

FDI INFLOW AND ENTREPRENEURIAL GROWTH IN INDIA: AN EMPIRICAL STUDY

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ABSTRACT

Starting with the Import Substitution Industrialisation (ISI) model of the early years, a number of distinct phases can be identified in the economic policy framework in India, as far as FDI is concerned. This paper attempts to explore empirically the relationship between growing FDI inflow and entrepreneurial development in India during 2001-15. The study shows that increasing FDI inflow in India could not significantly influence entrepreneurial growth in the country. The empirical analysis exhibits that though there is a significant rise in new business density of firms during the study period, both the rate of self employment as well as total early stage entrepreneurial activity show no significant correlation with FDI inflow during this period. It is also observed that rising FDI inflow could not make any major changes in entrepreneurial attitudes and behaviour during these years especially in terms of R&D expenditure for innovation. It is also revealed that entrepreneurship growth in India is still male dominated. Finally, the study reveals that though opportunity based entrepreneurship does not exhibit any definite trend the necessity driven entrepreneurship is on decline.

Keywords: Entrepreneurship, FDI, innovation, new business density, Total early stage entrepreneurship

I. INTRODUCTION

The world today is far more connected and the economies of the countries are far strongly interrelated than half a century ago. The sheer magnitude and power of the inter-connected world makes it relevant to examine it deeply and understand the complex neural network of finance that lies at the core of the globalised world economy. In case of India, starting with the Import Substitution Industrialisation (ISI) model of the early years, a number of distinct phases can be identified in its economic policy framework as far as FDI is concerned. It has been observed that the pattern of FDI inflows in India has gradually evolved from the period of anti-FDI inflows (1969-75) to selective FDI inflows (1975-91), and finally to pro-FDI inflows after the introduction of the New Economic Policy of 1991. The Government of India has embarked a

number of initiatives to attract FDI in the country as a part of the institutional reforms. Sectors such as defence production, construction, retail etc have been opened up for FDI. The government has been actively pursuing the goal of making India a manufacturing hub through latest 'Make in India' initiative and invitation to foreign companies to invest in India. The share of FDI net inflows in India has gone up from 0.1 percent of GDP in 1992 to 2.106 percent in 2015. According to the Department of Industrial Policy and Promotion (DIPP), the total FDI investments in India during April-December 2017 stood at US\$ 35.94 billion, indicating that government's effort to improve ease of doing business and relaxation in FDI norms is yielding results. In fact, in terms of FDI inflow, India continues to be among the top ten countries globally, and fourth in developing Asia. Reforms – as ushered through the 'Make in India', 'Digital India' and 'Startup India' campaigns – appear to be showing results with recent implementation of GST, allowing 100 percent FDI in limited liability partnership and easing regulations for setting up offices in India. The World Bank has stated that private investments in India is expected to grow by 8.8 per cent in 2018-19 to overtake private consumption growth of 7.4 per cent, and thereby drive the growth in India's gross domestic product (GDP).

Rates of entrepreneurship usually go hand-in-hand with competition in the economy; and both of them contribute strongly to the level of innovation and technological progress that are vital for economic development. As a result, inflow of FDI may be seen as an important transmission channel to diffuse technology, human capital and managerial skills into the host economy. The abolition of rules, regulations and restraints on entrepreneurs during the 1990s unleashed the spirits of the entrepreneurs and their desire to participate in the global economy through trade and investment.

Entrepreneurship is considered to be a significant determinant of economic development. New entrepreneurial activities play a vital part in the process of creative development that fosters innovation, employment, and growth. While India has traditionally been an entrepreneurial country, it fares poorly in numerous global studies exploring the entrepreneurial and business potential of countries. There has been a great deal of attention paid to the subject of entrepreneurship over the past few years, stemming primarily from the fact that small firms contribute considerably to economic growth and vitality. People have chosen entrepreneurial careers because that offers greater economic and psychological rewards.

