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## TREND OF FDI IN INDIAN POWER SECTOR

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**Abstract:** Indian power sector is one of the emerging sectors in the economy and we all know how all the sectors are dependent on the power sector. This sector has huge potential for Foreign Direct Investment, but this sector has not been able to attract much of FDI as Deserved. In this context this paper provides a brief view of FDI in Indian power sector, Determinants of FDI in Indian Power Sector, changes in FDI during covid 19 Period in Indian Power sector, Trend of countries contributing to Cumulative Foreign Direct Investment Flow. Data have been taken from before covid-19 period and during covid period because covid still continues. There are certain countries who made investment stable even during the period and they have been top investor in Indian Economy for so many years. The paper explains the reasons of their continuous investment and results of good relationship with these nations. The connection which people of one nation makes with other nation have been taken into consideration.

The power sector received \$14.5 Billion FDI from 2000-2019. Though 100 % FDI is allowed in Indian power sector still the sector is able to receive only 3-4 % of total FDI inflow. This paper tends to analyse the trend of FDI in power sector before covid and during covid period. Relevant information is collected through secondary sources.

**Key words:** Foreign Direct Investment, Covid -19, Demand, Cumulative Inflow & Indian Power Sector

### INTRODUCTION

Foreign Direct Investment is one of the most important elements of discussion in power sector of India. The sector has huge opportunity, but it gets less attention from the foreign investor. FDI plays an important role in the infrastructure development and technical development in the sector. Some policy changes by government like cost reduction, removal of entry barriers, Tariff rationalisation has encouraged foreign investor into the sector. The demand for power is increasing day by day in India but FDI is not increasing as it must. Power is generated through different sources like Coal, Hydro, Wind, solar and domestic waste. The growth in the demand of electricity gives opportunity for FDI.

1330 billion Unit electricity generation has been fixed as a target for the year 2020-21. If we see that demand and supply curve for power shows some positive changes since the year 2009-10 to 2020-21. we are still not able to fulfil the demands which results to energy Deficit of -0.4%.

Government of India has made such an easy process for foreign investor to invest in Indian power Sector through automatic route. 100% investment is allowed in Power sector and there is no system of Prior approval from government of India and Reserve bank of India. Concerned Regional Office of RBI needs to be Notified within 30 days of inward remittance and within 30 days of issue of shares to foreign investor you need to file the documents with regional Office of RBI.

## Review of Literature

There are some studies which have been done on FDI in Indian power sector. Some of the valuable studies are Reviewed here.

**Reddy K.S. (2014)** explained that constraint power equipment manufacturing capacity and Non availability of skilled manpower is the reason for the less FDI in India. It has also focused on the mismatch between loss making Electricity Distribution Company cost of electricity and power tariffs resulting into huge losses. Indian Government have been spending a big amount every year to reduce the losses of these DISCOMs. **Sinha N and Kumar N.V. (2011)** expressed in her paper that Indian economy has potential to get more than 4% of share in its total FDI inflow from all other countries and government of India needs to focus on reforms. **Sinha S, Kent D and Hamid S. (2007)** in their paper have compared between growth of FDI in China and India. China Got \$60 Billion FDI in the year 2005 and India was not even close to \$6 Billion in the year 2006. The study also tried to understand the drivers of FDI in the emerging economies. **Singh S. (2019)** says in her paper that FDI has helped India to transform its economic structure and innovative sectors have attracted FDI more in compared to others. She has also said that government in India since 2014 seems to be proactive. **Vijayalakshmi R, Singh P.V, Lingavel G and Gurumoorthy T.R. (2019)** narrates that FDI has been improving in India but the sectors Like power, telecommunication, petroleum are the most vital for the growth of the economy. He also tried to explain about different determinants of FDI in India. He made the focus on the human resources of the country and explains that they are the most important factor which attracts the foreign investor.

There are many papers of FDI related to Indian context but very few papers aimed to relate it to power sector of India. The sector needs much more investment in compared to what it is receiving till date. From the year 2014 there are so many changes which are encouraging factors for investor still the sectors need the Special attention.

