreign Direct Investment in International Capital Flows* (Issue January).
- Karthikeyan, P., & Mohanasundaram, T. (2012). FII Flows and Indian Equity Market Performance. *Asian Journal of Managerial Science*, 1(1), 12–16.
- Lakshmy, S. (2014). A Study of the Impact of FII on the Sectoral Market Indices. *Journal of Commerce & Accounting Research*.
- Liu, X., & Wang, C. (2003). Does foreign direct investment facilitate technological progress?: Evidence from Chinese industries. *Research Policy*, 32(6), 945–953. [https://doi.org/10.1016/S0048-7333\(02\)00094-X](https://doi.org/10.1016/S0048-7333(02)00094-X)
- Pujari, S. R., & Mamilla, R. (2022). Estimating the Long-run Equilibrium among Foreign Direct Investment, Foreign Portfolio Investment and Economic Growth: The Case of Indian Economy. *PRAGATI: Journal of Indian Economy*, 9(1), 43–63. <https://doi.org/10.17492/jpi.pragati.v9i1.912203>
- Raja Mannar, B. (2018). Correlation of Fdi With Gdp, Sensex and Nifty . *International Journal of Recent Advances in Multidisciplinary Research*, 5(5), 3841–3848.
- Raut Rameshwar babasaheb. (2019). THINK INDIA (Quarterly Journal). *Think India (Quarterly Journal)*, 22(3), 1–7.
- Sahoo, P. (2006). Foreign Direct Investment in South Asia : Policy, Trends, Impact and Determinants. *ADB Discussion Paper*, 56, 1–76.
- Sahu, K. K., Tarai, S. K., Bhukta, A., & Patra, S. (2014). Foreign Direct Investment in Health Care Sector and Economic Growth in India. *Vidyabharati International Interdisciplinary Research Journal*, 12(2), 361–371.
- Tarai, S. K., & Patra, S. (2020). An Analytical Study of Total FDI Inflow, Outflow and Net FDI of Five South Asian Countries over the Period 1992–2019. *EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal*, 7(4), 417–435. <https://doi.org/10.36713/epra2013>
- Tarai, S. K., Sahu, K. K., & Patra, S. (2021). A Study on Destinations of FDI and Pattern of Utilisation in India. *Vidyabharati International Interdisciplinary Research Journal*, 13(2), 32–40.