FOREIGN DIRECT INVESTMENTS AND ITS IMPACT ON ENTREPRENEURSHIP IN INDIA

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ABSTRACT

Foreign Direct Investment and entrepreneurship are important factors of economic growth and development. On the one hand, entrepreneurship contributes to employment generation, GDP per capita, reduces regional imbalances, etc. FDI brings capital, technology, and knowledge to accelerate entrepreneurial activities on another hand. This paper collects data from MSME Annual report(s), and FDI fact sheet(s) from DIPP and GEM. We assessed the role of inward FDI for the period 2006-2019 and used the fixed effects & random effect model to analyze the panel data. The result shows that there is no significant impact of FDI on Entrepreneurial activities. At the end of this paper, there is a policy recommendation to enhance the reach of FDI in Entrepreneurial activities.

Keywords: FDI, Linkage, Entrepreneurship, Panel Data, Spillover.

INTRODUCTION

As we all know entrepreneurship is the engine of economic growth and development, various determinants affect the nature of entrepreneurship. Apart from the economic condition, government policies, entrepreneurial culture, and operating environment, globalization through FDI is another emerging factor/ determinant of entrepreneurial activities. The branch of international trade and investments has, directly and indirectly, affected entrepreneurship development through a change in GDP growth rate, export and import activity, market/demand creation, investment opportunity, and many more. FDI may be in any form such as Greenfield investment or brownfield but the intensity of its effects is far different. Greenfield investment creates more opportunities and sources of entrepreneurship through outsourcing of intermediates products and final products. Greenfield investments help in enhancing innovation and creativity generates opportunities for entrepreneurship and makes the economy innovation-driven. But sometimes unfavorable FDI policies and plans increase the chance of creating more informal sectors/underground firms through subcontracting (Goel, 2018). Previous empirical findings have focused on the overall impact of FDI on employment, GDP, the balance of payment, and local economies. The first who examined the relationship between FDI and entrepreneurship. However, their work is limited to the context of European countries and other developing countries (Estrin et al., 2013). There is no empirical study conducted in the context of the Indian economy despite being the second-highest recipient of FDI globally. In this paper, a comprehensive dataset is used on inward FDI to explore the under-researched impact of inward FDI on the rate of entrepreneurial activities in the Indian economy (Eren et al., 2016).

As per GEM report 2020, the Indian economy is necessity-driven, holding the second position in the world with a total score of 91.5. It is observed that entrepreneurial activities are more prominent in innovation-driven economies. The number of opportunity-driven

entrepreneurs is directly proportional to the economic development (assess based on GDPC) and inversely proportional to the economic development. Therefore, it will be more interesting to analyze how a foreign investment will affect entrepreneurial activity (Table 1 and Table 2).

Table 1 CHANGE IN SELF PERCEPTION ABOUT ENTREPRENEURSHIP IN INDIA						
Perception	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Perceived Opportunities	38.91	38	44.3	44.9	83.14	82.45
Perceived Capabilities	36.71	38	44	42.1	85.15	81.65
Fear of Failure	37.67	44	37.5	39.6	55.94	56.8
Entrepreneurial Intention Rate	7.66	9.5	14.9	10.4	33.30	20.31

Source: GEM Annual Report

Table 2 ENTREPRENEURIAL MOTIVATION FACTOR						
Entrepreneurial Motivational Factor	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Necessity Driven	31.71	18.9	35	38.6	87.5	87.3
Opportunity Driven	59.97	78.7	60.9	39.1	86.8	80.7
Improvement Driven	36.54	34.3	43.3	28.9	87.2	74.7

Source: GEM Annual Report.

