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<u>TITLE IN ENGLISH</u>	<u>TITLE IN LITHUANIAN</u>
Impact of FDI on the Employment in Indian Service sector Industries	TUI įtaka užimtumui Indijos paslaugų sektoriaus pramonėje

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List of abbreviations:

FDI	Foreign direct investment
CII	Chartered Insurance Institute
DIPP	Department of Industrial Policy and Promotion
GDP	Gross Domestic Product
DPIIT	Department for Promotion of Industry and Internal Trade
IT	Information technology
WB	World Bank
RBI	Reserve Bank of India
OECD	Organization for Economic Co-operation and Development
BSE	Bombay Stock Exchange
IPR	Industrial Policy Resolution
IPA	investment promotion agencies
SME	small and medium enterprises
ME	Multinational Enterprise
IMF	International Monetary Fund
IBRD	International Bank for Reconstruction and Development
ADB	Asian Development Bank
EoDB	Ease of Doing business
CAGR	Compound Annual Growth Rate
WTO	World Trade Organization
ADF Test	Augmented Dickey-Fuller Test
HCL	Hindustan Computers Limited

Wipro	Western India Products.
CST	Cognizant Technology Solutions
NIIT	National Institute of Information Technology
HDFC	Housing Development Finance Corporation Limited
SBI	State Bank of India
ICICI	Industrial Credit and Investment Corporation of India.
MMT	Make My Trip
P&G	Procter & Gamble Company
ITC	Imperial Tobacco Company of India Limited
MTNL	Mahanagar Telephone Nigam Limited
MS	Mean square
SS	Sum of Squares
HUL	Hindustan Unilever Limited
ARIMA	Autoregressive Integrated Moving Average
R&D	Research & Development
OLS	Ordinary Least Squares
SAR	Spatial Auto Regressive Model

INTRODUCTION

- **Research background**

Over the last few years, India has globally been recognized as one of the fastest-growing economies in the world which is making the top market for Foreign Direct Investment (FDI). The other factors such as growing customer base, improving index, and increasing disposable income make India a preferred destination for investing in India. More than 60% of India's GDP and 28% of all jobs are supported by the services sector according to a new analysis from the Chartered Insurance Institute CII. The influx of foreign direct investment (FDI) into India's service sector has been the biggest in recent years. Such services are fueled by the government's digital activities and low-cost, highly skilled workers (Bharathi & Dinesh, 2021).

Due to an increase in the FDI inflows in India, the United Kingdom declared that India is one of the third world's top most significant markets for investment among other countries. However, the total FDI inflow in the country has been fluctuating because mixed FDI growth was recorded in the country in 2020. A significant reason behind the oscillating FDI growth was the uncertain nature of investment deals that kept the market fluctuating (Sandhya Keelery, 2022). It is expected that due to constructive changes made by the Indian government, May 2021 recorded the highest FDI inflow in the financial year 2022 (Sandhya Keelery, 2022).

According to figures, those were issued by India's Department of Industrial Policy and Promotion (DIPP), the service sector generated around 60% of GDP in 2014, making India one of the fastest-growing economies in the world (Mahapatra, 2020). As a result of the Covid-19 epidemic, cross-state traffic of raw materials and finished commodities was severely restricted. International trade and business have begun a grinding standstill as countries have tightened their borders. Almost every industry is significantly disrupted by supply and distribution systems (Muzaffer, 2022). Service demand has collapsed because millions of people remained at home and postponed their non-essential purchases as a result of the economic downturn due to the pandemic. This situation caused service sector industries such as transport, financial, trade and similar service industries to experience a downward trend in growth.

Due to unprecedented lockdown conditions during the Covid-19 pandemic, there have been adverse implications for the Indian economy (Dev & Sengupta, 2020). There were also adversities related to livelihood and job cuts and increased migration issues. The country experienced more than 50 million workers who migrated to cities for work, migrated back to their native villages during this period (Khanna, 2020). Recent data shows that these migrant workers are now moving and returning back to cities in search of work and livelihoods, but

some majorities of such workers have not yet come back, thereby there is a massive impose of strain on the labour supply in the urban areas.

- **Relevance of the topic**

Literature review shows that service sector industries obtain a significant part of FDI inflows. The service sector attracts an FDI of 261296 million USD from 2007 to 2021, which is 62.95% of total FDI inflows of 415059 million USD during the same period. According to the survey outcomes released by India's Department for Promotion of Industry and Internal Trade (DPIIT), it was found that the service sector industry acquired a major part of FDI inflows in India. The service sector in India covers a wide range of products and services that belong to different segments such as Information Technology IT (computer) services, transport, financial services, insurance, real estate, hotel, trade, personal services, and many more. These types of industries are highly dependent on humans in both ways as their workforce and their clients. India is not only a growing economy but also the second-most highly populous country in the world. The higher number of workforces is helping to nurture the service sector industries in India. Demands for services dropped during Covid-19, and the workforce was majorly affected due to the pandemic situation. These two caused adverse effects on service sector industries. Significant changes were observed in the FDI inflow during Covid-19 that impacted the contribution of the service sector industry (Bharathi & Dinesh, 2021). Research by Mishra and Palit (2020) shows that because of the fluctuation in FDI inflows in India and the trends of employment generation have been very drastically altered over the years. The percentage of the workforce in the service sector industries has also been showing tremendous changes over time. This suggests there is a strong relationship between FDI inflows and workforce strength in the service sector industries in India. By studying this relationship, growing economies can channel their workforce in their respective sectors to attract FDI and sustain in the global market.

- **Problem statement**

This research work will provide a descriptive analysis of the relationship between FDI inflows and employee count in the selected Indian service sector industries over the research period.

FDI is known as a major facilitator of growth and development that generates revenues and employment opportunities. If there is a reduction in FDI inflow, it adversely impacts the financial development and employee reduction of the organization and limits its growth and production capabilities to low levels. On the other hand, if there is an increase in the FDI inflow,

the service sector organizations obtain better opportunities for growth and employment generation. Therefore, this research highly focuses on analyzing the role of FDI on selected service sector organizations so that a better understanding is gained of its influence on their employee count. First, it is necessary to understand whether there is an underlying relationship between these two test variables. Other than this, it is necessary to analyze the causality to between FDI and Employee count in the service sector in India

- **Aim and objectives of the research**

Aim of the study – This study aims to identify and analyze the impact of FDI on the employee count in the Indian service sector industries.

Objectives of the study - To support the aim of the research requires focusing on the fulfilment of the following objectives:

- To study the FDI inflow patterns and contribution towards the service sector for the given research period.
- To study the trend of employee count in selected service sector industries.
- To detect the impact of FDI inflows on the employee count for the selected Indian service sector industries for the given research period
- To consider the results of empirical research to answer the research question of the paper.

- **Research methodology:**

The research methods used in this article include a literature review, a secondary data collection method referring to several journal articles, and government report compiled from World Bank (WB) data, Reserve Bank of India (RBI), Bombay Stock Exchange (BSE), Organization for Economic Co-operation and Development OECD, Department for Promotion of Industry and International Trade (DPIIT) and Indian governmental databases and other secondary source data and document screenings where we sourced data from financial reports. The relationship trend between variables is tested by using Regression analysis, correlation test, and the causal relationship tested Dickey-Fuller test, and Granger Causality test. For interpretation of results, Microsoft Excel is used.

- **Limitations**

The present study has limitations due to the narrow time focus of the analysis, data availability and scope of research.

- A) The sample size of the industries researched was relatively less (53 companies)
- B) The research period was relatively not wide (less than 15 years)
- C) It is overly complex to measure the relationship and impact caused between the test variables during the Covid-19 period (December 2019 –2021) because there are very fewer sample years of data

- **Hypotheses**

The hypothesis of the paper is based on the aim and objectives of the research, they are formulated as follows.

H01: There exists a positive relationship between FDI inflows and employee count in the selected service sector industries in India.

H11: There is no relationship between FDI inflows and employee count in the selected service sector industries in India.

H02: FDI inflows impact the employee count in selected service sector industries in India.

H12: FDI inflows have no impact on the employee count in selected service sector industries in India.

- **Scope of the study**

The scope of the present research highlights the discussion of facts related to trends and patterns of FDI in India in Covid-19 and post Covid-19, along with determining the role of FDI on the performance of the selected organization. The study will help in addressing the gap that exists between the previous and current literature in the segment of FDI inflow pattern in the service industry in India and its role in bringing improvements in the Indian economy. The study provides valuable facts related to the impact of FDI on the Indian economy, its factors along with the trends and patterns that help in understanding the role FDI inflows on the employment in the service sector industry.

- **Contribution of the study**

FDI is regarded as an important economic activity that is conducted at global levels so that development and long-term growth are provided to developing countries like India. The present research highlights contribute toward theoretical development by providing reliable insights into the role of FDI on the performance of selected organizations in the service sector industries in India. The study is anticipated to add to the previous literature review by providing the results of the FDI inflows for the study period and how they impact the employment of a specific sector of the market in India.

- **Structure of the research**

The study is divided into three major parts whose task is to represent all the aspects of the study more comprehensively.

1. The first part of the study is the Introduction, where the relevance, aim, research problem, methodology, objective, and other relevant components are explained. Also, the research question and hypotheses are revealed.
2. The Literature review will contain a critical evaluation of the articles and academic publications, government publications, and other sources dedicated to studying the several aspects of the FDI inflows in India and its relationship between employee count in Indian service sector industries.
3. In the research methodology part, methods of data collection and research models are presented, and their relevance to the current research is explained.
4. The data analysis part contains the empirical study of the obtained data, and calculations are done in this chapter to prepare the results for analysis.
5. In the conclusion section, the results are analyzed and discussed. Based on the literature review and empirical research obtained during the current study, conclusions are made to summarize the results obtained.

1. LITERATURE REVIEW

1.1. FDI and globalization in India

FDI is a major driver of economic growth for any developing country. It can provide capital, foreign exchange and ease access to markets for goods from around the world by providing technology transfer or through joint-venture requirements that give businesses in poor countries more resources than they would have otherwise (Crespo & Fontoura, 2007). FDI has been a fantastic way to inject investment and innovation into an economy. With its ability for cross-border movement, it can provide developing countries with much-needed capital when they need it most so that growth will come sooner rather than later. Focusing only on domestic sources would be unfair as well since those without enough savings rates are at risk of being trapped in low-level equilibrium forever due to the lack thereof (“Development Economics: From the Poverty to the Wealth of Nations,” 2000). Developing economies should provide incentives to foreign firms for them to close the idea gap with developed countries, bring resources from these economically advanced regions and use it alongside local ones. The more skilled a country's human capital is, the better its chances of attracting foreign direct investment (Dahiya, 2022).

FDI has two distinct but complementary impacts on economic growth. First, it increases the trade and commerce of the host country, which creates an increase in the gross domestic product (GDP). Other than this, hosting a foreign direct investment will not only help grow as well through increased demand from their company's business transactions but also due to capital markets, meaning that more money flows into the host country's economy for investments or loans made by banks who see there is profit potential before anyone else does (Bagli & Adhikary, 2014). To promote economic growth and the overall well-being of the community, it is crucial that foreign direct investment (FDI) be present in the country. Once this occurs, there will be a positive effect on stable financial conditions, which results from higher productivity levels within companies due to innovation opportunities offered by multinationals who bring innovative ideas from abroad into their industry or market space. In today's world, where globalization plays such an important role internationally, society needs FDI so they can keep pace with technological advancements while also achieving maximum profits at minimum costs. For over the past years, countries have been working to attract foreign direct investment for its many benefits. These include improved employment opportunities and managerial skills in addition to financial inflows from technological advancements that can be achieved through this type of FDI. The pursuit has helped propel developing economies into a new era where they're not just generating revenue but also becoming globally competitive on their own terms.

FDI is an extremely beneficial economic growth facilitator. Foreign direct investment (FDI) can increase the productive capacity and productivity of a country. Firms based abroad invest in developing countries with lower wages which allows for substantial increases in employment rates among disadvantaged populations, creating better opportunities for communities that were previously left out or marginalized by traditional development models (Srinivasan et al., 2011).

According to Baby & Sharma, (2017) Foreign Direct Investments (FDI) can be defined as an economic activity that allows a nation to obtain possessions or conduct commercial transactions in other countries. Baby & Sharma, (2017) have used the Ordinary Least Squares regression analysis for their research. Siddiqui (2018), in his research, also used the same method that is the panel OLS regression analysis. In addition to that, he used the spatial autoregressive model (SAR). He found that FDI is regarded as an important facilitator of growth and development in countries with developing economies for generating revenues and employment opportunities.

Khachoo & Sharma (2017) in their research, had made a significant observation on how the R&D in certain sectors and the competition level in the country raises along with the FDI inflows into India. This rise in R&D requirements not only impacts Indian industries' competition levels but also in the foreign firms. The authors had used the Heckman's two-step estimation strategy and analyzed the impact that FDI has caused in Indian industries over the period of 2000 to 2012 and their results shows that there exists a very good market for the investment capability for both domestic and foreign firms and they also further suggest that India has a better chance of economic development by the opening of the domestic economy for higher FDI. Programs like 'Make in India' are initiating a great move and directing India towards bringing remarkable transformation into the Indian economy, thus making it a global investment hub.

Anitha (2012) in her research, had analysed about the FDI inflow trends over the research window of 5 years, from 2010 to 2015 in India. The obtained data was then analyzed by using the Autoregressive Integrated Moving Average (ARIMA) model. This study examined and identified the influence of FDI inflows and the reasons for the downward trend in the inflow and suggested a few remedy techniques to increase FDI flow in India. This study also suggests that the Indian Government shall adopt innovative policies and good corporate governance practices according to international market development. Sahni (2012) studied the determinants and trends of the FDI inflow into India period from 1992 to 2009, and she has used the Ordinary Least Square (OLS) method for the data analysis of the time series data. She has analysed that the factors such as GDP, inflation within the country and open policies of a country for the trade are

the most critical factors in attracting more and more FDI inflows to the Indian market during the post-reform period. Along with its lower labour costs, higher human capital, and openness to trade policies, India has been a prime market for investors for the FDI.

The Indian economy was liberalized during the late June 1990s. After this liberalization, various reforms, policies and measures were introduced to promote higher FDI inflow possibility. The Industrial Policy Resolution (IPR 1991) introduced three main changes. The first two changes were introduced to benefit the domestic industries. The third change was with regard to promoting more foreign investments and easing the sectoral inflow policies. According to Sharma & Kautish (2020), globalization has impacted the FDI inflows and outflows by liberalizing the terms and conditions for trading activities. Zhang (2001) gives us straightforward evidence that countries with more liberalized trade regimes, higher workforce skillset and higher education have greater FDI inflows, and this immensely promotes economic growth. India's government's policies and regulations supporting the ease of doing business have let the developed economies transfer their capital stocks and technologies into India. (Popescu 2014). Due to flexible and liberalized policies, there has been an increase in cross-country investment that develops a strong association between FDI and consumer-driven consumption. For example, due to the adoption of post-liberalization policies by the Indian Government, there has been an increase in the involvement of foreign investors and an improvement in the political policies for supporting globalization. The liberalized policies have made investing easier for them by implementing the measures of ease of account of trade, raising funds from overseas securities markets, remitting earnings from Indian operations, and reduction in tariff charges for foreign trade (Maiti, 2018). Analysis of the trade patterns and the governmental policies and reforms enabled more FDI inflows in India. (Rajan and Sen. 2002), The FDI in India has been significantly increasing due to the economic reforms, which have specifically benefited a certain sector and helped it achieve its goals.

