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Does GDP Granger Cause FDI in India?

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Abstract *Since 1947, India has considered a vigilant approach to economic growth; however, subsequent to the execution of the LPG policy (1991), India has liberalised its foreign strategy and taken progressive measures to improve FDI (Rathore & Rajawat, 2019). The present study attempts to trace the causal relationship between GDP and FDI (net inflows and net outflows) in India, by using time series data from 1994 to 2017, and using unit root tests, the Johansen Co-integration test, and the Granger causality test among the variables. The results of the Johansen co-integration test indicate a long-term relationship among the variables. Moreover, the results of the Granger causality test confirm the unidirectional relationship running from FDI outflow to FDI inflow. The results also indicate that higher GDP growth causes FDI inflow into India. This study further suggests that for better GDP growth, India also needs to focus on FDI outflow.*

Keywords *Economic Growth, FDI, GDP, Unit Root, Granger Causality*

INTRODUCTION

The chronological surroundings of foreign direct investment (hereinafter referred to as 'FDI') could be seen in the trade of the East India Company of Britain in India. As a result, Japanese business players entered the Indian domestic market and improved their operations; however, the United Kingdom was subsequently regarded as the most important financier in India. Further, after 1947, India focused on industrial growth and related issues, like overseas capital, plans of MNCs, framing of a new FDI policy, acquiring advanced technology, mobilising foreign exchange resources, and so on. In 1965, industrial policy approved MNCs (FDI) through scientific cooperation in India (Malhotra, 2014) and regulated external transactions with the Foreign Exchange Regulation Act (FERA), 1947. Subsequently, it was known as FERA, 1973, which imposed restrictions on current account transactions on all import and export dealings, together with those between citizens and non-citizens, unless specially allowed. The law was very rigid on regulations, which led to many issues relating to foreign exchange deprivation (Baijal & Kumar, n.d.). Further, with the great contribution of the International Monetary Fund (hereinafter referred to as the 'IMF') and the World Bank, India introduced macro-economic stabilisation and structural adjustment programmes, welcomed FDI inflow, and considered a new moderate overseas policy to re-establish the assurance of foreign investors for better economic growth (Malhotra, 2014). After 1991, the Indian economy made quick efforts in the direction of mixing with other progressive nations to set up a common favourable platform with them. Principal modifications under the financial liberalisation programme were sustained till 1995, because India attempted to attract more foreign investment. Furthermore, factors such as economic growth, rapid population growth with an ever-increasing young population, consumer satisfaction, low interest rates, economic stability, efficient production at low cost, and low wages gradually transformed India's exchange rate mechanism (Singhania & Gupta, 2011). From 1992 to 1997, the yearly overseas direct investment in India increased and two-way trade between India and the US grew significantly, with a large chunk of FDI (Fallis, 2013). To attract more FDI, India enacted the Foreign Exchange Management Act, 1999 (FEMA), in the winter session of parliament, which came into effect on June 1, 2000. The key objective behind FEMA was to increase the level of foreign exchange reserves and economic growth to meet future challenges. This is why the FEMA Act, 1999, is found to be rigid, especially regarding disclosure, rather than regulation of foreign exchange. The FEMA came up with a new jurisprudence with innovative ideas, including offences under FEMA being compoundable. Staying longer than 182 days in India is the method to choose an inhabited position under the Act, 1999, with a liberalised approach towards Basic Travel Quota (hereinafter referred to as 'BTQ'), industry tour, donation, and so on, in FEMA. Finally, the nature of law is also transformed from a draconian police law to a civil law. These efforts were made solely to ensure and maintain foreign exchange levels, as well as to attract more FDI into the Indian economy (Adukia, 2011). However, in reality, India failed to attract more FDI flow from 1991 till the end of December 2007, i.e., only USD50 billion, which could not be considered as a productive parameter for global FDI in the world (Iqbal & Ghauri, 2009).

