



IMPACT OF OUTWARD FDI ON EMPLOYMENT IN THE SERVICE SECTOR

¹Abhirami Aykara

¹Research Scholar

¹Department of Economics,

¹Indian Institute of Foreign Trade, India

Abstract: The outward FDI helps in expanding the technological knowledge, improving skills and also in expanding the market for the domestic firms. Thus, the outward FDI alongside export increases the competitiveness in the global economy. The problem considered for the study is the impact of outward FDI in India on the employment in service sector. This study differs from other literatures in terms of the time period used in finding the trend and pattern used in the trends and patterns of OFDI and by using a firm level data in analyzing the impact of service sector OFDI on employment.

Index Terms – Outward FDI, Service sector, employment

I. INTRODUCTION

Foreign Direct Investment (FDI) gained importance and led to greater integration of different countries through the rapid growth of globalization. The investment of foreign companies in a domestic economy makes the whole world closely knitted. The different macroeconomic situations in a particular country, thus not only affects its domestic market but also affects other countries. The economic policies of different countries are also framed in such a way to attract foreign direct investments. Flexible investment policies and the resources in a country help in attracting foreign investment towards the country. Foreign Direct Investment helps in creating new jobs, development of human capital, and also helps the domestic country in accessing new technology, skills and expertise. The foreign direct investment can be inward where the foreign companies invest in a particular host country or outward FDI which is when a domestic firm expands its operations to a foreign country. FDI is a stable investment which sustain for a long period of time. Thus, it strengthens the relationship between different countries. India is not only trying to make its economy a favorable destination for inward FDI but also is in its way in expanding its presence in the global economy through outward FDI. The outward FDI helps in expanding the technological knowledge, improving skills and also in expanding the market for the domestic firms. Thus, the outward FDI alongside export increases the competitiveness in the global economy. According to the World Bank's data, the amount of FDI flowing to developing countries was four times that of foreign aids in 1999. The advancement of Multinational Corporations (MNCs) increased the scope of globalization.

II. DEFINITION OF FDI

According to World Investment Report 2007 by UNCTAD, FDI is defined as “an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one country (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliates enterprise or foreign affiliate)”.

The Balance of Payment Manual of IMF defined FDI as “the aim of obtaining a lasting interest (existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter) by a resident entity of one economy (direct investor) in an enterprise that is resident in another economy (the direct investment enterprise).”

The definition for Foreign Direct Investment given by Reserve Bank of India is that “the investment through capital instruments by a person resident outside India (a) in an unlisted Indian company; or (b) in 10 percent or more of the post issue paid-up equity capital on a fully diluted basis of a listed Indian company.”

III. TYPES OF FDI

The Foreign Direct Investment is the long term investment by a private firm in the production of goods and services in a foreign country. The FDI can be through Greenfield Investment or Mergers and Acquisitions. Greenfield investments are those where the firms establishes new operations and facilities in a foreign country while mergers and acquisitions are when a company acquire or merge with the local company of a foreign country. The net FDI shows the difference between inward FDI and outward FDI.

FDI can be further differentiated into Vertical FDI, Horizontal FDI, Conglomerate FDI and Platform FDI. Horizontal FDI is the common type of FDI where the investor invests in the company belonging to the same industry as the investor operates or owns. Vertical FDI is where investments are made within the supply chain of a company which can be in the same or different industry. The investment in a completely different companies belonging to different industries are called conglomerate FDI. Platform FDI are those investments where the goods produced in a foreign country are exported to another countries.

The different methods to penetrate a foreign country through overseas investment are mergers and acquisitions, voting stocks of companies in a foreign country, joint ventures with firms in foreign countries or by starting the subsidiary of a domestic firm in a foreign country.

IV. FDI IN INDIA

The economic reforms in India was an after effect of balance of payment crisis that affected India in 1991. Since 1991, the FDI increased steadily in India. There are two ways through which India gets FDI which are "Automatic Route" and through "government route". The former is where prior permission is not required by the non-resident Indians and the Indian companies while the latter makes it compulsory for government approval. The foreign direct investment towards India was further enhanced by the improvement of India in the Ease of doing Business ranking. The outward as well as inward FDI in India showed an increasing trend since 1991. The inward FDI in India increased at a rate of 37.85 per cent per annum over the years from US \$75 million in 1991 to US \$42285.68 million in 2018 (Nayak & Sahoo, 2020). The outward FDI from India increased from around \$6 million in 1991 (Oxfam discussion paper) to \$11 billion in 2018 (live mint). The overseas investment from India is regulated by Foreign Exchange Management (Transfer or Issue of any Foreign Security) Regulations, 2004. The Indian companies are permitted to invest in foreign countries through Joint Venture or Wholly Owned Subsidiaries.

V. OUTWARD FDI

Outward FDI is the overseas investment by expanding the operation of a firm to foreign countries. It can be through Greenfield investment or merger and acquisitions. It helps in expanding the market of a firm and also in getting access to better technologies and also different pools of labor.

Outward FDI is as important as inward FDI in increasing the competitiveness of the companies and also helps in long term stable investment for the sustained growth of the companies. India and UAE were considered as two countries which are in the top 10 countries as source of outward FDI for 2019 to 2021 period. The outward FDI of India also doubled to \$11.3 billion in 2017. As stated by India Brand Equity Foundation, even though the outward investment from India was focused towards resource rich countries like Australia, Sudan and UAE during first half of the last decade, the ODI got shifted to tax benefitting countries like Mauritius, Netherland, Singapore and British Virgin Islands.

According to the recent report of India Brand Equity Foundation, RBI relaxed the norms for domestic companies which invest in foreign countries by removing the ceiling for raising funds through pledge of shares, domestic and overseas assets. RBI also liberalized the guidelines for unfamiliar speculation for foreign investment by Indian companies.¹

VI. BACKGROUND OF THE STUDY/ THEORETICAL BASE

The different potential explanations for finding the effect of outward FDI on employment are as follows. When a company invest in a foreign country, the employees in the home country try to increase their marginal productivity. Another explanation can be that of backward linkages where the increase in the activity of a home MNC leads to increase in the demand of the home country's suppliers and thereby raises the marginal productivity of the laborers employed in these firms. According to Jones and Kierzkowski the international fragmentation of production leads to productivity enhancing effects. These explanations show a positive relationship between FDI and employment. While there can be a negative relationship between FDI and employment when the firms expand to other countries as a defensive strategy to fight against foreign competitors and thereby reducing the foreign demand for the domestic products whereby employment also. (Federico & Minerva, 2008)

The study of linkage between the OFDI and employment in the high-income economies showed that the outward investment might leads to lose of jobs in the domestic economy. While (Jaan Masso & Vahter, 2008) argues that this linkage was different for low cost economies from that of high-income economies. Thus, this is the first literature which looks into the difference in the linkages between employment and outward FDI in different countries. Another study shows positive home country employment effect in Slovenian firms, especially small and medium size firms. (M, Jaklic, & Burger, 2007)

There were studies done to determine the OFDI. The studies on the influence of different country specific macroeconomic variables on the OFDI has shown significant results by using vector autoregression model.

VII. STATEMENT OF PROBLEM

The problem considered for the study is the impact of outward FDI in India on the employment in service sector. The share of service sector companies in outward FDI has been increasing in India. The theoretical studies show that employment growth is dependent on firm size, age, export, average labor cost per employee, labor productivity and capital intensity.

¹ Indian Investment Abroad - Overseas Direct Investment by Indian Companies, 2021

VIII. IMPORTANCE OF THE STUDY

The impact of outward FDI on host country's employment is a very important area to study as the domestic activities of a country gets impacted by the foreign direct investment. Service sector received the highest share of FDI in India. The largest numbers of outward investing firms from India are from Service sector. Thus, it is very important to study about OFDI with respect to service sector. As outward FDI have been showing an increasing trend India and gaining more importance, this study is of current importance in studying its effect on employment. There has not been much study on the impact of outward FDI on employment especially in the service sector. As Outward FDI has an effect on domestic economy of a country it becomes necessary to empirically find out the impact of outward FDI on employment.

IX. REVIEW OF LITERATURE

Foreign Direct Investment

Ganesh (1997) explored the effect of Foreign Direct Investment on domestic industries in India. The study was done on FDI data in the post liberalization period and comparing it with the data on capital formation in the same period. A sectorial wise analysis was done on the impact of foreign firms on the domestic firms. FDI showed a huge increase after 1991. The analysis showed that the negative impact of foreign firms on domestic firms was hyped. The result was expected to be constant for a period of five years which was till 2001. The author showed that the FDI increase sharply after 1991 and Indian firms had taken steps to strengthen their equity and made themselves capable to compete with the foreign firms. Foreign firms had a dominance in food processing, cosmetics and soap segments. They were expected to dominate in the development of car, offices and household equipment. While Indian firms dominated in other products like metallurgical industries, textiles, cements, chemicals, paper and sugar. The foreign firms and Indian firms were expected to have competition in engineering goods, drugs, and pharmaceuticals and electrical equipment. Thus the author tried to establish that increase in FDI lead to an increase in dominance of the foreign firms but with a moderate competition.

