FINANCIAL PERFORMANCE OF FDI AND NON FDI BASED COMPANIES IN INFORMATION TECHNOLOGY SECTOR AND SERVICE SECTOR IN INDIA

Pooja Kumari
Ph. D. Research Scholar, Department of Commerce, Goa University, Goa - India
Dr. P. Sri Ram
Assistant Professor, Department of Commerce, Goa University, Goa - India

Abstract: Capital not only play very important role for the development of any economy but it is a life blood of business and in the absence of capital no economic activity can be performed. Capital can be raised with in the country know as domestic capital/investment or from outside the country which is known as foreign capital/investment. There are many research carried out to analyse financial performance of FDI based companies is superior than Non FDI based companies. The present study is made an attempt to make comparative analysis between FDI based companies and Non FDI based companies in Information Technology sector and Service sector in India by using panel data from 2007 to 2016. The study concluded that Information Technology Sector financial performance of FDI based companies are superior than Non FDI based companies Whereas in Service Sector Non FDI based companies is superior than FDI based companies.
Keywords: Age, Size, Current Ratio, Quick Ratio, Growth in sales, PAT and Assets

Introduction: Foreign Investment is playing a very important role for the growth and development of any developing countries. It is considered as one of the major sources of economic change irrespective of its growth status in the globalised world. FDI contributes to international trade, technology spillover, human capital formation, creating competitive business environment, employment opportunity etc which will helps in development of enterprise and in long run it will helps in developing countries to grow. According to (Blomstrom, 1996) Multinational enterprise (MNEs) will help the host economy by providing capital, technology, knowledge and boost its export. Hence FDI contributes to overall economic development by various channels (seethapathi, 2006). According to the definition give by IMF and OECD 2000, FDI is defined as an investment made by an investor of one country to acquire an asset in another country with the objective to manage that asset. There are many studies focusing to examine the financial performance of FDI based companies and non FDI based companies. The present papers made the attempt to examine wither financial performance of FDI based companies is superior than non FDI based companies in India.

Literature Review:

Aysegul (2015) made an attempt to examine the rationship between the degree of foreign ownership and performance of firms in Turkish. The balanced panel data was used for 270 firms from 2008 to 2012. Statistical tools used were Fixed Effects, Random Effects and Hausman test were used. Variables like Foreign ownership, return on assets (ROA), return on equity (ROE) and debt ratio (DR) were used. The result shows that there is a postive and significnat relaitonship eixst between foreign ownership and corporate performance but no differnce with degree of ownership**. Aydin, Sayim, & Yalama (2007)** made an attempt to find out whether foreign owned firms perform significntly better than domestically owned turkish firms listed on Istanbul stock exchange in Turket. Variables like operating profit margin (OPM) of firms, return on assets (ROA) and return on equity (ROE) between foreign owned firms and domestic firms were used. t test statistics was used in the study for the period 2003-2004. The study reveal that the firms with foreign ownership operating in Turkey perform better than the domestic owned firm in respect to return on assets (ROA) in Turkey for the period 2003-2004. **Taymaz & Ozler (2007)** made an attempt to examine the performance in terms of profitability of a foreign firm is better than domestic firm in Turkish. Panel data has been used from 1983 to 2001. Statistical tools used were Fixed Effects, Random Effects and Hausman test were used. Foreign ownership, size, capital intensity, growth rate and quality of labour force were variables used. The study concluded that foreign firms have a better performance level than do domestic firms when they are first established in the local market and performance is not caused by foreign ownership, but larger size, capital intensity, growth rate and quality of labor force **Dionisis, Katsaiti, & Petrakis (2011)** made an attempt to examine whether there are differences between domestic and foreign owned firms operating in Greece and to study the financial management

characteristics of selected 140 firms for the year 2008. Variables used are Net Worth, Short-term Debt, Fixed Assets, Inventories, Total Assets, Net Sales and four main categories Solvency, Managerial Performance, Profitability and Growth. Regression analysis was used in the study. The study concluded that foreign firms have higher capital, manage more financial elements, more access to long-term capital as compare to domestic firms. Foreign firms have higher sales and presented greater profitability. The variables which are found to be statistically significant at the 5% level are: Total Assets, Total Working Capital to Total Assets, Long Term Debt plus Net Worth to Fixed Assets, Fixed Assets to Total Assets, Inventory, Net Sales to Fixed Assets, Net Sales to Total Assets, Net Sales to No of Employees, Net Profit to Net Worth, % change in Total Assets and Net Profit to Total Assets. For foreign owned firms has positive relationship between Inventory and Short Term Debt, whereas for domestic firms shows negative relationship.

