

## An Empirical Study In The Liberalization Age Of International Investment And Indian Economic Growth

**Prof. Anuradha Jain**

bansalj946@gmail.com

Professor, Vivekananda Institute of Professional Studies

GGSIIP University

Delhi.

Professor in Economics

**Article History:** Received: 11 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 16 April 2021

**Abstract:** We are currently doing import substitution in line with the 'Swadeshi philosophy.' In truth, we have been exercising import substitution. In our nation there was a low wage, a low expenditure savings rate, an ongoing debt, a highly low development rate. Apart from this attractive growth rate for Asian tigers, then the IMF strategy, our policymakers were forced to liberalize and globalize with many other events. A major shift was made from a sleeping policy to an open-ended one. The present article is of its nature in India that seeks to encourage evidence of the impact on the Indian economy, measured under a time varying parameter regression model, of inward foreign investments at macro level as well as at the basic three-sector level. The study documents significantly differing findings in various sectors of the economy through a sector-level analysis. The study suggests that policymakers rejuvenate India's primary sector to draw and consume more intra-DFIs and ensure sustainable economic growth. The study results indicated that liberalization has positive impact on service sector growth while a negative impact on manufacturing sector growth. In conclusion the study shows a sectoral imbalance in India.

**Keywords:** Economic development, Economics and Business, Foreign investment, Indian economy, Liberalization

### 1. Introduction

The unification of the global economy continued to raise the quality of life for several countries across the globe in the early part of the 20th century. However, it has been noted that the trade reform slowed down in the early 2000s and there is an increasing chance of further reversal of income growth, competitiveness, etc. Trade liberalization in the world economy is now at a crucial juncture, particularly after the 2008 financial crisis.

In the early part of the 20th century, the rate of exchange grew tremendously. Global trade in products and services has grown by 6 percentage points each year over the period 1960-2007 (IMF, 2017). According to Solomon (1999), since the end of the 1970s, nations across the world have entered a worldwide trend for market-oriented economic strategies on a global scale. These measures were related to a group of doctrines, dubbed the 'Washington Consensus,' which later became recognized as the 'Post-Washington Consensus' (Williamson, 1994). Under the auspices of multilateral institutions such as the IMF and the World Bank, structural reform policies aimed at liberalizing the domestic economy from government regulation have been encouraged (De Haan et al., 2006). This significant growth in trade was encouraged by (i) a decline in trade prices by improvements in tariffs and other policies relevant to trade, (ii) advancement in information technology and (iii) increased transport. Reduction of exchange costs has a direct effect on global value chains (GVCs) which have played a key role in improving production and manufacturing exports since 1960 (IMF et al., 2017). Both developed and emerging economies have experienced higher living standards as a result of greater trade openness, which is perceived to be a core driver of economic development.

The empirical evidence available to support the argument that trade openness coincides with economic growth and development follows four key channels: increases in capital accumulation, decrease in income inequality amongst countries, expanded research and development initiatives and improved information sharing. The two last channels refer to the countries' human capital. Countries with higher levels of human capital and efficiency will benefit from greater commercial transparency. When the world has absorbed new innovations, the more competitive economy would have greater benefits from

trade openness. If the human resources of the country is not adequate for coping with new techniques, because of trade openness, the effect of the trade openness would be reduced. The transfer of expertise and new ideas through free exchange improves human capital's quality. On the other hand, trade barriers hamper the transmission mechanism and adversely impact human resources. "Trade liberalization between developed and less developed countries will inhibit learning by developing countries and thus growth of general knowledge. Trade liberalization will facilitate product line specialization that in developed countries hasn't been learned much" (Young, 1991). Young (1991) notes that the productivity of human resources is adequate to take advantage of information and technology from other countries. Human capital's effect on growth is well-defined and investigated. Researchers are unanimous about the positive contribution of human capital in every country to economic growth. Human capital refers to country's human resources' skills and capacities that develop through schooling, training and experience.

Henn et al. (2015) found out that the variations in trade advantages are primarily attributed to (i) the economic systems of the region, (ii) the specialization of exports and (iii) the degree of diversification of goods. Feyer (2009) showed that there is cross-country proof of a correlation between greater openness to trade and (i) higher per capita wages, (ii) higher productivity, (iii) higher GDP growth and (iv) lower poverty. The current downturn in world trade is one of the main contributors to the low growth rates faced by many nations (IMF et al., 2017). It is found that there has been an increase in trade and production development within a limited span of time during the recovery period of the Global Financial Crisis. In recent years, comparatively poor trade has once again slowed down economic development. Latest analyzes undertaken by the World Trade Organisation (WTO), the International Monetary Fund (IMF) and the World Bank (WB) have indicated that the recent downturn in trade is attributed to the contraction in the global supply chain and trade liberalization is having an effect on the global economy. (The IMF et al., 2017).