Investment is a central part of growth and sustainable development in a country. Investment within a country will expand the country's economy and productive capacity, paving the way to more job creation and income growth. India is the second most highly populated country in the world. A nation like that highly relies upon gaining FDI from other global organizations. Realizing this, the Indian government has established more Investment Promotion Agencies (IPAs). Indian government promoted IPAs such as the National Investment Promotion and Facilitation Agency of India and Invest India function as the first point of reference for investors in India.

International investments can raise the overall production capacity within a country and

the living standards of its citizens. Foreign investments contribute to the growth of the country beyond what domestic investments could do. FDI creates direct job opportunities in the host country. It also creates indirect job opportunities by having linkages with SMEs – small and medium domestic enterprises within the host country. This enhances the human capital and introduces them to more management related skills, technical skills, and other new skills which could benefit the foreign multinational enterprise (MNEs) workers and local/domestic firms that supply manpower to these MNEs.

Mallick, Mahalik & Padhan (2020), examined that India relies upon getting powers improvement help awards from global organizations, similar to International Monetary Fund (IMF), International Bank for Reconstruction and Development (IBRD) and Asian Development Bank (ADB), just to satisfy the need for outside trade and to top off the hole because of the scarcity of credits. As a result, globalization and advancement have turned out to be the most looked at monetary ways to deal with quickening the pace of financial creating in the improvement (nation) world and increasing FDI inflows in India (Sass, 2018).

There are several other factors than globalization and foreign policies which can affect foreign direct investments.

1.2. FDI Inflows in India by countries

There are few countries which actively participate in the FDI of India. Countries such as Mauritius, USA, Singapore, Netherlands and Japan are some top investing countries among them. These countries have been actively investing in India for over a decade. Following Figure 1 shows the top three countries which supported directly in India from 2007 to 2020.

India has had Mauritius, Singapore and Japan as the most prominent foreign investing countries, which have accounted for almost 60 per cent of all FDI that entered India since April 2000. Data collected from the DPIIT report states that the countries like UK, USA and Netherland have invested in India but not as much as these top three investing countries. This data doesn't have to determine an accurate representation of how the bilateral FDI actually exists between these countries and India.

Taxpayers in some of these nations may avoid paying double taxes on income received in both the source country and their home country because of incentives such as Double Taxation Avoidance Agreements (DTAAs). Investing in India has been made more accessible because of the agreements India has with nations like Mauritius, Singapore, Cyprus and the Netherlands. As a consequence, investors from the United States, the United Kingdom, and even India utilize these nations as transit places to take advantage of the DTAAs and avoid paying taxes in the

country where they are doing business, one of the most popular ways to entice foreign investment is to provide tax breaks to businesses.

Table 1 FDI Inflows in India by countries

FISCAL YEAR	FDI INFLOWS IN US\$ MILLION					
	Mauritius	UK	USA	Singapore	Netherland	Japan
2006-07	3780	1809	706			
2007-08	9518		950	2827		
2008-09	10165		1236	3360		
2009-10	9801		2212	2218		
2010-11	5616		1071	1540		
2011-12	8142	2760		3306		
2012-13	8059				1700	
2013-14	3695			4415		1795
2014-15	5878			5137	2154	
2015-16	7452		4124	12479		
2016-17	13383			6529		4237
2017-18	13415			9273	2677	
2018-19	6570		2823	14632		
2019-20	7498			12612	5295	
2020-21	4491		13204	15908		

(Source: DPIIT database 2006 to 2021)

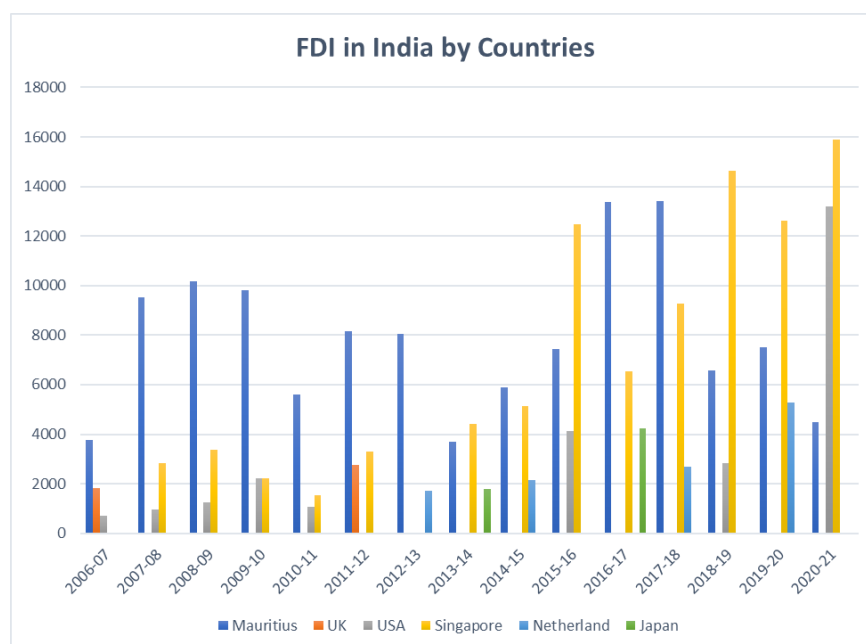


Figure 1 Country wise FDI in India
(Source: Compiled by author from the above Table 1)

Table 1 shows the FDI inflows in India by country, and Figure 1 shows a graphical representation of the data. It is clearly seen that these two countries, Mauritius and Singapore, has actively invested in India from 2007 to 2015, dominating the market. In 2008, 2009 and 2010, Mauritius investment recorded over double the rate of investment of other countries in India. Since 2012 Singapore's rate of investment in India is developed strongly, and in 2019, Singapore's rate of Investment in India is dominant to date. Many foreign countries are investing in the Indian market to take advantage of relatively lower wages, easily accessible human capital, special investment privileges like tax exemptions, etc. There are several factors like these which affect the FDI inflows and outflows.

1.3. Factors that affect the inflow and outflow of FDI

According to Ovezmyradov & Kepbanov (2021), several factors like population, geopolitics, internet penetration, national resilience, governance stability, tax policies & concessions, and scope of expansion (market) impact the inflow and outflow of FDI in India. Considering the population factor, the Indian population highly contributed to the labour force that formed an essential human resource part of the businesses.

To succeed in the investment climate, there is no single factor which creates success. Instead, it's a combination of many different factors, including improving your business environment through policies and regulations as well as attracting new investors who can help boost growth rates for firms within their borders while also providing employment opportunities outside the areas where they operate (Hunt, 2007).

India has been attracting FDI since the wake of 1991 Economic liberalization. Since then, FDI inflows have been increasing very rapidly in India. Today India is in the 1st position in the greenfield FDI ranking and is a member of the club of the top countries in Ease of Doing business (EoDB) and is ranked 63 out of 190 countries according to the World bank report 2020. India has been attracting FDI very rapidly over the past few years and has stood in the list of top 10 most improved economies in the world for the third time in a row. The government has set up policies and made it easy to do business in India. There are two ways to invest in the Indian market and by which India gets FDI, the automatic route and the government route. From the automatic route, the foreign investor, and the Indian company of them do not require any approval from the FDI regulatory bodies of the Indian government. This helps the FDI flow sooner and faster. FDI also facilitates the increase in employment and ensures access to technology and expertise for businesses (Mahapatra, 2020).

Implementing laws and policies will only support the private sector industries by giving

them security in doing business. Coordinating among different government agencies improves efficiency by improving coordination with other related departments or agencies that may be involved, such as finance for taxes owed etc., while also providing clarity on what each institution specializes in so there's less confusion when it comes time to make decisions about who should handle certain tasks best like paying employees (Skott, 2021). While focusing on population, the Indian population has reached the mark of 1.4 billion, and its prevalence could be recognized with every sixth individual across the globe could be recognized as an Indian. The Indian population does not only contribute towards being a part of the labour force but also contributes to increasing demand and consumption of goods through their purchasing power. It highly facilitates FDI by increasing the power of the population (Kamar, 2019).

There are various works of literature found on the factor that determines the inflow of FDI into the country. (Cleeve et al., 2015) discusses them depending on the level of economic and social development, political development, market size, growth prospects, human capital availability, natural resource availability, governmental measures, regulations & policies etc. FDI has been inflowing in India over the two decades because the country possesses all these factors, which stand unique and boost economic development. If a country lacks these factors and determinants, then that country might lose the attraction and retention of FDI. For a country, in order to attract FDI, a large supply of cheap labour is not enough, but it requires the availability of a skilled or well-educated labour force (Lemi and Asefa, 2003, Yasin, 2005). The existing skilled labour force is an essential factor for attracting more FDI.

Chacko (2021) examined that geopolitics is a significant driver of FDI in India. A positive shift in geopolitics can benefit India to form new alliance agreements with other countries. FDI decisions are affected as well because they lack facilitation from government institutions and have other issues such as power shortage, for example, which led to lower GDP per capita rates across all industries, including manufacturing sectors (Aggarwal & Evenett, 2017). Sharma & Kautish, (2020) Explain in their research work that governance stability is one of the primary requirements for driving FDI because it assures the investors against the risks of any losses and risks. More investors could be attracted to India by providing stable governance by reducing the risks of losses. On the other hand, if stable governance is not provided by the governing agency, there is a loss of FDI inflow, and the domestic companies also prefer to invest in foreign equities to increase their marketshare. It increases FDI outflow and a reduction in FDI inflow.

Research work by Annachhatre, (2020) shows that tax policies & concessions are also necessary to be taken into consideration to determine FDI inflow and outflow. A major reason behind it is that rigid and inflexible policies do not support industrial expansion resulting in FDI

inflow loss. On the contrary, flexible policies and regulations support industrial expansion, increasing FDI inflow. The scope of expansion market (China competition, large service sectors are thinking of establishing their production in India and taking advantage of the expert services provided by Indian service sector companies like giants like TCS, Infosys, HCL, and Wipro).

Analysis of the study by Awan, Abbasi, Rej, Bandyopadhyay & Lv (2022) shows that internet penetration helps in strengthening digital connectivity and allows MNC and Indian tech enterprises to unlock more market opportunities. It facilitates Indian organizations to adopt advanced technologies, innovate, and deliver high-quality services and products at a scale that attracts FDI. Additionally, national resilience is also known to play a significant role in influencing FDI by scourging remarkable developments and meeting crisis like the Covid-19 pandemic impact. The initiatives taken by the Indian government and the execution of restoration of economic activity will highly encourage global firms to make investments in India, thereby attracting more FDI inflows (Doytch, 2019).

Investing in a country with so many unstable governments can be risky. In fact, investors get distracted by the changing landscapes of these countries and their investments, also impacts FDI in India because it is directly related to the provision of wider markets. When wider markets are created within an economy, businesses gain more opportunities to serve the population. It attracts more FDI inflows for expanding company functionalities and meets the increasing demand for products by the population. On the other hand, if an adequate market is not provided to the firms, there is a lack of expansion of company operations leading to the insufficient meeting of population needs. With all these factors affecting the FDI inflows and outflows, the sectorized contribution of FDI differs on a wide range.

1.4. FDI and economic development in the Indian service sector

Das, Kumar & Patnaik (2020) examined that FDI inflows provide better grounds for generating new speculation, advancements, and administrative abilities for the host nations. While focusing on FDI in India, it has been showing an increasing trend and majorly contributing to the factor productivity, income growth, and Gross Domestic Product (GDP) of the country. However, the sudden outburst of the Covid-19 pandemic adversely impacted FDI inflows that tumbled the Gross Domestic Product (GDP) growth of the country. It was recorded that the GDP growth of India tumbled by 4.3% in the fourth quarter of 2019. Since the outset of a pandemic, a downward trend was recorded in India's GDP in 2019-20 in comparison to the increasing trend in the previous year. During the year 2015-16, the GDP of India was recorded to be 7.5% in the first quarter which fell to 7.3% in the third quarter but rose again to 7.9% in the fourth quarter. However, in

2019-20, the first quarter recorded a 5% reduction in GDP which further reduced to 4.5% in the second quarter and 4.7% in the third quarter (Rong, 2020).

Mehta, Raj & Sharma, (2021) analysed that in the pandemic conditions, the Compound Annual Growth Rate (CAGR) for Return on Equity was recorded to be 3% for Infosys, 5% for Wipro, -1% for HCL, and 3% for TCS. It can be estimated that the IT service-based companies like TCS, Wipro, and Infosys showed a positive trend from 2008 to 2020, while HCL showed a negative growth trend on equity during the same period. Therefore, it can be said that the position of Wipro was much stronger in comparison to other countries in regards to net return on equity (Hena, 2018).

Bayram Soylu (2019) examined that lockdown conditions, social distancing, and limited workforce engagement laid major constraints on the execution of commercial activities. Due to the lack of pandemic, there was a fluctuation in the price of raw materials in the automobile sector, the cost increase in the power industry, slow down of cash alteration in consumer & retail business. There was a slowdown in demand for new subscriptions for telecom, a gradual decline in the aviation & tourism industry, and short variations in transportation & logistics (Singh, 2019).

Mishra & Palit, (2020) examined that there was a definitive effect of FDI in the Indian economy as productivity is expected to increase post-Covid-19 conditions. In such conditions, exchange progression may encourage financial development through proficiency underway by using the rich elements of a generation. FDI inflow in the service sector in India may increase if the major focus must be given to recruiting skilled labour in the service sector industry so that there will be an increase in the productivity of the firm. With an increase in productivity, there will improve the sustainment of greater opportunities for revenue generation and FDI inflows (Mishra & Palit, 2020).

Based on the analysis, it is found that to increase FDI inflow in the service sector in India, the focus must be given to reducing the cost of the firm by enhancing the capabilities of the employees. FDI would directly impact the labour market of the host countries in such conditions, and the companies must include talented and resourceful resources to record increased firm efficacy. It may help in reducing the spillover effects between target enterprises and industries (Singh, 2019)

It would encourage retaining better innovations from cutting-edge nations and, conversely, might hurt the development procedure on the other hand through diverse types of macroeconomic flimsiness. Hence, it can be said that FDI plays a key role in exchange progression monetary development and ensuring a progressively good speculation atmosphere for growth (Singh, 2018).

1.5. Impact of Covid-19 pandemic on FDI inflows in India

According to VENNILA, (2021), Covid-19 created a global crisis and uncertainty that put the world economy at elevated risk. It ravaged the commercial and economic foundations for the execution of global trade. As to the World Trade Organization (WTO), it was found that global trade reduced by 13%-32% in 2020 because of Covid-19. It created a recession in the world economy whose adverse implications were observed in all countries including India. India recorded a gradual decline in FDI inflow with the outset of the Covid-19 pandemic in April 2020. There was a 60% reduction in net FDI inflow from April to June 2020. As a result, the FDI inflow was recorded to be 6562 million USD in April – June 2020 in comparison to 16329 million USD in the previous year (Omar, 2018). The COVID-19 circumstance applies various effects across areas and section modes. In the assembling area, COVID-19 harm in have nations has huge adverse consequences on both greenfield FDI, and crossline mergers & acquisitions. Be that as it may, home nations' Coronavirus circumstance does not fundamentally affect the two kinds of FDI. This finding is especially apparent when FDI streams are communicated by the number of cases or arrangements. Nevertheless, in the help area, Corona-virus harm in both the host and home nations is found to adversely affect greenfield FDI, though the effect of COVID-19 on crossline mergers & acquisitions seems, by all accounts, to be generally immaterial. At the point when a quarter-slack is permitted, COVID-19 harm in the nations of origin is likewise found to adversely affect M&A FDI.