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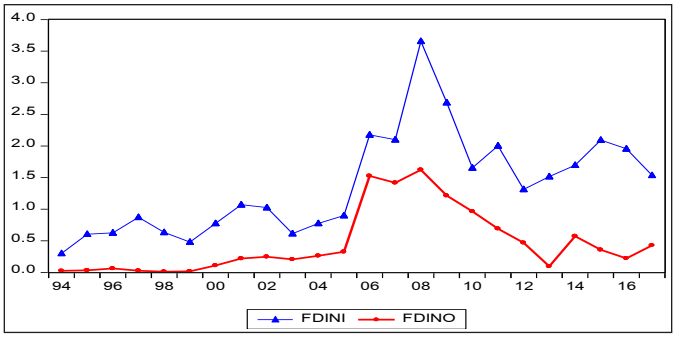
CONSTITUTIONAL DIMENSION OF FDI

The foreign investment policy document is responsible for facilitating capital inflows and technical flows, and regulating industrial progress in liberalised India. For this, the constitutional validity of foreign direct investment policies should be verified by referring to certain key provisions, including the preamble of the Indian constitution, which emphasises social, economic, and political justice for the citizens of India. It is also noted that the protection provided by Article 14 is available to all people and is not limited to citizens of this nation. Though Article 14 prohibits class legislation, it does not prohibit fair categorisation for legal purposes. In the Apex Court's ruling of the AP Dairy Development Corporation Federation Case, it was held that class legislation is permissible in law if it is founded on intelligible differentia, and that differentia has a rational relation to the object sought to be achieved by the statute in question. In addition, it is further found that all foreign investments in a nation are conducted on the assumption that the business climate is stable, and if the Press Note changes the whole premise on which a foreign investor has invested in India by unilaterally changing how an existing foreign investor may quit any Indian firm, and allowing the government unrestricted authority to accept or reject a specific transaction, it is entirely arbitrary under Article 14 of the Constitution. Moreover, Article 19 (1) (g) also guarantees the right of all people to engage in any occupation, trade, or business of their choice, and if any policy creates a hostile business climate and prevents investors from investing in India, preventing Indian entrepreneurs from getting financing, particularly in the middle of the COVID-19 pandemic when multiple enterprises are having liquidity crises and investor opinion is generally unfavourable, it is considered violate in nature. It also demonstrated that a blanket mandate in terms of authorisation from the government, without any guidelines or benchmarks, cannot be considered reasonable under Article 19(6) of the Constitution (Dharav Shah, 2020). The Supreme Court also held in the Ehsan Khalid case that it is possible to disregard economic policy, since it is evidently arbitrary and the Court does not intervene in policy concerns, unless the policy is unlawful, contradictory to legislative restrictions, arbitrary, unreasonable, or an abuse of authority. It also provides grounds for judicial review of such policy decisions under the Indian Constitution. In addition, FDI is also regulated by various legislations in India, including the Companies Act (2013); the Securities and Exchange Board of India Act, 1992 (SEBI); SEBI Regulation, Foreign Trade (Development and Regulation) Act, 1992; FEMA (1999); Civil Procedure Code, 1908; Indian Contract Act, 1872; Arbitration and Conciliation Act, 1996; Competition Act, 2002; Income Tax Act, 1961; and Foreign Investment Policy (Current Policy 2020-2021). For effective regulation and promotion of FDI, GOI considered two routes, where, in the first route, no government permission is required (i.e., the automatic route), and in the second one, government approval is necessary (Anuj, 2022).

To support the abovementioned facts, a graph of the data series from 1994 to 2017 on FDI net inflow and net outflow is given, by which the actual contribution of FDI flow may be analysed in India.