The planet has also witnessed an enormous rise in trade in services. In 2010-2015, imports of global commercial commodities rose by an average of 5 percent per year, while trade in products increased by just 1 percent per year. The globalization of exchange in resources has been well assisted by emerging market models in the fields of (i) communication technologies and knowledge (ii) financial services. In comparison, disruption in the digitalization phase has often reshaped the business environment.

The General Agreement on Trade in Services classified trade in services in four main areas on the basis of the geographical position of the producer and the customer during the transaction, i.e. Cross border: commerce that occurs from the territory of one Member to the territory of another Member via telephone or postal infrastructures. (ii) (Consumption abroad): customers who have migrated as visitors, teachers, etc. to consume the respective services. (iii) (Commercial Presence): facilities are offered by a foreign-owned establishment (e.g. bank, hotels, etc.) but locally based. (iv) (Movement of natural persons): foreign citizens offer facilities overseas as contractors, health professionals or staff.

After the Second World War, several developing countries have pursued a strategy of eliminating obstacles to foreign exchange. Several big free trade deals were signed in the 1990s. Such open exchange strategies have been implemented not only for economic growth, but also for the promotion of global peace. However, several economists have concluded that free trade has not been of significant value to developed nations. Since then, several anti-globalization/liberalization protest protests have taken shape. The anti-globalization/liberalization campaign gained traction in 1999, when demonstrators attempted to disrupt a big foreign trade conference in Seattle. The anti-globalization campaign has driven free trade proponents to explore alternative methods of representing their beliefs. Trade benefits is an important driver for development and improved living standards. Data from the globe shows that foreign exchange raises marginal production. In a survey focused on 138 nations, Alcalá and Ciccone (2004) observed that greater beneficial exchange openness has improved competitiveness. They find that, in the long term, a 1% rise in openness has improved efficiency by 1.23 per cent in the long run. Ahn et al. (2016) observed that a 1% decrease in tariffs on goods used in a given sector increases the production factor in that sector by 2%. Trade improves the efficiency because of (i) creativity and up gradation of technology, (ii) information spill over and (iii) indirectly by boosting structural change, strengthening governance, and triggering financial deepening.

Trade rewards customers by cheaper costs and wider access to products and services. Trade and trade policies also have a part to play in rising the actual wages of customers. In their report, Faijgelbaum and Khandelwal (2016) estimated the impact of trade-induced price shifts on real incomes of low-

income and high-income households in forty separate countries, and found significant 'pro-poor' bias in benefiting customers from lower rates, as poor consumers spent more on food and beverage products with higher price declines.

Global trade is largely dominated by trade in goods. Despite the fact that trade in services is increasing, it is observed that the share of trade in services is much lower compared to trade in goods. In 2005 and 2017, trade in services increased faster than trade in the countries, an average of 5.4 per cent per year. In 2017, the volume of exchange in services was \$13.3 trillion while economic presence is accounted for in another area. Commercial presence, which accounts for the vast majority of exchange in commodities, is the primary mode of supply for trading services. However, global trade growth of 3.0 per cent was slightly weaker in 2018 than the 4.6 per cent growth reported in 2017. The world has seen a dramatic upward trend in trade in goods between 2005 and 2017. On the other side, exchange in services nearly doubled in volume over the same period. It is also noted that almost two-thirds of the total value of trade in services comes from developed nations. In the case of trade in commodities, the share is nearly similar for industrialized and emerging economies. BRICS is one of the major contributors to global trade, while the LDCs continue to demonstrate their dismal performance in this regard. Global trading is split into three regions; i) North America, (ii) Europe and (iii) East Asia. In 2015, North American and East Asian countries showed relatively more stability in terms of trade flows. Goods trade is mainly concentrated between developed and East Asian nations. It is noted that energy commodities, chemicals, telecom devices have a comparatively greater share of global trade.

#### REVIEW OF LITERATURE

The discourse on the relation between development and exports has begun to accelerate in the 1970s and has now become one of the key concerns. Many scholars have established that trade in manufacturing and services industries is a vital driver for economic development and, as a result, industrialized and emerging countries have moved from severe security to open trade. The development of thought about the partnership between trade liberalization and productivity has been stimulated by Krueger (1997). It has shown a strong correlation between export growth and GDP growth. It argued that countries with more access to exchange are increasing higher than other countries. Krueger (1998) presented a valuable survey of the benefits from trade liberalization in her stylized article. Rodriguez and Rodrik (2000), however, argued that the data relating the external orientation of trade policy and economic development overstates the connection between liberalization and progress. There are quite a range of longitudinal studies on liberalization and development. However, the empirical research on trade liberalization and development is quite minimal. It is therefore necessary to consider how liberalization of trade will impact countries of different economic status.