Studies on entrepreneurship have classified the entrepreneurship into two broad groups- opportunity entrepreneurship and necessity entrepreneurship (Koster and Raj, 2008). The former comes into play when employment opportunities deteriorate and job seekers are forced to establish production possibilities on their own. On the other hand, opportunity based entrepreneurship arises when firms explore ways and means to capture new markets. Several

studies have investigated the characteristics of both necessity based and opportunity driven entrepreneurship in both high and low income economies (Bergman & Sternberg, 2007; Block, Sadner & Spiegel, 2015; Block & Wagner, 2010). But these types of study is noticeably absent in India according to the extant literature. In an attempt to explore and fill this research gap, we have investigated the level of necessity and opportunity entrepreneurship in India.

The objective of this study is to find out the relationship between FDI inflow in India and the growth of entrepreneurial activity during the period, 2001-15. In the present paper we want to empirically verify the fact that whether the increasing FDI inflow in India since 1991 has been really acting as a significant positive catalyst in the entrepreneurial development during the post reform period. In this context, the study also attempts to highlight the changes in entrepreneurial attitudes and behaviour in India during the same period. Finally the study makes a comparative analysis of the growth of opportunity and necessity driven entrepreneurship in India.

The present Paper is organized in six sections. Section II presents selected survey of literature concerning the relationship between foreign direct investment and entrepreneurial development in different economies. The methodological framework is discussed in Section III. Section IV explains data and sources required for the purpose of the study. Empirical analysis and discussion is made in Section V and Section VI sums up the main findings.

II. SURVEY OF SELECTED LITERATURE

Starting with McDougall (1960), the researchers have been interested in the relationship between foreign direct investment and a variety of economic development outcomes in the destination country, including the activity of local firms. The studies have shown that FDI improve labor productivity (Liu et al., 2000) and increase the production capabilities of local firms (Hejazi & Safarian, 1999). On the other hand, a huge body of literature has focused on the determinants of entrepreneurial activity. While theoretical papers are oriented towards the entrepreneurial culture and gradual learning or to the role of technological innovation in supporting the role of entrepreneurial intentions (Jovanovic, 1982; Jovanovic & MacDonald, 1994; Ericson & Pakes, 1995), empirical works consider in particular the role of the economic context and institutional framework in promoting the entrepreneurial development. While much of the empirical literature on FDI spill over effects has argued that the impact on the host economy will be positive (Javorcik, 2004; Blanchard et al., 2009), a few papers have suggested a negative effect (Aitken and Harrison, 1999). Foreign direct investment (FDI) is an important element of international economics; the flow of capital, technology, knowledge and skills across national boundaries creates opportunities for host countries, particularly for developing countries to 'catch up' with others (Caves, 1996; Markusen and Venables, 1999; Javorcik, 2004). The literature linking FDI and economic development in the host economy mostly addresses spill over productivity effects

via the dissemination of innovations on locally-owned firms (Barrios et al., 2005; Ayyagari and Kosova, 2010). Other avenues for positive spill overs include demonstration effects (Barry et al., 2003); labor mobility (Fosfuri et al., 2001), enhanced export performance (Greenaway et al., 2004) and stimulating import-competing production (Christiansen & Ogutcu, 2002). They bring technical and informational externalities (Rodriguez-Clare, 1996; Meyer, 2004). Moreover, FDI permit access to financial resources (Urata & Kawai, 2000; De Maeseneire & Claey, 2012). Others cite potential advantages to the recipient country through contributions to restructuring of the economy (Caves, 1974; Kokko et al., 1996). Finally, the FDI can help new firm extend their activities by subcontracting activities or by developing collaborations for different activities (vertical effects).

However, some authors also draw attention to the potentially detrimental effect of FDI on development (Aitken and Harrison, 1999; Kathuria, 2000; Barrios et al., 2005). Negative spill-overs can derive from for example reduced market competition through entry-deterrence in the style of Dixit (1980) or crowding out (Caves, 1996). Negative spill over effects were usually reported for the transition economies (Djankov & Hoekman, 2000; Konings, 2001; Sabirianova et al., 2005). Similar results were reported by De Backer & Sleuwaegen (2003), in their study of firm entry and exit across Belgian manufacturing industries. Contrary to these, Görg & Strobl (2002) find a positive effect of the FDI on the entry of new domestic firms in Ireland. More recent studies test the effects of FDI on entrepreneurship using a panel data approach. While Doytch & Epperson (2012) has found that FDI positively affect entrepreneurship only in the middle income country group, Kim & Li (2012) state that the main positive impact of FDI on business creation is most salient in regions with weak institutional support. Their findings obtained from 104 countries panel analysis are consistent with the predictions that foreign direct investment positively relates to business creation, especially in the less developed countries, characterized by lack of institutional support, political stability and good quality of human capital. Another study (Onwuka, 2014) investigates the effect of FDI on entrepreneurial development in Nigeria during 1990-2013, which discovers that FDI, export, exchange rate, technology, import, and political risk have significant impact on entrepreneurial development in Nigeria for the period under study and concludes that FDI induces the inflow of capital, technical know-how and managerial capacity which can stimulate entrepreneurial activities and accelerate the pace of entrepreneurial development in Nigeria.