Objectives

1. To study the comparative analysis of the financial performance of FDI based Companies and Non FDI based Companies in Information Technology Sector.
2. To study the comparative analysis of the financial performance of FDI based Companies and Non FDI based Companies in Service Sector.

Research Methodology: This study is based on secondary data. The required data have been collected from CMIE Prowess IQ data base from 1st April 2007 to 31st March 2016.The tools used in the study are panel data Fixed Effect Model, Random Effect Model, Hausman test and Chow test. The sample companies in Information Technology and Service sector has been selected on the basis of FDI definition given by IMF i.e. if foreign shareholding is 10% or more than 10% in the company that company will be considered as FDI based companies and less than 10% Non-FDI based companies. There are total 1281 companies in Information Technology sector and 9672 companies in service sector are found in CMIE Prowess data base. In Information Technology sector there are 26 FDI based companies and 26 Non FDI based companies where found and in case of service sector are 27 FDI based companies and 33 Non FDI based companies are found which are fulfilling IMF definition.

Research Hypothesis:

Following is the hypothesis of the study

Ho_1: Financial Performance of FDI based companies is superior than Non FDI based companies in Information Technology Sector.

Ho_2: Financial Performance of FDI based companies is superior than Non FDI based companies in Service Sector.

Models Used in the Study: *The following is the regression specification.*

FDI Based Companies and Non FDI Based Companies

$$ROA_{FDI} = \alpha + \beta\ Age + \beta\ Size + \beta\ CR + \beta\ QR + \beta\ DTER + \beta\ GSales + \beta\ GPAT + \beta\ GAssets + e$$

$$ROA_{NONFDI} = \alpha + \beta\ Age + \beta\ Size + \beta\ CR + \beta\ QR + \beta\ DTER + \beta\ GSales + \beta\ GPAT + \beta\ GAssets + e$$

Where, ROA_{FDI} = Return on Assets of FDI Based Companies, α = Constant, β= Slope, CR= Current Ratio, QR = Quick Ratio, DTER = Debt to Equity Ratio, GSales = Growth in Sales, GPAT = Growth in Profit after Tax, GAsset = Growth in Assets, e = Error term, ROA_{NONFDI} = Return on Assets of Non FDI Based Companies,

Analysis and Interpretation:

Information Technology Sector: **FDI based companies in Information Technology Sector, F- test** is performed to know among Pooled and Fixed effect model which model is better. The result shows that **Fixed effect model** is better as P value is more than 5% which means we reject null hypothesis 0.63 (0.87). **Breusch Pagan test** is done to know among Pooled and Random effect model which model. The result shows **that Random effect** Mode is accepted 2.85 (0.09) since P value is more than 5% which means we reject null hypothesis**.** Lastly **Hausman test** is done to know among fixed effect and random effect model which model is more suitable the result shows that for FDI based companies Fixed effect Model is accepted 6.17(0.80) as P Value is more than 5% hence we are rejecting null hypothesis i.e. Random effect model is adequate. **Non FDI based companies in Information Technology Sector, F- test** is performed to know among Pooled and Fixed effect model which model is better. The result shows that Fixed effect model is better as P value is more than 5% which means we reject null hypothesis 1.53(0.22). **Breusch Pagan test** result shows that Random effect Mode is accepted 0.0013 (0.97) and **Hausman test** result shows that fixed effect model is accepted 10.08

(0.43). There is a positive relationship existing between **age and Profitability** for FDI based companies (0.005, 0.14) and negative relationship existing for Non FDI Companies (-0.012, -0.99). It shows that in this sector as companies becoming older their profits are increasing as they are capturing the market. In other hand Non FDI based companies negative relationship between age and Profitability. **Size and profitability** is also showing positive relationship for FDI based companies (0.35, 4.31)*** which is statically significant at 1% level of significance and negative relationship existing Non FDI Companies (-0.0008, -0.24) which means as higher the size lower will be profitability of the companies. The relationship between **Liquidity and profitability** that is current ratio of shows a positive relationship for FDI based companies (0.07, 1.87)* and Non FDI based companies (0.04, 1.98)* which is statically significant at 10%, where as quick ratio shows negative impact of for FDI based companies (-0.05, -1.45) and Non FDI based companies (-0.03, -1.48). It will help to know firm ability to meet its current obligation of FDI and Non FDI based companies.