In the other hand, the value of measuring the effects of the liberalization of trade in services, in particular on trade in manufacturing, is increasing. Trade in the manufacturing sector requires feedback from the services sector of the economy and does not take place without international trade in critical services such as transport, communications, banking and insurance, etc. In recent years, there has been a rapid rise in longitudinal studies analyzing the effect of liberalization on trade. Several case studies were investigated by Hoekman and Braga (1997). Overall, the results indicate that lowering barriers to resource sharing in a defined sector is likely to result in lower prices, increased productivity and greater choice. In an analytical study, Blyde and Sinyavskaya (2007) found that the liberalization of trade in services may have an effect on international trade in goods.

The liberalization of trade in manufacturing products may also have an effect on trade in services. Interlinkages between the exchange of manufactured products and services have become particularly significant in recent years. Among other prominent works by Fieleke (1995), Lennon Clarion (2006) finds that exchange in products describes trade in services. However, there is not sufficiently literature to deal directly with the effect of the liberalization of trade in products on trade in services.

Studies on development before the mid-1980s concentrated largely on the accumulation of physical assets. It is observed, however, that if the pace of capital accumulation is higher than the rate of population development, then the return on capital tends to decline and expenditure is discouraged. Romer (1990), Lucas (1988), Aghion and Howitt (1992), Grossman and Helpman (1991) and others have concentrated on the acquisition of expertise rather than the accumulation of money. Non-rivalism is the key contrast between information and physical wealth. One person's usage of information does not preclude any human from its use. Awareness of non-rivalry of contributes to improved return as output is combined with all sorts of inputs. Researchers have concentrated on the possible relations

between foreign integration and development in recent research. Scholars have often focused on creating relations between cross-border commerce and the accumulation of expertise.

Grossman and Helpman (1991) did an excellent survey on the studies related to the interlinkages between globalization/liberalization and economic growth. In their study they found that possible links are (i) Flow of knowledge (Spill over of knowledge) leads to cultural integration which in turn leads to the exchange of ideas for inventing new products or product development. (ii) Integration of product market via international makes it affordable to invest on new product and product innovation since this integration provides the greater access to the international market through which firms can exploit the benefit of increasing return. (iii) International integration provides incentive for the creation of new knowledge. It is also helpful for the diffusion of knowledge and technology. Gilles et al. (2010) in their study have investigated how the impact of trade openness on the per capita GDP growth rate varies with the conditional distribution of GDP growth. In this study they have applied quantile regression techniques. They have identified investment, terms of trade, government balance, and inflation and population growth as independent variables in their study. They found that there exist relationship between trade openness and growth in both short and long run. The study reveals that effect of trade openness on growth is higher for higher growth rate countries whereas it is lower for lower growth rate countries.

Michael (1997) in his paper has studied the association between economic growth and trade liberalization. In his paper he has argued that trade can enhance world growth rate through specialization because specialization leads to increasing return to scale. The study has found that growth rate, share of export in income decreases in the presence of tariff war. However, in the regime of trade liberalization economic growth rate is higher \* and it has increased over time.

Ocampo and Taylor (1998) in their study argued that micro economically, if the production function exhibits increasing return to scale and firm invest in the improvement of productivity, then liberalization may have dubious impact. The impact of commercial policy changes can be regressive from the distributional point of view, however, the depending on the firms' performance 'rents' they produce can be used as basis of effective policy intervention.

In their research, Ackah and Morrissey (2007) explored the correlation between trade policy and economic growth by implementing a dynamic panel regression model. The research is focused on a total of forty-four developed countries over 1980-1999. They captured trade policy by tariff controls, import and export tariffs, etc. Economic policy is covered by measures related to duties, import and export taxes. The research looks at the consequences of shifts in trade policy (tariff, import and export duties).

Kneller (2002) analyzed whether or not the favorable impact of trade liberalization on economic development are reversed by shifts in fiscal policy. The research used a difference-in-difference approach. Generally, the Government is growing its healthcare budget by increasing its exposure to foreign trade. The study shows that countries that do not raise their welfare expenditure by their trade liberalization have virtually no impact on economic development as a consequence of trade liberalization.

In their research, Frankel and Romer (1999) showed that the simple association between exchange and income does not decide the course of causation between trading countries. Geographical characteristics, though, have a huge effect on exchange and might not be linked to other big income determinants. Measurements of the regional components of exchange were built in the analysis.

Despite the fact that services trade comprises more than 20% of global trade it is observed that economists have not paid much attention to the empirical modelling and research in trade in services and its liberalization episodes. Recently, the trend towards liberalizing goods trade and services trade have created enormous pressures on political and economic actors to become more competitive not only in the domestic market but also in the global market. The increased mobility of the skilled labour coupled with the technological and knowledge diffusion has opened up the global economy exponentially. This opening up of global economy has contributed a lot in the creation of dynamic trading environment (goods and services trade).