### **Objective of the study:**

1. To study the Trends of FDI inflows in Indian Power Sector.
2. To study the impact of Covid- 19 on FDI in Indian Power Sector.
3. To study the Trend of Countries contributing to Cumulative FDI Inflow.

### **Research Methodology:**

The Relevant information are collected from various Authentic sources like Journals, Books, Government Websites like Reserve Bank of India, Ministry of Power, Central Electricity authority, DISCOMS etc. In this study simple statistical technique like Bar Graph, pie chart etc are used.

### **Allocation of Fund by government of India in various sectors:**

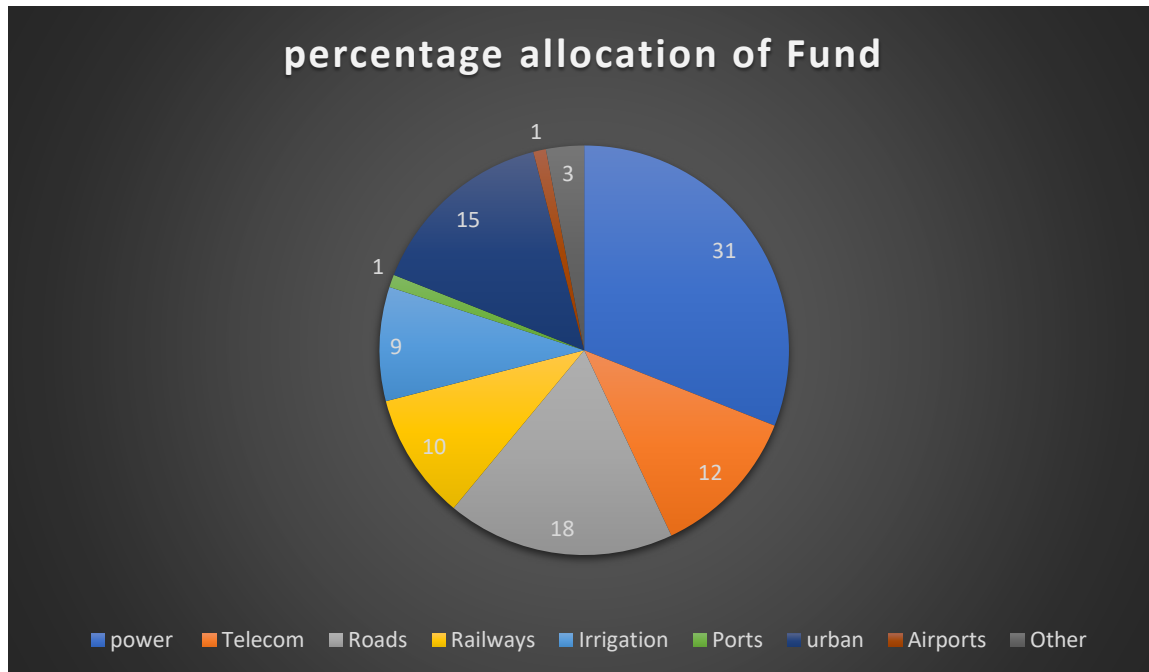
**Sector wise share (%) in infrastructure of 57 lac crore from 2013-19**

**Table 1**

Sector	Share Percentage % (2013-19)
Power	31
Telecom	12
Roads	18
Railways	10
Irrigation	9
ports	1
Urban	15
Airports	1
others	3

**Source: Report of Task force National Infrastructure Pipeline**

Above table shows the share percentage in infrastructure of 57 lac crores from the year 2013 to 2019. 31 % of total fund has been allocated to power sector. Government understands the importance of the sector. All other industries are interrelated to the development of power sector. This sector has capability to build the economy of our nation. The increase in demand of electricity also forced government to allocate funds to this sector to this level. We will be clearer from the following pie chart.

**Fig.1**

The total Allocated fund for power sector from the year 2013-2019 is 31 percent of 57 lac crore i.e., 17.67 lac crore.