Vennila, (2021) concluded in the research work about FDI equity inflows through the components of equity inflows and re-invested earnings. It was found that there was an increase in the equity inflow during 2016-17. However, re-invested earnings recorded a decrease of 20% in the year 2020-21 because of the Covid-19 pandemic condition. A reduction of 72% was recorded in other capital in 2020-21 in comparison to 2019-20. The study examined that the highest amount of FDI inflow was obtained from Singapore with 15717 million USD FDI inflows. The Singapore FDI inflow contributed 31% of the total FDI collected in the pandemic year (April – December 2020) in India. It was followed by the United States, which was the second-largest contributor of FDI in India with 12828 million USD. It was followed by other countries like United Arab Emirates, Mauritius, Cayman Island, Netherlands, the United Kingdom, Japan, Germany, and Cyprus (Serfraz, 2018).

Vennila, (2021) examined the contribution of the service sector in FDI inflow and outflow during Pre Covid-19 and during Covid-19 in India. The study examined that the service sector accounted for 3857 million USD FDI inflows in 2020-21 in comparison to 7854 million USD FDI inflows in year 2019-20. The computer software & hardware recorded an increasing

trend with 24385 million USD FDI inflows in 2020-21 in comparison to 7673 million USD FDI inflows in the year 2019-20. A decreasing trend was observed in the telecommunication, trading, and construction industry, recording 357 million USD, 2141 million USD, and 272 million USD in year 2020-21 in comparison to 4445 million USD, 4574 million USD, and 617 million USD in year 2019-20. The automobile, chemicals, and hotel & tourism industry recorded a decreasing trend with 1185 million, 739 million USD, and 326 million USD FDI inflows in 2020-21 in comparison to 2824 million USD, 1058 million USD, and 2938 million USD in 2019-20 (Bhattarai, 2020). On the other hand, the service sector industries like infrastructure activities and Drugs & Pharmaceuticals recorded an increasing trend in FDI inflows with 7149 million USD and 1246 million USD FDI inflows in 2020-21 in comparison to 2042 million USD and 518 million USD inflows in 2019-20. Therefore, it can be said that there was a mixed trend in FDI inflows in FDI inflows in pre and during the Covid-19 pandemic since service sector industries like infrastructure, Pharmaceuticals, and the computer showed a positive trend, and industries like automobile, telecommunication, and chemical showed a negative trend (Mamba, 2020).

Xiang, Rasool, Hang, Javid, Javed & Artene (2021) examined that though there has been a significant reduction in the Gross Domestic Product (GDP) and FDI inflow in India during the Covid-19 duration, the service sector industry performed better by contributing 31% to GDP because of industrialization policies such as “Make in India” introduced by the government of India. For example, there was a spike in demand for certain products such as food and healthcare sectors in India. There was also an emergent demand for e-educational services among the different educational organizations and students. Hence, it can be said that though there was a reduction in FDI and employment in certain sectors in India, a few sectors, such as education, healthcare, and food, experienced a boost (Jacob, 2021).

According to Joshi, Bhaskar & Gupta (2020), there was a negative impact of Covid-19 on the employee turnover in the service sector by abruptly interrupting the supply chains at the domestic levels. Due to disruption in the manufacturing, supply, and delivery process, there was a reduction in the company's revenue. It directly impacted the working opportunities of the contractual labourers because, with the reduction in the company revenue, the contractual labourers and daily wage earners are the first ones to be fired at the lower organizational level. It significantly reduces the employee count in the firm and the proportionate the spending of the company with decreased revenue generation. The example of service sector industries such as retailers, airlines, multiplexes, retailers, malls, and restaurants can be taken into consideration that experienced a significant revenue shortage during Covid-19. Since these enterprises were not in an able position to generate revenue, they focused on minimizing their expenditure by

reducing the number of employees (Das, 2018). Additionally, due to curtailed cash flow in the Indian economy, there was a negative implication on the payments that were made to the employees. There were salary cuts, apprehensive job dismissals, and re-scheduling of loan repayments, taxes, and interests. All of these made the Indian economy more vulnerable that adversely impacted the inflow of FDI in the country. Through this instance, it can be said that the Covid 19 must-have affected service sector employee turnover negatively by reducing the employee count and FDI inflow (Chaudhury, 2020).

1.6. Importance of employees in service sector industries

According to (Kianto & Hurmelinna-Laukkane, 2010), Human capital is something which is particularly important in-service sector industries as this industry needs highly skilled employees who are motivated and ready to gain a competitive advantage.

The human capital in service sector industries such as hotels and restaurants, financial services, etc. They must be someone who is competent, qualified, and experienced enough to perform the job in the field with direct customers. Hence, the employees in the service sector must be capable of connecting the client's demands with the service provider. Employees must have training and experience, have suitable qualifications to perform the job, possess enough knowledge in the field of work and must also be psychologically aware of the behavioral factors which one might face in this field of work. (ogodziński, 2000). These are the basic characteristics the employee working in this sector must have. (Sanders, Shipton & Gomes, 2014; Sydler, Heafliker & Prukka, 2014) According to that, skilled labour has played a particularly important role over the past two decades in India's overall performance and has contributed immensely, especially to the growth in the services sector. They are considered the most prominent and very crucial sources of creating business value because they are exceptionally reliable indicators for economic development in that country. Human capital plays a vital role in creating value in the knowledge-based economy.

Edvinsson and Sullivan (1996) suggested that it is very important for firms to know how to leverage the knowledge of their employees toward value creation. Indian culture can play a key aspect in these psychological and behavioural demands as people from the Asian continent have a strong community spirit and maintain a humble and welcoming nature with everyone. (Lin, Nguyen & Lin, 2013).

In other sectors such as manufacturing, Agriculture, Medical or similar, the involvement of the number of the human workforce is smaller in comparison to the service sector due to mechanization and industrial automation. The service sector is primarily based on services

provided by the human workforce, so the number of employees is a prime factor of growth for any service sector industry.

The present research is about analyzing if the employee count is an important criterion that must be taken into account for the determination of FDI and highlight its association with industry growth. By focusing on employee count, an association could be established between the number of employees and FDI that are interlinked to each other in the segment of service sector industries in India. It was examined that the service sector industry is a labour-oriented industry in which there is an urgent requirement for skilled and semi-skilled labour so that services and utilities can be provided to consumers proficiently (Baby & Sharma, 2017).

The contribution of the employees plays a vital role in enhancing the performance and productivity of the firm by allowing them to deliver quality work on time. If the employees accomplish their tasks with high-quality aspects on time, it increases the value of the company in the domestic and international markets. Hence, employee contribution is directly related to firm performance that influences FDI inflows (Mallick, Mahalik & Padhan, 2020).

1.7. Impact of Covid-19 pandemic on workforce strength (employee count) in service sector industries

According to Xiang et al. (2021), the covid-19 has a significant influence on the service sector industries, especially in the tourism industry, logistic industry, hotel industry, Transport and the airline industry, etc. This pandemic era has affected the service sector business in a negative manner. The pandemic has introduced a disruptive amount of stress and panic in the workforce. Healthcare was the most affected sector by the pandemic. Not only did the employees get affected by covid, but there was also a shortage of healthcare-related equipment, ventilators, beds etc. The transport industry plays a key role in providing essential services to consumers during the Covid-19 lockdown period. (Rani & Dhir, 2020). During this period, various online platforms such as food delivery apps, groceries shopping platforms, medical services, etc. were developed to provide increasingly vital services for people who are in quarantine and who are vulnerable to covid. At the same time, workers involved in the location-based work avoided this.

1.8. Theory

The theory of the exchange rates on imperfect capital markets

The Theory of Exchange Rates on Imperfect Capital Markets focuses on explaining FDI by considering the international trade perspective. The theory highlighted that uncertainty highly

impacted FDI because it stimulated real exchange rates. For instance, the theory asserts that if there is an increase in the real exchange rate, it stimulates FDI that has been made by USD, simultaneously during the same period, and there will be a reduction in the foreign currency appreciation. However, the use of this theory gets limited because this model could not explain the association between the FDI between nations with different currencies.

The Internalization theory

The Internalization Theory plays a leading role in explaining the transition experienced by companies and the motivation behind achieving FDI goals. Since the inception of the theory in 1937 by Coase, it has undergone several changes in the consecutive years 1976, 1982, and 1983. Buckley and Casson modified the theory in 1976 and found that it helps demonstrate transitions that occur in companies at the time of organizing their internal activities. It plays a significant role in developing specific advantages that are to be explored later on for obtaining more benefits. The theory was enhanced with the inclusion of Internalization theory by developing two types of models which were the vertical model and the horizontal model. Additionally, Hymer also highlighted the international context of the theory and asserted that firm-specific advantages were associated with FDI and outweighed operational costs. As a result, Hymer concluded that FDI was linked with enterprise-level strategy and made the decision for the capital market that influenced the flow of FDI.

The Eclectic Paradigm of Dunning

The Eclectic Paradigm of Dunning theory was introduced by Dunning, a mixture of three FDI-related theories O-L-I. In this theory, O is referred to as ownership benefits. It includes intangible assets that ensure that companies execute their activities at low costs and obtain higher profits at low costs. L is referred to as location; it is considered one of the most important requirements for the determination of FDI that specifies the ownership of the company. IT is referred to as internalization, in which major emphasis is given to integrating the internal operations of the firm. The Eclectic paradigm OLI highlights the company's OLI constructs that differ between enterprises depending on the economic, political, and social features of the host country. Thus, by using this theory, the determination of the enterprise's objectives and strategies help determine the pattern of production and ascertain the challenges and opportunities associated with it. Therefore, it can be said that by using FDI theories, a better understanding could be gained of their effect in the commercial sector that would not only help in estimating its influence on the company but also on the economy.

1.9. Research gap

FDI plays a key role in economic development by attracting revenues for the country and influencing the GDP of the country. Research investigation by Boermans, Hein, and Zhang (2011) shows the scattered distribution of foreign investment across the regions of China geographically. They also concluded that geographical areas with larger market sizes and good institutions are playing crucial roles in attracting higher FDI inflows. In addition to this, they also found that low labour cost is a statistically significant factor affecting foreign direct investments. Indian economy and market are similar to China. In addition to this, India and China are remarkably similar to each other in various other aspects such as population, geographical area, human capital, cultural similarities, etc. Based on the literature analysis of the Chinese market, results and analysis can be used to predict the effects and impact of FDI in the Indian market. Also, in the case of the Chinese market, it has been analysed that lower wages, skilled labour and human capital played a significant role in attracting FDI. India has comparable properties, which might have an effect on the FDI inflows in the Indian market.

Kim, Lin, and Suen (2013) studied the effects of the social capability of trade and foreign investment inflows on the country's internal investments using the instrumental variable threshold regressions approach. Human capital was one of their social capability variables. During their research, the human capital variable is measured as years of schooling in the initial year. The research concluded that trade is adversely affected by investment in geographical areas whose human capital is lower than respective other areas.

In their research study, Reiter and Steensma (2010) concluded that FDI inflows and employees' development are strongly related, and they show a positive relationship using the Pannel Linear Regression model. However, studies related to it in the previous academic literature have been limited that do not provide in-depth insights into the correlation between FDI and employment ratio (Mohanty, 2019). A gap has been identified in previous and current literature in the segment of the relationship between FDI and workforce strength (number of employees). Literature review shows that till the Covid-19 period, FDI inflows in India were increasing, the majority of which were acquired by the service sector. During Covid-19, service sector industries were affected, and the employee count for some of them was decreased or incapable of working for a short period. The decreasing trend of both FDI inflows and the number of employees during the Covid-19 period suggests the relationship between them. Hence the present research addresses this gap by providing insights related to the relationship between FDI inflows in India and the number of employees in the service sector industries.

2. RESEARCH METHODOLOGY

2.1. The reasoning of the research

Many studies have analyzed how FDI inflows have positively affected the economic development of the country. However, there are very few papers examining the impact FDI inflows have on the number of employees in a particular sector and whether there is any causal relationship between them. It is important to address this research gap; the research question of this study is formulated to address the prime factor for globalization in India over the past two decades has been FDI inflows, and since then, India has shown immense growth and economic development. FDI has paved the way for more foreign investments, the inflow of not just capital but also the inflow and transfer of modern technologies, business practices, etc.

These FDI inflows dramatically change the effects on employment and India's economy. In this research, two variables are chosen for data analysis: foreign direct investment and employee count. The reason for selecting these two variables is because it suggests positive interdependence between FDI and economic growth. For example, if FDI inflows in India raise 1%, then it automatically impacts employee growth leading it to also increase. As a result, more significant economic growth provides high employment opportunities.

The major focus of the research work is given to adapting a quantitative research approach with the help of data analysis tools such as Regression analysis, Granger Causality test, Correlation, and Augmented Dickey-Fuller Test to examine data related to the impact of FDI inflows in the service sector on the employment in Indian service sector industries. The tools such as literature review, research design approach, data collection, sampling, and data analysis are used in research work to explore the facts and obtain reliable insights related to the proposed research objectives and identified research problem.

2.2. Variables for research

The major aim of this research work is to study the impact of FDI inflows on employment in Indian service sector industries by researching the two variables - Foreign Direct Investment (FDI) inflows and employee count in the Indian service sector industries. For this research, FDI inflows are the independent variable, and the dependent variable is the employee count in the Indian service sector industry.

The independent variable is measured by collecting the yearly FDI inflow data from the Reserve Bank of India reports.

Figure 2 below is a graphical representation of the dependent variable used for the research. The rate of change in employee count is calculated by collecting the total employee count for the selected service sector industries where the workforce growth rate is estimated. This rate is obtained by calculating the difference between the total number of employees in the current year to the total number of employees in the last year and dividing it by the number of employees of last year.

This is a logical representation of how the workforce growth rate of the selected 53 Indian service sector companies for the period of research is measured in this research.

- a) If the previous year’s total number of employees was higher than the total number of employees in the current year, that means the rate of change in employee count is less than 0, which shows that there is a lapse in the total workforce change rate.
- b) If the previous year’s total number of employees was equal to the total number of employees in the current year, then the rate of change in employee count is equal to 0, which shows that there is no change in the total workforce change rate.
- c) If the previous year’s total number of employees was less than the total number of employees in the current year, that means the rate of change in employee count is higher than 0, which shows that there is a growth in the total workforce change rate.

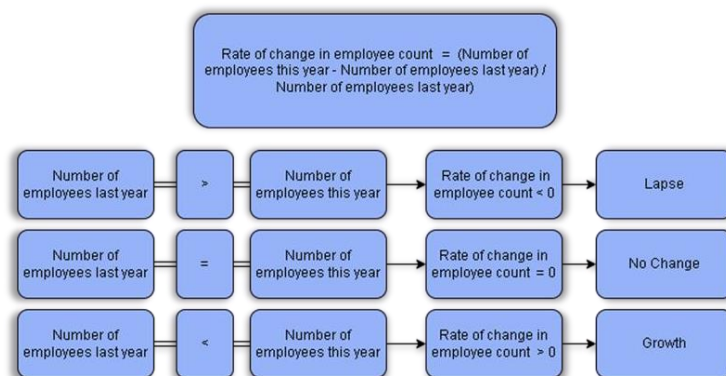


Figure 2 Relationship between the rate of change of employees to organization growth

(Source: compiled by author)

While considering the association between FDI and workforce requirement, both are indirectly linked to each other (Behera, 2021). A major reason behind it is that FDI is directly related to industry growth, and industry growth is linked to workforce requirements. Hence, there is an indirect association between FDI and the workforce, with industry growth acting as the

mediator variable. Hence, there is a formation of a circular linkage between FDI and workforce count in which FDI is linked to industry growth which is again linked to higher workforce requirements. Based on the above discussed facts, it can be said that the number of employees is the key aspect for more FDI inflows in the service sector industries in India. It can also be said that FDI has a significant impact on the employment of service sector industries in India. The literature review shows that there are studies performed by comparing different variables with FDI inflows in developing economies of different countries. Previous studies analyse the relation between GDP and FDI inflows, Wage scale and FDI inflows and Human capital and FDI inflows. However, there is no research work on the relationship between FDI inflows and employment. This research gap will be addressed by the current research.