Dwivedi & Jyoti (2013) did a time series analysis to determine the effect of FDI inflows on Indian economy over the time period 2000 to 2012. The effect of inward FDI on Gross Domestic Product in the service sector was also analyzed by an econometric model using data between 2000 to 2012. The relations between two variables were found out using correlation and regression analysis. The results showed that the Foreign Direct Investment directly affects the foreign direct investment and has a significant impact on GDP.

(Khan, 2012) in depth analyzed the trends and patterns of FDI in India. He described the FDI pattern through three different phases. The first phase was the period of Liberalization of Indian Economy from 1992 to 1995. The Phase II was the creation of Fast Track Route from 1995 to 2000. Phase III was liberalized framework under FEMA from 2000 till current date.

Inekwe (2013) examined the relation between economic growth, employment and foreign direct investment in Nigerian manufacturing and service sectors between 1990 and 2009. The Johansen cointegration technique and the vector error correction model were used for the analysis. The results showed that FDI in service sector had a positive relationship with economic growth while FDI in manufacturing sector had a negative relationship with economic growth. FDI in manufacturing sector had a positive while that in service sector had a negative relation with employment. The causality test showed that growth leads to changes in FDI in service sector while it is a bidirectional relation in manufacturing sector. With regard to employment FDI leads to changes in employment in service and manufacturing sectors.

Herzer & Nunnenkamp (2013), in his study on the effect of inward and outward FDI on income inequality, used panel cointegration techniques and unbalanced panel regression. The study was done with the help of sample from 8 European countries over a period from 1980 to 2000. The results from the analysis showed in some European countries an increase in the FDI leads to a decrease in income inequality. In the same way a decrease in FDI is reported to lead to an increase in FDI. Income inequality was used as the dependent variable and ratio of inward FDI to GDP, country specific omitted factors which will be stable in the long run and country specific deterministic time trends are used as the independent variables. The same equation is used for outward FDI also by just replacing inward FDI with outward FDI. These equations considered inequality to be endogenous where inward or outward FDI causes changes in inequality in the long run. The variables used for the empirical analysis were FDI stocks from UNCTAD's FDI database, FDI flow to GDP from World Development Indicators Online and Household inequality data developed by University of Texas Inequality Project. The empirical study shows that the inward and outward FDI are negatively related to inequality in the long run. The long run causality shows that an increase in FDI reduces income inequality and a decrease in income inequality leads to an increase in FDI. The long term effect of FDI on income inequality shows a different trend for different countries with poorer countries and richer countries showing different trends. Finally, the results shows that while the long term association of FDI on income inequality in negative, it is positive in short term.

Saini, Madan, & Batra (2017) investigated the effect of Inflow of Foreign Direct Investment on export promotion. The time period between 1991 and 2012 was used for the study as the year 1991 showed a sudden increase in the Foreign Direct Investment growth. Cointegration statistics, Augmented Dickey Fuller test and Granger Causality Test were used. The ADF was used to determine the stationarity while Granger causality test was used to find the the direction of relationship between the two variables considered. The two variables considered were FDI and export growth. The study showed that export growth and FDI has a long run positive relationship and also a bidirectional relationship between the both.

Guruswamy, Sharma, Mohanty, & Korah (2005) observed that retail and wholesale are the largest of the service sector activity contributing largely to the GDP of India. It accounts to more than double of the second highest service sector activity contributing to GDP. Author studied the share percent of various service sector activities to GDP, growth of service sector, growth of retail outlets in India and so on. A time series data was analyzed on the employment of organized wholesale and retail trade in India. A cross section interstate data comparison was done on the workers engaged in retail trade by type of enterprises for the year 1998. The shares of retailing in employment across different countries were also analyzed. The data for the study were collected from different sources like FICCI, Monthly Abstract Statistics, MoSPI, CRISIL and so on. Gruswamy et.al recommended from the result

of their study that policies should be undertaken to increase the efficiency of organized and unorganized retail sector and the entry to FDI to the retail sector should be slow to minimize the impact on domestic retailers.

Chongvilaivan (2012) assessed the performance of Thailand's economy in inward and outward FDI. A trend analysis of FDI was done in the study. The share of Net FDI from different countries for the period 2000 to 2005 was studied using data from Bank of Thailand. The performance of the inward FDI was found out through Inward FDI Performance Index and Inward FDI Potential Index developed by United Nations Conference on Trade and Development (UNCTAD). The performance of Outward FDI was also found out similar way by Outward FDI Performance Index. It was observed that Thailand was engaged in labour intensive low end stages of production which attract FDI but generates only modest backward and forward linkages. The infrastructural constraints and different stringent laws and contract enforcement acted as a hindrance to full inward FDI potential. The financial crisis had an adverse impact on FDI as the other Asian economies like India and China emerged strongly after the financial crisis driving FDI towards these countries.

Outward Foreign Direct Investment

Buckley & Clegg (2007) investigated the determinants of Chinese Outward FDI. The study was done for a time period of 1984 to 2001 using official Chinese data on outward FDI. The total amount of FDI approved by SAGE for a particular project was considered as the dependent variable. The forty nine destination countries of Chinese ODI was identified of which twenty two belongs to members of Organization for Economic Cooperation and Development (OECD). The pooled ordinary least square method (OLS) and random effects (RE) generalized least square method were used for the study. From 1984 till 1991, the Chinese ODI to the destination country was related highly with the political risk, cultural proximity, relation with the host country, host country market size and geographical proximity. While after 1991, it was observed that the Chinese ODI was highly associated with host country's natural resource endowment. The market imperfections were also found to be an influencing factor for foreign investors. Liberalization of the Chinese economy was found to positive stimulate the FDI.

Tang & Altshuler (2014) emphasizes that the outward FDI can have a spillover effect on the domestic economy of the home country. This study's focus on outward FDI makes it different from other studies which were focused on the spillover effect of inward FDI on domestic economy. This particular study is on the productivity spillover effect of OFDI on the domestic firms other than the MNCs. The country considered for the study was United States of America using firm level data of domestic firms other than MNCs in the upstream as well as downstream industries. The data source were Standard and Poor's Compustat and U S Bureau of Economic Analysis. The time period considered for the study was between 1999 to 2009. Cobb Douglas Production function was used to estimate the total factor productivity for domestic manufacturing industry in US. The simultaneity of input choices and selection bias were tackled by using Olley-Pakes method estimate total factor productivity. The analysis showed that there was no significant spillover effect of outward FDI by MNCs on the productivity of firms in the same industry and upstream industry. It was found out that the absorptive capacity of a firm has a significant role in determining the spillover effect. The relationship between absorptive capacity and spillover effect was found to be non-linear. Exporting status and size of the recipient domestic firms were also influential on the spillover effect.

Passakonjaras (2012) explored the outward FDI of Garment Industry in Thailand and the difference in the firms with and without FDI. The study was done using survey and interview method using data from June to December 2008. The in depth interview was done on four Thai Garment firms that have OFDI, one Thai firm with no experience in investing abroad and a representative from the Thai Garment Manufacturers Association (TGMA). It was identified efficiency seeking as the motive for Outward FDI. Labour shortage and general cost pressure were identified as push factors to OFDI. The study showed that the firms with OFDI showed higher levels of management proficiency than firms without OFDI mainly due to their large size and being ready to serve market and production technology. Their location of investment abroad depends upon labour costs and cultural proximity. The author stressed on the improvement of managerial efficiency by the Thai Garment forms and the promotion of OFDI by the Thailand government as the policy suggestions to improve the OFDI of Garment Industry from Thailand.

Bano & Tabbada (2015) examined the determinants and extend of Foreign Direct Investment outflows from the East, South east and South Asian economies as the outward FDI from these economies increased significantly from these countries since 1980. The time period considered for the study was from 1980 to 2011. The data for the study were collected from different sources like IMF, World Economic Outlook, UNCTAD and World Bank database. The correlation and regression analysis were used for finding the determinants of FDI using country specific variables. The different regression and correlation analysis showed that the outward FDI was positively associated with Gross Domestic Product, Domestic savings, foreign reserves, export orientation and FDI flows in the source countries. The extent of influence of these factors on outward FDI varied from countries to countries. There was a need of supportive environment internationally for many Asian developing countries to contribute more towards outward FDI in non-traditional sectors.

Huijie (2018) analyses the impact of Japan's Outward Foreign Direct Investment on employment and domestic production in the manufacturing industry using input-output analysis. OFDI were observed to have both negative and positive effect on the export and employment of the home country. The author through analysis of data from 2000 to 2014 found out that the negative impact of export substitution effect and inverse import effect is greater than the positive impact of export promotion effect. Thus the total effect of OFDI from Japan has a negative impact on domestic production. The decrease in employment further leads to increase in unemployment through "Hollowing-Out" effect.