Graph 1

Graph 1 reveals that after 1991, India's FDI net inflow (hereinafter 'FDINI') started rising through liberalisation, privatisation, and globalisation (LPG policy); however, the growth rate was not very appropriate. FDINI and FDINO were 0.301 and 0.026 per cent of GDP, respectively, in 1994. It is also revealed that after 2002, the FDINI and FDINO again started growing and achieved 1.025 per cent and 0.248 per cent of GDP, respectively, whereas GDP growth was recorded at 3.804 per cent. In 2007-2008, they (FDINI and FDINO) were at their high levels, i.e., 2.100 and 1.418 per cent, respectively, and GDP growth was recorded at 9.801 per cent. Furthermore, after 2008, the FDINI was in a critical phase until 2012, and the decline in FDINI and FDINO could be clearly seen. As a result, the FDINI and FDINO were 2.093 and 0.357 per cent, respectively, in 2015, while GDP increased by 8.154 per cent. Subsequently, Modi's government failed to maintain the FDINI, which resulted in another downfall in its growth rate. However, initiatives were taken by Modi's government, i.e., the 'Make in India' campaign for improvement in business and better investment through FDI in the Indian economy. Graph 1 also shows that the growth rates of FDINI and FDINO are not proportionate, and more FDINI could be seen towards the Indian economy rather than FDINO, which is a sign of progress and a reason for framing better policies towards balancing FDI net inflow and outflow in India. India is constantly making efforts to improve the level of FDI flow (inflow and outflow) in GDP growth. By keeping these facts in mind, the author has decided to frame the below-mentioned objective for this study.

RATIONALE OF THE STUDY

- The present study is an attempt to investigate the fundamental relationship involving GDP and FDI (net inflows and outflows) in India.
- To analyse the contribution of FDI inflow and outflow to economic growth and development by referring to recent policies.

METHODOLOGY

This research study has considered the time series data of three variables, including GDP growth, FDI net inflow, and FDI net outflow. Further, the author analysed the data by applying the unit root test, the Johansen co-integration test, and the Granger causality test among the variables.

DATA SOURCE

The current study is primarily based on the secondary statistics compiled from different sources, like the World Bank, the Reserve Bank of India (RBI), and online sources, for analysing the relationship among the variables with the help of the abovementioned methods.

RESULT OF THE STUDY

Result of Unit Root Test

Table 1

Variable	Level (Prob.)	First Difference (Prob.)
LFDIN	0.1383	0.0005***
LFDIO	0.408	0.0013***
LGDPG	0.004	0.0000***

Note: ***Indicates stationarity at 1 per cent level of significance.

The results of the unit root test are reported in Table 1. The Augmented Dickey-Fuller test is used to ensure the stationarity of information. All the information is found to be non-stationary at level and become stationary at the first difference.

Result of Johansen Co-Integration Test

The Johansen test was founded by Soren Johansen (an econometrician) to test the co-integration of various time series statistics. This test allows more than one co-integrating relationship between variables. The author applied this test, and the findings of the Johansen co-integration test are shown in Table 2. The results show that there are a maximum of two co-integration equations among the variables.

Table 2

Hypothesised No. of CE (s)	.05 Critical Value	Prob.**
None*	42.915	0.0058
At most 1*	25.872	0.0156
At most 2	12.517	0.1162

Result of Granger Causality Test

Table 3

Null Hypothesis	F-Statistics	Prob.
D(LFDIO) does not Granger-Cause D(LFDIN)	1393.34	0.0206
D(LFDIN) does not Granger-Cause D(LFDIO)	8.8129	0.2539
D(LGDPG) does not Granger-Cause DLLFDIN)	7.4029	0.0059
D(LFDIN) does not Granger-Cause D(LGDPG)	0.2632	0.9077
D(LGDPG) does not Granger-Cause D(LFDIO)	4.1525	0.3614
D(LFDIO) does not Granger-Cause D(LGDPG)	0.3179	0.8806

The Granger causality test was introduced by Sir Clive William John Granger in 1969 as a statistical theory test for checking whether one time series is helpful in predicting another. He is a British econometrician known for his assistance with non-linear time series. The author attempted to apply this test and revealed the results of the Granger causality test, which are offered in Table 3. The findings of this test confirm the unidirectional relationship running from FDI outflow to FDI inflow. The results also indicate that higher GDP growth causes FDI inflow into India, which is further supported by the facts mentioned below.