The service sector is a labour-oriented industry in which skilled and semi-skilled employees are required to execute different work operations (Ngoc, 2019). The employees play a key role in accomplishing the task and delivering projects so that the set work target is achieved accordingly. When there is the delivery of work on time, there is the execution of organizational activities proficiently.

The timely and quality-based delivery of work opens the door to more foreign investment in the company and enhances its position in the international market. Hence, the present research focused on analysing the association that exists between the independent variable FDI and dependent variable employee count, which are essential for determining the linkage between industry growth, workforce requirement, and required investment. It helps in the determination of the relation between FDI and employee count (Beena,2018).

2.3. Formulation of the hypothesis

According to the theoretical review of the scientific literature in the previous chapter, it is clear that the FDI is a prominent source of economic development in India. FDI inflow in the Indian service sector over the past two decades has drastically grown. In this research, the formulation of the hypothesis is based on this logical concept.

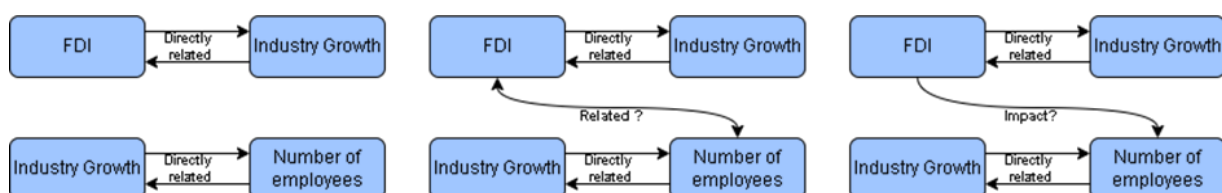


Figure 3 FDI and Employee count relationship, (Source: compiled by author)

From the literature review, it can be analysed that FDI and the growth of service industries are related to each other. The more the amount of FDI inflows, the higher growth rate of the service industry. Also, Industry growth is related to the employee count in a certain industry. These two relationships and a certain drop in both of these parameters suggest the relationship between FDI inflows and employment in the service sector. In this research work, tests are performed to determine this relationship. And if there is any relationship, whether it is a cause-effect relationship between these two variables is also tested.

2.4. Research Paradigm

In the present research positivism research approach has been included to collect facts related to the role of FDI on the performance of the service sector organization. The positivism research approach is based on the single concept of reality that helped in the building of a structured framework for the conduction of the research process. It is directly associated with the hypothetic-deductive aspect that facilitates the development and examination of hypotheses. The ontological aspect of the positivism research philosophy allowed the researcher to focus on single truth and gather insights related to the study. As a result, there was a collection of single reality-based insights by including the unique identity or individuality of the investigator. The epistemological aspect of the positivism research approach allowed the conduction of the research process in a unidirectional manner that helped in the collection of facts related to factors that influence FDI flow in the Indian service sector during the Covid-19 and pre Covid-19 period. The methodology aspect of the positivism research approach supported the use of arithmetical and statistical tools such as Regression analysis, Granger Causality test, Correlation, and Augmented Dickey-Fuller Test because of which research-related facts were collected effectively. Thus, by using positivism research philosophy, there was a collection of reliable insights about trends and patterns of FDI in the Indian service sector.

2.5. Research Approach

In the present research, the quantitative research approach has been included to collect reliable insights related to the research objective. The current research is performed to determine the impact of FDI on employment in Indian service sector industries, for which the best-suited method is the quantitative research approach because it provides a statistical basis for the assessment of facts. The quantitative research approach is known to be based on the deductive research approach that allowed the collection of facts related to several employees, which is considered to be the key aspect for more FDI inflows in the selected service sector industries in India as per the empirical research. The inferential research approach used in the study allows the

author to collect facts about the impact on the employment of service sector industries in India by using statistical tools such as Regression analysis, Granger Causality test, Correlation and Augmented Dickey-Fuller Test.

2.6. Research Design

In the present research, a descriptive research design has been included to justify the results of the study strategically. The descriptive research design facilitated the development of a structured framework or a blueprint to systematically ensure the research process's conduction. It played a vital role in describing the phenomenon and formulating hypotheses (Creswell & Creswell, 2017). The present study mainly focuses on collecting data by conducting an industry-wise analysis carried out by including 53 company's employees count data. It ensured that there was exploration and examination of the current state of the situation without delimiting the implication of the variables. As a result, there was a collection of valuable insights about the role of FDI in bringing improvements to the Indian economy. The descriptive research design helped in acquiring relevant insights about the role of FDI on the performance of the selected organization from the information from diverse sources in a systematic manner. It allowed obtaining reliable insights about the research objectives by determining the research perceptions and attributes. The selected research design facilitated the research process by providing an in-depth understanding and learning about the research facts. Therefore, it can be said that the descriptive research design helped in obtaining valuable insights about the role of FDI on selected service sector organizations so that a better understanding is gained of its influence on their employee count.

2.7. Data Collection

Data collection is a primary part of research methodology that mainly includes valuable information related to the numerous factors that impact the FDI inflow. The research period of this study is from the years 2006 (pre covid) to (during covid) 2021. All the FDI inflows in India related data is collected from the website of the Reserve Bank of India (RBI), Organization for Economic Co-operation and Development OECD reports, DPIIT- Department for Promotion of Industry and Internal Trade, and Indian governmental databases and other secondary source data. The study examines the direct effect of FDI inflows in India before and during Covid-19 and how FDI can be used as a propagator of growth for the Indian economy via its contribution. This current study examines the impact of FDI inflows on employee count in the selected service

sector industries. The data for FDI inflows and outflows for the particular research is collected from governmental data sources. Data collected from RBI is used to gather data about the distribution of FDI inflows in the different sectors.

The data about Employee count was collected throughout the research period 2006 to 2021 in the selected 53 service sector industries in India that are mainly dealing in IT services, finance, banking, hospitality, consumer goods, telecom, transport, and airline industries. The researcher has selected the top nine companies that are dealing in IT services, such as Tata consultancy service (TCS), Infosys, Hindustan Computers Limited (HCL technologies), and Western India Products. (WIPRO), Tech Mahindra Ltd, Cognizant, Mphasis, Coforge (NIIT), Mind Tree consulting service. This study includes nine companies that are dealing in the finance sector Muthoot finance, Bajaj FinServ, Axis capital holding, Kotak Mahindra, Mahindra and Mahindra, Shriram transport finance, Goldman Sachs and Housing Development Finance Corporation Limited (HDFC) life insurance company.

The study has selected twelve companies that are dealing in banking IndusInd Bank, State Bank of India (SBI), ICICI Bank, Industrial Credit, and Investment Corporation of India, HDFC Bank, Axis Bank, Yes Bank, Bank of Baroda and Canara Bank. The study has also selected ten companies that deal in hospitality Taj GVK royal, Orchid hotels, the Oberoi hotel, Leela Ventures, Marriott international hotels, Intercontinental hotels, Mahindra holidays, Make My Trip MMT, International travel house limited and India tourism development corporation limited. The study has also selected three consumer goods companies that are Procter & Gamble Company(P&G), Imperial Tobacco Company of India Limited (ITC) and Hindustan Unilever Limited (HUL). The study has three telecom companies Mahanagar Telephone Nigam Limited (MTNL), Vodafone and Airtel. The study has selected four transport companies Blue dart, GATI, ABC India and Transport Corporation of India Limited. Lastly, the study has selected three airline companies - Air India, SpiceJet and Jet Airways.

The DPIIT reports and data from other government data sources are used to identify major organizations in service sector industries in the Indian market. Based on this, 53 organizations are chosen, which are companies in the Indian service sector industries that are large companies or subsidiaries of large companies. The chosen organizations are distributed over different service sector industries, such as financial services, transport services, telecom and communication services etc.

2.8. Sampling

In the present research, a random simple sampling method was included to select the unit sample from the large population. A major reason behind the selection of a simple random

sampling method is that it allows the selection of the unit sample in an unbiased manner (Acharya, Prakash, Saxena & Nigam, 2013). About nine companies (TCS, HCL, Infosys, Wipro, Tech Mahindra, Cognizant Technology Solutions (CST), Mphasis, Coforge- formerly known as National Institute of Information Technology (NIIT), and Mind Tree Consultancy Services were included in the Information Technology (IT) services segment. Nine companies such as Muthoot Finance, Bajaj Finserv, Axis Capital Holding, Kotak Mahindra, Mahindra & Mahindra, Shriram Transport Finance, Goldman Satche, and HDFC Life Insurance from finance, and twelve companies (IndusInd Bank, SBI Bank, ICICI Bank, HDFC Bank, Axis Bank, Canara Bank, Bank of Baroda, and Yes Bank) from banking sector had been included in the research. About ten companies such as Taj GVK, Royal Orchid Hotel, the Oberoi Hotel, Hotel Leela Ventures, Marriott International Hotels, Intercontinental Hotel, Mahindra Holidays, Make My Trip, International Travel House, VIMTA LABS LTD, and India Tourism Development Corporation LTD had been included from the hospitality sector. About three companies (P&G, ITC, Hindustan Unilever) from consumer goods and three companies (MTNL, Vodafone, Airtel) from telecom had also been included in the study sample. Four companies such as Blue Dart, GATI, ABC India, and Transport Corporation of India from transport and three companies such as Air India, SpiceJet, and Jet Airways from airlines had been included in the sample unit (Mujere, 2016).

2.9. Data analysis

In the present research, quantitative data analysis has been included to examine the authenticity of the collected facts. It included the use of Regression analysis that helped in determining the relationship between two distinct variables that would be analyzed in this test. The Granger Causality test helped in examining the relationship between two distinct variables with the constant period in this test (Gallagher, 2009). The Pearson Correlation test helped to determine the correlation between these two variables by measuring the strength of the linear relationship between them. By using Spearman's correlation, helped to verify the strength and direction of monotonic association between these two variables. Monotonicity was assessed and found to be "less restrictive" than that of a linear relationship. The augmented Dickey-Fuller test was included in the research to analyze the validity of facts through time series. By using the quantitative data analysis, there was analyzing of the research objectives such as the role of FDI on the performance of the service sector organization, factors that influence FDI flow in the Indian service sector, and trends and patterns of FDI in the Indian service sector accurately. The statistical tools also helped in an examination of hypotheses such as Employee count of selected service sector industries in India increases with increasing FDI inflows, and FDI inflows in India

impact the number of employees in selected Indian service sector industries and found that the unit sample that was selected in the present research was small because of which it was difficult to ascertain whether employee count data impacted the entire FDI inflow in the service sector.

- **Regression analysis**

Regression analysis is the data analysis method most frequently used to analyze the trend of data points. It is a statistical technique that is often used in fields like banking and investment to figure out how well one variable correlates with another (known as independent variables). There are two most common forms of regression - Simple linear regression and multiple linear regression. However, the non-linear regression technique is also available for more complex data and their analysis. The difference between these two forms of regression is that simple linear regression relies only on one independent variable, whereas multiple linear regression relies on numerous independent variables. Since this research is based on FDI inflows over the research period & Employee number, the simple linear regression model is used to analyze the relationship trend between these two variables. For each year, the independent variable (X) is the FDI inflows in India, and the dependent variable is the Employee count (Y).

Following is the linear regression formula:

$$\hat{Y} = b_0 + b_1x$$

b₀ - the y-intercept, this is where the line crosses the y-axis.

b₁ - the slope describes the line's direction and incline.

$$b_1 = \frac{SP_{xy}}{SS_x} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sum (x_i - \bar{x})^2}$$

$$b_0 = \bar{y} - b_1x$$

R squares is the percentage of the variance explained by the regression (SS_{Regression}) from the overall variance (SS_{Total}).

$$R^2 = \frac{SS_{Regression}}{SS_{Total}}$$

SS = Sum of Squares.

Regression MS = Regression SS / Regression degrees of freedom.

Residual MS = Mean squared error = Residual S.S. / Residual degrees of freedom.

F = Overall F test for the null hypothesis.

Significance F = The significance associated with P-Value

The before mentioned formulas and variables are used to create a regression statistics table. Measures the model's ability to match the data, statistically speaking. Another key part of regression analysis is the ANOVA table. The most critical figure in an ANOVA analysis is the measure of Significance F. The p-value from the regression test for the overall significance of the F-test is also shown here. This test is done to check whether the model with all of its independent variables is better at describing the variability of the dependent variable. There is a strong chance that this test result is statistically significant.

For this reason, it may be more difficult to make sense of the statistics if the sum of squares is broken down into its component parts (e.g., the regression and residual sums of squares). This element of the output does not need to be evaluated if the basic linear regression is performed (and there is no need to go into specific components).

- **Correlation tests**

Two or more variables are compared to see whether there is a relationship between them using this test. During the study period, we are interested in finding out whether or not there is a correlation between FDI inflows in India and the number of employees in the chosen service sector organizations. The correlation coefficient is calculated to answer this question.

Correlation tests were performed to detect the relationship between FDI inflows and the number of employees in India's selected service sector industries. To determine the strength of the relationship and direction of the linear relationship between these two continuous variables, the Correlation coefficients are studied.

Pearson Correlation Coefficient

The Pearson correlation coefficient test is usually called as the Pearson's R or the bivariate correlation. This is a statistical statistic that helps in evaluating the linear connection between two variables, X and Y usually valued between the range of +1 and -1. A positive linear correlation is represented by a +1 number, whereas zero means there is no connection, and a negative linear correlation of -1 indicates a true negative correlation.

$$\text{Pearson correlation coefficient} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$$

Here,

X = First variable data

Y = Second variable data

n = Number of datapoints

Strength of the relationship –

From -1 to +1, the correlation coefficient may be calculated. It is easier to see the link between two variables when their coefficients have a greater absolute value. The Pearson correlation is perfectly linear if its absolute value is 1. A correlation close to zero shows that there is no linear connection between the test variables.

The direction of the relationship -

By looking at the at the sign of Pearson's coefficient, one can find which way it is going. If the correlation coefficient value is found to be positive then the line depicting the correlation slopes would be upward when both variables tend to rise or decrease together. If the Pearson's coefficient is found to be negative, then one variable tends to rise while the other falls and the line that illustrates the connection which would be curved downward. The data in the following graphs have been correlated to reveal varied patterns in the strength and direction of correlations between variables, as shown by the plots.

