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# AN ANALYTICAL STUDY ON RELATIONSHIP BETWEEN GOODS AND SERVICE TAX AND FOREIGN DIRECT INVESTMENT IN INDIA

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**Busera Nadaf,**

*Research Scholar, Kousali Institute of Management Studies,  
Karnatak University, Dharwad*

*ABSTRACT: Since the implantation of the LPG policy during 1991 in India many companies have seen India as the hub of investment. To accelerate these foreign investments into the economy the government of India has taken another major step to attract the foreign investments on 1<sup>st</sup> July 2017 called the Goods and Service Tax implementation. GST has increased the ease of doing business and eliminates the cascading effect of tax on goods and services. These are a few of the major reasons for attracting FDI in India. The paper throws light on importance of GST and its relationship with FDI in India.*

*Keywords: Goods and Services Tax (GST), Foreign Direct Investment (FDI), investment sectors, economy.*

## **1. LITERATURE REVIEW:**

Implementation of GST the new indirect tax law will lead increased flow of Foreign Direct investment (Abdul Matheen, K.Sai Santosh Kumar, Qamer Unnisa Hina, 2018). According to the data released by the Department of Industrial Policy and Promotion (DIPP), Indian automobile industry has attracted about US\$ 17.40 billion foreign direct investment from April 2000 to July 2017 (Dr. Davendrakumar Sharma, 2018), The implementation of GST is expected to reduce the prices of the service sector in the long run. GST will create a common national market reduce overall tax burden and also attract the foreign direct investment leading to increasing employment in the nation (Dhayalan, 2021), implementation of GST will attract more FDI in retail sector and the retail sector will boom in the long run (Mahlawat, 2018), (Lama, 2019), (Khatri, 2018), implementation o GST has attracted a lot of foreign direct investment in India (Richa Kumari, 2021), (Pali & Pal, 2022), government initiative to implement GST will accelerate FDI (Mandal, 2016), implementation of GST will increase the easy of doing business and hence will attract FDI in the Indian economy (BADGAYAN, 2018), GST and Make in India schemes attract many countries to invest their money and it will certainly raise the inflow of FDI Equity in the different sector of economy in finance, banking, insurance, telecommunication, computer software & hardware, defence, aviation, pharmaceutical etc. With the rollout of GST in 2017 in and around 72 percent investments rise



across sectors and a significant portion of this is from FDI especially in heavy engineering and automotive sector (Dr. A. K. Srivastava, 2019), implementation of GST has help the supply chain smoothing management in the textile sector and also attracted profits (Maidan & Ganganagar, 2018), FDI in service sector has improved post implementation of GST in India and the government also has increased its revenue from this sector (Gramopadhye & Samudre, 2018), .Implementation of proposed GST and opening of Foreign Direct Investment (F.D.I.) are expected to fuel the growth and raise FMCG industry's size to \$95Billion by 2018-35 (Swetha & Kanade, 2019), Owing to consequences of demonetization and GST pace of FDI in the year 2016 and 2017 showed reverse turn. Dip of US\$5728.72 million is due to sharp fall of demonetization and GST all in the same year (Sheikh & Singh, 2019), The cement industry has witnessed foreign players' entry in the form of mergers and acquisitions, thereby enhancing the cement production capacity, although the initiative of GST taken by the Indian government has impacted the sales and revenues of cement industry due to 285 tax slab post GST (Panduranga, 2021), pre GST tax system was a complex one, implementation of GST may increase FDI and pave way for foreign companies to come in India (Shweta R, 2016), Implementation of single goods and services tax (GST) across the country will avoid delays and losses due to local tax collection bottlenecks (B.Vijayalakshmi Murthy, 2018). The benefit to FDI is that in a case of Export Company, it can appoint an agent from India and export to the required country will be subjected to GST and tax will not be claimed, hence, there exists a high scope for export company FDI promotion for economic progress. The agent will be liable under GST because the export will be carried under his name. The beneficial factor in GST is that, if the company delivers goods to the local forwarding agent for the purpose of export to an overseas client, no GST is needed to be charged from the overseas client by the company. In case of machinery fault imported for export production, the export of service is zero rated, whereas if any parts are newly implemented then GST will be levied during import of machinery, if the only service is carried out on existing machine, GST will not be charged. The important documentation to be enclosed for export are Export declaration (K2), Sales invoices, Bill of lading, Shipping note, Insurance note, Payment document, such as documentary credit, debit advice, bank statement, Debit and Credit note, Tally sheet from Port Authority, Short ship/short landed certificate, Other documents related to export (Thowseaf & Millath, 2016), GST has brought in many positive changes in the economy and boosted the GDP of the nation (Sadhani & Joshi, 2022), GST implementation will not only provide easy of doing business but also will attract and yield positive results for foreign direct investment into India (Gaur, 2017), implementation



of GST will boost Japanese investment in India for important sectors such as automobile, electrical equipment, telecommunications, chemical and pharmaceutical sectors (Goyal & Kumar, 2018).

## **2. RESEARCH GAP**

The study undertaken considers the implementation and importance of GST in India and its impact on the Foreign Direct Investments in the economy. The study concentrates to analyse whether FDI and GST collection made in the past four years since inception in 2017 have any relationship with one another as there is only theoretical literature found and no statistical analysis conducted with respect to the two variable FDI and GST implementation in India. Hence the paper throws light on the correlation between the 2 variable and also regression analysis of the same.