Banga (2007) examined the factors which determined the OFDI from the developing countries. The other objectives of the study were to the extend to which the existing theories can explain the reason for emergence of OFDI to developed countries from developed countries. The time period considered for the study was 1980 to 2002 where the study was done on 13 developing countries using panel data. It was found out that the outward FDI from developing countries were driven out by exports and imports. The other major drivers of outward FDI from developing countries were an increase in domestic consumption, bilateral investment agreement, higher inward foreign direct investment, lower availability of infrastructure in the domestic country, rising technology, higher education and labour policies in the domestic countries.

Outward Foreign Direct Investment in India

Chaudhry & Joshi (2018) discusses on the trend of Indian outward foreign direct investment and deeply analyses the policies and legislations in India with regard to OFDI. The trend of OFDI in India emerged as an important source of FDI after the 1991 economic reforms. The OFDI from India increased steadily till 2010 after which it shows a declining trend. The major reason for the same can be attributed to the global financial crisis. The outward FDI again picked up back to the pre crisis level (of 2005) in 2015. The enactment of Foreign Exchange Management Act (FEMA) in 2000 further liberalized the political framework by systematically raising per annum upper limits for overseas investment through automatic route. The data from 2000 to 2014 shows that the India's approved OFDI from manufacturing sector decreased from 40 percent to 39 percent while that of service sector increased from 35 percent to 53 percent.

Khatik & Patil discusses the importance of outward foreign direct investment from India on the economic cooperation between India and the host countries. It plays an important role in the transfer of skills, technology, sharing research and development, access to global market, generation of employment, and utilization of raw materials. The study found out that guarantee issued contributed to 66% of the investment while 22% was in equity and 13% in loans. With respect to destination countries, Netherland attracted 22% of the investment followed by Singapore with 19% of investment. The study also showed that that manufacturing sector is the sector which attracted maximum outward FDI from India of 28% followed by Transportation, Storage and communication. The other major sectors which contributed to outward FDI from India are storage and communication, financial, insurance and business services, agriculture and mining, wholesale, retail trade, restaurant and hotels contributed to 20%, 17%, 13% and 12% of the outward FDI respectively.

Athukorala (2009) examined the patterns and economic implications of outward Foreign Direct Investment from India. The study was done on the theoretical background of the evolving role of the developing countries in enforcing economic globalization. The implication of changes in the trade and investment regime were analyzed and the study also focused on the overall climate for internationalization of the domestic firms and on the nature of their global cooperation.

Thomas & Narayanan examined the impact of productivity, exports, imports of technology and Research and Development intensity on ODI. The time period considered for the study was from 1998 to 2009. The outward FDI from India showed a rapid rise by the late 1990s and this growth continued in 2000s. The firm level data was collected for the study for 4000 firms. The data source was prowess iq. The data was filtered using the National Industrial Classification provided by Central Statistical Organization (CSO). Dynamic Random Effect Probit and Tobit model were used for the analysis. The theoretical grounded about which the study was done was that the firms with high productivity will undertake ODI as the mode of internationalization. A positive relationship between OFDI and export was observed and the OFDI was dependent on past productivity level. The result showed that the exports productivity, import of technology and research and intensity has a significant positive impact on OFDI.

Agnihotri & Arora (2019) studied the linkages between outward FDI and Domestic Economic Growth in the Indian economy. The study was based on the theoretical underpinning that the OFDI has an impact on domestic industries based on scale effect, competition effect and knowledge effect. OFDI helps in the expansion of business and scale of domestic firms through technological and trade benefits. Thus it was analyzed as to whether OFDI leads to increase in production or it will just be a withdrawal of domestic capital and also the effect of OFDI on GDP. A secondary analysis was done using data from RBI sources for a period of 10 years from 2007 to 2016. The analysis was done using Augmented Dickey-Fuller (ADF) Test to test stationarity, Eigen value test and Trace test. The relationship between GDP and OFDI was found out using a regression analysis. It was found out that there is no significant relationship between OFDI and economic growth in India. The result differs for some firms.

Das (2013) explored the impact of Outward FDI from manufacturing sector on the domestic activities. The domestic activities identified for the study were export intensity, Research and Development intensity, domestic investment, employment, output, import of raw materials and import of capital goods. The data for the study were collected from RBI, CMIE prowess iq, UNCLAD. The methodology used for the study was a firm level study with treatment and control group of firms. Casual impact is found out between the treatment group and control group. The result showed that there is a positive impact of outward FDI on export and R&D intensity while there was no significant impact on investment, output, employment, import of raw material and import of capital goods. The result also showed that there was weaker involvement of Indian firms in the international production network and value chain.

Outward Direct Investment from India: Trends, Objectives and Policy Perspectives (2014) India emerged as a major overseas investor amongst developing countries since 2005. There was an increase in the number of approved projects for outward FDI from 2005. India's share of FDI outflows among the developing countries increased from 0.5 percent in 1990s to 4.6 percent in 2010. According to EXIM bank research, the major drivers of ODI from India are the increasing profitability of Indian firms, Regulatory changes, Value added strategic growth, increase in appetite to take risk and expanding existing markets. The highest percentage of ODI was from manufacturing sector. Even though manufacturing sector contributed the highest share in the ODI of India it has been showing a decreasing trend. The share of manufacturing sector decreased from 59.8 to 40.3 and 31.5 percent in 2003-04, 2009-10 and 2011-12 respectively. The empirical evidences also showed that the sector finance, insurance, real estate and business services increased its share from 12.6 percent in 2003-04 to 29.2percent in 2009-10 and then decreased to 19.7 per cent in 2011-12. The share of wholesale, retail trade, restaurant and hotels was around 9 to 11 percent during early 2000s which dropped to 4 percent in 2006-07.

Deol & Bhagat (2017) analyzed the trends of outward FDI from India. The outward FDI from India showed an increasing trend from 2005-06 after the liberating policies of Government of India towards inward and outward FDI. The author also looks into the determinants of geographical destinations of outward FDI of India. The method used was ordinary least square method applied to a panel data for 22 economies from 2009 to 2012. The sources for the data were RBI, UNCTAD and World Bank publications. It shows hoe the funding of outward FDI moved majorly from equity and loans to guarantees. The sectorial analysis shows the major contribution to outward FDI from manufacturing and service sector. The results showed that the major destination of the outward FDI from India is developed countries. The pattern of investment in developed countries from India was majorly through mergers and acquisition while that in developing countries were through green field investment. The real GDP of the host country and the governance were found out to be the drivers of outward FDI from India. While the inflation rate in the host country is an insignificant factor determining outward FDI.

Pradhan (2006) discusses the trend and pattern of service sector OFDI in India. It was observed that the increasing OFDI from India were driven majorly from service sector enterprises than the manufacturing firms. The contribution of service sector enterprises increased from 20 percent in 1975-80 to 44 percent in 1991-95 which further increased to as high as 62 percent in 1996. It was also empirically found out that the OFDI of service sector firms at firm level is non-linearly related to age, size, firm's innovation, export orientation and profitability.

Outward Foreign Direct Investment and employment

Masso, Varblane, & Vahter (2008) analyzed the effect of Outward FDI on the home country's employment in a low cost medium income transition economy. The country taken for the study was Estonia. The time period considered for the study was from 1995 to 2002 and the data was taken from the population of firms in Estonia. Most of the researches in this field were done on high income economies while this study was done on a low income low transition economy like Estonia. The result showed that the OFDI positively affects the home country's employment growth. The different methods for estimating the outward and inward FDI was discussed. One method was estimating with a regression through a firm growth model, the second one was to use static labour demand model and another one was through finding the elasticity of parent employment to wages. This study was done by estimating a regression equation with logarithmic employment growth as dependent variable and OFDI, IFDI, age of the firm, labour productivity, wages as the independent variables. The results showed that the employment growth was rapid in small firms while it was slow in old firms. It also showed that the labour cost had a significant negative relationship with employment growth. The result showed no significant difference between direct and non-direct investors. The inward FDI showed a positive relationship with employment growth while it did not show a negative relationship between OFDI and employment growth.

Federico & Alfredo (2008) studied the impact of outward FDI on the local employment of 13 Italian manufacturing industries and 102 provinces. The study was done for a time period of 6 years from 1996 to 2001. Even though it was of a wide public opinion that the outward FDI lead to the job loss in the domestic economies, this study showed that outward FDI do not necessarily lead to job loss and proved it empirically. The reason for the same was given as that the expansion of a given plant abroad will not replace the domestic employment but only helps in expanding the market. Another reason for the same was that only some stages of production will be moved abroad and the core activities in the domestic economy might still need more labour. The study investigates the issues if the FDI on the home country employment from where the investment originates. The study is done through an estimation of employment growth regression which shows the relationship between the employment levels and the specialization, variety, plant size and so on. A measure of FDI was added as a control to the above regression. The result shows that keeping all other variables constant, the local employment is positively associated with the FDI. The analysis of FDI on non MNC firms showed that the small firms not involved in investing abroad seemed not to be negatively affected by FDI.