**Trend of FDI inflows in Indian Power Sector:**

The Power sector has huge potential to attract the FDI inflows and return on investment is the factor that plays a vital role. Government of India has made an easy step for the foreign Investor which is also called as automated Route. It does not need any Prior approval from the Government of Reserve bank of India.

**Cumulative FDI inflows in India Since 2000-2020****Table 2**

CUMULATIVE AMOUNT OF FDI INFLOWS (Equity inflows + 'Re-invested earnings' + 'Other capital')	-	US\$ 749,397 Million
CUMULATIVE AMOUNT OF FDI EQUITY INFLOWS (excluding, amount remitted through RBI's NRI Schemes)	Rs. 3,114,966 Crore	US\$ 521,468 Million

The above table reflects the cumulative FDI inflows from the year 2000-2020 i.e., Rs. 3,114,966 Crore (US\$ 521468 Million).

**Trend of FDI inflows in Indian Power Sector****Cumulative FDI inflows in Power Sector since 2000-2019 (Apr-Dec)****Table 3**

Sector	Amount of FDI in US \$ (Million)	Amount of FDI in INR (Crores)	% Age of Total Inflows
Power	14653	80257	3%

Source: [www.dipp.gov.in](http://www.dipp.gov.in)

The power sector has been able to attract 14506 million US \$ Foreign Direct Investment since 2000-2019 which is only 3% of total FDI received. The sector which holds such a potential is still not able to win the trust of foreign investor. Government of India is allocating the highest amount of its budget to this sector but still we are not able to meet the requirement of foreign investor.

**FDI Inflows from 2014-2019 in Indian Power Sector****Table 4**

Year	Amount of FDI in US \$(Million)	Amount of FDI in Crore	Increase/decrease of FDI in compared to previous year
2014-15	707	4296	Increased
2015-16	869	5662	Increased
2016-17	1113	7473	Increased
2017-18	1621	10473	Increased
2018-19	1106	7330	Decreased
<b>Total</b>	<b>5416</b>	<b>35234</b>	

Source: [www.dipp.gov.in](http://www.dipp.gov.in)

Here the data of five years is taken for better understanding of Trends in Foreign Direct Investment in Power Sector. In 2014-15 the amount of FDI received was 707 million US \$ and then it grows to 869 million US \$ in Next year which in total makes a difference of 1366 crore in Indian currency. The policy of government of India has allowed the Foreign Investor to invest in different sectors of India including the power sector. The same trend continues till 2017-18 and then it declines in the year 2018-19. In the year 2017-18 the FDI in power sector was 1621 million US \$ and then in the year 2018-19 it falls to 1106 million US \$ which is around a big loss for Indian power sector in terms of FDI. It has difference of 3143 crore which is huge for any developing nation.

This was the year when the whole world started experiencing the Corona virus and it has disturbed the economy of the whole world. As the FDI in power was increasing every year but it started to decline since the year 2018-19. If we go in detail study from month to month, we will see that how it has impacted to the FDI.