Hoekman and Braga (1997), in their study have mentioned that implementation of tariffs in services trade is generally difficult since it is extremely difficult for the customs agents to observe whether the services have crossed the border or not. The main reason behind this unobservable nature is the simultaneity of production and consumption of services.

Kimura and Lee (2006) have empirically investigated the impact of the factors on bilateral trade in services relative to that on bilateral trade in goods. The Gravity Model of Trade was used for the study. The study is based on bilateral trade in goods and services between 10 OECD member countries and other OECD member and non-member countries for the years 1999 and 2000. The study finds that bilateral trade in services is better predicted by the model of gravity compared to bilateral trade in goods. Karmali and Sudarsan (2009) indicated in their study that trade in services is essential for trade in goods and that trade in goods cannot be separated from trade in services. The study examined the causality between trade in services and trade in goods in a sample of 20 countries from different income groups over a period of 21 countries. They applied the Granger Causality test to investigate the causality of trade in goods and trade in services. They find that trade in goods is causing trade in services in thirteen countries. The study also shows that income differences do not play a significant role in determining causality.

Sudarsan and Karmali (2011) looked at the growth structure and determinants of India's export services. The study finds that the growth rate of exports of services is much higher than the growth rate of exports of goods in recent years. On the basis of static and dynamic models, the study concluded that the major determinants of Indian services export trade are (i) Share of goods trade in GDP (Good Trade Openness) and (ii) Share of services trade in GDP (Services trade openness).

### 3. Research Gap

There are plenty of theoretical and empirical studies which dealt with the determinants of bilateral trade flow. Moreover, the impact of liberalization may vary on the basis of income categories of the countries. The study of impact of liberalization on economic growth requires incorporation of this essential issue which is absent in the existing literature. The present study has tried to fill these lacunas in the existing literature. However, there is no studies found which analysis the sectoral balance between the between manufacturing and services sector. Finally, the review of literature in the area of linkages between liberalization and trade in services has revealed that there exists a clear dearth of studies in this field. However, the importance of trade in services is increasing rapidly. Thus there is a need of empirical research which deals with the impact of liberalization on the trade in services. Moreover, the impact of liberalization on services trade may not be similar for different trading blocs. Thus researcher needs to incorporate this aspect also to get the better policy results.

### 4. Objective

The present study has identified these research gaps and has attempted to fill these gaps in the existing literature. The present study systematically reviewed the study on two major areas of international economics:

- (i) To study the patterns of Trade liberalization and economic growth
- (ii) To study the impact of Trade liberalization on manufacturing sector and services sector
- (iii) To analyze sectoral balance for manufacturing sector and services sector due to trade liberalization.

### 5. Data collection and methodology

The present study is based on the data of period 2006-2020. The period of that data was chosen according the availability of data as for each variable and each time point data is not available. Data has been taken from various website of Reserve Bank of India, IBEF, World Bank, IMF, and facilitation, Organization for Economic Co-operation and Development(OECD) report. This section of study analyze the trend and patterns of FDI post liberalization by using trend wise, sector wise trends and pattern of FDI. The two sectors are mainly studied which are two of the most important contributors of the Indian economy which are manufacturing and services sector. Least Squares Method has been used to analyze the results.

Model specification- The model has been designed to study the direct impact of liberalization of the economic growth with reference to manufacturing and services sector. In this model we have taken the GDP as a dependent variable as it is considered in earlier studies to be the good indicator of economic growth. Which is hypothesized to be a function of FDI which is a main indicator of the liberalization.

$$GDP_i = f(FDI_i)$$

The equation can be written as

$$Y_{ij} = a + b X_{ij}$$

Where  $Y_{ij}$  = GDP share % of a specific sector

a = Constant

b = coefficient of independent variable

$X_{ij}$  = FDI of specific sector.

To estimate the model least square regression model was employed. "Least squares" method is a form of mathematical regression analysis that is used to find the line of best fit for a set of data. In order to provide a demonstration relationship between the data points this method has been prominently used. Each point of data represents the relationship between the dependent and independent variable.