Rizvi & Nishat (2009) did a panel data analysis to find the impact of foreign direct investment on employment in the case of Asian economies of India, China and Pakistan. A balanced panel data of these countries were used for analysis for a period of 24 years from 1985 to 2008. The variables used for the study were employment, foreign direct investment and gross domestic product. The data were collected from IFS and various issues of Economic Survey of Pakistan. The impact of FDI on employment in these three countries was found out using a Seemingly Unrelated Regression. The result showed that FDI do not directly contribute to enhancing employment opportunities in these three countries. Thus arises the need of employment priority programmes to improve the elasticity of employment.

Outward Foreign Direct Investment and Service Sector

Imbriani, Pittiglio, & Reganati (2011) discuss the effect of Italian firms investing in foreign countries on the employment and productivity of service and manufacturing sector. The time period taken for the study was from 2003 to 2006. The study was done on a firm level data where analysis was done by dividing the firms into those which were invested abroad for a considerable period of time and those who never invested abroad. The results were different for manufacturing and service sector. The analysis was done using dummy variable technique. The study examined the causal effect of Italian firms investing abroad. The combination of matching approach with difference-in-difference estimation methodology was used for the analysis. The results showed that the investments of firms abroad led to productive gain in manufacturing sector while the employment did not show much improvement due to outward FDI. The productivity as well as employment in the service sector did not show any improvement in both service and manufacturing sector.

Karpaty & Poldahl (2006) analyses the determinants of foreign direct investment at both firm and industry level for the manufacturing and service sectors in Sweden during 1990-2000. The traditional panel estimation techniques were used to perform industry level estimation while a duration analysis was performed on a panel of firms for estimating firm level determinants. The results showed that both manufacturing and service sector owner specific factors can to some extent explain inward FDI into Sweden. It was also found out that the inward FDI was determined by vertical motives. The home country of parent firm was found out to have little significance on FDI.

Sakura & Kondo (2014) determines the relationship between FDI by service sector firms and domestic employment growth by using a firm level dataset of Japanese listed companies from 2000-2011. The result showed a positive relationship between FDI and employment growth. The results were controlled for spurious regression. The result is more applicable in the case of retail, construction, and personal and business services industries. Similar effects were observed in wholesale and transportation industries. While the information and communication technology showed a negative relationship between FDI and domestic employment. The overall results show a positive relationship between outward FDI and domestic job creation.

X. OBJECTIVE OF THE STUDY

1. To determine the trend and pattern of outward FDI in India
2. To study the impact of outward FDI on employment in the service sector

10.1 Data and Sources of Data

The trend and pattern of the Outward FDI was derived from the factsheets of Overseas Direct Investment data published by the Department of Economic Affairs, Ministry of Finance and the factsheets on Overseas Direct Investment published by Reserve Bank of India (RBI). The net outflow of FDI as percentage of GDP and in absolute amount (current) in terms of US dollar from 1980 to 2019 was collected from the data published by World Bank. Scatterplot was used to find the trend and pattern of net outflow. Component-wise outward FDI flow, the top OFDI destinations of India and sector-wise distribution were studied. The time period considered for the study of component wise, destination-wise and sector-wise was from 2013-14 to 2020-21. This is the maximum period of data available for the study pre-covid crisis. The study on the impact of outward FDI on employment growth is done using a panel data by collecting various firm level data on the variables like size, age, labour productivity, capital intensity and employment for the period 2015 to 2019. The sources of data are CMIE prowess iq and Reserve Bank of India database.

There are in total 765 observations from 153 companies. The data is a balanced panel data. Time period take for the study is from 2015 to 2019. The year 2015 onwards was considered because it is the period of latest foreign trade policy of India. The year 2020 is not included in the analysis as the economy witnessed a downturn in 2020 and thus may show biasness in the analysis. A total of 153 companies were collected for the analysis. The companies chosen are those which sustained throughout the year considered for analysis and also had atleast one employee in all the years considered. The database lack a significant portion of data on the number of employees. Thus, for the analysis only those firms whose employment data were available for all the years considered are taken. Thus the study is a panel data analysis where the employment growth is considered as the dependent variable while outward FDI as a dummy variable, size, employment, capital intensity, wage cost per employee, and firm's age were considered as the independent variables. The data is collected for both companies with outward FDI and companies without outward FDI in the service sector. The outward FDI was taken as a dummy variable. The multicollinearity is checked through vector inflation factor test. Then the panel data analysis was done by doing fixed effect model and random effect model. Hausman specification test was used to check which model was apt for the analysis. The fixed effect model believes that there are unique features of individual cross section that do not change during time. It considers that the unique feature of the model is that the error term is not correlated with individual dependent variables of cross section. In the random effect mode, there are some systematic random effects of individual cross section. It believes that the unique time constant feature of individual that are not correlated with X.

Panel data is the data where the same cross sectional unit is surveyed over time. It has both space and time dimensions. Panel data can help in minimizing the bias that might result if aggregate individual or firms were changed to broad aggregates. This is a balanced panel data each cross sectional unit has the same number of time series observations.

The data on outward FDI was collected from the RBI database. The companies having outward FDI were collected from the factsheets on ODI, RBI. The different data on different variables were collected for these companies from CMIE prowess iq database. The other companies in the service sector without outward FDI and the data on their variables were collected from CMIE prowess iq database.

10.2 Theoretical framework

Service sector is the sector which shows an increasing contribution in India's outward FDI. Service sector is thus a very important sector to be taken up for a study. The increasing importance of service sector is shown by its increasing growth of contribution towards outward FDI.

Even though there has been studies on the effect of outward FDI on employment in high income countries, it showed a difference in its pattern from its relation in the transition economies. There has not been enough literatures which analysed the impact of outward FDI on home country employment and there have not been even a single study on the same with respect to India. (Heshmati, 2001) showed that the firm level independent variables that affects employment growth can be size, age and other controls. In Masso, Varblane, & Vahter (2008) the analysis on the effect of outward FDI on employment in Estonia was found out by using employment growth as the dependent variable. According to Faggio and Konings (2003) showed that the possible measurement errors on factors like size and employment can be solved by double differentiating the variables. Masso, Varblane, & Vahter (2008) showed that employment growth is dependent on size, employment, capital intensity, wage cost per employee and firm's age.

It is considered a priori that the Outward FDI to a target country will lead to job loss in the domestic economy and thus lead to a lower employment growth in the domestic economy with increase in the OFDI from the country.

XI. RESULTS AND DISCUSSION

11.1 Trends and pattern of OFDI in India

11.1.1 Overview of India's Outward FDI policy

There were two waves in the course of expansion of Indian firms overseas (Amann & Swati, 2015). The first wave was between 1970s and 1980s while the second wave was after 1995. The second wave of OFDI from India was followed by the liberalization policy adopted by the Government of India in 2000s. During the second wave the outward investment from India was more than the inward FDI to India.

The Indian firms were allowed to invest in turnkey projects which involve no cash remittances and only minority participation by Government of India in its policy guidelines in 1969. During the initial periods of ODI, the investments were allowed only with prior permissions and some restrictions were also imposed on investment abroad. The investment policy during that time allowed only limited size of the investment and they also required prior approval. Government of India policies at that time also restricted the cash remittances for equity participation. The Indian firms were allowed to undertake FDI in the form of machinery and equipments. Thus this showed that the Indian companies were not allowed to undertake FDI in the form of cash remittances while they could undertake in the form of kind. The India firms faced very less competition at that time because of the limited exposure to export market. Another policy change was made in 1978 where guidelines were released Indian Joint Ventures were allowed to include all sectors except industry, consultancy, trading, mineral exploration, services etc. The Ministry of Commerce was made the focal point. This reform of 1978 also encouraged the maximum feasible association with local partners by Multinational companies. The permissions for the firms were given on the basis of merit considering the foreign exchange needs of the country.

Further relaxation in the overseas investment happened in 1980 with the liberalization of trade policies whereby the Indian firms were allowed to raise foreign currency loans and were also allowed to grant loans to their foreign joint ventures. The exposure of Indian companies in the international market was limited by the shortage of foreign exchange and also because of the different restricted trade policies that were adopted by the government of India. The equity participation by the Indian investors was allowed in compliance with laws through the revised guidelines released in 1985. This guideline allowed investment by companies which were registered under the Companies Act, 1956 and investment by individuals were not allowed. Permission were given for wholly owned subsidiaries. Indian investors were allowed to participate through the investment in export indigeneous plant, machinery and equipments. Equity participation was allowed which were through capitalization of fees, royalties, and other entitlements. The financial soundness and past export performances were the essential criteria considered for granting permission. The firms had to compulsorily submit an annual performance report to Ministry of Commerce.