FDI Inflow in India

The financial, manufacturing, and communication sectors are growing very fast in India, followed by Turkey, China, Hong Kong, and other ASEAN countries. The retail sector also jumped during 2017-18 from USD23 to 33 billion. Further, Flipkart's USD2 billion deal in 2018 played a significant role in the Indian economy. Moreover, during 2018-2019, the highest FDI equity inflows could be observed from Singapore, followed by Mauritius, the Netherlands, the USA, and Japan, i.e., USD16.23, USD8.08, USD3.87, USD3.14, and USD2.97 billion, respectively. Further, India is considered the top recipient of Greenfield FDI inflow from the Commonwealth in 2018. To increase FDI flow,

some significant announcements have already been made: VMware (a software company in the US) savings plan of USD2 billion in India; Bharti Airtel got authorisation from the government for a deal of 20 per cent venture in its DTH support in August 2018; Idea's 100 per cent FDI was recognised, followed by a government arrangement with Vodafone to become the principal telecom worker in India in August 2018; a 77 per cent stake of Walmart in Flipkart (2018); an Ikea Rs. 4,000 crore project for Maharashtra; and CG Group is planning to invest Rs. 1,000 crores in India by 2020. The World Bank Group's strong pillar, i.e., the International Finance Corporation (IFC), is also projecting to invest approximately USD6 billion by 2020. In addition, India has taken some major initiatives to support and promote the abovementioned projects. India released a draught National e-Commerce Policy to encourage foreign investment (February 2019); India certified 100 per cent FDI, in particular, in brand retail in the regular route (January 2018); steps towards 100 per cent FDI in the assurance industry to make it a better sector for investment plans; FDI rules related to e-commerce revised (December 2018); National Digital Communications Policy (2018) began; and investment in Air India up to 49 per cent (which can be increased). Further, over the next five years, FDI inflows into the country are likely to increase to USD75 billion, and India's goal is to reach USD100 billion in FDI inflows in the subsequent two years, while personal savings is expected to increase by 9 per cent in 2018-19, as assured by the World Bank. These facts show that the Indian government is proactively making efforts to attract FDI flow towards India and, as a result, during 2017-2019, Mauritius ranked first in FDI equity inflow investment, followed by Singapore, i.e., 32 and 20 per cent (of total FDI inflow) respectively. Japan invested 7% of FDI inflows, while the United Kingdom and the United States of America invested only 6% each.

To attract more FDI flow towards any country, the importance of these sectors cannot be ignored, especially the service sector, with a significant contribution to international business (*Japan's Foreign Direct Investment in Services in ASEAN: The Implications of Services and Investment Agreements*, 2011). Furthermore, the computer software and hardware sectors, as well as the telecommunications sectors, attracted the highest FDI equity inflows into India, amounting to approximately 18, 9, and 8 per cent, respectively. FDI brings new technologies, new managerial practices, increased marketing capabilities, and so on, for better production of goods and services (Adhikary & Mengistu, 2018). Furthermore, the automobile sector received only 5% of FDI equity inflows, followed by construction and power, which received 4% and 3%, respectively. The effective contributions of these sectors will lead to better economic growth and development in the future. To analyse the contribution of FDI inflow to the Indian economy, the RBI also revealed the facts sheet, which shows that in 2000-2001, the FDI flows into India was only USD4,029 million, whereas in 2019-2020 (up to June) it was recorded at USD21,310 million. The grand total amount of FDI inflows received by India from various countries is approximately USD436,471.45 or 2,492,396.830.01 (in Rs. crore), which is a sign of growth and shows the significant contribution of FDI in the Indian economy (Quarterly Facts Sheet, 2020).