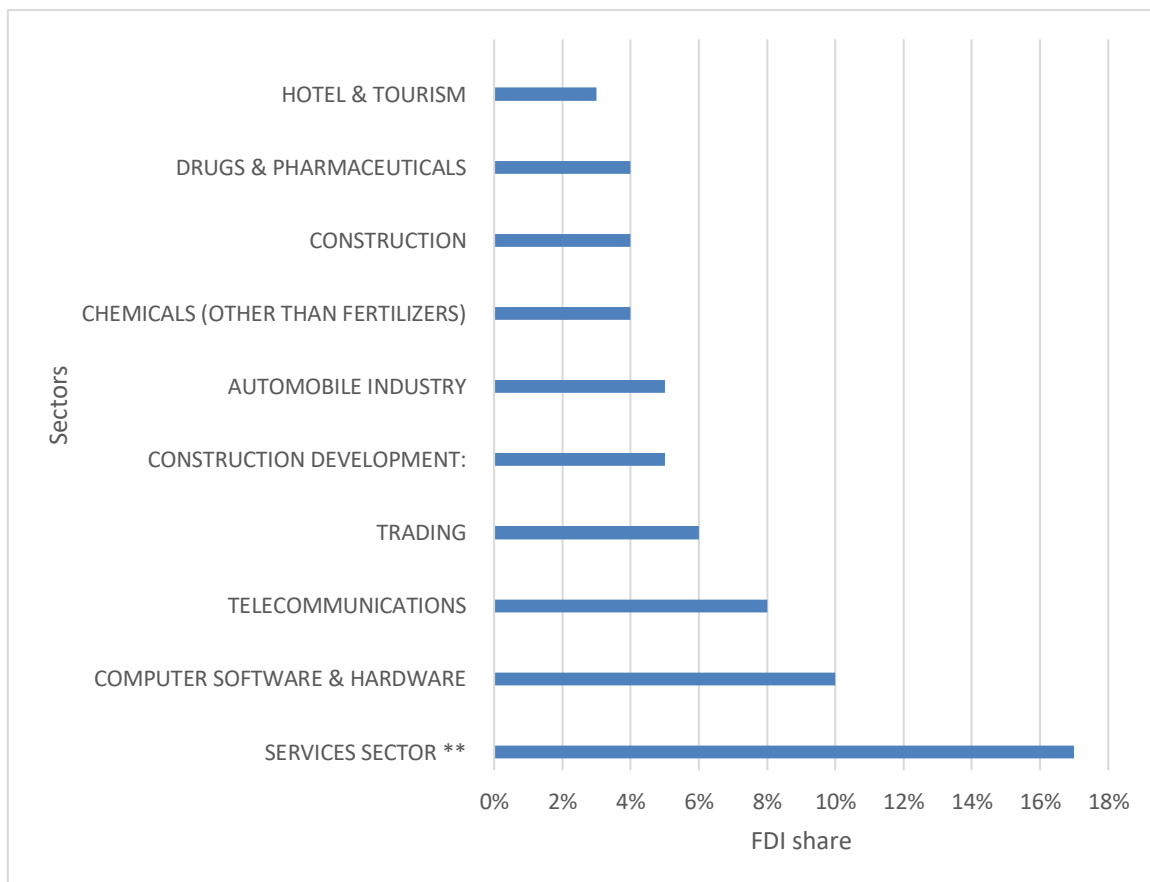
**Description of variable**

**GDP –**

The Gross Domestic Product is the monetary value for a given period of time of all finished goods and services generated in a region. The GDP provides a country's economic overview to calculate the scale and pace of growth of an economy.

**FDI -**

Foreign Direct Investment reports the valuation of cross-border activities, usually a quarter to one year, connected to direct investment over time. (FDI). The movement of funds will consist of investment gains, income reinvestment, and debt transaction inside companies. External flows represent transactions that expand investors' contributions in foreign economic entities in the reporting sector. Within flows represent transactions that boost investment by foreign investment firms in reporting economy businesses by fewer transactions that lower foreign investor investment in resident firms. Figure 1 present top ten FDI attractor in 2019-20