It was by 1990 that the policies were framed to first liberalize inward FDI followed by easing the policy towards outflow of FDI. The liberalization policy of 1991 led to an increasing foreign competition in Indian domestic market. Even though the liberalization of FDI led to increased foreign competition, it also helped in building up the competitive advantage for the Indian firms and also encouraged them to invest overseas. Government of India initiated the liberalization of the Indian investments overseas because of the increasing importance to globalization, to enhance competitiveness of the firms and to encourage exports and thereby helping the Indian firms to obtain greater access to new market, technology and other strategic assets.

On October 1992, an automatic route for overseas investment was introduced and cash remittances was also allowed. The cash remittance of a maximum of 0.5 million USD over a three year period for investment upto value of two million USD was allowed. The policy change also allowed operational freedom to investors provided there would not be additional financial transfers from India. The condition of allowing only minority equity shareholding in joint venture was also removed. The financial sector was excluded from the purview of automatic approval. The responsibility of monitoring overseas investment was transferred to Reserve Bank of India (RBI) from the Ministry of Commerce and Industry in 1995. Overseas investment upto four million USD was allowed through automatic route for overseas investment. The Ministry of Finance approved the investments that were beyond 15 million USD through a framework of case-by-case approval. Thus the guideline released in 1995 was aimed to provide better opportunities for Indian industries to access global market when the global trade and investment are showing growing linkages. The OFDI was also promoted to favour the macroeconomic situation and also to make favourable balance of payment considerations for India. The technology seeking, market seeking and resource seeking Indian OFDI were considered as a strategic response to the emerging global opportunities in trade in goods and services. It was also done to ensure strategic positions for Indian companies in certain areas or geographic blocs.

The limit of the automatic approval for overseas investment was increased to US \$15 million in 1997. If the resources exceeding US\$15 million was raised through Global Depository Receipts (GDRs), the investment proposals beyond US\$15 million were considered. An investment upto 50 percent of the GDR fund allowed for OFDI in joint ventures. Indian OFDI was permitted in Nepal and Bhutan in the form of Indian rupee for an amount upto Rs 60 crore through fast track mode was allowed in 1998 while an annual ceiling of US\$15 million was allowed to other countries. This policy was further revised in 1999 to allow upto Rs 120 crore as investments in Nepal and Bhutan. In the same year, the investment through fast track mode was allowed at an annual ceiling of US\$30 million in SAARC countries and Myanmar while that of other countries were sealed at US \$15 million. Some special provisions were introduced for investment by computer software companies which included allowing these companies with export earnings of \$25 million or above for the past three years were allowed to invest upto 50% of such earnings with a limit of \$25 million over three years. The overseas investment for financial sector was allowed considering the track record of minimum three years, a net worth of Rs 15 crore and the capital adequacy ratio of 8% as the criteria.

The Foreign Exchange Management Act, 1999 (FEMA) was introduced in 2000 which acted as the major policy reform of 2000. According to FEMA 2000, the limit of automatic approval was increased to US\$50 million in a block of 3 years. Earlier overseas investment was prohibited in real estate and banking sector. The policy changes in 2000 was primarily due to the recognition that the Indian firms requires improved technology and efficient production centers to compete in the global market. Indian firms were allowed to invest up to 100 million USD per annum in Joint Ventures and Wholly Owned Subsidiaries outside India in 2002. It was also allowed to fund the investment under the automatic route by withdrawing the foreign exchange from an authorized dealer an amount not exceeding 50 percent of the net worth of the Indian party. Some companies which are operating in the Special Economic Zones (SEZ) and whose investment was made out of Exchange Earners Foreign Currency (EEFC) account balances were exempted from the ceiling under automatic route.

The investment in joint ventures or wholly owned companies were allowed in 2003 under automatic route through the medium of special purpose vehicle. The Rs 15 crore net worth as the criterion for financial companies to invest abroad was also removed. The investment limit to invest in Nepal and Bhutan was increased to Rs 700 crore in a bloc of three years and that for SAARC countries and Myanmar was raised to \$150 million. Investment by indivials were also allowed by allowing them to invest in the shares of foreign companies listed in a registered foreign stock exchange with a ceiling of 25 percent of the net worth of the investor. In 2004, the firms were allowed to invest upto 100 percent of their net worth under the automatic route. Thus annual ceiling under the automatic route was removed by FEMA regulation of 2004. The financial commitment in automatic route was permitted up to 1000 percent of the net worth.

There was further revision in the overseas investment policies of India to enable the Indian firms to obtain the benefits of globalization by revising the ceiling of the investment by Indian companies under the automatic route to 200 percent of their net worth and the policy to get prior permission from RBI was also removed in 2005. This policy changes led to an increase in the number of overseas acquisitions from 46 to 130 in 2004 and 2005 respectively. Later the ceiling of the investment under automatic route was further revised to 400 percent of the net worth of the Indian firms in overseas subsidiaries and joint venture. All the sectors except energy and natural resources sectors were included in the ceiling of 400 percent net worth by 2007. Thus these two sectors required prior permission from RBI. While Navaratna public sector companies, ONGC Videsh Ltd and Oil India Ltd were permitted to invest abroad in umincorporated entities in the oil sector without any limits under the automatic route. These policy changes showed the intention of Government of India to make the Indian companies competitive in the globalized world.

The macroeconomic challenges that India faced further led RBI to revise their overseas investment policies. The limit to make investment was reduced from 400 percent of the net worth of Indian firms to 100 percent of the net worth under automatic route in

August 2013. This limit was not applicable for funding through Additional Depository Receipts (ADRs) and Global Depository Receipts (GDRs). In 2014, the limit to invest through automatic route was restored again to 400 percent of net worth of the company. The government policy towards investment abroad was framed and revised in different years to meet the objectives of providing business networks, improved technology, strategic assets, markets and resources for the Indian companies and at the same time stabilizing the macroeconomic conditions and the balance of payment condition in the country. These policies helped the Indian firms to access resources and also strategic assets. The market seeking strategies of the investing firms were also facilitated. Thus these changes in the economic policies over the years led to the growth of India's outward foreign direct investment.

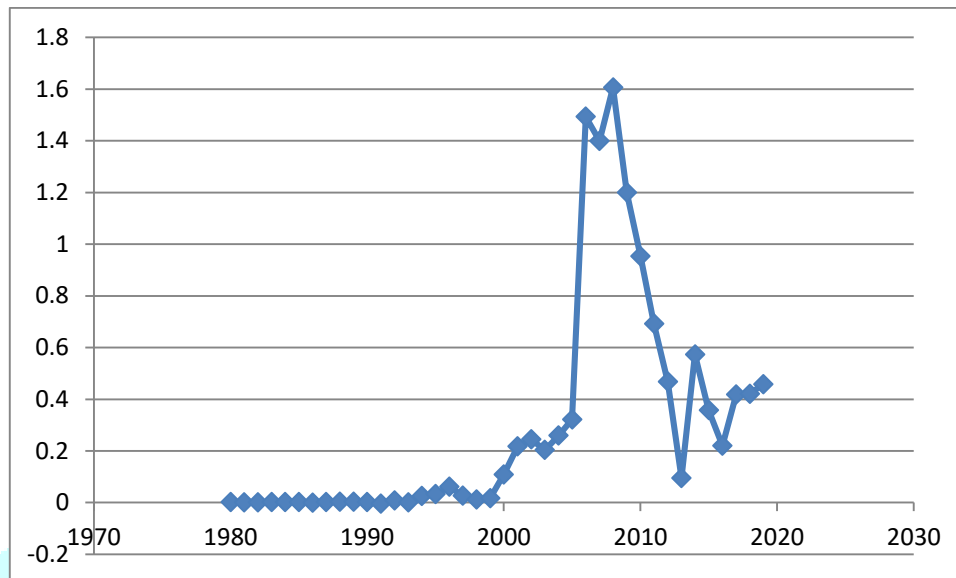
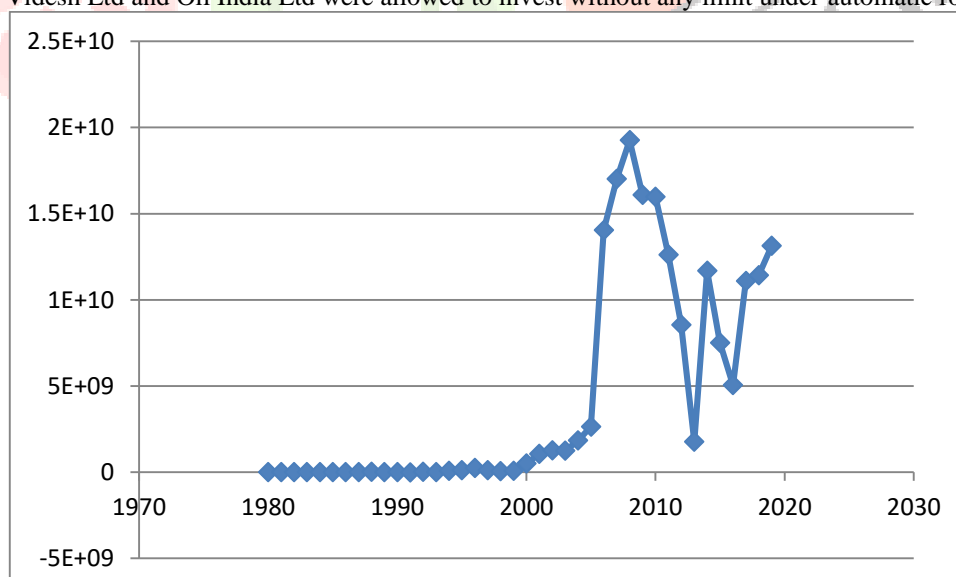