## **3. RESEARCH QUESTIONS**

1. Has GST implementation any impact on the GST collection made in the economy since its implementation?
2. What is the relationship between FDI and GST collection in India?

## **4. OBJECTIVE**

1. To identify the literature on the impact of GST on FDI in the economy
2. To understand what kind of relationship does GST and FDI have whether they are positively correlated, negatively correlated or not at all related.
3. To study the extent of relationship between GDP and GST.

## **5. HYPOTHESIS**

- a) Null hypothesis: There is no relationship between FDI and GST.
- b) Alternate Hypothesis: There is a relationship between FDI and GST.

## **6. RESEARCH METHODOLOGY**

Data Collection: Data of both variables are collected from year 22017 to 2021. The data of GST for year 2016-2017 is not present due to its initiation was done on 1st July 2017

### **6.1. SOURCES OF DATA**

Source: <https://www.clearias.com/foreign-direct-investment/>



Department of Industrial Policy &amp; Promotion (DIPP)

Source:<https://taxguru.in/goods-and-service-tax/gst-collections-fy-2017-18-fy-2020-21.html>

Table 1 - Foreign Direct Investment in India year wise

Sl. No.	Financial Year	FDI Inflow (US \$ billion)
1	2017-18	60.97
2	2018-19	62
3	2019-20	73
4	2020-21	81.7

Source: <https://www.clearias.com/foreign-direct-investment/>, Department of Industrial Policy & Promotion (DIPP)

Table 2 – GST Collection in India year wise

Sl. No.	Financial Year	GST Collection (Rs. Crore)
1	2017-18	719078
2	2018-19	1177370
3	2019-20	1222117
4	2020-21	1136803

Source: <https://taxguru.in/goods-and-service-tax/gst-collections-fy-2017-18-fy-2020-21.html>

Table 3 - Foreign Direct Investment vs GST Collection in India year wise

Financial Year	FDI Collection (Rs. Crore)	GST Collection (Rs. Crore)
2017-18	6097	719078
2018-19	6200	1177370
2019-20	7300	1222117
2020-21	8170	1136803

Source: Comparison Data of Table 1 and Table 2

**7. CORRELATION ANALYSIS:**

Table 4 – Correlation Analysis

Year	X	Y	x <sup>2</sup>	y <sup>2</sup>	xy
2017-18	6097	719078	37173409	5.17073E+11	4384218566
2018-19	6200	1177370	38440000	1.3862E+12	7299694000
2019-20	7300	1222117	53290000	1.49357E+12	8921454100
2020-21	8170	1136803	66748900	1.29232E+12	9287680510
<b>Summation</b>	<b>27767</b>	<b>4255368</b>	<b>195652309</b>	<b>4.68916E+12</b>	<b>29893047176</b>

Source – Based on the Calculation

$$\text{Correlation Formula} = \frac{n\sum xy - \sum x \sum y}{\sqrt{\{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]\}}}$$

∴ Correlation calculated is 0.515254

## 8. REGRESSION ANALYSIS

Table 5 – Regression Analysis

Year	X	Y	x <sup>2</sup>	y <sup>2</sup>	xy
2017-18	6097	719078	37173409	5.17E+11	4.38E+09
2018-19	6200	1177370	38440000	1.39E+12	7.3E+09
2019-20	7300	1222117	53290000	1.49E+12	8.92E+09
2020-21	8170	1136803	66748900	1.29E+12	9.29E+09
<b>Summation</b>	<b>27767</b>	<b>4255368</b>	<b>2E+08</b>	<b>4.69E+12</b>	<b>3E+10</b>

$$b_{yx} = \frac{\Sigma (X - \bar{X})(Y - \bar{Y})}{\Sigma (X - \bar{X})^2}$$

$$Y=121.8126X+218249.384$$

## 9. FINDINGS AND SUGGESTIONS

- The correlation coefficient between FDI and GST is 0.515254. This implies that both the variables are positively correlated to each other.
- Hull hypothesis is rejected and the alternative hypothesis is accepted.
- The regression coefficient is 121.81
- The constant value is 218249.384 which indicate that for every value of x, y will increase by 218249.384.
- There is a linear relationship between the two variables. As one variable increase in Foreign Direct Investment will lead to increase in the Goods and Services Tax Collection in the economy.

## 10. CONCLUSION

GST implementation in India has positively influenced the economy and almost all the sectors have seen the acceptance of FDI in the economy. GST has boosted the business activities in the nation and will continue to help for the sustainable development of the economy in the long also. The Foreign Direct Investments are sensitive to taxation policies in the economies; hence the government should not raise the tax slabs for the goods and services in the short run as there is a possibility that this would scare away the foreign investments in India. FDI also depends on other factors such as cost of trade such as transportation, firm locations, market location, mobility of business activities, well developed infrastructure, mobility of capital etc. Implementation of GST is a major move adopted by the government and many MNC's have



looked positively towards this move and accepted it. There is scope for further study to analyse which sectors has contribute highest and lowest to the GST collection in India after implementation of GST, also an analysis can be made for find out the reasons for their contributions.

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