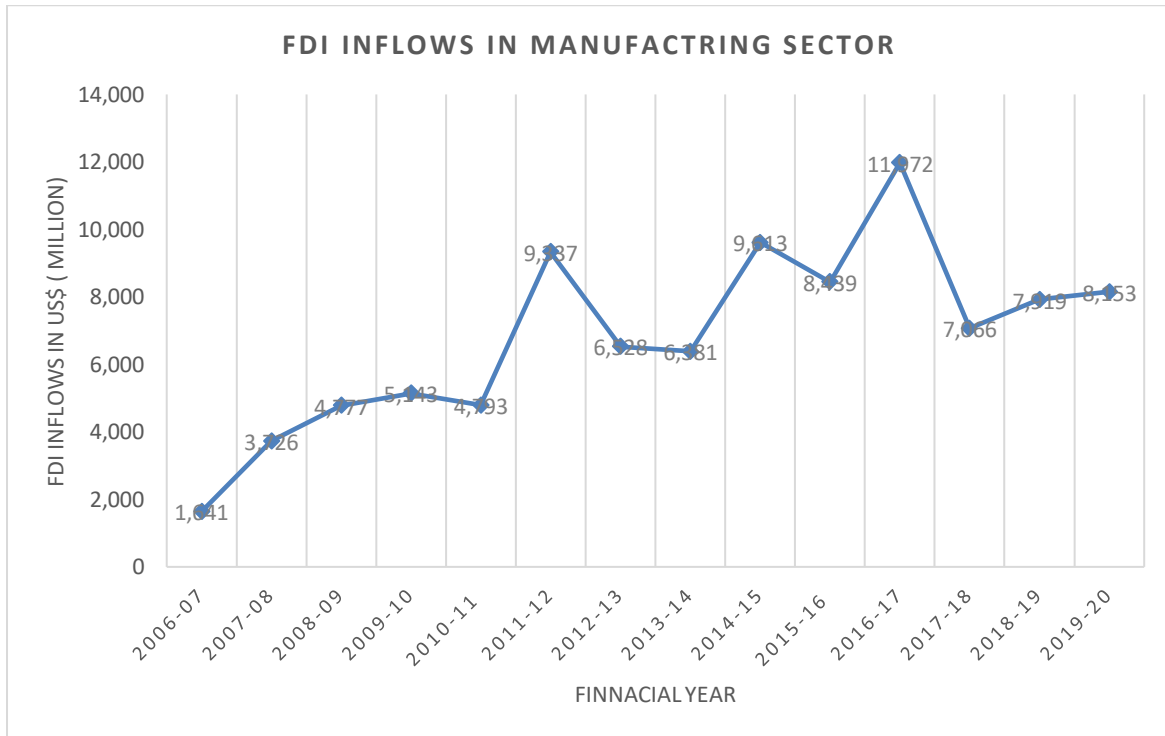


**Figure 1: Top 10 FDI attractors in 2019-20**

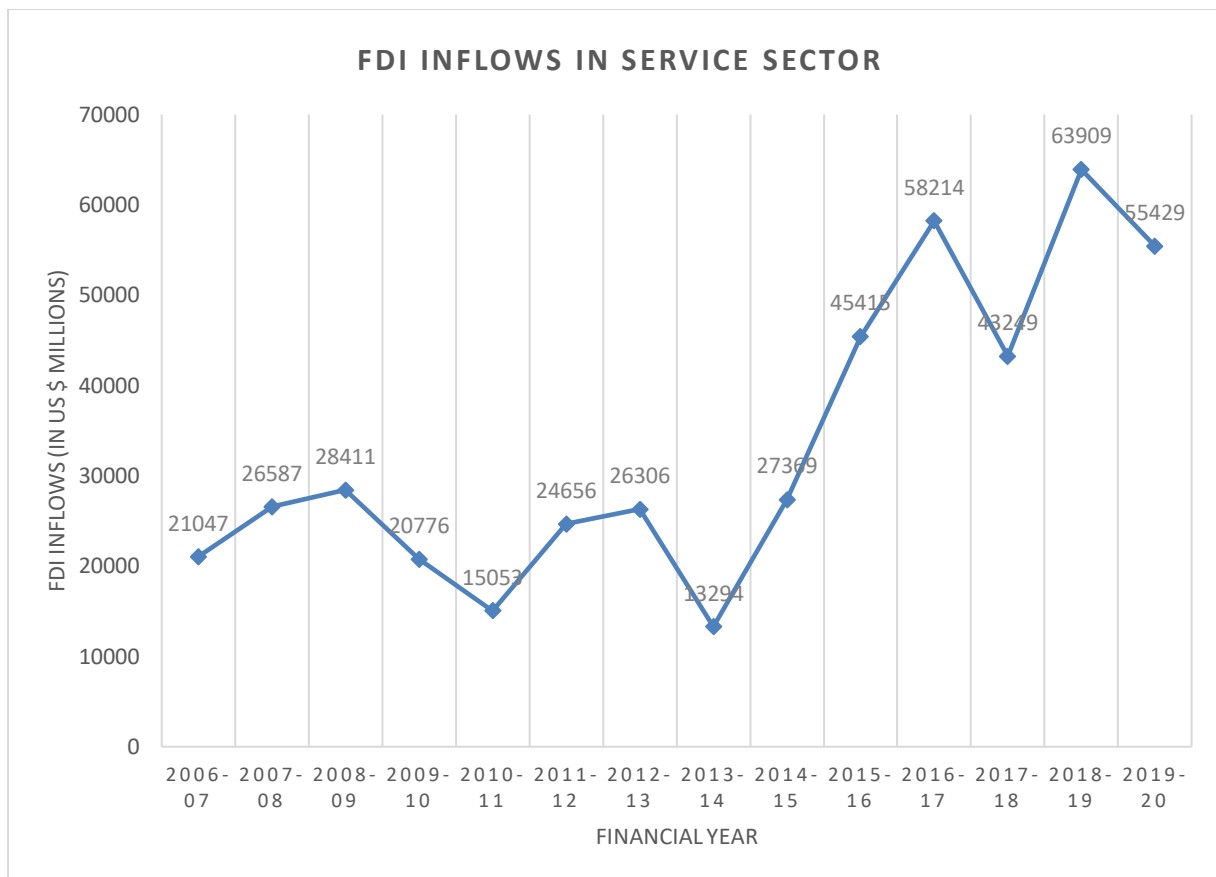
**Table 1: Comparison of FDI and GDP for manufacturing and services sector.**