FDI Outflow from India

On the other hand, FDI outflow is also important for foreign exchange reserves and economic development. It has been discovered that emerging economies, specifically Russia and China, are at the top of the FDI outward flow, while India and Brazil are at the bottom. Further, Indian FDI outflow during 1990-2000 was 0.1 (USD Billions), which was further followed by 12.8 and 31.7 (USD Billions) in 2006-07 and 2007-08, respectively. India's FDI outward flow was just USD0.12 billion in 1990, which rose to USD12.9 billion during 2006-07. India's outward FDI was 62 per cent towards Asia and 37 per cent towards Africa, which was broken down to 21 per cent and 20 per cent in Africa and Asia, respectively. Further, India's outward FDI had broken down to 18 per cent in the Commonwealth of Independent States and 16, 14, and 11 per cent in North America, Europe, and Latin America and the Caribbean, respectively. India was fighting with FDI outward and tried to regulate FDI activities through economic policy, mainly between 1991 and 1999 (unless specifically permitted, FDI was prohibited), and after 1999 ('automatic approval'), with effective law, i.e., FEMA. India has to immediately elucidate that no authorisation is necessary for FDI for operations that are under the automatic approval route, even if an Indian holding firm makes an investment (Iqbal & Ghauri, 2009), which is favourable, especially to FDI inflow. On the other hand, the FDI outflow growth rate is not appreciated at all. RBI reveals certain facts which show the real picture of FDI outflow, like in 2003, 2004, and 2005 financial years, FDI investments started slowly increasing, i.e., USD1,819, USD334, and USD2,274 million, respectively, due to relaxations in overseas venture policy. Furthermore, it was at its peak in 2007 and 2008, totalling USD18,835 and USD19,365 million, respectively. On the other hand, after 2008, the downfall in FDI outflow could be seen clearly, i.e., USD15,144 in 2010, USD17,195 in 2011, USD11,097 in 2012, and USD7,000 in 2013 financial years. Moreover, in the 2014 financial year, India's FDI investment can be divided into three parts: equity, loans, and guarantees, covering approximately 2.9, 11.0, and 65.1 per cent shares in total, which is nearly an estimated USD29,294 million. India's most favourable countries for FDI investment are the Netherlands, Singapore, British Virgin Islands, and

Mauritius, where India invested approximately 28.8, 15.2, 12.6 and 10.3 per cent in total (Sabnavis & Jaripatke, 2014), respectively. In 2014, India launched 'Make in India' by Prime Minister Mr. Narendra Modi with the intention of relaxing the FDI norms for better business and economic growth (Jagdish & Devnarayan, 2002). As a result, from 2017 to 2019, India's GDP reached Rs. 170.95 and 190.54 trillion, respectively. Furthermore, India's total exports increased by 8.73 per cent to USD483.92 billion in 2018-19, while total imports increased by 9.42 per cent to USD577.31 billion. Further, India's exports were expected to reach USD540 billion very soon in the future. The Commerce and Industry Minister, Mr. Suresh Prabhu, also assured the government's intention to speed up exports to generate more job opportunities for future generations, and to raise foreign exchange reserves, which were recorded at USD410.64 billion (up to March 15, 2019). Some major steps have also been taken by the Indian government, including the proposal of a Free Trade Agreement (FTA) with Africa in March 2019 (Sianturi, 2019). Furthermore, according to official data, India received USD60.3 billion in total foreign direct investment from April to December 2021, a 10.6 per cent decrease from USD67.5 billion received during the same period in 2020-21. Whereas, the equity inflows through FDI were USD43.1 billion from April to December 2021-22, which is 16% less than the USD51.4 billion received in FY 2020-21, even as the government continues to implement the allowing and shareholder guidelines and remove policy bottlenecks that have been impeding investment inflows into the country. Further, the industry, software services, telecoms, retail and wholesale commerce, education, and research and development drew the majority of investment, with software devices leading the way with USD10.25 billion in FDI equity inflows (The Economic Times, 2022).

CONCLUSION AND SUGGESTIONS

On the basis of the above-mentioned facts, an interpretation may be drawn that the FDI inflow is better than the FDI outflow in India, which highly supports economic growth. The result of the study reveals that FDIO does cause FDIN, and GDPG causes FDIN, which means that India needs to focus more on FDIO to attract more FDIN. In addition, better GDP growth would attract more FDIN. It is revealed that India needs to focus more on FDI outflow to attract more FDI inflow for economic growth and development.

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