LITERATURE REVIEW

The cross-section, panel data, and instrumental variable technique it is found that FDI has a positive impact on economic growth but the volatility of FDI has a negative impact due to the growth retarding effect of an unobserved variable. UNCTAD (2001), there should be a focus on *"dynamic comparative advantages"* rather than *"static comparative advantages",* this can be achieved by maximizing quality as well as higher quality of investment through optimization of development goals and vision of host economies. De Backer (2002), FDI has long-term positive effects on domestic firms through demonstration effects, networking, and forward and backward linkages. OECD (2002), there is an urgent need of establishing positive linkages between FDI and local firms to eradicate the potential shortcomings such as deterioration of host countries' balance of payments due to repatriation of profits (He & Liu, 2019). Cross-country data for 1981-99, it is found that FDI in the primary sector hurts economic growth, has a positive impact on investing in the manufacturing sector, and has ambiguous effects on the service sector. UNCTAD (2003), when local firms are more dynamic and well developed than FDI acts as a lag rather than a leading factor in the development process of an economy. Ayyagari and Kosovo (2006), FDI stimulates the entry of new domestic firms in the same industry through positive horizontal spillover and forward and backward linkages through vertical spillover effects. Abdulhamid Sukar used an estimated growth model for panel data and concluded that foreign direct investment has a marginally significant positive effect on the economic growth of developing economies. Time-series data using regression and Granger Causality test found that there is indeed a positive impact of FDI on economic activities of developing countries but statistically not significant. Fahed (2013), through regression analysis of pooled time series and cross-sectional data it is found that there is a positive and significant relationship between FDI and entrepreneurship. The effects of FDI either positive or negative solely depend upon the economic condition of the host economy such as the quality of human capital, technology, and

the openness of the economy (Javorcik, 2004). The inward FDI has a positive impact on the opportunity-driven economy while outward FDI has a positive impact on a necessity-driven economy. Oke (2014), there is an insignificant relationship between FDI and entrepreneurship development in developing countries. Ordinary least square technique used in the model for time series data to establish the relationship between FDI and Entrepreneurship and it is concluded that FDI not only stimulates entrepreneurship but also the pace of entrepreneurial development in the host economy. FDI in the form of M&A has negative and significant effects on domestic entrepreneurial activities but the crowding-out effect of FDI in extractive industries is not significant. Goel (2018), there is a higher possibility of an increase in informal sectors firms via subcontracting activities or the crowding-out effect of FDI through the substitution of domestic entrepreneurship by a foreign firm. In this way, FDI acts as a *"double-edged sword"*. Nxazonke and Wyk (2020), after testing the Vector Autoregressive model on data for the period of 2000-2018, there is a positive short-run and long-run relationship between FDI and Entrepreneurship. Outward Foreign direct investments have inverted *"U"* shaped (due to pulling) effect on entrepreneurial activities of investing economy, using panel data and random effect model for analyzing the same. FDI is not necessary for growth rather sufficient for overall economic growth of a country due to its wide approach such as skill development through technology transfer, more funds or availability of capital for investments, raises for ex reserve due to increase in exports, employment generation, etc. Ha et al. (2021), Greenfield investments have a positive impact on opportunity-driven entrepreneurship and mixed effects on the necessity-driven economy (Susic et al., 2017).

A review of the above works of literature generated the need of conducting such an empirical study on the impact of FDI on entrepreneurial activities in India. Since there is no such empirical study conducted yet in the context of India and our study will add something new to the literature on determinants of entrepreneurship. In this era of globalization, both FDI and entrepreneurship are vital organs of economic growth and development.

DATA

For the present study, we used the MSME annual reports, Economic Survey reports, and DIPP reports for selected 10 states of the Indian Economy (Gujrat, Maharashtra, West Bengal, Delhi, Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Karnataka, Punjab, Odisha). All in all, we added NSDPC and NSDPG as developmental and growth rates in the data. Data about FDI inflows obtained from RBI's FDI fact sheet ranges from 2006 to 2019. States' GDP growth rate and GDP per capita data are cross-sectional of 10 states from 2006 to 2019. Data related to our study is fully derived from government reports & publications. Finally, variables are arranged, analyzed, and combined to produce panel data of 140 observations of 10 states with six variables (Kim & Li, 2012).