Figure 11.1 Net outflow of India's FDI (% of GDP)

Data source: World Bank

Figure 11.1 shows that the outward Foreign Direct Investment as the percentage of GDP. The data was collected from 1980 because there was no considerable OFDI before 1980. OFDI as a percentage of GDP was close to zero before 1980. The OFDI value from 1980 to 2000 was still negligible. The net OFDI became negative in 1986 and 1991. It was after 2000 that the OFDI as percentage of GDP showed an increasing trend. The OFDI showed an increasing trend from 2000 to 2008 and then reached a peak by 2008 even though it showed a slight decline in 2006. After 2008 the OFDI showed a decreasing trend and the OFDI as percentage of GDP decreased during the consecutive years. It reached a low point at 2013 and then showed an increasing trend with minor fluctuations. After 2013, OFDI as a percentage of GDP increased in 2014 and then again the value declined in 2015 and further in 2016. It again increased slightly in 2017 and the growth was further followed in 2018 and 2019. The data shows that the OFDI as percentage of GDP was highest in 2008. This may be because the ceiling of the investment under automatic route was revised to 400 percent of the net worth of the Indian firms in overseas subsidiaries and joint venture in 2007 and also Navratna public sector companies, ONGC Videsh Ltd and Oil India Ltd were allowed to invest without any limit under automatic route at that time.



Source: World Bank

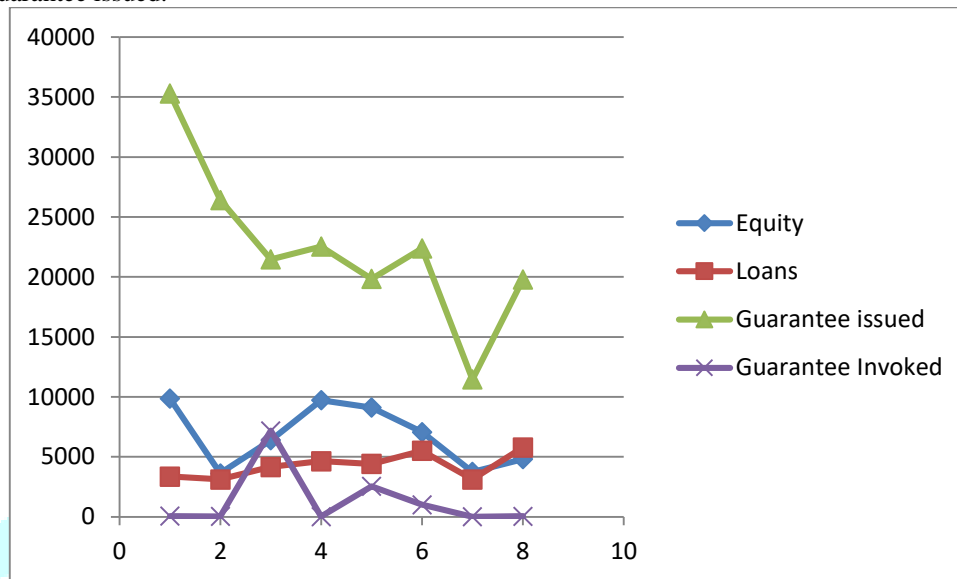
Figure 11.2 Net outflow of FDI (in US\$)

Figure 11.2 shows the net outflow of the Foreign Direct Investment. The figure shows that the OFDI was very small from 1980 till 2000. The Net OFDI values were negative in 1986 and 1991 the probable reason for which can be the world oil price crisis in the later years of 1980s and the balance of payment crisis that India faced in 1991. After 2000, the net outflow showed an increasing trend. The net outflow reached its highest peak on 2008 and after which the net outflow showed a declining trend. The global financial crisis of 2007-08 can be a reason for the decreasing net OFDI after 2008. The net outflow reached its lowest point on 2013. Then the net outward FDI showed an increasing trend with minor fluctuations. After 2013, net OFDI increased in 2014 and then again the value declined in 2015 and further in 2016. It again increased slightly in 2017 and the growth was further followed

in 2018 and 2019. The data shows that the net OFDI was highest in 2008. This may be because the ceiling of the investment under automatic route was revised to 400 percent of the net worth of the Indian firms in overseas subsidiaries and joint venture in 2007 and also Navartna public sector companies, ONGC Videsh Ltd and Oil India Ltd were allowed to invest without any limit under automatic route at that time.

11.1.2 Components of India's OFDI

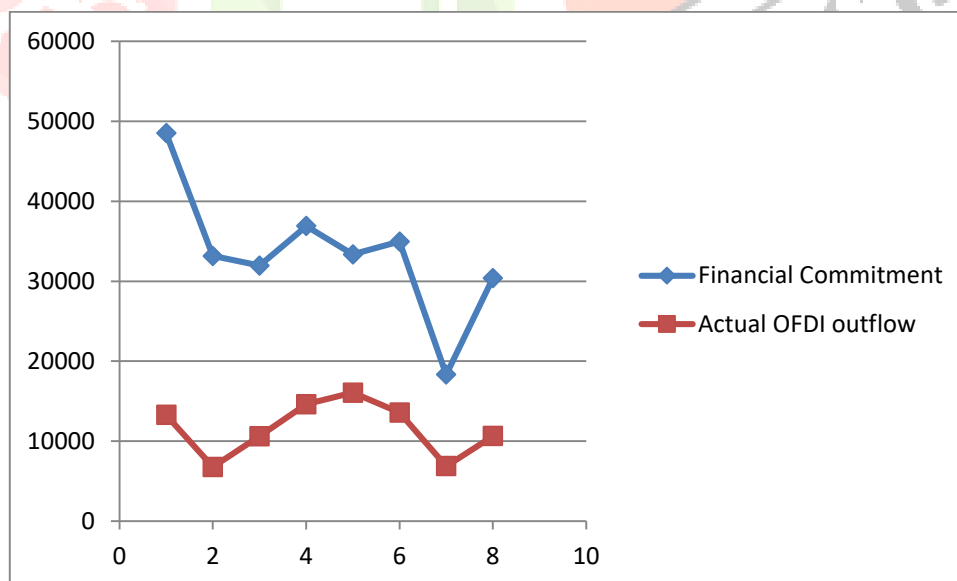
The four components of India's outward foreign direct investments are equity, loans, guarantee invoked and guarantee issued. The actual OFDI was found out by adding equity, loans and guarantee invoked while the financial commitment was found out by adding equity, loans and guarantee issued.



Source: Compilation of data from ODI factsheets released by Department of Economic Affairs

Figure 11.3 Component wise breakup of OFDI

Equity, loans, guarantee invoked and guarantee issued are the components of outward FDI. The data shows that all through the years, the guarantee issued was higher than the equity, loans and guarantee invoked. The data was collected from 2013-14 to 2020-21 which was the latest data available. The data on equity, loans, guarantee issued and guarantee invoked was available from 2013-14. The guarantee issued showed a declining trend from 2013-14 to 2019-20 while it increases in 2020-21. In the components of OFDI, guarantee invoked was the lowest in all the years except in 2015-16 when loans were the lowest. The highest amount of guarantee invoked was in 2015-16. Guarantee invoked showed a stable constant trend from 2013-14 till 2019-20 apart from a slight increase from 2016-17 till 2017-18 and then declining in 2017-18. The equity and loans showed slight increase and decrease from 2013-14 to 2019-20 and an increase after 2019-20.