Nevertheless, the contradictory results found in the literature can also be associated with the lack of distinction between opportunity and necessity driven entrepreneurs. In terms of inwards FDI, positive effects are expected for the overall entrepreneurial activity (Albulescu and Tamasila, 2014). In addition, new firms entrances increase once the entrepreneurs observe new opportunities in the market. Contrary, as the multinational firms create jobs, the impact of the

FDI on the necessity entrepreneurs is a negative one. These hypotheses enable the reconciliation of the contradictory findings in the literature. The impact of FDI over entrepreneurship can also vary over time. De Backer and Sleuwaegen (2003) study firm entry and exit across Belgian manufacturing industries. They find that in the short term, import competition and FDI can crowd out local entrepreneurship, but that it can be moderated in the long term with other positive effects of FDI as a result of learning, demonstration, networking and linkage effects. Pica and Mora (2004) explore the impact of “proximity in regulation” over FDI flows. According to them, it is not only the level of regulation that matters, but also the similarity in regulation in terms of quality. The more similar the regulations, the more firms will engage in FDIs. This will also have an impact over the allocation of talent. Their model assumes that individuals choose between being entrepreneurs or workers on their managerial skills (those with better managerial skills will choose to be entrepreneurs). It also assumes that participating in FDIs increases competition. Therefore, similar regulation will lead to more firms participating in FDIs, raising the minimum ability to be an entrepreneur and ultimately productivity.

But less has been written on the interaction between FDI and entrepreneurship in India especially the change in entrepreneurial behaviour and attitudes in recent years. Again there is lack of study on the subject of necessity and opportunity entrepreneurship in Indian economy to the best of the knowledge of the present researcher. This study wants to fill this gap and attempts to investigate the relationship between growing FDI inflow in India and entrepreneurial activity in details.

III. DATA AND SOURCES

Entrepreneurship data

The lack of data on the economic activity of enterprises operating in India classified by nationality of ownership has constrained a fuller appreciation of the role played by FDI in the country’s development process. Three measures have been particularly prevalent in the research and represent different dimensions of entrepreneurship. These are: self-employment, new firm formation and early-stage entrepreneurship.

Many empirical studies prior to the mid-2000s often used self-employment as the proxy for entrepreneurship. Measuring self-employment is typically done as a proportion of the total employed, consistent with the well-accepted International Labour Organization (ILO) classification of self-employed workers as those working on their own account across four sub-categories (employers, own-account workers, member of producer cooperatives, contributing family workers). To gauge the entrepreneurial activity in details we have used data of self-employment in India during our period of study, the source for which is ILO-ILOSTAT database over different years.

Data on new business creation, which is often collected by country registrars and other sources, has become increasingly more accessible and provides a count of new business entities. New firm formation—interchangeably also called “new venture creation,” “entry,” and “new business”—is frequently considered an appropriate measure for entrepreneurship. New firm formation represents the creation of a new organizational entity, which is born in order to pursue a market opportunity. For the purpose of our study, we have used new business density as the reliable measure of entrepreneurial activity. New business density is estimated as new registrations of firms per 1000 people within the age group 15-69. The data for number of new businesses registered over the years, is compiled from World Bank’s Entrepreneurial Survey and Database and the data published by Ministry of Corporate Affairs, Government of India.

The Global Entrepreneurship Monitor database (GEM) collects data to help assess entrepreneurial activity. The project started as a partnership between London Business School and Babson College in 1999 covering 10 countries. Today it offers a database with over 1.3 million observations across 85 countries as a result of primary data collection conducted in collaboration with almost 100 local teams. We use the data from the Adult Population Survey (APS), which is administered annually to a minimum of 2,000 adults in each GEM country. The survey is administered by these local teams either by phone or in writing, and the data is reviewed by a central team for standardization purposes.