Data Analysis

We constructed a 10 states panel for the period 2006-2019 (140 observations). Data related to entrepreneurial activities are derived from MSME annual reports and inward FDI state-wise collected from FDI fact sheet generated by DIPP reports. Descriptive statistics of the variables are presented in the Table 3.

From the above statistics, the mean value of UNIT, FDI, and NSDPG is higher than the median value of respective variables, which means there is an existence of the higher value in the

dataset, showing the inconsistent nature of a variable. In the case of NSDPC, the mean value is almost equal to the median and consistent in the occurrence of the phenomenon.

Table 3
DESCRIPTIVE STATISTICS

	Mean	Median	Variance	Std. Dev.	Skewness	Kurtosis
UNIT	492.30	190.19	742639.86	861.76	3.51	14.86
FDI	17293.21	6175.14	677153817.23	26022.18	2.4	6.98
NSDPG	101833.08	80736	4879823471.3	69855.73	1.4	2.06
NSDPC	13.6	13.45	17.30	4.16	.38	0.17

If we talk about skewness and kurtosis, UNIT and FDI variables are positively skewed and leptokurtic, while NSDPG has a substantially skewed and little bit peaked distribution. In the case of NSDPC, distribution is symmetric and normally distributed (Table 4).

Table 4
CORRELATION MATRIX

call:corr.test(x=dataset[3:6])				
correlation matrix				
	unit	NSDPC	FDI	NSDPR
unit	1.00	0.29	0.41	-0.25
NSDPC	0.29	1.00	0.63	-0.34
FDI	0.41	0.63	1.00	-0.21
NSDPR	-0.25	-0.34	-0.21	1.00
Probability values (Entries above the diagonal are adjusted for multiple tests)				
Sample size-140				
	unit	NSDPC	FDI	NSDPR
unit	0	0	0.00	0.01
NSDPC	0	0	0.000	0.00
FDI	0	0	0.00	0.01
NSDPR	0	0	0.01	0.00

As we can see there is no significant correlation between the dependent variable and independent variables (FDI, NSDPR, and NSDPC). But the correlation between FDI and national state domestic product per capita is very high (as compared to other variables). There is a negative correlation between entrepreneurial activities and national state domestic product growth rate

Methodology

In India, small business does not have sufficient financial stock to invest abroad, and hence there is no possibility of reverse causality. But NSDPR and NSDPC are variables that have endogenous problems with FDI, and this is one of the limitations of our study.

The general equation for fixed and random effects is as follows:

$$Y_{it} = \beta_0 + \beta_1\, FDI_{i,t} + \beta_2 NSDPC_{it} + \beta_3 NSDPR_{it} + \alpha_i + e_{i,t} \qquad \text{(fixed effect model)}$$

Where $Y_{i,t}$ is the dependent variable, β_0 is intercept, α_i is all the able characteristics of the states, $X_{i,t}$ vector of all the independent variables, β_1 coefficient, $e_{i,t}$ error term.

$$Y_{i,t} = \beta_0 + \beta_1\, FDI_{i,t} + \beta_2 NSDPC_{it} + \beta_3 NSDPR_{it} + \mu_{i,t} + \varepsilon_{i,t} \dots\dots\dots \text{(random effect}$$

model)

Where μ is between entity error and ε is within entity error.
NSDPRit= state's domestic product growth rate,
NSDPCit= state's domestic product per capita,
FDIit= foreifn direct investments

In the first step, we did a stationary test using the Levin-Li-Chu (2002) test as well as "*The Maddala-Wu Unit Root test*" to cross-check the result. And the summary of the result is given below Table 5:

Table 5 STATIONARITY TEST				
Tests	**Unit**	**FDI**	**NSDPR**	**NSDPC**
Levin-Lin-Chu (2002)	-0.31545[**]	-13[***]	-10.942[***]	-5.2612[***]
Maddala-Wu Unit-Root Test	27.567[**]	237.37[***]	279.25[***]	50.865[***]

All variables (FDI, NSDPR, and NSDPC) are significant at a 5% level of significance i.e., stationary except the unit of entrepreneurs registered I MSME in each state (Konings, 2001) Table 6.