Source: Compilation of data from ODI factsheets released by Department of Economic Affairs

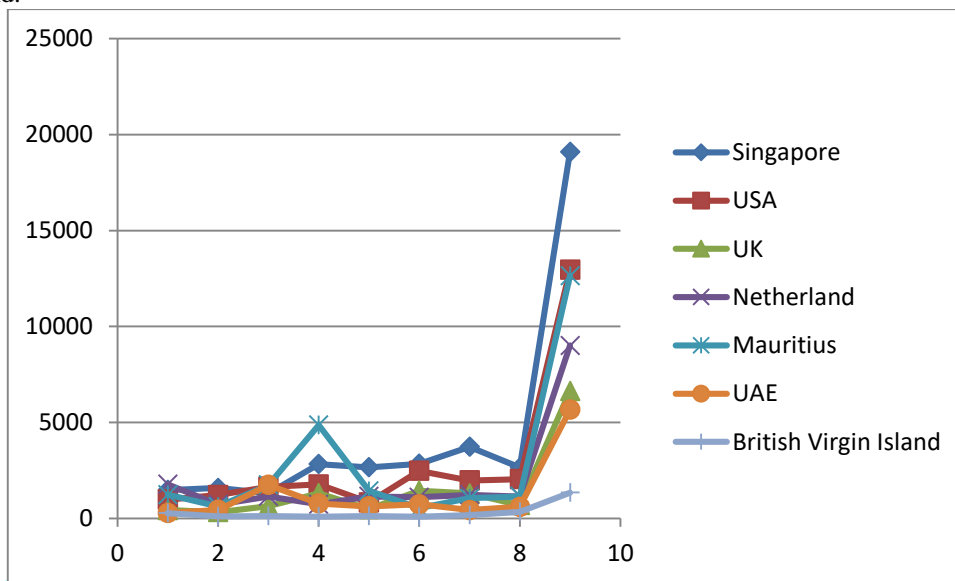
Figure 11.4 Actual ODI and Financial Commitments (US\$MN)

Financial Commitment was higher than Actual ODI outflow in all the years. The major reason for the same may be that Financial commitment is calculated by adding guarantee issued to equity and loans while actual OFDI outflow is calculated by adding guarantee invoked to equity and loans. Guarantee issued was higher than guarantee invoked in all the years. Guarantee issued was the highest in all the components while guarantee invoked was lowest of all the components which is the reason for the difference between financial commitment and actual ODI outflow. The actual ODI and Financial commitment are also components of ODI. Both of them shows a similar trend from 2013-14 till 2019-20. Both of them decline from their amount in 2013-14 and after 2014-15 the actual ODI increased till 2017-18. It was after 2017-18 that the actual ODI again fell down and then it picked up again after

2019-20. While financial commitment declined till 2015-16 and then had slight fluctuation of increase and decrease till 2018-19. It fell down in 2019-20 but again showed an increase in 2020-21. The financial commitment was highest in 2013-14 while lowest in 2019-20. The actual ODI was highest in 2016-17 while lowest in 2014-15.

11.1.3 Top Destination Countries of Indian ODI

The new investment policy and new trend in the global investment pattern, India witnessed a significant change in overseas direct investment. The major destinations of India’s outward direct investment are Singapore, USA, UK, Netherland, Mauritius, UAE and British Virgin Island.



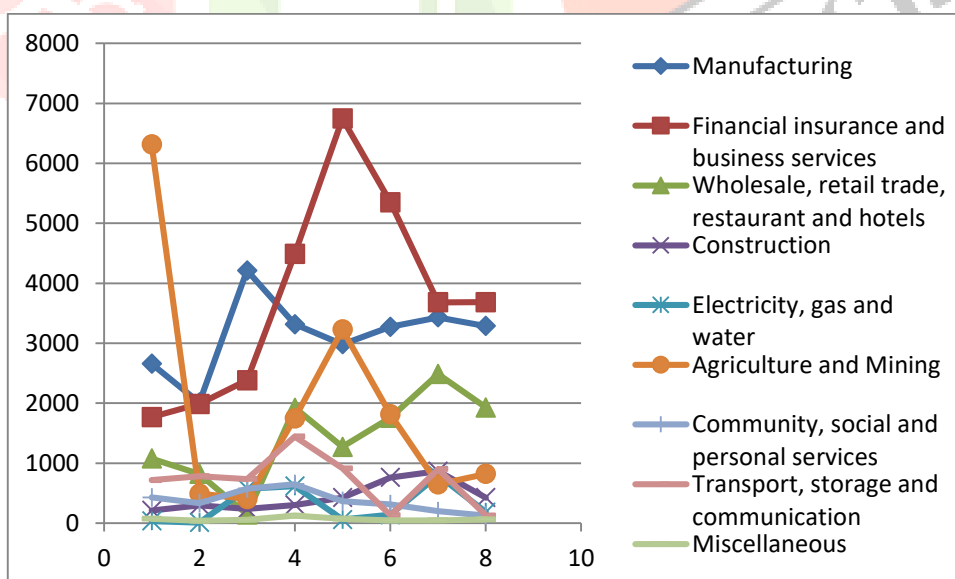
Source: Compilation of data from ODI factsheets released by Department of Economic Affairs

Figure 11.5 Destination Countries of Indian ODI

The above data on the country wise destination of outward FDI from India shows that Singapore is the country which receives highest outward FDI from India. While Mauritius is the second top destination country of India’s outward FDI. Mauritius was in the top position till 2017-18 after which Singapore surpassed Mauritius. The data shows that Mauritius became the largest destination of outward FDI of India in 2016-17 with an investment of 4868.27 million dollars. But this increase was temporary and the investment decreased after 2016-17. Even though the investment to Mauritius decreased; it is still the second largest destination of outward FDI of India. This showed the improved relation of India with Singapore in successive years. Singapore was followed by USA. The data on the top 10 FDI destination from India are mainly developed countries.

11.1.5 Sectors Attracting India’s ODI

The outflow of FDI after liberalization reveals a dynamic trend between different sectors. The table 3.7 below shares the total outward direct investment made by India over the past financial years from 2013-14 to 2020-21.



Source: Compilation of data from ODI factsheets released by Department of Economic Affairs

Figure 11.6 Sectors attracting highest ODI (US\$MN)

The data on the sectors attracting highest ODI (US\$mn) from 2013-14 till 2020-21 shows that the sector financial insurance and business services is the sector which has shown one of the highest outward FDI. While agriculture and mining had the highest Outward FDI in 2013-14, it showed a sharp decline after that. Electricity, gas and water, construction, community, social and personal services, transport, storage and communication and miscellaneous are few sectors which attracted lowest outward FDIs from 2013-14 till 2020-21. There was no steady increase in outward FDI in any of the sectors. Manufacturing was the second-best sector which attracted almost a steady OFDI compared to other sectors. While manufacturing was in the second position till 2018-19 in attracting OFDI, it became the first sector in attracting OFDI in 2020-21. OFDI was highest in agriculture and mining in the year 2013-14 while the same in financial insurance and business services was in 2017-18. The highest contribution to manufacturing

was in 2015-16 while those in wholesale, retail, trade, restaurant and hotels was in 2019-20. The maximum contribution to electricity, gas and water and transport, storage and communication was in 2016-17.

11.2 The impact of outward FDI on employment in the service sector

The pooled regression shows that OFDI and size of the firm positively affects the employment growth. Thus, the employment growth will be higher in a firm with OFDI and the employment growth will be higher with the increase in the size of a firm. While capital intensity, employment, wage cost per employee and age of a firm showed a negative relationship with employment growth. The result shows that firms with outward FDI helps in a positive employment growth and the result is shown to be significant. The p value of OFDI is less than 0.05 and thereby making it statistically significant. Capital intensity and age are the only variables which are not statistically significant. All other variables have their p value less than 0.05 making them statistically significant. The overall significance of the model is given by the p value which is less than 0.05 making the overall model statistically significant. The result shows that the model has no multicollinearity. The rule of thumb used here is that the coefficients with VIF value above 5 should be concerned about having multicollinearity while those with VIF above 10 has multicollinearity. The above result shows that all the variables have the VIF value below five and the mean value is also below 5. Thus the model do not suffer from the problem of multicollinearity.

Hausman specification test helps in finding out whether fixed effect model or random effect model is appropriate model for the data. The Hausman specification test was done by considering using fixed effect as the consistent estimator.

As the objective of the study is to find the effect of OFDI on employment growth, random effect approach is the appropriate model. This is because OFDI is time invariant and thus the fixed effect approach will not be able to identify the impact of time invariant variables which will be wiped out by the presence of the fixed effect dummies. Thus the variable OFDI will be omitted from the analysis in the Fixed Effect Model. Fixed effect model is used to study how individual values changes across time. As OFDI is a variable whose values donot change across time and the effect they have at one time is the same effect in another time period and thus their effects are controlled (Williams, 2015). While considering which model to be used, Judge et.al commented that when cross sectional units are large and time periods are small, the estimates obtained by the two methods can differ significantly. If the cross sectional units in the sample are regarded as random drawings, then Random Effect Model is appropriate while if the individual or cross sectional unit in the sample are not random drawings from a larger sample, then Fixed Effect Model is appropriate. In this condition where the cross sectional units are larger than time series units, then is the assumptions underlying random effect model holds, then random effect model estimators are more efficient than fixed effect model estimators (Gujarati, 2004). In the random effect model it is assumed that the entity's error term is not correlated with the predictors which allows for time invariant variables to play a role as explanatory variables (Torres-Reyna).