	Manufacturing sector		Services sector	
Year	FDI (US \$ millions)	GDP share %	FDI (US \$ millions)	GDP share %
2006-07	1,641	17.30365	21047	44.44293
2007-08	3,726	16.86457	26587	44.04324
2008-09	4,777	17.09867	28411	44.00816
2009-10	5,143	17.14358	20776	45.88255
2010-11	4,793	17.02993	15053	45.98488
2011-12	9,337	16.13934	24656	45.03375
2012-13	6,528	15.81692	26306	45.44214
2013-14	6,381	15.25302	13294	46.30115
2014-15	9,613	15.06557	27369	46.69871
2015-16	8,439	15.58385	45415	47.82241
2016-17	11,972	15.16224	58214	47.78375
2017-18	7,066	14.89392	43249	47.7494
2018-19	7,919	14.58401	63909	47.89239
2019-20	8,153	13.72217	55429	48.81249

Source: RBI annual reports, FDI factsheets.



**Figure 2: Graphical representation of FDI inflows in manufacturing sector**



**Figure 3: Graphical representation FDI inflows in service sector.**

The above charts indicate that in study period the FDI inflows have steadily increased in both the services and the manufacturing services. Both the sectors have significantly attracted the foreign investments with growth in their GDP. The peak investment in manufacturing was in year 2016-17 and in services highest investment was in 2018-19.s

## 6. Results and Discussion

**Projection of GDP by FDI using least square method in Manufacturing and services sectors:**

**i) Service sector: Results from regression analysis**

**Model fit values:**

**Table 2: Regression statistics for data on services sector.**

Multiple R	.833
R Square	.694
Adjusted R Square	.675
Std. Error of the Estimate	.987

The R squared value of the model is .694 which indicates that the model is good for the data.



**Table 3: T-test for data on services sector**

Coefficients				
		Beta	t	Sig.
	(Constant)	44.228	111.804	.000
	FDI inflows	.833	6.031	.000

The equation obtained was

$$\text{GDP (services)} = 44.228 + .833 \text{ FDI}$$

The findings indicate that FDI inflows have had a positive and significant correlation with GDP (percentage) in the service sector. This means that a rise in FDI leads to a positive improvement in the share of GDP in the services sector.

**ii) Manufacturing sector**

**Model fit values**

**Table 4 :Regression statistics for data on manufacturing sector.**

Multiple R	.897
R Square	.804
Adjusted R Square	.800
Std. Error of the Estimate	.838

The R squared value of the model is .804 which indicates that the model is good for the data.

**Table 5: T-test for data on manufacturing sector.**

Coefficients				
		Beta	t	Sig.
	(Constant)	17.819	28.272	.000
	FDI	-.697	-3.371	.006

The equation obtained was:

$$\text{GDP}_{(\text{manufacturing})} = 17.819 - .697 \text{ FDI}$$

The above equation indicates that FDI in manufacturing sector have a negative relationship in the past years which means with increment in FDI inflows in manufacturing the GDP share has decreased.

**7. Conclusion**

It has been acknowledged that international trade is one of the main drivers in accelerating economic development. International exchange and global integration have grown exponentially with a spike in world GDP since the mid-eighties. Trade of products and services is one of the main elements of global integration. The study finds that the role of trade openness is critical in deciding the economic growth of countries. The key focus of this study was to assess the effect of liberalization on the services sector and the manufacturing sector. The study shows that international globalization has a beneficial effect on the services market. Thus, the study concludes that the liberalization of trade in services is one of the main impactful as comparing to trade in the manufacturing field. Although the analysis has shown that there is a negative effect of liberation on the manufacturing sector. There is also no adequate balance of liberation in the manufacturing and services market. For the future perspective, the present study did not consider technical advancement to be one of the independent variables in the analysis. The position of education and skills training is also critical for economic development. These factors were specifically included in the empiric analysis of the study.