But GEM’s methodology is harmonized across countries and it is the best data source available that includes developing countries. Two important considerations make the GEM data particularly relevant for our study. First, the database focuses on early entrepreneur activity, that is, firms less than three and a half years old. This is important as much as it is age versus size that matters. Traditionally much of the analysis and policies related to entrepreneurship have focused on small and medium size firms since SMEs have the largest shares of total employment and job creation. But recently the focus has shifted towards young firms, since they have higher job creation rates and productivity growth. There is some overlap in the sense that most young firms are small, but many small and medium firms will remain so throughout their existence without necessarily leading to much job creation or productivity growth (Ayyagari, Demirguc-Kunt, Maksimovic 2011).

Second, it collects data at the individual entrepreneur level capturing the motives that lead people into entrepreneurship, their aspirations for the future of their business, and social attitudes towards entrepreneurial activities. GEM defines entrepreneurship as “any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business.”

TEA is one of the main variables produced, standing for “total early-stage entrepreneurial activity”. It combines the stage before the start of a new firm (nascent entrepreneurship) and the stage directly after the start of a new firm (owning-managing a new firm). The GEM database makes it possible to identify two types of entrepreneurs: 1) “opportunity entrepreneurs”, those who decide to pursue an independent business venture driven by opportunity; and 2) “necessity entrepreneurs”, those who lack an outside work option and are forced into self-employment. Central measure of GEM is the Total Entrepreneurial Activity (TEA) rate, which consists of the percentage of individuals aged 18 – 64 years in an economy who are in the process of starting or are already running new businesses. The TEA rate therefore includes both nascent and new entrepreneurs. In the present paper, we have denoted entrepreneurial activity by TEA (Total entrepreneurial activity).

Foreign Direct Investment data

A simple definition of FDI would be –“An investor based in one country acquires an asset in another country with the intent to manage that asset” (OECD, 2000). It is important to understand the significance of FDI in global trade and in economic development. Also it is important to understand the shift in FDI towards the developing world, and the future trends of FDI. For FDI inflows we use IMF data. In order to control for country income levels, we use FDI as a percentage of GDP.

IV. METHODOLOGY

To examine the rising importance of FDI inflow in Indian economy we have used different indicators like percentage of FDI in gross fixed capital formation as well as FDI as a percentage of GDP. Next, we have made a comparative analysis of sectoral distribution of FDI inflow in Indian economy to study its impact on the growth of different sectors. To find out the relationship between the two prime variables, FDI inflow and entrepreneurial activity in India, first we have analysed the movements of FDI inflow during this 15 years along with three prime measures of entrepreneurial activity. Next, we have estimated Karl Pearson’s correlation coefficients between FDI inflow and all three indicators of entrepreneurial activity in India for the purpose of our study and also determine their level of significance. The present study has measured the entrepreneurial activity by GEM (Global Entrepreneurship Monitoring Index), self employment and new business density respectively. In place of FDI inflow, we have used relative FDI inflow, i.e FDI w.r.t GDP of the country. To make a comparative study of opportunity and necessity entrepreneurs we have studied the growth rates of some selected variables like self employment, new business creation, R&D expenditure and annual growth rates of creative goods exports in India during the study period.

V. RESULTS AND ANALYSIS

A. Growing importance of FDI in India

The attitude of Indian Government towards FDI has changed diametrically from late 1980s where a liberal policy towards FDI was adopted. As a result of policy changes in 1991 and active promotion of India as destination, the amount of FDI approved and received has increased sharply. From 1992 till 1997, FDI inflows continuously increased in India. The introduction of Foreign Exchange Management Act (FEMA) in 1999 and recovery from the South-East Asian crisis resulted in the increase in FDI inflows. The FDI inflows during 2001 to 2015 are presented in Table-1. During the time (2001-15), the FDI inflows have increased from \$6.13billion in the year 2001 to \$55.56 billion in the year 2015. Therefore, FDI inflows in India have increased by nearly nine times during this 15 year period. As evident from the table, FDI inflow has gained momentum from the year, 2006-07, when the inflow of FDI was more than doubled compared to the previous year. Well-developed financial sector, strong industrial base and critical mass of well educated workers raised India's FDI inflows further at \$41.87 billion in 2008. Although, due to the adverse effect of the US financial crisis at the end of 2008, India's FDI inflows were declined during the years 2009 and 2010 respectively, India succeeded to invite substantial inflows again in 2011 when FDI inflow touched \$46.55 billion level. With the entry of Modi government in 2014, which initiated another phase of reforms in FDI policy revive the confidence of foreign investors again in India. At the end of 2015, the FDI inflows reached at the highest level \$55.55 billion