In a random effect model, the intercept is the sum of mean value of all cross section intercept and random deviation of individual intercept from its mean value. The random effect GLS regression was done on the panel data. The random effect model is given by the equation:

$$Y_{it} = \beta X_{it} + \alpha + u_i + \epsilon_{it}$$

$$R\text{-sq within} = 0.2254$$

$$\text{Between} = 0.0459$$

$$\text{Overall} = 0.0818$$

$$\text{Wald chi2 (6)} = 85.70$$

$$\text{Prob}>\text{chi2} = 0.0000$$

It was assumed that the differences across the units are uncorrelated with the regressors. The result shows that OFDI and size are positively related to employment growth. All variables except capital intensity and age are statistically significant. Capital intensity and age has a p value greater than 0.05 and thus making them statistically insignificant. The result shows that the companies with OFDI has a positive relationship with OFDI thereby stating that the OFDI helps in increasing employment growth. A percentage change in size of a firm across time and firm leads to 0.097 percentage change in employment growth. All other variables have a negative relationship with employment growth. The overall model is significant at $p = 0.0000$ which is less than 0.05. It shows that the model is correctly specified. It shows that all the coefficients are different from zero. Standard deviation of u_i is given as 0.155 and standard deviation of v_i is given as 0.396. rho is the fraction of variance due to u_i which is equal to 0.134 in the given model.

XII. CONCLUSION

The OFDI and size are positively related to employment growth. Thus the companies with OFDI has a positive relationship with OFDI thereby stating that the OFDI helps in increasing employment growth. All variables except capital intensity and age are statistically significant. Thus variables like OFDI, wage per employee, size and employees employed in the firm have a statistically significant impact on employment growth. While, OFDI and size has a positive relationship with employment growth, an increase in wage per employee and the number of employees employed in the firm leads to a decrease in the employment growth.

XIII. ACKNOWLEDGMENT

I would like to thank Dr. Syam Prasad (Assistant Professor, Central University of Kerala) and Dr. T J Joseph (Assistant Professor, Central University of Kerala).

REFERENCES

- Outward Direct Investment from India: Trends, Objectives and Policy Perspectives. (2014). *Export Import Bank of India*.
- Agnihotri, A., & Arora, S. (2019). Study of Linkages Between Outward Foreign Direct Investment (OFDI) and Domestic Economic Growth: an Indian Perspective. *Financial Markets, Institutions and Risks*, 3(1), 43-49.
- Amann, E., & Swati, V. (2015). Is the Evolution of India's Outward FDI Consistent with Dunning's Investment Development Path Sequence? *Lancaster University Management School, Economics Working Paper Series*, 1-39.
- Athukorala. (2009). Outward Foreign Direct Investment from India. *Asian Development Review*, 26(2), 125-153.
- Banga, R. (2007). Explaining Asian Outward FDI. *ARTNeT Consultative Meeting on Trade and Investment Policy Coordination*, 1-29.
- Bano, S., & Tabbada, J. (2015). Foreign Direct Investment Outflows: Asian Developing Countries. *Journal of Economic Integration*, 30(2), 359-398.
- Buckley, P. J., & Clegg, L. J. (2007). The Determinants of Chinese Outward Foreign Direct Investment. *International Expansion of Emerging Market Business Studies*, 38(4), 499-518.
- Cazurra, C. (2008). The Multinationalization of Developing Country MNEs: The case of multinationals. *Journal of International Management*, 138-154.
- Chaudhry, D., & Joshi, P. (2018). Deconstructing Indian Overseas Foreign Direct Investments. *Oxfam Discussion Paper*, 1-34.
- Chongvilaivan, A. (2012). From Inward to Outward: AN assessment of FDI performance in Thailand. *Southeast Asian Affairs*, 318-338.
- Das, K. C. (2013). Outward FDI by Indian Manufacturing MNEs: Impact and Implication for Participation in Production Network. *ARTNeT Workshop*.
- Deol, O. S., & Bhagat, S. (2017). Outward Foreign Direct Investment from India: Trends, Issues and Destination Determinants. *IOSR Journal of Business and Management*, 19(6), 18-28.
- Divya Chaudhry, P. T. (2018). Deconstructing Indian Overseas Foreign Direct Investment. *Oxfam discussion papers*, 1-34.
- Dwivedi, P., & Jyoti, B. (2013, July). Impact of FDI inflow on service sector in India: An empirical analysis. *International Journal of Management Research and Business Strategy*, 2(3), 1-12.
- Federico, S., & Alfredo, G. (2008). Outward FDI and Local Employment Growth in Italy. *Review of World Economics*, 144(2), 295-324.
- Federico, S., & Minerva, G. A. (2008). Outward FDI and Local Employment Growth in Italy. *Review of World Economics*, 144(2), 295-324.
- Gammeltoft. (2008). Emerging Multinationals: Outward Foreign Direct Investment from the BRICS Countries. *International Journal of Technology and Globalisation*, 5-22.
- Ganesh, S. (1997). Who is Afraid of Foreign Firms? Current Trends in FDI in India. *Economic and Political Weekly*, 32(22), 1265-1274.
- Gujarati, D. N. (2004). *Basic Econometrics*. (4th ed.). McGraw-Hill Companies.
- Guruswamy, M., Sharma, K., Mohanty, J. P., & Korah, T. J. (2005). FDI in India's Retail Sector: More Bad than Good? *Economic and Political Weekly*, 40(7), 619-623.
- Herzer, D., & Nunnenkamp, P. (2013). Inward and outward FDI and income inequality: evidence from Europe. *Review of World Economics*, 149(2), 395-422.
- Heshmati, A. (2001). On the Growth of Micro and Small Firms: Evidences from Sweden. *Small Business Economics*, 17(3), 213-228.
- Huijie, G. (2018). Outward foreign direct investment and employment in Japan's manufacturing industry. *Journal of Economic Structures*, 7(27), 1-13.
- Imbriani, C., Pittiglio, R., & Reganati, F. (2011). Outward Foreign Direct Investment and Domestic Performance: the Italian Manufacturing and Services Sectors. *International Atlantic Economic Society*, 39, 369-381.
- Inekwe, J. N. (2013). FDI, employment and economic growth in Nigeria. *African Development Review*, 25(4), 421-433.

- Jaan Masso, U. V., & Vahter, P. (2008). The Effect of Outward Foreign Direct Investment on Home-Country Employment in a Low-Cost Transition Economy. *Eastern European Economics*, 46(6), 25-59.
- Karpaty, P., & Poldahl, A. (2006). The Determinants of FDI flows : Evidence from Swedish manufacturing and service sector. 1-33.
- Khan, H. (2012). Outward Indian FDI - Recent Trends & Emerging Issues. *Reserve Bank of India*, 1-18.
- Khatik, S. K., & Patil, M. (n.d.). A study on FDI outflow from India.
- M, S., Jaklic, A., & Burger, A. (2007). Internationalization of Small and Medium Sized Enterprises from Selected Central European Companies. *Eastern European Economics*, 45(4), 36-65.
- Masso, J., Varblane, U., & Vahter, P. (2008). The Effect of Outward Foreign Direct Investment on Home-Country Employment in a Low-Cost Transition Economy. *Eastern European Economics*, 46(6), 25-29.
- Passakonjaras, S. (2012). Thailand's Outward Foreign Direct Investment: The Case of the Garment Industry. *ASEAN Economic Bulletin*, 29(2), 101-115.
- Pradhan, J. (2006). Rise of Service Sector Outward Foreign Direct Investment from Indian Economy: Trends, Pttrens and Determinants. *GITAM Journal of Management*, 4(1), 70-97.
- Rizvi, S. Z., & Nishat, M. (2009). The Impact of Foreign Direct Investment on Employment Opportunities: Panel Data Analysis: EMpirical Evidence from Pakistan, India and China. *The Pakistan Development Review*, 48(4), 841-851.
- Saini, A., Madan, P., & Batra, S. K. (2017). Foreign Direct Investment and Indian Export Growth. *World Affairs: The Journal of International Issues*, 21(2), 128-139.
- Sakura, K., & Kondo, T. (2014). Outward FDI and Domestic Job Creation in the Service Sector. *Bank of Japan Working Paper Series*, 1-54.
- Tang, J., & Altshuler, R. (2014). The spillover effects of outward foreign direct investment on home countries. *Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association*. 107, pp. 1-42. National Tax Association.
- Thomas, R., & Narayanan, K. (n.d.). Determinants of outward foreign direct investment: a study of Indian manufacturing firms. *Transnational Corporations*, 24(1).
- Tolentino, P. E. (2008). The determinants of the outward foreign direct investment of China and India: Whither the home country? *MERIT Working Papers*.
- Torres-Reyna, O. (n.d.). Panel Data Analysis - Fixed and Random Effects. *Princeton University*.
- UNCTAD. (2013). World Investment Report 2013: Global Value Chains: Investment and Trade for Development .
- Williams, R. (2015). Panel Data: Very Brief Overview. 1-16.
- Xplained. (n.d.). Retrieved from <https://xplained.com/796295/capital-intensity-ratio>