Table 1 Financial Performance Companies in IT Sector

	FDI Based Companies	**Non FDI Based Companies**
	F- Test = 0.63 (0.87) FEM Breusch-Pagan test = 2.85 (0.09) REM Hausman Test = 6.17(0.80) **Fixed effect Model**	F- Test = 1.53(0.22)FEM Breusch-Pagan test = 0.0013 (0.97) REM Hausman Test = 10.08 (0.43) **Fixed effect Model**
const	0.35 (2.14)**	0.008 (0.17)
AGE	0.005 (0.14)	-0.012 (-0.99)
SIZE	0.35 (4.31)***	-0.0008 (-0.24)
Current Ratio	0.07 (1.87)*	0.044 (1.98)*
Quick Ratio	-0.05 (-1.45)	-0.03 (-1.48)
Debt to Equity Ratio	0.01 (0.85)	0.0041 (1.32)
Growth in Sales	0.68 (17.58)***	0.96 (80.78)***
Growth in PAT	0.06 (3.99)***	-0.004 (-0.49)
Growth in Assets	-1.13 (-15.23)***	-0.96 (-106.69)***
R Square	0.97	0.99
Adj R Square	0.96	0.98
DW Test	1.14	2.5
Chow Test	0.37 (0.54)	
No of Observation	260	260
Note: Numbers in Parentheses are the t- Statistic, ***Coefficient are Significant at 1%, **Coefficient are Significant at 5% and *Coefficient are Significant at 10%		

Source: Author Compilation

The relationship between **Solvency and profitability** shows positive relationship for FDI based companies (0.01, 0.85) and a positive relationship for Non FDI based companies (0.0041, 1.32) which mean that the company has sufficient cash to meet its short term and long term obligations as and when it will arise. The relationship between **growth and profitability** shows with the help of Growth in sales shows that the a positive relationship for FDI based companies (0.68, 17.58)*** and Non FDI based companies (0.96, 80.78)*** which is statically significant at 1% level of significance. Growth in PAT also shows positive relationship between FDI based companies (0.06, 3.99)*** which is statically significant at 1% level of significance and negative relationship between Non FDI based companies (-0.004, -0.49). Growth in Assets also shows negative relationship between FDI based companies -1.13 (-15.23)*** and negative relationship between Non FDI based companies-0.96 (-106.69)*** which is statically significant at 1% level of significance. To know is there is any difference in the financial performance of FDI based companies and Non FDI Companies model is estimated separately. To know is there is any difference between these two groups of companies **Chow test** is done, the results shows that F=0.37(0.54) which is more than 5% hence accept null hypothesis. It means that there is no structural break in the data set.

Service Sector: FDI based companies in Service Sector, F- test is performed to know among Pooled and Fixed effect model which model is better. The result shows that **Pooled model** is better as P value is less than 5% which means accept null hypothesis 0.09(0.0). **Breusch Pagan test** result shows that **Pooled** Model is accepted 12.18 (0.0004) since P value is less than 5% hence accept null hypothesis**.** Lastly **Hausman test** is not

applicable since Pooled Model is used. **Non FDI based companies in Service Sector, F- test** is performed to know among Pooled and Fixed effect model which model is better. The result shows that Fixed effect model is better as P value is more than 5% which means we reject null hypothesis 2.64(1.14). **Breusch Pagan test** result shows that Random effect Mode is accepted 21.58(3.39) and **Hausman test** result shows that Random effect Model is accepted 8.06(0.62).