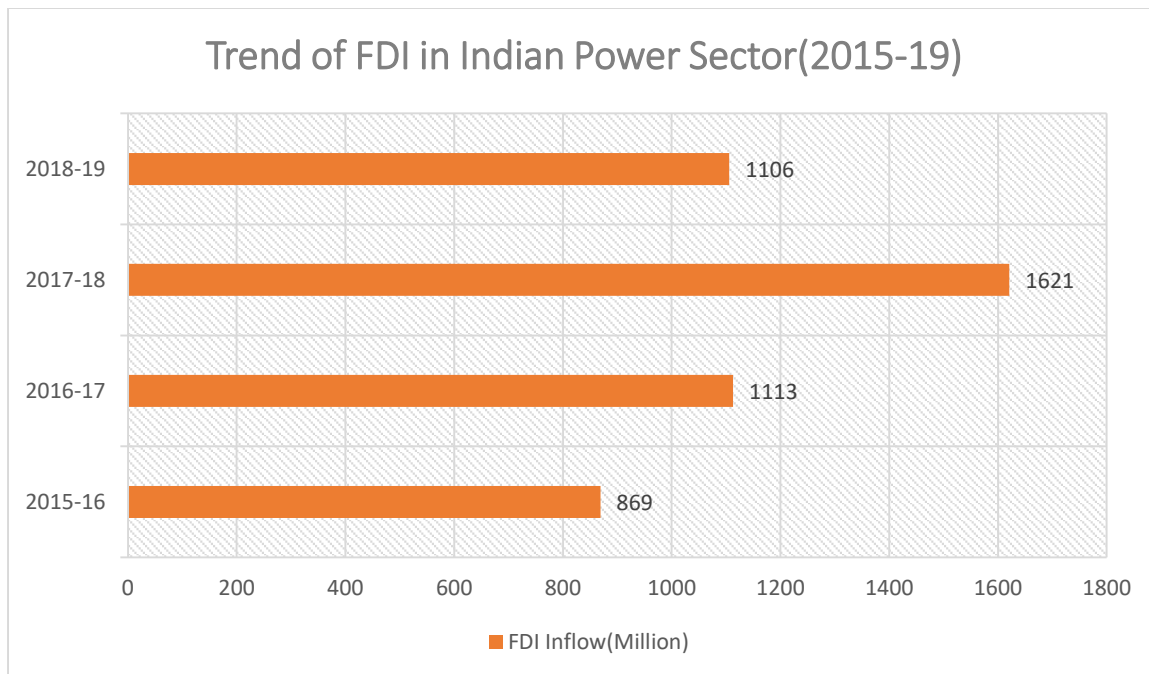


Fig.2

### Comparison between before Covid Period and During Covid Period

Corona has made an impact on whole world economy. India is one of the growing economies of the world, but it has been severely affected by the virus which led to slow down of economy. This study tries to see its effect on Foreign Direct Investment in Power Sector of India. During Covid the Demand for Electricity was reduced but its projects and Future targets are affected by this Covid Lockdown. Government has no option left with them as the virus has affected almost all parts of country. The government of India are trying their best in this worst situation to Fight with the virus and provide all facilities to its people and trying to save the economy of the nation. Its almost 1.5 years now since this virus has affected India so we will take data of this two years and we have already studied the data of previous year. We will try to see the amount of loss this sector is bearing in terms of FDI.

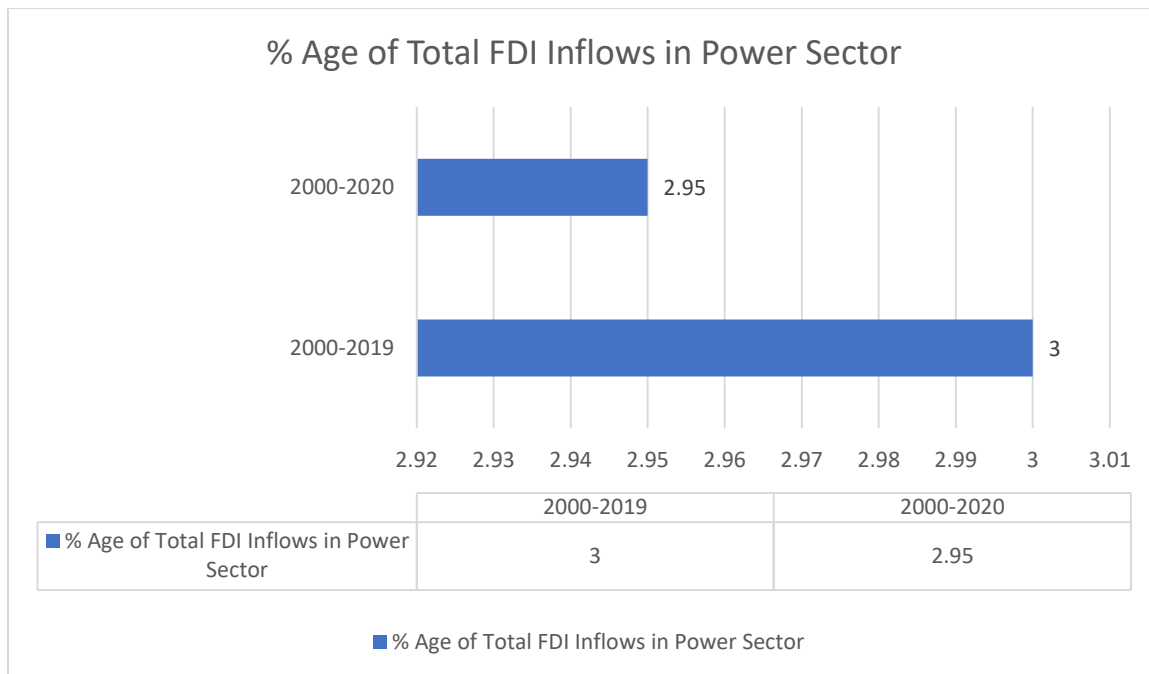
### Cumulative FDI Inflows in Indian Power Sector From 2000-2020(Apr-Dec) – COVID Period