Table 1: FDI inflows in India, 2001-2015

Year	FDI inflows(\$ million)	% of GDP	India's share in global FDI inflow
2001-02	6130	1.071	0.80
2002-03	5036	1.025	0.95
2003-04	4322	0.614	0.78
2004-05	6051	0.776	0.84
2005-06	8961	0.899	0.80
2006-07	22826	2.176	1.45

2007-08	34843	2.1	1.33
2008-09	41873	3.657	3.14
2009-10	37745	2.688	3.02
2010-11	34847	1.654	1.97
2011-12	46556	2.002	2.31
2012-13	34298	1.313	1.60
2013-14	36046	1.516	1.98
2014-15	45148	1.699	2.61
2015-16	55559	2.016	2.48

Source: RBI Bulletin May 2017, table no.34 and The World Bank

But FDI inflow as a percentage of GDP in India is following a rather fluctuating trend touching highest in 2008(3.657) during the same period. The same is true for India’s share in global FDI inflows. In 2001, India saw just 1.07 percent of GDP coming from FDI, less than one-third of China's 3.56 percent. From 2006 to 2008, however, India's percentage grew to 3.64 percent, surpassing China's 2.4 percent in 2008. In fact, as FDI dropped off quickly in Southeast Asia in the 2008 due to global recession, India's percentage actually passed Southeast Asia's in 2008. Since then, FDI as a percentage of GDP has settled down in both India and China to something in the range of 1.5 percent annually, while it has rebounded to the level of 2.61 again in 2014-15. The rising importance of FDI in Indian economy is represented by Table-2.

Table 2: Rising Importance of FDI in Indian Economy

Indicator	1990	1995	2000	2005	2010	2015
FDI inflows as a % of gross fixed capital formation	0.3	2.2	3.3	2.9	5.2	7.0
Inward stock of FDI as a % of GDP	0.5	1.5	3.5	5.2	12.1	2.0

Source: UNCTAD Communications and Information Unit, FDI/TNC Database

Though, initially, the pace of FDI inflow in India was slow due to regulatory policy framework, FDI inflows have taken steady steps after the announcement of the new economic policy. India’s

GDP growth has been steady over the years despite wide fluctuations in FDI inflow or foreign capital.

Sectoral distribution of FDI inflow in India

In this section we want to analyse the sector wise break up of FDI inflow in India during our period of investigation and want to verify the fact that whether this sectoral distribution of FDI has really contributed in the growth of these sectors during the study period. The sector wise distribution of FDI inflow in India is presented in Table-3.

Table 3: Sector wise break up of FDI inflows in India (in Percent)

Sector	2001-02	2005-06	2010-11	2015-16
Service	3.067	6.13	9.46	12.4
Construction	0.84	2.89	4.77	0.20
Computer software & Hardware	6.84	15.18	2.24	10.6
Telecom	14.25	6.9	4.78	2.4
Automobile	3.85	1.56	3.73	4.55
Drug & Pharmaceutical	1.27	1.92	0.6	1.36
Chemical other than Fertilizer	1.42	4.33	6.76	2.65
Trading	0.71	0.32	1.43	6.92
Power	12.35	0.81	3.65	1.56
Hotel & Tourism	0.52	0.80	0.88	2.4

Source: RBI Bulletin, May 2016 and author's own calculations

It is observed from the above table that while service sector maintained a steady rising trend in FDI inflows during this fifteen year period (2001-15) the case is not the same for all other

sectors. In fact, except trading most of the other sectors followed fluctuating FDI inflows during the same period. Trading sector though received a mild growth in FDI inflows until 2010 experienced a sudden increase in FDI inflows during the financial year 2015-16. While in the pre-reform period, majority of FDI in India took place in the primary and manufacturing sector, but with the growth of the economy, the share of FDI in the primary sector declined whereas the share of FDI in the manufacturing sector as well as service sector increased substantially. Again, the foreign investment inflow in the post-reform period shows two diverse trends in this one and half decade. While manufacturing sector dominated FDI inflow during 1990 to 1999, the service sector dominates FDI inflow since 2000 to till date. The sector wise growth rate in India during the last three Five Year Plans supports our point of view. It is observed from Table 4, that the service sector experienced a robust growth compared to the manufacturing sector in the post reform years.