## References

1. Aghion, p. And howitt, p. (1992), "a model of growth through creative destruction," *econometrica*, vol. 60 (2):323-351.
2. Alcalá, f., & ciccone, a. (2004). Trade and productivity. *The quarterly journal of economics*, 119(2), 613-646.
3. De haan, j., lundström, s., & sturm, j. E. (2006). Market-oriented institutions and policies and economic growth: a critical survey. *Journal of economic surveys*, 20(2), 157-191.
4. Fajgelbaum, p. D., & khandelwal, a. K. (2016). Measuring the unequal gains from trade. *The quarterly journal of economics*, 131(3), 1113-1180.
5. Feyrer, j. (2009), "trade and income-exploiting time series in geography," nber working paper no. 14910.
6. Fieleke n.s (1995). "the soaring trade in non-tradables," *new england economic review*, federal reserve bank of boston (nov/dec), pp. 25 -36.
7. Giles, d., valerie, m. And charalambos, t. (2010), " the trade - growth nexus in the developing countries: a quantile regression approach", *review o f world economics*, vol. 146 (4): 731-761.
8. Greenaway, david (1998), "does trade liberalisation promote economic development?", *scottish journal o f political economy*, vol.45(5): 491—511.
9. Greenway, d., morgan, w. And wright, p. (2002), "trade liberalization and growth in developing countries" *journal o f development economics*, vol. 67(1): 229 – 244.
10. Grossman, m. And helpman, e. (1991), "innovation and growth in the global economy", cambridge, ma. M it press.
11. Henn, c., papageorgiou, c., romero, j. M., & spatofora, n. (2017). Export quality in advanced and developing economies: evidence from a new data set. The world bank.
12. Hikari and ishido (2015), "economics impacts of ftas on trade in services: some empirics in east asia", *journal of international commerce, economics and policy*, vol. 6(2): 1550011-20.
13. Hoekman, b. And braga c. A. Primo (1997), "protection and trade in services: a survey." Policy research working paper no. 1747, international economics department, world bank.
14. Hoekman, b., & braga, c. A. P. (1997). Protection and trade in services: a survey. *Open economies review*, 8(3), 285-308.
15. Imf, world bank and wto (2017), "making trade an engine of growth for all, the case for trade and for policies to facilitate adjustment", discussion paper for g20 meeting, frankfurt, germany.
16. International monetary fund (imf) (2016), "global trade: what is behind the slowdown?", chapter 2 of the imf world economic outlook, imf.
17. Karmali and sudarsan (2009), "trade in goods and trade in services linkage: some evidence from causality test", *the asian economic review*, vol. 51(3): 581 - 590.
18. Kimura, f and lee, h. (2006), "the gravity equation in international trade in services" *review o f world economics*, vol. 142(1): 92 -121.
19. Kimura, f. (2003). "economic analysis on japan - korea fta: services trade", mimeo. Keio university, japan.

20. Kneller, r. (2007), “no miracles here: trade policy, fiscal policy and economic growth”, *journal o f development studies* 43 (7), 1248-1269.
21. Krueger, a. O. (1997). *Trade policy and economic development: how we learn* (no. W5896). National bureau of economic research.
22. Krueger, a. O. (1998). Why trade liberalisation is good for growth. *The economic journal*, 108(450), 1513-1522.
23. Learner, edward and levinsohn james (1997) “international trade theory, the evidence” in grossman and rogooff (eds), *handbook o f international economics*, vol. 3. North-holland.
24. Lee and lloyd (2002), “frontiers of research in intra - industry trade”, palgrave mcmillan, uk  
lee, jong-wha (1995), “capital goods imports and long-run growth”, *journal o f development economics*, vol.48(1): 19-110
25. Lennon clarion (2006), “trade in services and trade in goods” *universities of paris and jordan science economiques* (pse)a%.
26. Lucas, r.e. (1988), “on the mechanics of economic development”, *journal o f monetary economics*, vol. 22(1):3-42.
27. Mccallum, john (1995), “national borders matter: canada-u.s. regional trade patterns”, *american economic review*, vol. 85, june, 615--623.
28. Michael b. Devereux (1997), “growth, specialization and trade liberalization”, *international economics review* , vol. 38(3): 565 - 585.
29. Ocampo j.and taylor,l (1998), “trade liberalization in developing economies: modest benefits but problems with productivity growth, macro prices, and income distribution”. *The economic journal*, vol. 108 (450): 1523-1546.
30. Rodriguez, f., & rodrik, d. (2000). *Trade policy and economic growth: a skeptic's guide to the cross-national evidence*. Nber macroeconomics annual, 15, 261-325.
31. Rodrik, d. (1992), “the limits of trade policy reform in developing countries”, *journal o f economic perspectives*, vol. 6(1):87-105.
32. Romer, d. (1990) “endogenous technological change”, *journal o f political economy*, vol. 98 (5):71—102.
33. Sachs, j.d. and warner, a.m. (1995), “economic reform and the process of global integration,” *brookings papers on economic activity*, vol. 1:1-118.
34. Solomon, r., & solomon, r. (1999). *The transformation of the world economy*. Macmillan.
35. Sudarsan, p.k. and karmali (2011), “determinants of india’s services exports”: a static and dynamic analysis”, *journal o f international economics*, vol. 2(2): 73 – 83.
36. Sudarsan, p.k.(2013), “movement of natural persons and free trade agreement: india’s prospects”, *journal o f international economics*, vol.4(1): 63 —73
37. Williamson, j. (1994). *The political economy of policy reform*. Peterson institute. Washington: the institute for international economics.
38. Young, a. (1991). Learning by doing and the dynamic effects of international trade. *The quarterly journal of economics*, 106(2), 369-405.