Table 5

Year	Amount in Million (US \$)	Amount in Crore	% Age of Total Inflows
2000-20	15359	85450.01	2.95

Source: [www.dipp.gov.in](http://www.dipp.gov.in)

During Covid 19 Period the Power Sector has come down to Number 11<sup>th</sup> Position in the list of Top sectors attracting Foreign Direct Investment. **Hotel and Tourism has taken over the position of Power sector.** Earlier in the table presenting the data of 2000 -19 shows a % Age of Total Inflows as 3 % and the above table Reflects it to be decreased to 2.95 %. I believe that as data is provided only till December means there would more decline in the year 2021 as second wave has hit India badly. This is Big Loss for Power Sector in terms of Foreign Direct Investment.

**Fig.3**

The covid Period shows an Impact on the FDI of Indian Power Sector which seems to be .5 percent only but when we calculate in INR then we would realize the loss. The cumulative Inflow in FDI has increased in decreasing order which shows the addition of approx. **5193 crores** still when it is compared with data with previous Year or with 2018-19 data, we see a huge difference. It is a big challenge for Government of India to identify the reason that why there less percentage of FDI inflows in this emerging sector. There are many good companies like Tata Power, Torrent Power which are private entities but are doing good job in resolving so many issues in this sector but still there are loopholes which are not allowing the investor to come in.

### Countries which are contributing maximum in the FDI of India

The Investment is done very carefully by any nation, Individual or a Company. The Bilateral relation between the nations also plays a big role in the investment decision. Let us say two countries are in war so will they be investing in each other's economy? Answer is not at all. Sentiments of people are particularly important in this play. We will look at data of past few years and from the trend we would be able to understand the reasons behind it. Religion can also play a big Role into it because People connect themselves with Religion More. All the economist in the past have emphasized on the Profit Maximization but I believe that there is a point where Religion plays a big role.

Sometimes we see the policy makes a huge Impact on the decision in FDI. Recently India has made changes in the FDI Policy on April 2020 which states” *entity of a country that shares a land border with India or where the beneficial owner of investment is a citizen of any of those countries will need government approval*”

### Top Five Countries Contributing to Cumulative Inflows of FDI from 2000-2020(Apr – Dec)

**Table 6**

Ranks	Country	Amount of FDI Inflows in US \$(Million)	Amount of FDI Inflows in Crore	% Age to Total FDI inflows
1.	Mauritius	146186	821844	28%
2.	Singapore	11386	726373	22%
3.	U.S.A	42607	271468	8%
4.	Netherland	36287	226573	7%
5.	Japan	4526	203805	7%

Source: [www.dipp.gov.in](http://www.dipp.gov.in)

The above data shows the contribution of top 5 Countries in Foreign Direct Investment of India. The data shows the cumulative FDI inflows from 2000-2020. Mauritius is at the top contributing 28% of Total FDI till 2020 and Singapore Being the Second Contributing to the 22 % of Total FDI inflow. United states of America also hold a good position in the contribution list as they have contributed 42607 million US \$. The trend holds a data of 20 years which is not less. If we compare between the nations like United states of America Hold a big economy in compared to Singapore which hold second position and Mauritius which hold First position. Government of India should think on it that why Mauritius have been spending much on India? What are the factors which have been pulling Mauritius and Singapore?