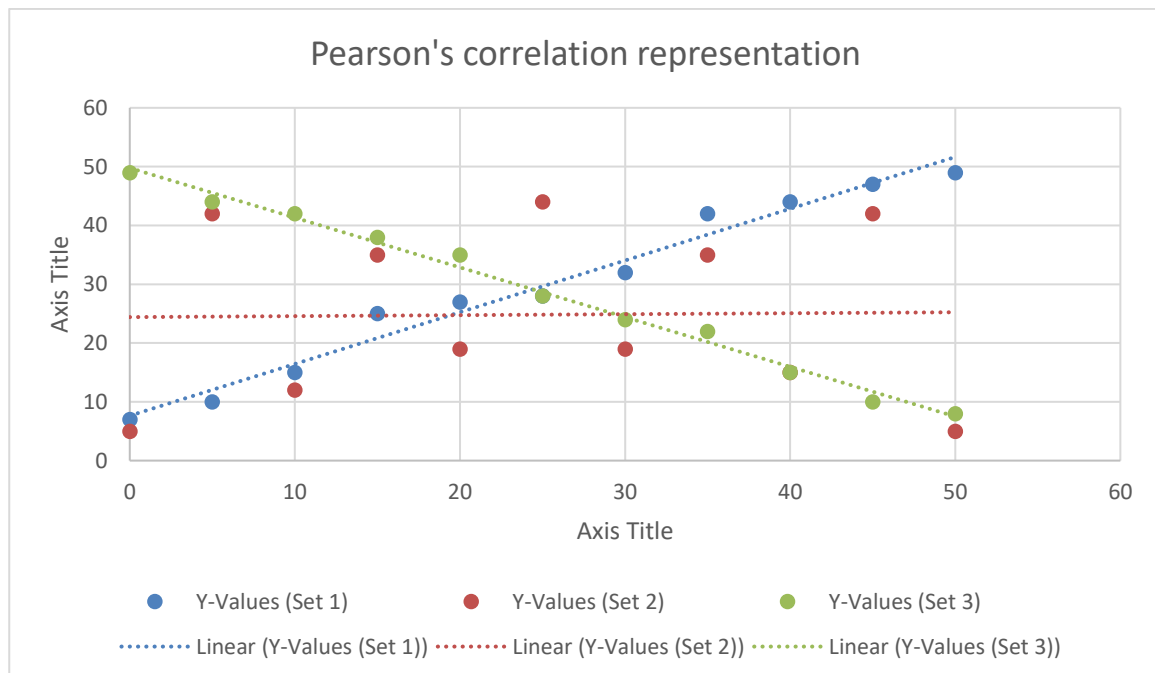


Figure 4 Representation of Pearson's test
(Source: Compiled by author)

Figure 4 is a graphical representation of Pearson's correlation test performed on three different data sets of the Y variable, keeping the X variable the same. Data set 1 shows the positive relationship as both X and Y grow together. The data set shows there is no significant linear relationship between X and Y variables, and the data set is scattered. Data set 3 shows the negative relationship as the Y variable is decreasing with an increment in X.

Statistical significance of relationship -

It is reasonable to assume that if the p-value is less than or equal to the threshold of statistical significance (α) the correlation is not zero. This relationship and association is not significant if the p-value is bigger than the significance threshold (α).

Spearman's correlation test –

In statistics, Spearman's rank correlation coefficient is named after Charles Spearman. This is a nonparametric measure of rank correlation (which, in simple words, would be the statistical dependence between the rankings of two variables). It assesses the relationship between two variables that can be described using a monotonic function.

The interpretation of Spearman's test for the strength of relationship, direction of relationship and significance of relationship is similar to Pearson's test.

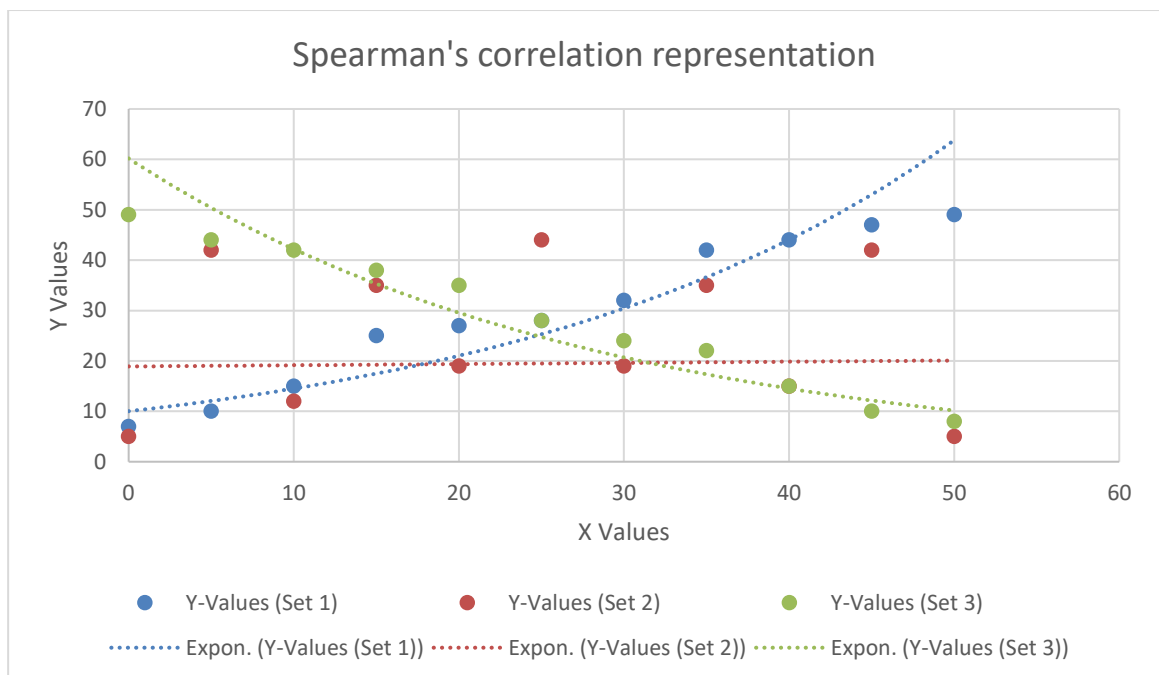


Figure 5 Representation of Spearman's test
(Source: Compiled by author)

Figure 5 is a graphical representation of Spearman's correlation test performed on three different data sets of Y variable, keeping X variable the same. Data set 1 shows the positive exponential relationship as both X and Y grow together. Data set shows that there is no significant exponential relationship between X and Y variable and the data set is scattered. Data set 3 shows, the negative exponential relationship as Y variable is decreasing with increment in X.

There is a linear connection between the two variables in a Pearson Correlation Coefficient, but in the Spearman correlation coefficient there is a monotonic correlations between its variables. This is the primary distinction between the two correlation coefficients. As a further distinction, Pearson utilizes the raw data values of the variables, while Spearman utilizes ranked-ordered ones.

- **Augmented Dickey-Fuller test**

Time series stationarity may be determined statistically with the help of the Augmented Dickey Fuller Test (ADF Test). It is the most often and commonly used statistical tests for determining if a series is stationary.

- **Granger causality:**

Use this test to do statistical hypothesis testing by examining if one-time series may be used to predict another time series. In order to examine the pattern of correlation in empirical data, this approach might be effective. Granger causality is utilized in FDI research to ensure that the findings are reliable and to determine the nature of the link between FDI and GDP.

$$x_t = c1 + \sum_{i=1}^3 \alpha 1, iy_{t-1} + \sum_{i=1}^3 \beta 1, ix_{t-i}$$

2.10. Ethical consideration

Ethical consideration has been included in the present research by obtaining relevant permits from all the companies that were included in the research. In this study 53 companies have been selected that deal in different sectors. All genuine data were used and were collected from the companies reports issued from their websites and FDI related data are collected from the official Indian Governmental websites. So, this study is completely valid and data collected is reliable.

2.11. Summary of research methodology

Based on the above facts, it can be said that the present research included a positivism research paradigm so that there is a quantitative analysis of facts by using statistical tools such as Regression analysis, Granger Causality test, Correlation, and Augmented Dickey-Fuller Test. The descriptive research helped in the identification of the unexplored facts systematically and the deductive research approach assisted in developing and accessing hypotheses. The primary data collection method helped in collecting valuable insights related to the research objectives by interviewing respondents from selected service sector industries in India. The simple random

sampling method helped in selecting the unit sample of 53 companies in an indiscriminative manner to represent the views of the large population. The ethical consideration was taken into account to ensure all reliability and validity aspects.

3. EMPIRICAL RESULT ANALYSIS

The research data about FDI inflows are collected from various sources such as RBI and DPIIT. The data about employee counts in different service sector industries is obtained from the annual reports of the respective organizations. In the present section of the research, data that has been collected is analysed, and results are interpreted.

3.1. FDI inflows and FDI in the Service sector

Table 2 FDI inflows in the service sector

YEAR	FDI INFLOWS IN THE SERVICE SECTOR		FDI INFLOWS IN OTHER SECTORS		TOTAL FDI INFLOWS
	million USD	% of total FDI Inflows	million USD	% of total FDI Inflows	million USD
	2007	6104	66%	3203	34%
2008	10230	53%	9195	47%	19425
2009	12185	54%	10512	46%	22697
2010	15082	67%	7379	33%	22461
2011	10768	72%	4171	28%	14939
2012	17810	76%	5663	24%	23473
2013	13592	74%	4694	26%	18286
2014	10878	68%	5176	32%	16054
2015	17646	71%	7102	29%	24748
2016	23472	65%	12596	35%	36068
2017	17836	49%	18481	51%	36317
2018	21837	58%	15529	42%	37366
2019	20883	54%	17861	46%	38744
2020	24411	57%	18218	43%	42629
2021	38562	73%	13983	27%	52545
AVERAGE		64%		36%	

(Source: Reserve Bank of India database 2006 to 2021)

Table 2 shows that during the period 2007 to 2021, FDI inflows attracted by the service sector is an average of 64% of total FDI inflows in Indian market. For the years, the contribution of service sector industries in FDI inflows has been higher than 49% of total FDI inflows. This

shows the importance of the service sector in the market for attracting higher FDI inflows.

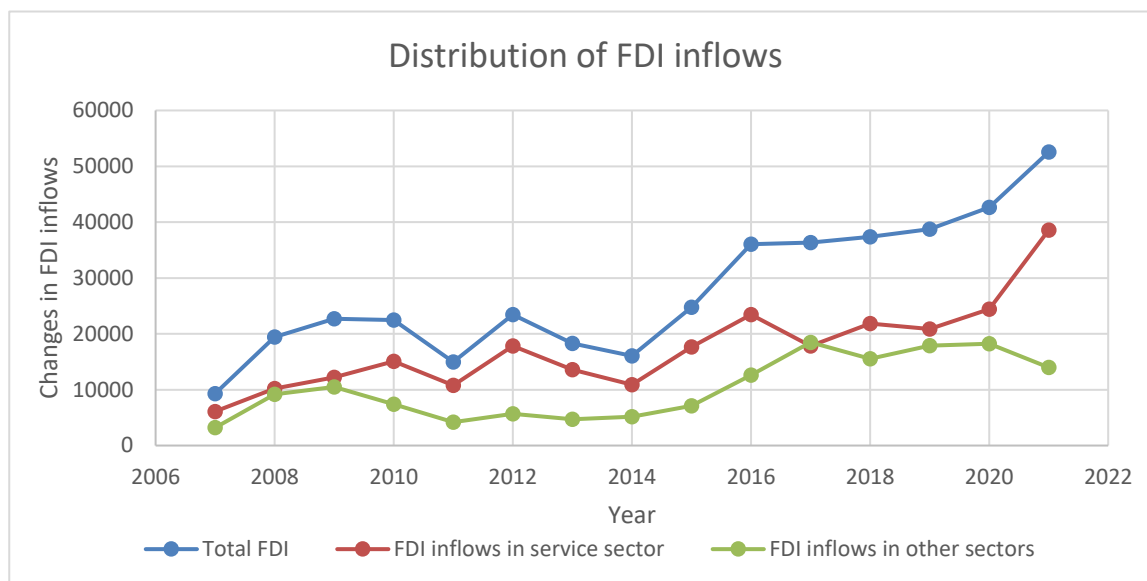


Figure 6 Distribution of FDI inflows
(Source : Compiled by author)

The above figure 6 shows a graphical representation of the distribution of India's FDI inflows between the service sector and other sectors. The trend followed by the FDI inflows for the Indian service sector is similar to that of the trend followed by the total FDI inflows. FDI inflows in India show a positive increment trend over the years for the research period from 2007 to 2021. In 2007, the total FDI inflow was 9307 million USD, whereas, in 2021, it reached 52545 million USD, which is 564.58% of FDI in 2007. It shows that FDI inflows increased by 5.5 times more than in the year 2007. Similarly, FDI inflows for the service sector were 6104 million USD in the year 2007, which increased to 38562 million USD in the year 2021. FDI inflows in the service sector increased by six times over the years 2007 to 2021. This shows that the service sector has a major part in FDI inflows, and it is increasing over the years.

3.2. Number of employees in the service sector

This table describes the collected data of the number of employees in 53 different service sector industries in India.

Table 3 Employee count in service sector industries

YEAR	EMPLOYEE COUNT							TOTAL EMPLOYEES IN SERVICE SECTOR
	IT Service	Hotel and Restaurant Service	Financial Service	Banking Service	Transport Service	Consumer goods services	Communication Service	
2007	366856	167169	87994	380597	54440	166380	121400	1344836
2008	451197	162174	114918	395819	56088	169810	135200	1485206
2009	547862	153342	134170	530576	62718	172750	149900	1751318
2010	636281	148535	149820	537627	60761	165500	148390	1846914
2011	740160	140836	154424	594644	55094	168000	149562	2002720
2012	827673	148686	147408	627290	57340	166200	148473	2123070
2013	969010	144674	161209	505529	56094	162000	135972	2134488
2014	1053788	148149	178184	533749	54793	158400	150569	2277632
2015	1142963	150543	193215	539339	50335	150800	164440	2391635
2016	1207656	249214	228930	642769	53982	141600	167654	2691805
2017	1275139	201686	172037	665465	59663	138900	162275	2675165
2018	1308852	208227	192821	740633	56216	136100	152119	2794968
2019	1411964	207155	228934	753147	57705	142300	140425	2941630
2020	1487780	149576	251383	823615	53603	148100	137892	3051949
2021	1623804	37338	263548	883381	56574	148000	123101	3135746

(Source: Compiled by author)

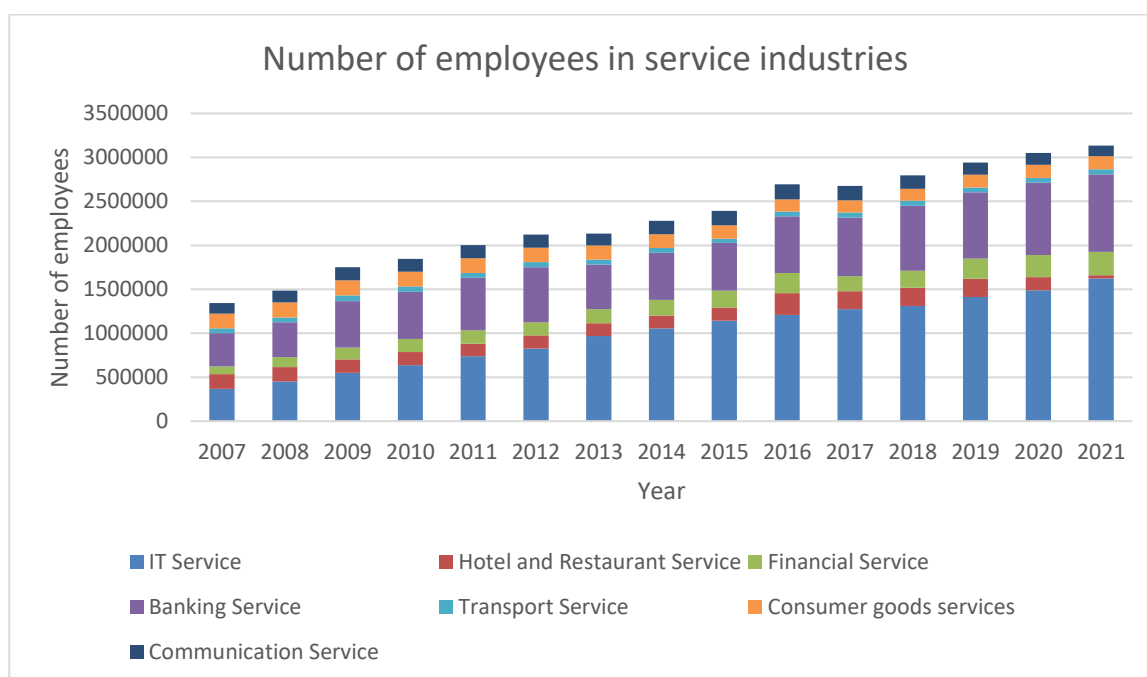


Figure 7 Number of employees in service industries
(Source: Compiled by author)

Figure 7 shows the graphical representation of the yearly increment in employee count in the overall Indian service industry. IT service has the highest contribution in the increment of the number of employees over the year till 2021. In the year 2007, IT service employees contributed 27.28% of the total employee count in the service industry. Till the year 2021, the contribution of the IT service industry increased to 51.78% of the total employee count in the service industry.