Table 2: Financial Performance Companies in Service Sector

	FDI Based Companies	**Non FDI Based Companies**
	F- Test = 0.09(0.01) Pooled Breusch-Pagan test = 12.18 (0.0004) Pooled Hausman Test = Nil **Pooled Model**	F- Test = 2.64(1.14)FEM Breusch-Pagan test = 21.58(3.39)REM Hausman Test = 8.06(0.62) **Random effect Model**
const	-4.12 (0.31)	-0.68 (-2.57)**
AGE	0.58 (1.26)**	0.66 (2.52)**
SIZE	0.0003 (0.06)	1.012 (0.85)
Current Ratio	1.03 (0.08)	-0.0005 (-0.22)
Quick Ratio	-1.08 9 (-0.08)	0.0005 (0.21)
Debt to Equity Ratio	-0.002 (-0.009)	0.001 (0.15)
Growth in Sales	-0.008 (-0.01)	4.28 (1.30)
Growth in PAT	-0.0003 (-0.01)	2.75 (2.50)**
Growth in Assets	-0.0001 (-0.05)	-3.86 (-1.22)
R Square	0.48	0.74
Adj R Square	0.15	0.70
DW Test	1.7	2.8
Chow Test (F*Test)	0.017 (0.89)	
No of Observation	270	330
Note: Numbers in Parentheses are the t- Statistic ***Coefficient are Significant at 1%, **Coefficient are Significant at 5% and *Coefficient are Significant at 10%		

Source: Author Compilation

The result shows that there is a positive relationship existing between **age and Profitability** for FDI based companies (0.58, 1.26)** and Non FDI Companies (0.66, 2.52)** which is statically significant at 1% level of significance. It shows that in this sector as companies becoming older their profits are increasing as they are capturing the market. The relationship between **Size and profitability** is also showing positive relationship for FDI based companies (0.0003, 0.06) and Non FDI Companies (1.012, 0.85) which means as higher the size lower will be profitability of the companies. The relationship between **Liquidity and profitability** that is current ratio of shows a positive relationship for FDI based companies (1.03, 0.08) and negative relationship exist for Non FDI based companies (-0.0005, -0.22) where as quick ratio shows negative impact of for FDI based companies (-1.08, -0.08) and positive relationship for Non FDI based companies (0.0005, 0.21). The relationship between **Solvency and profitability** shows negative relationship for FDI based companies (-0.002, -0.009) and positive relationship for Non FDI based companies (0.001, 0.15) which mean that the company has sufficient cash to meet its short term and long term obligations as and when it will arise. The relationship between **growth and profitability** shows with the help of Growth in sales shows that the a negative relationship for FDI based companies (-0.008, -0.01) and positive relationship for Non FDI based companies (4.28, 1.30) where as Growth in PAT also shows negative relationship between FDI based companies (-0.0003, -0.01) and positive relationship between Non FDI based companies (2.75, 2.50)**which is statically significant at 1% level of significance. whereas Growth in assets also shows that there is a negative relationship between FDI based companies (-0.0001, -0.05) and Non FDI based companies (-3.86, -1.22) at 1% level of significance which means faster growing companies are more profitable in financial service sector. To know is there is any difference between these two groups of companies **Chow test** is done, the results shows that F=0.017(0.89) which is more than 5% hence accept null hypothesis. It means that there is no structural break in the data set.

Conclusion: The objective is to study the financial performance of FDI based companies is superior than Non FDI based companies in Information Technology and service sectors under the study for the period of 10 years by using panel data analysis. The study concluded that Information Technology Sector financial performance of FDI based companies are superior than Non FDI based companies this result are in support to Kesari 2010; Voicu 2004; Willmore 1986; Asheghian 1982; Valsamis et al 2011; Ayudin et al 200). In Service Sector Non FDI based companies is superior than FDI based companies (Erdogan 2010; Xu et al 2006).

References:

1. Aydin, N., Sayim, M., & Yalama, A. (2007). Foreign Ownership and Firm Performance:Evidence from Turkey. *International Research Journal of Finance and Economics* , 103-111.
2. Aysegul. (2015). Foreign Ownership and Corporate Perfromance in Turkey. *Journal of Business, Economics & Finance* , 29-35.
3. Azzam, I., Fouad, J., & Ghosh, D. K. (2013). Foreign ownership and financial performance: evidence from Egypt. *International Journal of Business*, *18*(3), 232
4. Dionisis, V., Katsaiti, M. S., & Petrakis, P. (2011). Discrepancies in Financial Performance between Domestic and Foreign Owned Enterprises: The case of Greece. *International Journal of Economics and Finance* , 76-85.
5. Greenway D., A. Guariglia, and Z. Yu. (2014), "The More the Better? Foreign Ownership and Corporate Performance in China", the European Journal of Finance, (20): 681-702
6. Maathai K Mathiyazhagan (2005), "Impact of Foreign Direct Investment on Indian Economy: A Sectoral Level Analysis", Institute of South Asian Studied, Motional University of Singapore. ISAS Working Paper No.6, Nov 2005

***