There are so many others big economy, but they do not show much interest in Foreign Direct Investment of India. Netherland and Japan have also been contributing to our Economy in terms of FDI. Government of India needs to review not only the policies but the root cause of NON-Investment of other nations.

Experts have given statement that after 2019 the Foreign Direct Investment Inflow in India will decrease but data says that still in cumulative inflow, they are ranked at No 1. There are many measures or factors which decided the FDI inflow to country. It can be the policy of government, tax benefits, trust on economy, growing economy, religious Sentiments etc. I have emphasized more on sentiments of the people or Government which is playing a vital role. we can also derive from the above that all Top 5 countries are having good relations with India since so many years and so we can say their portion in the investment is more.

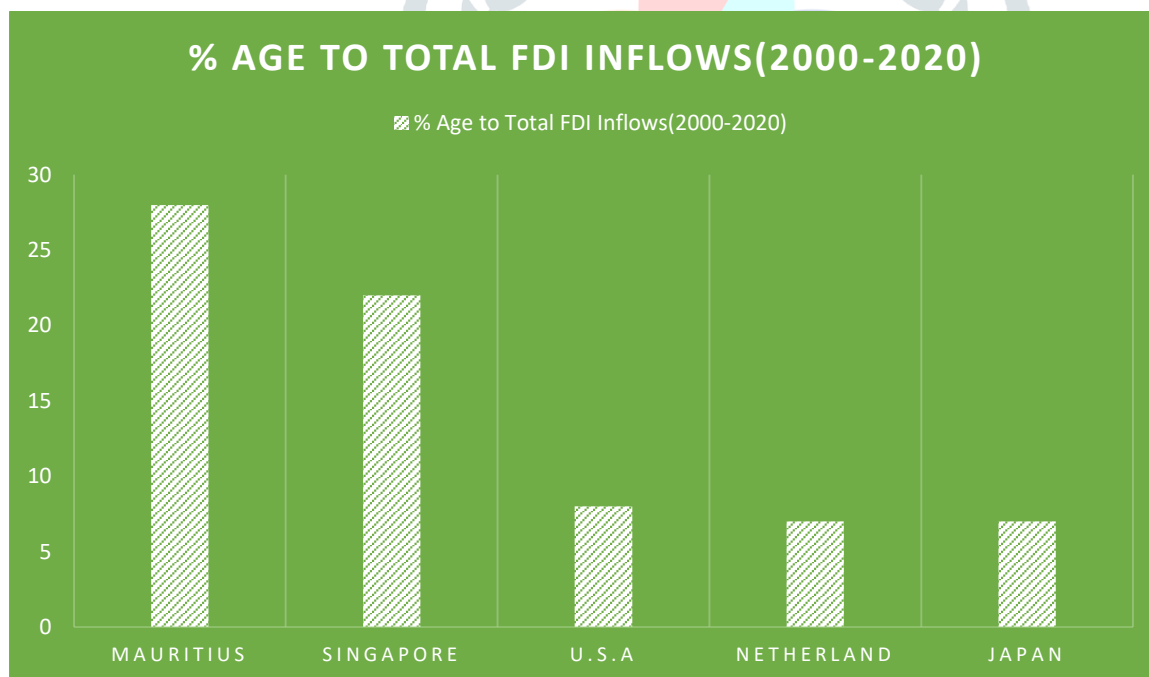


Fig.4

### Conclusion:

The trend of FDI Rotates around **3% to 4%** of total inflow in Indian Power Sector. This number is very less in compared to other Sectors. In one hand Government of India is spending a huge amount of Capital on Its Power Sector but on other hand the Foreign Investor does not show much interest into investing. The loss-Making Electricity Distribution company is a big issue to be resolved. Private sector is doing good job which attracts some good Amount of FDI, so these sectors need to be encouraged. There are some Distribution Companies which are really doing Good Job in reducing the Loss of **DISCOMs**.