3.3. Relationship between FDI inflows in the service sector and the number of employees

To detect the relationship between FDI inflows in the service sector and the number of employees in Indian service sector industries, correlation tests are performed.

Table 4 Percentage change in FDI inflows and Number of employees in the service sector.

YEAR	FDI INFLOWS IN THE SERVICE SECTOR (US MILLION)	NUMBER OF EMPLOYEES IN THE SERVICE SECTOR	CHANGE IN FDI INFLOWS IN THE SERVICE SECTOR	CHANGE IN NUMBER OF EMPLOYEES IN THE SERVICE SECTOR
2007	6104	1344836	0	0
2008	10230	1485206	67.60%	10.44%
2009	12185	1751318	19.11%	17.92%
2010	15082	1846914	23.78%	5.46%
2011	10768	2002720	-28.60%	8.44%
2012	17810	2123070	65.40%	6.01%
2013	13592	2134488	-23.68%	0.54%
2014	10878	2277632	-19.97%	6.71%
2015	17646	2391635	62.22%	5.01%
2016	23472	2691805	33.02%	12.55%
2017	17836	2675165	-24.01%	-0.62%
2018	21837	2794968	22.43%	4.48%
2019	20883	2941630	-4.37%	5.25%
2020	24411	3051949	16.89%	3.75%
2021	38562	3135746	57.97%	2.75%

(Source: Compiled by author)

Table 4 shows the percentage change in FDI inflows compared to the previous year and the percentage change in the number of employees in service sector industries compared to the previous year.

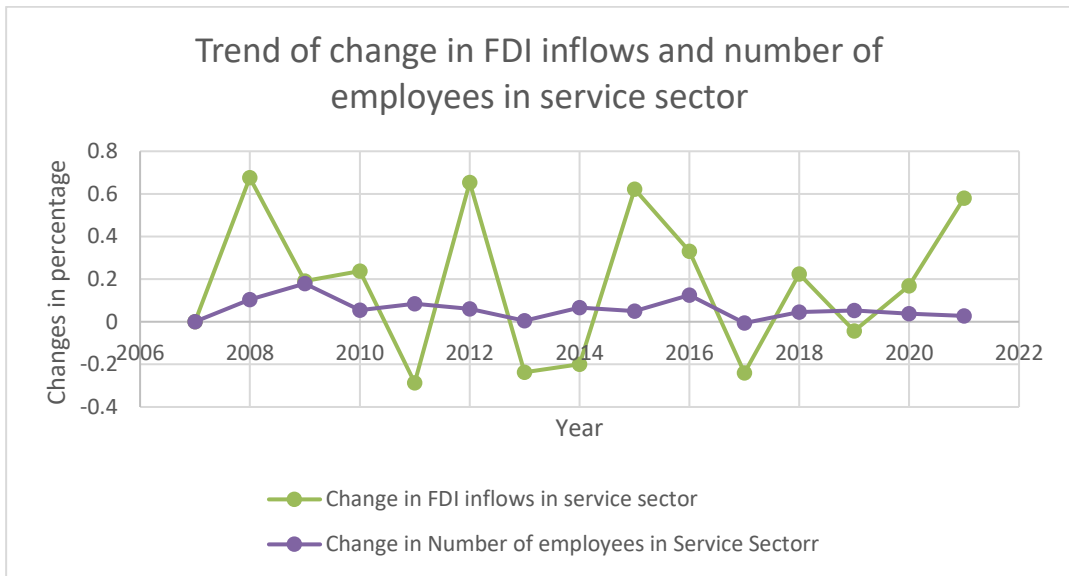


Figure 8 Trend of change in FDI inflows and number of employees in the service sector (Source: Compiled by author)

Figure 8 shows the graphical representation of the percentage change in FDI inflows compared to the previous year and the percentage change in the number of employees in service sector industries compared to the previous year.

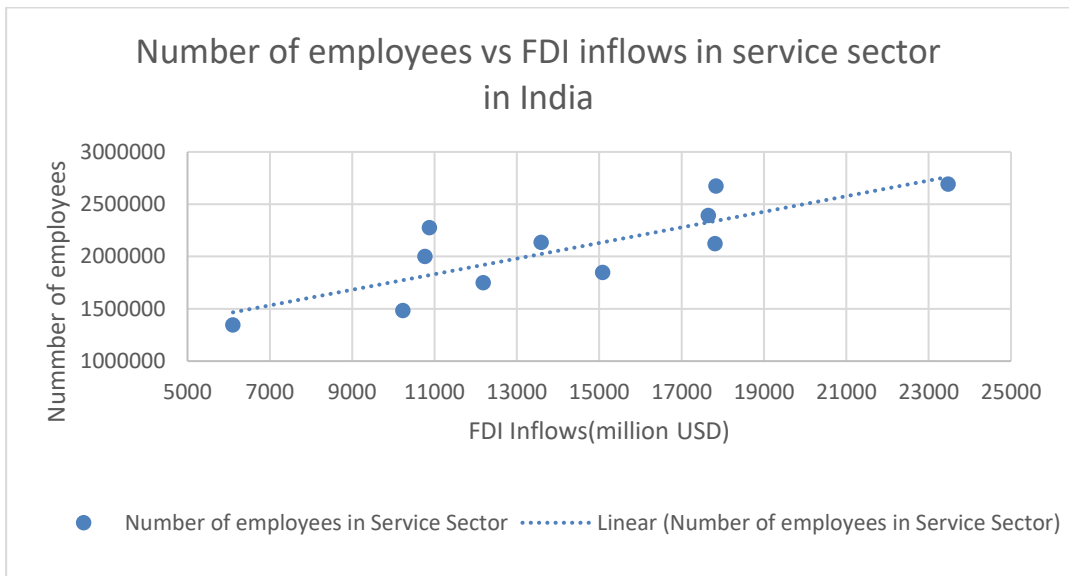


Figure 9 Number of employees Vs FDI inflows in the service sector (Source: Compiled by author)

Figure 9 shows the scattered plot graph between FDI inflows and percentage change in the number of employees in service sector industries. It suggests a linear relationship between these two variables to detect the relationship between them, and correlations tests are performed.

- **Pearson correlation test**

Table 5 Pearson's correlation test

PEARSON'S CORRELATION TEST (FISHER)	
RHO	0
ALPHA	0.05
TAILS	2
CORR	0.8501085
STD ERR	0.2672612
Z	4.3527957
P-VALUE	1.344E-05
LOWER	0.5984643
UPPER	0.9490709

(Source: Compiled by author)

Two-tailed Pearson correlation test is performed to identify the linear relationship between FDI inflows in the service sector and the number of employees in the selected service sector industries in India

The P-Value of the Pearson correlation test (1.344E-05) is smaller than the alpha (0.05). This shows the significant linear relationship between examined variables. The Pearson correlation coefficient(0.85) suggests a stronger relationship between FDI inflows in the service sector and the number of employees in the selected service sector industries in India.

- **Spearman correlation test**

Table 6 Spearman's correlation test

SPEARMAN'S CORRELATION TEST	
ALPHA	0.05
TAILS	2
CORR	0.907142857
RHO	0.9071429
T-STAT	7.7722738
P-VALUE	3.063E-06

(Source: Compiled by author)

Two-tailed Spearman correlation test is performed to identify the monotonic relationship between FDI inflows in the service sector and the number of employees in the selected service sector industries in India.

The P-Value of the Spearman correlation test (3.063E-06) is smaller than the alpha (0.05), this shows the significant monotonic relationship between examined variables. The Spearman correlation coefficient (0.91) suggests a stronger relationship between FDI inflows in the service sector and the number of employees in the selected service sector industries in India.

- **Kendall correlation test**

Table 7 Kendall's correlation test

KENDALL'S CORRELATION TEST (FISHER)	
ALPHA	0.05
TAILS	2
CORR	0.771428571
STD ERR	0.1924501
Z	4.0084604
Z - CRITICAL	1.959964
P-VALUE	6.112E-05
LOWER	0.3942333
UPPER	1

(Source: Compiled by author)

Two-tailed Kendall's correlation test is performed to identify whether the linear relationship between FDI inflows in the service sector and the number of employees in the selected service sector industries in India can be expressed in a linear equation.

The P-Value of the Kendall correlation test (6.112E-05) is smaller than the alpha (0.05); this shows the significant monotonic relationship between examined variables. The Spearman correlation coefficient (0.77) suggests a stronger possibility to express FDI inflows in the service sector and the number of employees in the selected service sector industries in India by a simple linear equation.

Table 8 Correlation coefficients

CORRELATION COEFFICIENTS	
PEARSON	0.8501085
SPEARMAN	0.9071429
KENDALL	0.7714286

(Source: Compiled by author)

3.4. Regression analysis

It is a statistical strategy used to estimate the association between a dependent variable and one or more independent variables. Using it, you may figure out how well two variables go together, as well as predict how they will interact in the future. Total FDI inflows in India from different foreign industries, institutions, and nations are shown in the following table 4.

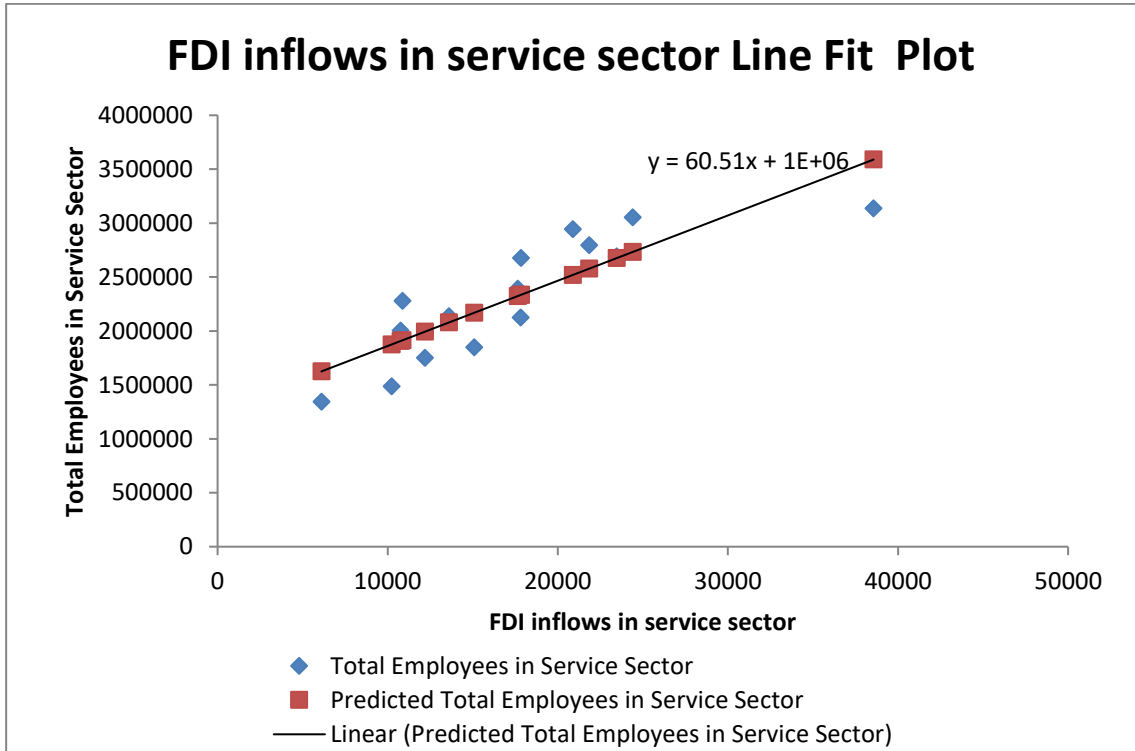


Figure 10 FDI inflows in the service sector Line Fit Plot

(Source: Compiled by author)

Regression line equation,

$$\hat{Y} = (1E+06) + 60.51X$$

The above equation of line predicts the number of employees in the service sector (\hat{Y}) at a given FDI inflows in the service sector (X).

The Regression Statistics table provides statistical measures of how well the model fits the data.

Table 9 Regression statistics table 1

REGRESSION STATISTICS	
MULTIPLE R	0.8501085
R SQUARE	0.7226844
ADJUSTED R SQUARE	0.7013525
STANDARD ERROR	308168.32
OBSERVATION	15

(Source: Compiled by author)

Table 10 Regression statistics table 2

	COEFFICIENTS	STANDA RD ERROR	T STAT	P- VALUE	LOWER 95%	UPPER 95%	LOWER 95.0%	UPPER 95.0%
INTERCEPT	1255862.1	197807.0	6.34892	2.54E-05	828526.04	1683198.2	828526.04	1683198.2
FDI INFLOWS IN SERVICE SECTOR	60.510496	10.39613	5.82048	5.969E-05	38.051017	82.969974	38.051017	82.969974

(Source: Compiled by author)

$R^2 = 0.72$, $F(1,13) = 49.19$, $p < .001$ and $\beta = 60.5104$, $p < .001$.

R Square (R^2) equals 0.7226. It means that 72.26% of the variability of Y is explained by X. Correlation (R) equals 0.85. It means that there is an extraordinarily strong direct relationship between X and Y.

Overall regression: F-value (1,13) = 33.878005, p-value = 0.00005969. Since p-value < α (0.05), hence the hypothesis H01 which is ‘There exists a positive relationship between FDI inflows and employee count in the selected service sector industries in India’ is Accepted & Hypothesis H11 ‘There is no relationship between FDI inflows and employee count in the selected service sector industries in India’ is Rejected

The linear regression model, $Y = b_0 + b_1X + \epsilon$, provides a better fit than the model without the independent variable resulting in $Y = b_0 + \epsilon$.

The Slope (a), T (13) = 5.82048, p-value = 0.00005969. For one predictor, it is the same as the p-value for the overall model.

Table 11 Regression statistics table 3

	DF	SS	MS	F	SIGNIFICANCE F
REGRESSION	1	3.217E+12	3.217E+12	33.878005	5.969E-05
RESIDUAL	13	1.235E+12	9.497E+10		
TOTAL	14	4.452E+12			

(Source: Compiled by author)

3.5. Augmented Dickey-Fuller test

To perform the cause-effect analysis, the granger causality test is used in this research.

For the Granger causality test, data must be stationary. To check whether the data is stable over a time period is tested by using the Augmented Dickey-Fuller test (hereinafter – ADF test).