The manufacturing sector which attracted majority of FDI in the 1990s failed to keep its momentum, and its share towards sectoral inflow gradually declined. Despite Government's proactive FDI policy, the manufacturing sector in India failed to reap the benefits. On the other hand, service sector highly benefitted from the liberalization measures. FDI in services sector led to the growth of new industries such as telecommunication, Information Technology (IT), Business Processing Outsourcing (BPO) in the country creating huge job opportunities. Similarly, scanty FDI inflow in the manufacturing sector of India since the late 1990s can be explained by the limited size of the domestic market. Secondly, the manufacturing sector growth in the post-reform India is 'input driven' rather than efficiency driven. The material cost of production in the manufacturing industries is higher when compared with its competitors in the global market. But, the growth of services sector is not limited by the development of physical infrastructure among the regions. Most of the service sectors like finance, non-banking financial services, health care, education and software industries could easily develop in enclave industrial and urban structures without any huge investment on infrastructure. Perhaps, this market-driven uneven and enclave nature of growth is compatible with the growth of the services sector which is evident from the Indian experience.

Table 4: Sector wise Growth Rates in India (1997-02 to 2007-12)

Sector	IX Plan 1997-02	X Plan 2002-2007	XI Plan 2007-12
Manufacturing	3.3	9.3	8.3
Electricity, Gas, water	4.8	6.8	6.4
Construction	7.1	11.8	8.2
Trade, Hotels & Restaurants	7.5	9.6	7.0
Transport, Storage, Communication	8.9	13.8	12.3
Services	7.9	9.3	10.1
Industry	4.3	9.4	7.9

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Table 4 reveals that while other sectors experienced fluctuating growth rate, this is the service sector only which has steady growth rate over these years.

B. Movement of FDI inflow and Entrepreneurship in India

The present section wants to investigate whether FDI inflow in India has contributed in the entrepreneurial development during our period of study. For this purpose first we have analysed the movement of FDI inflow in India as well as all the three variables used to measure the entrepreneurial activity during 2001-15, the result of which is presented in Table-5.

Table 5: Trends of FDI and Entrepreneurship in India, 2001-15

	constant	b	R ²	Adj. R ²
FDI inflow	7.843	0.204 (6.477)*	0.763	0.745
FDI inflow as a % of GDP	-0.051	0.058 (2.243)*	0.279	0.224
Self Employment	4.477	-0.007 (-12.87)*	0.927	0.922
New Firm Registration Number	10.208	0.093 (6.811)*	0.781	0.764
New Firm Registration Density	-3.174	0.075 (5.508)*	0.700	0.677
GEM indicator(TEA)	2.696	-0.586 (-2.044)**	0.343	0.261

Student t Statistics are in parentheses.

* t values are significant at 5% level.

**t values significant at 10% level.

The above table shows that both FDI inflow in India and FDI inflow as a percentage of GDP increased over the years under consideration. While FDI inflow has risen at a rate of 20.4 percent per annum (significant at both 5% and 1% levels), FDI inflow as percentage of GDP exhibits a significant (5% level) rising trend over the same period. To gauge the extent of entrepreneurial development in India in detail, we have attempted to find out the movement of all the three measures of entrepreneurial activity in India which are being considered for the purpose of our study. Firstly, the self employment rate in India during our period of study reveals a significant (at both 5% and 1% levels) downward movement. In fact it is observed that the self employment in India is declining at a rate of 0.7 percent per annum during this 15 year period. On the other hand, both the number of new firms registered as well as the new firm registration density show significant upward movement. The study shows that the number of new firms registered during this one and half decade is rising annually at a rate of 9.3 percent. On the other hand, registration density of newly registered firms has gone up annually by 7.5 percent.