Table 6 PANEL REPORT			
Variable	**Model**	**Unit**	
		Fixed Model	**Random Model**
Intercept		-	0.7582
FDI		2.8373[**]	2.9436[**]
NSDPG	-	-0.5721	-1.2305
NSDPC		3.0656[**]	2.1832[*]
R^2		0.29227	0.24855
F-test (p-value)		1.4578e-09	
Hausman test (Indicated model)		Fixed Model	
'*','**','***' are significant at 5%, 10%, and 1% levels of significance.			

From the above analysis, it is concluded that both in the fixed effect and random effect model FDI has a positive impact on entrepreneurship but is not highly significant (only at a 10% level of significance) (Malhotra, 2014). National state domestic product per capita (NSDPC) has a moderate impact on a dependent variable but in the random effect model, the effect is very low. Here the more interesting outcome is NSDPG (growth rate) is negatively associated with entrepreneurship. Since Indian entrepreneurs are necessity-driven entrepreneurs. Therefore, there is a negative relationship between GDP growth rate and entrepreneurship Ha et al. (2021) and no significant evidence of the relationship between FDI and entrepreneurship.

In this outcome, the R2 value is very low i.e., below 50%, which means explanatory variables are not explaining or defining the dependent variable (unit). Hausman's test specified that the fixed effect model is the best-fitted model out of the Random and fixed-effect models. Since fixed effect underlines disparities between the states (Fazalbhoy, 2013).

CONCLUSION

The main idea behind this study is to determine how FDI actually behaves in a host economy like India. Since India is the second-largest recipient of FDI after China, still facing macro-economic problems like unemployment, inflation, low per capita income, and inter-state migration (creating the problem of unbalanced population density)? India is doing well in entrepreneurial activities but neither opportunity nor innovation; it is a necessity/ factor which influence them to choose the option of entrepreneurship. Therefore, it is justified from the empirical findings that, the role of FDI on entrepreneurial activities is not satisfactory. There is no significant impact of FDI on entrepreneurship, and the change in entrepreneurial activities may or may not be the actual or direct impact of FDI. This result shows that FDI does not play any significant role in entrepreneurial activities but at the same time, there is no negative impact of FDI on domestic or local entrepreneurs such as the *"crowding-out effect "*or *"barrier effect"* of FDI. The reason is our economy i.e., is still a 'necessity-driven/ factor-driven economy, as per the GEM report, India holds 2nd rank globally. From the literature review, it is also made clear that FDI is productive for entrepreneurial activities in those countries where economies are either opportunity-driven or innovation-driven. And hence our empirical findings hold good for that literature. As per Rubix Data Science, there are a total of 122721 & 155377 new entities registered during this pandemic period of 2020 & 2021 respectively. This necessity/ factor-driven intention forced people to start their businesses due to job losses and migration.

We can conclude that the impact of FDI on entrepreneurial activity is very poor. It shows the lacuna of government and policymakers in the channelization of those foreign investment funds. Unlike western countries, European nations, and other fastest-growing economies of East Asia, Indian policymakers never justified or failed to establish a proper linkage between FDI and MSME. Indian MSMEs have an enormous capacity to help India to achieve a $3 Trillion economy. the MSMEs need a proper source of finance, technical know-how, management skills, and training opportunity to increase their productivity & scope. The lack of proper investments in research and development, innovation and technology, and infrastructure, local/ domestic firms fail to absorb the positive spill over effect of FDI.