Table 12 Data preparation for ADF test

YEAR	NUMBER OF EMPLOYEES IN THE SERVICE SECTOR	TOTAL FDI (US MILLION)	CHANGE IN NUMBER OF EMPLOYEES IN SERVICE SECTOR	CHANGE IN TOTAL FDI (US MILLION)
2007	1344836	6104	0	0
2008	1485206	10230	140370	4126
2009	1751318	12185	266112	1955
2010	1846914	15082	95596	2897
2011	2002720	10768	155806	-4314
2012	2123070	17810	120350	7042
2013	2134488	13592	11418	-4218
2014	2277632	10878	143144	-2714
2015	2391635	17646	114003	6768
2016	2691805	23472	300170	5826
2017	2675165	17836	-16640	-5636
2018	2794968	21837	119803	4001
2019	2941630	20883	146662	-954
2020	3051949	24411	110319	3528
2021	3135746	38562	83797	14151

(Source: Compiled by author)

Table 13 ADF test for change in the number of employees

ADF TEST FOR CHANGE IN NUMBER OF EMPLOYEES IN THE SERVICE SECTOR					
DRIFT	NO	DRIFT	YES	DRIFT	YES
TREND	NO	TREND	NO	TREND	YES
LAG	0	LAG	0	LAG	0
ALPHA	0.05	ALPHA	0.05	ALPHA	0.05
TAU-STAT	-1.79249874	TAU-STAT	-4.75442233	TAU-STAT	-4.75442233
TAU-CRIT	-1.96597544	TAU-CRIT	-3.10418388	TAU-CRIT	-3.10418388
STATIONARY	NO	STATIONARY	YES	STATIONARY	YES
AIC	26.37757865	AIC	25.65086348	AIC	25.65086348
BIC	26.42103629	BIC	25.73777877	BIC	25.73777877
LAGS	0	LAGS	0	LAGS	0
COEFF	-0.40088564	COEFF	-1.35641973	COEFF	-1.35641973
P-VALUE	0.073860461	P-VALUE	< .01	P-VALUE	< .01

(Source: Compiled by author)

ADF test of change in employees in the service sector shows that the dataset is stationary for the ADFtest performed with the drift parameter (P-Value <0.01) and for Drift and Trend parameter (P-Value<0.01). But it is not stationary when the test is performed for the No drift and No trend type (P-Value = 0.07386).

From the ADF test, the dataset of change in employees in the service sector is stationary for the given time period and can be used for the Granger causality test.

ADF test of change in FDI inflows for the service sector (Table 14) shows that the dataset is stationary for the ADF test performed with No drift and No trend type (P-Value < 0.01), drift parameter (P-Value =0.022) and for Drift and Trend parameter (P-Value= 0.022).

From the ADF test, the dataset of change in FDI inflows for the service sector is stationary for the given time period and can be used for the Granger causality test.

Table 14 ADF test for change in total FDI

ADF TEST FOR CHANGE IN TOTAL FDI

DRIFT	NO	DRIFT	YES	DRIFT	YES
TREND	NO	TREND	NO	TREND	YES
LAG	0	LAG	0	LAG	0
ALPHA	0.05	ALPHA	0.05	ALPHA	0.05
TAU-STAT	-3.0739687	TAU-STAT	-3.59543794	TAU-STAT	-3.59543794
TAU-CRIT	-1.96597544	TAU-CRIT	-3.10418388	TAU-CRIT	-3.10418388
STATIONARY	YES	STATIONARY	YES	STATIONARY	YES
AIC	20.33117665	AIC	20.27883052	AIC	20.27883052
BIC	20.37463429	BIC	20.36574581	BIC	20.36574581
LAGS	0	LAGS	0	LAGS	0
COEFF	-1.14795891	COEFF	-1.33186171	COEFF	-1.33186171
P-VALUE	< .01	P-VALUE	0.022514957	P-VALUE	0.022514957

(Source: Compiled by author)

3.6. Granger causality test

From correlation tests and regression analysis, it can be analysed that there is a linear relationship between FDI inflows in the service sector and the number of employees in Indian service sector industries. To test the cause-effect analysis of these two variables, the Granger causality test is performed. This test will analyse whether a change in FDI impacts the change in the number of employees in the Indian service sector industries.

First, the Granger causality test is performed to the detection of the Impact of change in the number of employees on the change in FDI inflows for the service sector.

The null hypothesis will be, a change in the number of employees in the service sector does not granger cause a change in service sector FDI inflows.

Table 15 Granger's causality test (Employee count Vs FDI) (Source: Compiled by author)

CHANGE IN THE NUMBER OF EMPLOYEES IN THE SERVICE SECTOR DOES NOT GRANGER CAUSE A CHANGE IN SERVICE SECTOR FDI INFLOWS		
LAGS	F-Test	P-Value
1	2.91181E-05	0.995800674
2	0.230783841	0.799719803
3	0.1743045	0.908539183
4	0.534134542	0.756955288

Table 15 shows the Granger causality test performed for the 4 lags. Here, lags show the number of years it takes for the impact of change in FDI to show the effect of change on the

number of employees. For example, if the value of lag is 4, then FDI in the year 2006 will affect the change in the number of employees in the year 2010.

From Table 15, the Granger causality test P value for 1 lag (99.6%) is greater than the significance level, i.e., 5%. This means the null hypothesis cannot be rejected. Similar for lag 2, 3 and 4, the P-value is 79.97%, 90.85% and 75.69%, which is also higher than the significance level of 5%. It shows that this Hypothesis - change in the number of employees does not granger cause a change in service sector FDI inflows, cannot be rejected.

Another Granger causality test is performed for the detection of the Impact of change in the FDI inflows for the service sector on the change in the number of employees in the service sector. The null hypothesis will be, that change in the change in service sector FDI inflows does not granger cause a change in the number of employees in the service sector.

Table 16 Granger's causality test (FDI vs Employee count)

CHANGE IN SERVICE SECTOR FDI INFLOWS DOES NOT GRANGER CAUSE CHANGE IN NUMBER OF EMPLOYEES IN SERVICE SECTOR		
LAGS	F-Test	P-Value
1	0.493951881	0.498204165
2	0.118983935	0.889579696
3	0.716589471	0.591672517
4	3.841576106	0.36322801

(Source: Compiled by author)

From Table 16, the Granger causality test P value for 1 lag (49.8%) is greater than the significance level, i.e., 5%. This means the null hypothesis cannot be rejected. Similar for lags 2, 3 and 4 the P-Value is 88.97%, 59.16% and 36.32%, which is also higher than the significance level of 5%. It shows that this Hypothesis - change in service sector FDI inflows does not granger cause a change in the number of employees in the Indian service sector, cannot be rejected. From the above two tests, it is indicated that hypothesis H02: 'FDI inflows impact the employee count in selected service sector industries in India' is Rejected & hypothesis

H12: 'FDI inflows have no impacts on the employee count in selected service sector industries in India' is Accepted.

CONCLUSION

FDI plays an important role in the growth of the Indian economy by allowing the industries to avail better opportunities for funds and resources. FDI provides several benefits to businesses in terms of market diversification, subsidies, and tax incentives. FDI also impacts other business aspects, such as providing preferential tariffs and lowering labour costs. As a result, the host country receives benefits in terms of human capital development and stimulation of the economy. The present research highlighted the role of FDI on the performance of the service sector organization and asserted that FDI plays an important role in liberalizing the terms and conditions for trading activities. It provides flexibility to the businesses to conduct their commercial activities in the competitive business environment in both pre and post Covid-19 duration. It was found that the global pandemic condition adversely impacted the company's performance because of the global crisis and uncertainty. As a result, the companies faced issues that impacted their productivity and efficacy at the domestic and international levels.

The literature review part of this study also focused on analysing the factors that affect the inflow and outflow of FDI in the Indian service sector and found that it was impacted by drivers such as population, geopolitics, internet penetration, national resilience, governance stability, tax policies & concessions, and scope of expansion (market). Considering the population factor, it was determined that the Indian population highly contributed to the labour force that formed an important human resource part of the businesses. The skilled employees use technology and the internet as major tools to scourge remarkable development in the competitive market that attracts more FDI inflows into the economy.

The present study explored trends and patterns of FDI inflows in the Indian service sector and found that during the incidence of Covid-19, there was a reduction in the FDI inflows. It was ascertained that during Covid-19, India experienced several challenges such as supply chain disruption, migration of labour, and interruption in manufacturing. All of these adversely impacted the workings of the service sector industries and reduced their capabilities to contribute to the Gross Domestic Product (GDP) of the country. Covid-19 affected both FDI inflows and Employees working in the service sector, causing a similar trend of decrement to be followed by them. This suggested the relationship between them. Hence, in the present research major emphasis was given to determining the precarious situation of the Indian economy so that a better understanding could be gained of the role of FDI in employment in service sector industries in India.

To test the hypotheses, several tests were performed; from the test results, it was found

that the hypothesis that defines the association between employee count of selected service sector industry in India and the increasing impact of FDI inflow was accepted because there was a positive relationship between FDI inflow and employment growth opportunity. The reason behind it is that foreign direct investment creates a long term growth economy by providing transfer of technology so that it attracts the highest FDI equity flow in the service sector, which automatically creates the demand for employment. On the contrary, the second hypothesis about the impact of FDI inflows on employment in the service sector was rejected in this study. From Granger's causality test, it shows no cause-effect relationship between the FDI inflows in the service sector and the number of employees in the service sector. The reason behind that could be explained as the FDI inflows are not always related to market expansion but also lateral growth of the market, such as technological advancement and sustainability.

The validity and reliability of the tests are high in this research as the data figures are collected from official Indian governmental data sources and official Company's Financial year and Annual reports, and the results obtained would have no change or variation in them due to the reliability of the data collected.

- **Discussion**

Based on this research, FDI inflows and employee count have an interrelationship between them, but there is not a direct causal relationship. FDI and Employee count might not impact each other directly, but there could be a high possibility for various interlinked variables which bridge these two variables and creates a linear relationship between them (such as Pay-scale, job demand, market growth, and various other). Since the service sector is demanding a high employee base, the linear relationship is stronger here and the causal is a bit weaker, but these results might not be the same for other sectors such as manufacturing, media, healthcare etc. Other alternatives like Foreign Portfolio Investors/Foreign Institutional Investors (FPIs/FIIs), venture capitalism and Indian innovation must also be promoted to improve the foundations of the domestic economy. Care should be taken to utilize the increase in foreign money inflow. In the near future, the government of India could also take some policy measures to captivate employment generation in India, basically in the organized sector. India can also boost its regulatory mechanism by advancing its monetary and fiscal policies.

- **Limitations**

The present research is limited to the analysis of selected 53 companies belonging to the service sector. Since the sample unit is small (53), there was difficulty in justifying how

employment (independent variable) affected FDI (dependent variable). The reason of choosing these companies are because they are the top companies in the chosen industries researched. More than 200 companies were studied but the reason to choose just 53 is because of the availability of data from the year 2007. Service sector companies in India are either new companies or subsidiaries of the other big companies, so their data since the year 2007 was not available.

The period of research for this was conducted for 15 years, which is relatively not very wide. It is also very complex to measure the relationship and impact caused between the test variables during the Covid-19 period (December 2019 –2021) because there is a very fewer sample years of data, and covid is not yet over; it is still continuing as of now (June 2022) Due to these limited data, the impact of employee count on the FDI inflow of the selected Indian service sector could not be ascertained precisely. Thus, the present research was limited in terms of company representations.

- **Recommendations**

To increase FDI inflow in the service sector in India, the focus must be given to reducing the cost of the firm by enhancing the capabilities of the employees. FDI directly impacts the labour market of the host countries in such conditions, and the companies must include talented and resourceful resources to record increased firm efficacy. It will help in reducing the spillover effects between target enterprises and industries.

- **Future Work**

The present research provides valuable insights into the impact of FDI on employment in Indian service sector industries by including two variables which are Foreign Direct Investment (FDI) and employee count. The employee count is an important factor to be taken into consideration for the determination of the workforce growth rate that directly accounts for the efficacy of the firm. The firm productivity and efficacy play an important role in attracting the investors and FDI by presenting the firm in a positive limelight. Hence, the workforce and FDI are indirectly related to each other in which the workforce increases firm efficacy, and firm efficacy attracts FDI. In future research, workforce efficiency and FDI relations could be put under the test.

Also, current research work was done only for the service sector as it was using major contributions from FDI inflows; in future research, employee count from different sectors could be studied and compared to get more insights into the dependence of FDI.

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SANTRAUKA

Per COVID-19 pandemijos laikotarpį Indija susidūrė su keliais sunkumais, įskaitant tiekimo grandinės sutrikimus, darbo jėgos migraciją ir pramonės pertrūkius. Šių veiksnių derinys turėjo neigiamos įtakos paslaugų sektoriaus įmonių darbo jėgai, nes jos, pirmiausia, priklausomos nuo žmonių. Taip pat, remiantis šio tyrimo metu gautais TUI įplaukų duomenimis, per Covid-19 pandemijos protrūkį sumažėjo TUI įplaukos Indijos paslaugų sektoriuje. Covid-19 pandemija neigiamai paveikė TUI įplaukas ir paslaugų sektoriaus darbuotojų skaičių, abiem atvejais buvo mažėjimo tendencija. Tokia elgsena leidžia manyti, kad yra ryšys tarp jų.

Šio tyrimo literatūros apžvalga rodo, kad tokie veiksniai kaip žmogiškasis kapitalas, gyventojai, geopolitika, interneto skverbtis ir nacionalinis atsparumas, taip pat valdymo stabilumas ir fiskalinė politika bei nuolaidos turėjo įtakos TUI įplaukoms ir nutekėjimui. Ankstesnėje literatūroje nėra minima informacija apie TUI įplaukas ir darbo jėgos dydžio ryšį, siekiant pašalinti šią tyrimo spragą, formuojamas tyrimo klausimas ir atliekama duomenų analizė, siekiant nustatyti ryšį tarp TUI įplaukų ir užimtumo Indijos paslaugų sektoriaus pramonėje.

Koreliacijos testas naudojamas nustatyti ryšį tarp dviejų kintamųjų, kurie yra: TUI įplaukos Indijos paslaugų sektoriaus pramonėje ir darbuotojų skaičius Indijos paslaugų sektoriaus pramonės šakose. Šių dviejų laiko eilučių kintamųjų priklausomybei analizuoti naudojamas Grangerio priežastingumo testas. Hipotezėms patikrinti buvo atlikti duomenų analizės testai ir nustatyta, kad TUI įplaukos rodo teigiamą koreliacijos tendenciją su užimtumo augimu Indijos paslaugų sektoriuje, kas patvirtino hipotezę, kad TUI įplaukos turi koreliaciją su darbuotojų skaičiumi pasirinktose paslaugų sektoriaus pramonės šakose Indijoje. Remiantis Grangerio priežastingumo testu, TUI įplaukos paslaugų sektoriuje ir paslaugų sektoriaus darbuotojų skaičius nėra susiję tiesioginiu priežastiniu ryšiu. Tai galima paaiškinti tuo, kad tiesioginės užsienio investicijos sukuria ilgalaikį ekonomikos augimą, siūlydamos technologijų perdavimą, dėl kurio didžiausias tiesioginių užsienio investicijų nuosavo kapitalo srautas patenka į paslaugų sektorių, o tai gali padidinti užimtumo poreikį, tačiau lygiagrečiai jis gali būti neaptinkamas. Be to, TUI įplaukos yra orientuotos ne tik į rinkos plėtrą, bet ir į šoninį vystymąsi, pavyzdžiui, techninę pažangą ir tvarumą.