The GEM index measuring total early stage entrepreneurial activity (TEA) shows significant (10% level of significance) downward movement during 2001-15. The empirical analysis is carried out to explore the relation between rising FDI inflow in India with entrepreneurial activity in the country, represented by self employment, new business density and TEA measured by GEM index (total entrepreneurial activity) published by UNCTAD for the period,

2001-15. The estimated Pearson's correlation coefficients and the corresponding test of significance of the correlation coefficients between FDI inflow and the three measures of entrepreneurial activity are presented below.

Table 6: Correlation between FDI inflow and Entrepreneurial Development

	Correlation Coefficient	t-value	P value (1-tailed)
Between inward FDI inflow and GEM	r= -0.442374409	-1.77811764	0.099024
Between FDI inflow and self employment	r=-0.449200423	-1.81280168	0.099024
Between FDI inflow and new business density	r=0.416026654	1.64954751	0.123006

The above table reveals that the FDI inflow in India and self employment ratio are negatively correlated though the level of correlation is not significant at 5 percent level. Therefore we cannot ascertain the fact that the increasing flow of foreign capital in India has accelerated the self employment growth in the economy as a whole. In fact according to our analysis, the rising FDI inflow has slowed down the entrepreneurial activity measured in terms of self-employment, in India. According to our analysis, the FDI inflow and GEM index (estimating total early stage entrepreneurial development) show moderate but negative correlation indicating an insignificant influence of FDI inflow on early stage entrepreneurial development. On the other hand a moderate and positive correlation (0.416026654) is observed between FDI inflow and new firm business density. This implies the fact that growing FDI inflow in India during this one and half decade has positively influenced the growth of new firms.

Next we want to investigate the fact that whether FDI inflow in India during the last 15 years has really helped in changing the nature of entrepreneurial behaviour and attitudes in India. In the following table we have presented the data for entrepreneurial behaviour for the last fifteen years.

Table 7: Attitudes and Behaviour towards Entrepreneurship

Year	Perceived Opportunity	TEA	Female/Male TEA	Established Bus. Ownership rate(% Of 18-64 population)	R&D Expenditure (% of GDP) value	Exports of goods and services (% of GDP)	IIP
2001	30.93	10.81	0.31	8.76	0.72	12.69	50.16
2002	42.40	16.04	0.63	12.15	0.71	14.41	52.61
2006	52.09	10.09	0.79	5.60	0.80	21.66	73.03
2007	70.96	8.53	0.79	5.53	0.81	21.01	84.46
2008	58.47	11.49	0.45	16.50	0.87	24.27	90.94
2013	41.43	9.88	0.49	10.66	-	25.43	106.18
2014	38.91	6.60	0.54	3.73	-	23.01	108.10
2015	37.79	10.83	0.58	5.50	0.63	19.94	111.61

Source: GEM dataset for various years and OECD Innovation indicators

It is quite obvious from the above table that perceived opportunity in entrepreneurship is declining over the years though the rate of fall is not significant enough. TEA (Total early stage entrepreneurship) follows a decreasing movement which is significant at the rate of 5 percent during 2001-15. The ratio of Female/Male TEA is showing insignificant rising trend establishing the fact that, in India the entrepreneurial activities are still male dominated. Research and development expenditure by the entrepreneurs also remains almost stagnant during this one and half decade establishing the fact that increasing FDI inflow did not promote innovations through research and development activities for further economic development. Established business ownership rate in India does not exhibit any significant change during this period under observation. But export shows a significant rising trend over the years (7.17 percent per annum) along with Index of industrial production (9.88 percent annually). So it can be inferred from our analysis that though both industrial production and exports observe significant upward movement, both TEA and R&D expenditure in India do not show any significant change even if FDI inflow is accelerating.

Necessity and Opportunity Entrepreneurship

There are two underlying components to business creation. As much as the TEA measure is the key important indicator of GEM, the distinction between Opportunity–Necessity types is of equal importance. While the former is a quantitative measure, the latter captures the qualitative

aspect to some extent. Research establishes that economic contribution of opportunity-motivated firms is higher than that of necessity-driven ones (Kelley et al., 2010).