RECOMMENDATION

Government should focus on some issues to encourage entrepreneurial activities:

1. Establishing linkages between FDI and MSMEs.
2. Removing the restriction on foreign investors from investing in MSMEs.
3. Encouraging foreign investors to invest directly in MSMEs.
4. Providing proper skill development programs & training to the present and potential entrepreneurs through quality training institutes and various seminars & workshops to maintain international quality services and products.
5. Internationalization of MSMEs, so that entrepreneurs can upgrade themselves through demonstration effects, demand creation effects & supply effects.

There is ample scope of the present study, to check the robustness of the outcome of the present paper, we can explore the area on sectorial level, vertical and horizontal spill over through forward and backward linkages, greenfield investments, M & A, and opportunity-driven & necessity driven economy.

REFERENCES

Ayyagari, M. & Kosova, R. (2010). Does FDI facilitate Domestic Entry? Evidence from the Czech Republic. *Review of International Economics, 18*(1), 14-29.

De Backer, K & Sleuwaegen L. (2003). Does Foreign Direct Investment Crowd Out Domestic Entrepreneurship? *Review Industrial Organisation, 22*(1), 67-84.

Estrin, S., Hülya Danakol, S., Reynolds, P., & Weitzel, U. (2013). Foreign Direct Investment and Domestic Entrepreneurship: Blessing or Curse?.

Eren, O., Onda, M., & Unel, B. (2016). Effects of FDI on Entrepreneurial Activity: Evidence from Right to Work & Non-Right to the Work States. *Department of Economics Working Paper Series*.

Fahed, W.B. (2013). The effect of entrepreneurship on foreign direct investment. *In Proceedings of World Academy of Science, Engineering and Technology, 78*, 242.

Fazalbhoy, S. (2013). FDI in India- Its Impact on Entrepreneurial Ventures in India.

Goel, R. (2018). FDI and Its Impact on Entrepreneurship and Informal Markets: A Double Edge Sword?. *The blog of Asian Development Bank Institute*.

Ha, T.S., Chu, V.T., Nguyen, M.T.T., Nguyen, D.H.T., & Nguyen, A.N.T. (2021). The Impact of Greenfield Investment on Domestic Entrepreneurship. *Journal of Innovation and Entrepreneurship 10*, 1-16.

He, Q. & Liu, T.K. (2019). The Impact of FDI on Entrepreneurship in European Countries: Mechanism and Strength. Journal of Advanced Computational Intelligence and Intelligent Informatics, 23(4), 649-657.

Susic, I., Stojanovic-Trivanovic, M., & Susic, M. (2017). Foreign Direct Investments and their Impact on Economic Development of Bosnia and Herzegovina. *IOP Conference Series: Materials Science and Engineering, 200*(1), 012019.

Javorcik, B.S. (2004). Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In search of Spillover through Backward Linkages. *American Economic Review, 94*(3), 605-627.

Kim, P.H & Li, M. (2012). Injecting Demand through Spillovers: Foreign Direct Investment, Domestic Socio-political conditions, and Host Country Entrepreneurial Activity. *Journal of Business Venturing, 29*(2), 210-231.

Konings, J. (2001). The Effects of Foreign Direct Investment on Domestic Firms: Evidence from Firm Panel Data in Emerging Economies. *Economics of Transition, 9,* 616-633.

Malhotra, B. (2014). Foreign Direct Investment: Impact on Indian Economy. *Global Journal of Business Management and Information Technology*, *4*(1), 17-23.

Nxazonke, B & Wyk, R.B. (2020). The Role of Foreign Direct Investment on Domestic Entrepreneurship in South Africa. *Development Southern Africa, 37*(4), 587-600.

Oke, O.S & J M.O (2014). Entrepreneurship Contribution of Foreign Direct Investment: A Reality of Unfulfilled Vision in Nigeria. *International Journal of Development and Sustainability, 3*(1), 184-195.

OECD (2002). Foreign Direct Investment for Development, Committee on International Investment and Multinational Enterprises, OECD Publication Service.

UNCTAD (2001). The Impact of FDI Policies on Industrialization, Local Entrepreneurship and the development of supply capacity, Policy Issues to consider/by the UNCTAD Secretariat.