Raktiniai žodžiai - *Tiesioginės užsienio investicijos, paslaugų sektorius, užimtumas, Indijos paslaugų sektorius.*

SUMMARY

During Covid-19, India faced several difficulties, including supply chain disruptions, labour migration, and industrial interruptions. A combination of these factors has had a negative influence on the workforce of service sector businesses as they are primarily dependent on people. Also, there was a decrease in FDI inflows in the Indian service sector during the outbreak of Covid-19, according to the FDI inflows data obtained for this research. FDI inflows and service sector employee count were both adversely impacted by Covid-19, with both showing a downward trend. This behaviour suggested the relationship between these two.

The literature review of this study shows that factors like human capital, population, geopolitics, internet penetration, and national resilience as well as stability in governance and fiscal policy & concessions influenced FDI inflows and outflow. The previous literature does not mention any information regarding FDI inflows and workforce size relationship, in order to address this research gap, the research question is formed and data analysis is performed to identify the relationship between FDI inflows and employment in the Indian service sector industries.

The correlation test is used to detect the relationship between two variables, which are FDI inflows in Indian service sector industries and employee count in the Indian service sector industries. To analyse the dependency of these two-time series variables, the Granger causality test is used. Data analysis tests were conducted to test the hypotheses, and it is discovered that FDI inflows show a positive correlation trend with employment growth in the Indian service sector industries, which supported the hypothesis that FDI inflows have a correlation with the number of employees in the selected service sector industries in India. According to Granger's causality test, FDI inflows in the service sector and the number of service-sector employees do not have a direct cause-effect relationship between them. A possible explanation of this could be that foreign direct investment produces a long-term growth economy by offering technology transfer, which draws the biggest FDI equity flow in the service sector, which might increase the need for employment but it might not be detected parallelly. Also, the FDI inflows are not just focused on market expansion but also on lateral development, such as technical progress and sustainability.

Keywords - *Foreign direct investment, service sector industries, employment, Indian service sector.*

Annexures

Annexure 1 – Sector wise distribution of FDI inflows in India

Table 1: Sector wise distribution of FDI inflows in India(Part1).

SOURCE/ INDUSTRY	2006- 07	2007- 08	2008- 09	2009- 10	2010- 11	2011- 12	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21
TOTAL FDI	9,307	19,425	22,697	22,461	14,939	23,473	18,286	16,054	24,748	36,068	36,317	37,366	38,744	42,629	52,545
COMPUTER SERVICES	1,641	3,726	4,777	5,143	4,793	9,337	6,528	6,381	9,613	8,439	1,937	3,173	3,453	4,104	23,050
	18%	19%	21%	23%	32%	40%	36%	40%	39%	23%	5%	8%	9%	10%	44%
TRANSPORT	967	2,551	2,237	3,516	1,599	736	247	934	2,154	4,319	891	1,267	1,019	2,333	7,584
	10%	13%	10%	16%	11%	3%	1%	6%	9%	12%	2%	3%	3%	5%	14%
MANUFACTURING	1,330	3,850	4,430	2,206	1,353	2,634	1,319	1,276	1,640	4,141	11,972	7,066	7,919	8,153	6,739
	14%	20%	20%	10%	9%	11%	7%	8%	7%	11%	33%	19%	20%	19%	13%
RETAIL & WHOLESALE TRADE	431	1,336	1,886	2,191	444	567	551	1,139	2,551	3,998	2,771	4,478	4,311	4,914	2,960
	5%	7%	8%	10%	3%	2%	3%	7%	10%	11%	8%	12%	11%	12%	6%
FINANCIAL SERVICES	174	829	669	1,877	1,338	2,603	2,760	1,026	3,075	3,547	3,732	4,070	6,372	4,326	2,728
	2%	4%	3%	8%	9%	11%	15%	6%	12%	10%	10%	11%	16%	10%	5%
COMMUNICATION SERVICES	423	66	2,067	1,852	1,228	1,590	643	521	680	3,031	5,876	8,809	5,365	6,838	2,314
	5%	0%	9%	8%	8%	7%	4%	3%	3%	8%	16%	24%	14%	16%	4%
BUSINESS SERVICES	2,425	1,158	643	1,554	569	1,458	92	1,256	1,075	2,638	2,684	3,005	2,597	3,684	1,750
	26%	6%	3%	7%	4%	6%	1%	8%	4%	7%	7%	8%	7%	9%	3%
CONSTRUCTION	298	1,901	1,458	888	509	1,395	1,653	1,284	1,284	1,364	1,564	1,281	2,009	1,937	1,746
	3%	10%	6%	4%	3%	6%	9%	8%	5%	4%	4%	3%	5%	5%	3%

Source: Data collected from RBI, DPIIT, OECD and Indian Governmental Databases.

Table 1: Sector wise distribution of FDI inflows in India (Part2).

SOURCE/INDUSTRY	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
EDUCATION	9%	5%	7%	4%	6%	2%	1%	2%	2%	4%	5%	5%	6%	4%	2%
RESEARCH & DEVELOPMENT	153	280	343	671	218	801	552	941	586	1,022	205	347	736	528	963
MISCELLANEOUS SERVICES	47	200	294	536	391	870	3,129	361	686	889	1,816	835	1,226	443	671
REAL ESTATE ACTIVITIES	1%	1%	1%	2%	3%	4%	17%	2%	3%	2%	5%	2%	3%	1%	1%
RESTAURANTS AND HOTELS	165	816	401	220	344	103	150	107	131	394	430	452	749	2,546	278
MINING	2%	4%	2%	1%	2%	0%	1%	1%	1%	1%	1%	1%	2%	6%	1%
TRADING	82	176	400	198	156	340	197	201	202	112	141	82	247	217	186
OTHERS	1%	1%	2%	1%	1%	1%	1%	1%	1%	0%	0%	0%	1%	1%	0%
	43	156	243	91	56	6	140	0	228	0	0	0	0	0	0
	0%	1%	1%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%
	262	884	1,097	384	506	419	43	292	232	215	470	226	102	137	187
	3%	5%	5%	2%	3%	2%	0%	2%	1%	1%	1%	1%	0%	0%	0%

Source: Data collected from RBI, DPIIT, OECD and Indian Governmental Databases.

Annexure 2 – Sector wise data for the number of employees in service industries

Table 3: IT services employees data for the number of employees in service industries.

YEAR	IT SERVICES EMPLOYEES	TCS	HCL	INFOSYS	WIPRO	COGNIZANT	TECH MAHINDRA	MPHSIS	COFORGE (NIIT)	MINDTREE CONSULTING SERVICES
2007	366856	85582	42017	72000	75052	55400	19749	8446	4448	4162
2008	451197	89419	50741	91200	95700	61700	22884	28795	5118	5640
2009	547862	143761	54216	104850	97810	78400	24972	33524	4238	6091
2010	636281	160429	64366	113796	108071	104000	33524	39962	4476	7657
2011	740160	198614	77046	113800	122385	138000	38333	36629	5806	9547
2012	827673	238583	84319	150000	135920	124000	40763	37056	6032	11000
2013	969010	276196	85505	156688	140000	171000	83109	37056	7865	11591
2014	1053788	300464	91691	160405	142820	212000	89441	35666	8375	12926
2015	1142963	319656	106107	176184	159000	222000	103281	34039	8494	14202
2016	1207656	353843	103391	194004	160000	260000	88417	22302	9476	16223
2017	1275139	387223	115973	200364	165481	260000	98781	21994	8853	16470
2018	1308852	394998	120081	204107	163287	282000	94994	22239	9423	17723
2019	1411964	424285	137965	228123	175690	293000	103822	18612	10263	20204
2020	1487780	448464	150423	242371	188270	290000	106400	28705	11156	21991
2021	1623804	488649	168977	259619	201665	331000	99607	29473	21000	23814

Source: Data collected from respective organisation's Annual Reports

Table 4 : Hospitality Industry employees data for number of employees in service industries.

YEAR	HOSPITALITY EMPLOYEES	TAJ GVK	ROYAL ORCHID HOTELS	THE OBEROI HOTEL	HOTEL LEELA	MARIOTE	INTERCONTINENTAL	MAHINDRA HOLIDAYS	MAKE MY TRIP	INTERNATIONAL TRAVEL HOUSE LIMITED	INDIA TOURISM
2007	168603	1600	1273	206	2589	151000	7088	1200	659	234	2754
2008	163894	1650	1289	272	2668	146000	7064	1432	670	289	2561
2009	155384	1680	1350	334	2689	137000	7178	1683	704	359	2407
2010	14	1769	1384	360	3352	129000	7858	1814	754	482	2244
2011	14	1798	1764	394	3885	120000	7956	2007	854	510	2178
2012	14	1956	2151	438	3533	127000	7981	2322	1273	539	2032
2013	147694	1969	2483	516	4275	123000	8197	3020	1613	747	1874

2014	148149	1840	3057	928	3727	123500	7797	3128	1712	727	1733
2015	150543	1857	3179	852	2541	127500	7311	3238	1774	714	1577
2016	249214	1834	3124	771	2358	226500	6787	3784	1940	713	1403
2017	201686	1774	3418	847	2280	177000	6658	4615	3164	698	1232
2018	208227	2962	3351	845	2298	176000	12812	5246	3051	639	1023
2019	207155	1735	3463	782	2265	174000	14436	5439	3450	675	910
2020	149576	1708	1366	792	935	121000	12832	5518	3960	695	770
2021	37338	970	1126	636	613	12000	12838	4702	3256	534	663

Source: Data collected from respective organisation's Annual Reports

Table 5: Financial industry employees data for the number of employees in service industries.

YEAR	FINANCIAL SERVICES EMPLOYEES	MUTHOOT FINANCE	BAJAJ FINSERV	AXIS CAPITAL HOLDING	KOTAK MAHINDRA	MAHINDRA AND MAHINDRA	SHRIRAM TRANSPORT	GOLDMAN SACHE	NEW INDIA ASSURANCE COMPANY	HDFC LIFE INSURANCE
2007	455422	2902	1000	792	6700	13100	4952	30300	20583	8457
2008	476752	2999	17100	827	10800	14000	9600	31700	20219	8500
2009	542179	5979	11600	882	20000	16100	12196	32500	19913	15000
2010	554460	9745	22700	1000	18000	14000	13817	35700	19958	14900
2011	610937	16688	16600	1100	20000	16100	16919	33300	19417	14300
2012	646193	25351	21800	1100	20500	17800	15057	32400	20158	13400
2013	592495	24881	30900	1200	22000	19400	16178	32900	19863	13750
2014	625599	25012	39800	1250	26700	19400	18122	34000	18621	13900
2015	642529	22882	50600	1225	31400	19800	16160	36800	18253	14348
2016	662524	22781	73900	1325	42000	20100	19170	34400	18130	15254
2017	685673	24205	11500	1647	44000	20400	18885	36600	17937	14800
2018	759992	23455	15300	1567	35700	20900	23819	36600	17880	17600
2019	772037	24224	20200	1667	60000	21000	26630	38300	17330	19583
2020	843052	25554	27000	1921	71000	20600	28045	40500	16506	20257
2021	902356	25911	28500	2082	85000	19900	24452	43900	15249	20636

Source: Data collected from respective organisation's Annual Reports

Table 6: Banking industry employees data for the number of employees in service industries (Part 1).

YEAR	BANKING SERVICES EMPLOYEES	INDUSIND BANK	SBI BANK	ICICI BANK	HDFCBANK	AXIS BANK	CANARA BANK	BANK OF BARODA	YES BANK	SOUTHINDIAN BANK	JAMMU AND KASHMIR BANK
2007	455422	26100	185000	65958	21477	9980	46359	38036	46359	3868	3418
2008	476752	28700	179000	71269	37836	14700	45260	37260	45260	4223	3580
2009	542179	42500	206000	73362	52687	20600	44090	38838	44090	4809	3600
2010	554460	53800	200000	74056	51888	21600	43380	38071	43380	5132	6320
2011	610937	70100	223000	79978	55752	26400	43395	39385	43395	5619	7620
2012	646193	93700	215000	81254	66076	31700	42272	41447	42272	5879	7690
2013	592495	11500	228000	85217	68900	37900	42693	43108	42693	6383	8035
2014	625599	15600	222000	94204	72982	42400	48794	46001	48794	7111	8845
2015	642529	19100	213000	90486	84356	42200	53984	49378	53984	7825	9382
2016	662524	23100	208000	97132	87263	50100	54008	51237	54008	7780	10141
2017	685673	25300	210000	107971	84041	56600	55717	52420	55717	7677	10022
2018	759992	25300	264000	112360	87983	59600	58855	55662	58855	7946	10072
2019	772037	27700	257000	117340	97805	61900	58350	55754	58350	8440	10508
2020	843052	30700	249000	131232	116726	74100	58632	84283	58632	8570	11740
2021	902356	29700	246000	130170	119858	78300	88213	82886	88213	8314	11727

Source: Data collected from respective organisation's Annual Reports

Table 7 : Banking industry employees data for the number of employees in service industries (Part 2).

YEAR	IDBI Bank	Dhanalakshmi Bank
2007	7482	1385
2008	8253	1411
2009	10201	1402
2010	12213	4620
2011	12213	4080
2012	15435	3468
2013	15465	2601
2014	16438	2430
2015	16555	2279
2016	17570	2185
2017	18187	2021
2018	17475	1884
2019	17117	1773
2020	17723	1714
2021	17319	1656

Source: Data collected from respective organisation's Annual Reports

Table 8: Courier and Airlines industry employees data for the number of employees in service industries.

YEAR	Courier and Airlines Employees	BlueDart	GATI	ABC India	Transport Corporation of India	Air India	Spicejet	Jet Airways
2007	58740	5700	3000	502	4300	32250	1900	11088
2008	61888	6300	2869	533	5800	32287	2349	11750
2009	62718	6000	2843	515	6500	31106	2271	13483
2010	60761	6000	2865	494	6500	29630	3212	12060
2011	61394	7792	2914	486	6300	28085	3890	11927
2012	60442	8000	3102	440	5000	26851	4684	12365
2013	61344	8500	3560	444	5250	25047	5252	13291
2014	59803	8860	3500	280	5010	23258	5639	13256
2015	55325	7419	3800	267	4990	21137	4185	13527
2016	58702	10000	4200	232	4720	19285	5360	14905
2017	59663	10000	4500	190	4379	17677	6902	16015
2018	56216	11000	5000	162	4162	10887	8447	16558
2019	57705	13000	5000	112	4486	9993	8556	16558
2020	58703	12000	5100	107	4222	9041	11675	16558
2021	61974	12800	5400	107	4375	8156	14578	16558

Source: Data collected from respective organisation's Annual Reports

Table 9: Consumer goods and telecom industry employees data for the number of employees in service industries.

YEAR	Others (CG and Telecom) Employees	P&G	ITC	Hindustan Unilever	MTNL	Vodafone	Airtel
2007	287780	127900	21780	16,700	30650	70,450	20300
2008	305010	132010	22000	15,800	32800	76,800	25600
2009	322650	135000	22750	15,000	46000	79,000	24900
2010	313890	127000	23500	15,000	45000	84,990	18400
2011	317562	129000	24000	15,000	43300	82,862	23400
2012	314673	126000	25200	15,000	41600	86,373	20500
2013	297972	121000	26000	15,000	19000	91,272	25700
2014	308969	118000	25400	15,000	36523	89,146	24900
2015	315240	110000	25800	15,000	33770	105,970	24700
2016	309254	105000	25600	11,000	31070	111,684	24900
2017	301175	95000	25900	18,000	27919	111,556	22800
2018	288219	92000	26100	18,000	25191	106,135	20793
2019	282725	97000	27300	18,000	21708	98,996	19721
2020	285992	99000	28100	21,000	14387	104,000	19505
2021	271101	101000	26000	21,000	3907	105,000	14194

Source: Data collected from respected organisation's Annual Reports