Covid-19 has made effect on FDI of Indian Power Sector. The data shows loss of almost **5193** crore which is excessively big amount specially for this sector which receives only few percent of total FDI inflows in India. Government of India needs to think about how to increase FDI in this sector which has huge Potential. India is third largest Producer and Third largest consumer of electricity in the world. Government is allocating good amount of money to this sector still there needs some attention on FDI in this sector.

Top Countries which are investing in India needs to be given priority and some encouraging policy needs to be made. The country like Mauritius which is small economy in compared to other big Economy of the world contributes the most. There is certain third-party inflow from United Kingdom and Cyprus but still it will hold a Rank in the contributor list. I feel the trust which the people of this country have in India is making them invest in this country. This needs to be emphasized that these relation needs to be stronger in coming future. There are certain countries which like only to make deals for their own profit, India needs to be aware of them. The whole world knows that we have the largest potential to consumption, so we need to make review on our policies with big Giants which invest less in India but wants to sell their own products here.

Power sector is ever emerging sector because of demand of electricity and growth of Industries and economy. Government needs to form a committee to investigate FDI growth in this sector particularly.

### References:

1. Neena Sinha, N.V Kumar (2011)" Towards Sustainable FDI policy for Power Sector development" International Journal for Sustainable strategic management (IJSSM) Vol 3, No 2,2011.
2. Dr. K Sreelatha Reddy (2014) Title "Trends in FDI inflows in India- A study of power Sector "Trans Asian Journal of Marketing and management research Vol 3, Issue 9, 2014.
3. Mishra, Bibendu (2011)" Lack of Proper Support slows FDI into power sector "Economic Times, August 2011
4. Daizy Chawla, Jatin Kapoor" Foreign Direct Investment in India Solar Sector- A perspective" ET Energy World, April 2021.
5. Avishek Vijaykumar Vyas (2015) "An analytical Study of FDI in India" International Journal of Scientific and research Publications, Vol 5, Issue 10, October 2015.
6. Blomström, M. and A. Kokko (2003). "The Economics of Foreign Direct Investment Incentives", Working Paper No.9489, NBER.
7. Swapna S. Sinha, David H. Kent, and Hamid Shomali (2007)" Comparative Analysis of FDI in China and India", Journal of Asia Entrepreneurship and Sustainability, Vol 3, Issue 2, September 2007.
8. Singh Shikha (2019)" Foreign Direct Investment (FDI) Inflows in India" Journal of general Management and Research, vol 6, Issue 1, January 2019.
9. Singh, Shikha, Chauhan, A. Kumar & Pandey, Nikhil (2012), Foreign Direct Investment (FDI) in Bric Countries: A Panel Data Analysis of the Trends and Determinants of FDI, European Journal of Economics, Finance and Administrative Sciences, Issue 53.
10. Saini N & Singhanian M. (2018), 'Determinants of FDI in developed and developing countries: a quantitative analysis using GMM', Journal of Economic Studies, Vol. 45 Issue 2, pp. 348-382.
11. Teli, R.B. (2014), A critical analysis of foreign direct investment inflows in India, Procedia – Social and Behavioural Sciences 133, 447–455.
12. Sharma R. & Khurana N. (2013), Role of Foreign Direct Investment (FDI) in Different Sectors, International Journal of Advances in Management and Economics, Jan.-Feb., Vol. 2, Issue 1, 14-19.
13. Pant M. & Srivastava D. (2018), FD in India: History, Policy and the Asian Perspective, Reserve Bank of India Occasional Papers, Vol. 39, No. 1 & 2, 2018.
14. Economic Survey (2017), Industry and Infrastructure chapter 08, Government of India publication.
15. Athreye, S. and S. Kapur (2001). "Private Foreign Investment in India: Pain or Panacea?" The World Economy, 24, pp.399-424.
16. R. Vijayalakshmi, V. Palani singh, G. Lingavel, T. R. Gurumoorthy (2019) "Factors Determining in Foreign Direct Investment (FDI) in India, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-2S10, September 2019.