So there are two different motivations for starting a business- opportunity based and necessity driven. The basic distinction between the two is that some entrepreneurs create business when they see a business opportunity whereas other entrepreneurs are forced into starting a business out of necessity i.e. because of lack of other options in the labour market. Table 8 distinguishes between opportunity-driven and necessity-driven entrepreneurship in India.

Certain changes are observed in the extent of entrepreneurial activity in India during the study period.

Table 8: Opportunity and Necessity Entrepreneurship in India

Year	Opportunity Entrepreneurship(in %)	Necessity Entrepreneurship(in %)	TEA(in %)
2001	3.70	7.5	11.20
2002	12.42	5.04	17.88
2006	6.71	2.86	10.42
2007	5.51	1.67	8.53
2008	8.02	2.47	11.49
2013	5.7	3.8	9.9
2014	3.96	2.09	6.6
2015	8.52	2.05	10.83

Source: GEM APS database

In Table 8, rates of opportunity entrepreneurship in India show a non-uniform trend, whereas necessity entrepreneurship is on a decline. This decline in necessity entrepreneurship in India could be attributed to the economic growth experienced by the economy in recent years resulting in job creation and providing employment in rural areas through various social schemes.

The above empirical analysis reveals that rising FDI inflow does not exhibit any significant influence on the entrepreneurial growth in India during the study period though FDI inflow in India during recent years has boosted the growth of new registered business firms in the

economy. In fact it is established that there are no definite changes in entrepreneurial behaviour and attitudes in India even in the post reform years.

CONCLUSION

Foreign Direct Investment involves the ownership and control of a foreign company in the host country. For this ownership the investing country usually transfers some of its financial, managerial, trademark and other resources to the foreign country. The most common system of FDI flow is through participation in risk capital and gaining control in the management of the host country enterprise. The FDI inflow has been increasing in India since globalization. However, the trend has been mixed. The FDI inflows in India has gone down in all most all the sectors except service and trading over the years. The study shows that increasing FDI inflow in India could not significantly influence entrepreneurial growth in the country. The empirical analysis exhibits that though there is a significant rise in new business density of firms during our study period, both the rate of self employment as well as total early stage entrepreneurial activity show no significant correlation with FDI inflow during the same period. It is also observed that rising FDI inflow could not make any major changes in entrepreneurial attitudes and behaviour during these years especially in terms of R&D expenditure for innovation. It is also revealed that entrepreneurship growth in India is still male dominated. Finally, the study attempts to make a comparative analysis of necessity driven and opportunity based entrepreneurship in India. The result shows that though opportunity based entrepreneurship does not exhibit any definite trend the necessity driven entrepreneurship is on decline.

It can be inferred that the increasing inflow of foreign capital does not ensure increasing business activity, growth in entrepreneurship in India. Entrepreneurship not only depends on the flow of foreign capital it depends on several other factors as well. In case of our country, the non-availability of infrastructure, lack of transparency of processes, policies and long decision making time on the part of the government and their implementation play a major hindrance on the path of entrepreneurial growth. FDI crowds out domestic entrepreneurship and hence it is necessary for the investor to ensure minimum level of local content, export commitment and technology transfer. Economic development is an urgent need for the country. With this purpose distribution of wealth can be affected by contemplating domestic investment and by undertaking trade and transfer of knowledge, skills and technology. To sum up, a corruption free, politically and economically stable governance with a special emphasis on financial and information technology sector would create conditions for building an environment that would be beneficial for entrepreneurship development in India.

APPENDIX

Table A.1: Self Employment as a Percentage of Total Employment

Year	Self Employment(%)
2001	87.5
2002	87
2003	87.1
2004	85.4
2005	84.3
2006	84.7
2007	83.4
2008	82.3
2009	82.7
2010	81.8
2011	79.9
2012	79.9
2013	80.3
2014	80.4
2015	80.3

Source:ILO-ILOSTAT Database

Table A.2: New Businesses Registered (Number) in India, 2001-15

Year	New Businesses
2001	31,511
2002	23,062
2003	28,236
2004	37,210
2005	51,448
2006	49,721
2007	62,919
2008	70,313
2009	60,813

2010	86,645
2011	97,405
2012	1,03,078
2013	91,841
2014	69,841
2015	80,546

Source: World Bank's Entrepreneurship Survey and Database and www.mcagov.in

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