

ROLE OF FDI & ENTREPRENEURSHIP IN FOSTERING ECONOMIC GROWTH -A REVIEW OF LITERATURE

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ABSTRACT

The later part of twentieth century saw developed nations emerge into knowledge economies, hinging on technological change which serves as the main driver for growth of economies in the long run. Entrepreneurs have attained attention as the tool for imbibing these fast evolving technological changes in the form of new start-ups and deliberate on these changes in their existing business also. Economies now count knowledge as a part of the capital stock and technology is no longer an unintentional offshoot of a firm's investment action. FDI plays an eminent role in fostering growth through innovation, by serving as the source for knowledge and technological spillovers depending upon the absorptive capacity of the nation. In this paper a modest attempt has been made to explore the present literature regarding the link between FDI and entrepreneurship. This will help to present insights into how spillovers generated by FDI can aid entrepreneurs in promoting and sustaining long term economic growth. It also elaborates upon various channels through which transmission of knowledge and technological know-how takes place in an economy.

Keywords: *FDI, Entrepreneur, Technology, Economic Growth, Innovation, FDI, Absorptive Capacity, Spillovers, Entrepreneurship.*

Introduction:

Nations have evolved to become knowledge based economies. Such economies hinge on leveraging technological innovation and learning as factors of growth. The studies connecting FDI and economic betterment of host nation, precisely developing economies, establish the link through productivity generated spillovers via dissipation of innovations in indigenous firms by entrepreneurs (Carayannis et-al, 2006). Advancement in technology has revolutionised the way organisations, societies and nations at large operate. Technological advancement creates gap in ideology between developing and developed nations. The existence of "idea- gaps" is the reason for advancement of a nation over others in terms of economic strength. Gradually, the eminence of physical stock as a measure of economic growth has

been replaced by intangible assets in the form of technology and know-how. FDI acts as a key instrument in transfer of technological know-how from the developed to the developing nations. Its influx has changed the industry dynamics in host nations in unprecedented ways usually yielding positive results.

This paper makes an attempt to explore the literature regarding the link between FDI and entrepreneurship and theoretically investigate the role of both in fostering economic growth in the host economy.

Objectives:

- To study the role of FDI in economic growth by acting as the generator of knowledge and technology spillovers ,

- to analyze how entrepreneurs acting as innovators imbibe knowledge and technological improvements in the economy and
- To examine the importance of existence of absorptive capacity for FDI to generate positive effects in the host nation.

Innovation and Entrepreneur:

The drivers of growth of the twenty-first century differ markedly from those of the twentieth century, both qualitatively as well as quantitatively (ADB, 2011). According to U.S. Council on Competitiveness (1998) an economy which is able to collaborate an infrastructure of linkages among various firms and institutions is able to gain competitive advantage over other nations. Economic growth attained as an outcome of capital widening (i.e. accumulation of physical capital stock) and more importantly innovations in technological know-how (termed as capital deepening) depend on RnD. Since capital widening is found to yield diminishing returns, in the long-run it is innovation in production process which sustains economic growth. For Schumpeter (1939), a new combination of means of production accounts for technological innovation. Aghion and Howitt (1998) deliberated upon what is known as the New Growth Theory by postulating that innovation and creation are the major determinants of growth. These two factors can be achieved by knowledge and technological spillovers generated as a result of presence of foreign firms. Neuhas (2006) delineates three channels through which technology and knowledge are brought to the host country, i.e direct transmission through Greenfield investments, indirect transmission through ownership participation and second-round transmission through technology spillover. It is in the second-round transmission, ie spillovers that the entrepreneur spots opportunity to innovate. According to Neuhas (2006) FDI exerts influence on technological change, enhances the stock of capital of host country and above all breeds economic growth as a result of these three activities.

Role of Spillovers:

Agion and Howitt (1998) deliberated upon what is known as the New Growth Theory. Contrary to the earlier belief that capital formation is not the main channel for progressing growth through FDI, they postulated that innovation and creation are the major determinants of growth. These two factors can be achieved by knowledge and technological spillovers generated as a result of the presence of foreign firms. The proponents of endogenous growth model (Romer, 1986; Lucas, 1988; Rebelo, 1991) consider 'knowledge' as capital. They assumed Research and Development equivalent of a tangible commodity since it uses inputs just as production of any

commodity. Technology is viewed as an endogenous factor involved in economic growth instead of an unintentional offshoot of a firm's investment action as was perceived in earlier work. Literature has established that increase in the rate of savings (therefore investment) enhances economic growth. But, this does not render permanency to the growth figure. Permanency is achieved only when it is coupled with technological progress (Robert M. Solow, 1987). It is technological progress that causes long term economic growth of the host country (Borensztein, 1995). Blomstrom and Kokko (1996) consider a spillover when the presence of a Multi-National Firm benefits an indigenous firm. According to Gachino (2007), technological spillover induces five kinds of production related changes, viz. production changes, process changes, industrial engineering, new marketing strategies, management and organisation changes. Findlay (1978) considers knowledge diffusion as one of the major forms of technological spillover as the entrepreneur is quick to sense superiority of the new technique brought in. The transfer of knowledge in the form of organisational and managerial best practices through labour mobility channel has been endorsed by some researchers (Kaufman, 1998 ; Glass and Sagi, 2002) stating it has a positive effect on domestic firm's operations. After the technical transfer which is the prime characteristic of FDI, Borensztein (1998) saw the number of production equipment swelled which in turn encouraged further FDI penetration and economic wellbeing. For Findlay (1978) apart from considering the above stated factor as a cause of technological spillover, he also takes into account the share of FDI vis-à-vis domestic investment. According to Hymer (1976) technological spillover takes place when a considerable difference between the home and host country at technological and scientific level exists. Romer (1986), reiterating the above stated fact, states that production possibility of a firm is positively influenced by investment in knowledge by other firms, since knowledge can never be kept entirely secret even with the existence of Intellectual Property Rights in the host country. This spillover of knowledge from foreign to indigenous firms acts as a cause for enhancing efficiency and therefore increases chances of survival of latter in the market. Know-how gets transferred by training of labour force, managerial and organisational best practices which get transmitted with shifting of people from subsidiaries (of foreign firms) to an indigenous firm (Fosfuri & Ronde, 2001). Knowledge spillover can also occur without any mobilisation of workforce. In this case, as Gunther (2002) puts it, the demonstration or learning-by-watching effect occurs simply as the indigenous firm imitates the MNE. According to Schumpeter, introducing new goods, new production practices, new market penetration, new supply source (of raw

materials) or organisational restructuring any one of these five stated phenomenon can be included in the ambit of innovation: Jenkins (1990) states that since the MNF and domestic firm operate in the same market producing similar goods, it is quite natural for the latter to adopt any superior technology used by former. The demonstration effect is restrained by the presence of patents, licenses and other forms of intellectual property laws. The existence of entry spillovers varies greatly with the type of industry.

The effect of spillover generated from FDI could display varied effects for different sectors. According to Ayyagari and Kosova (2006), while the service industries benefits from large FDI spillover effects through both horizontal and vertical channels, manufacturing industries in particular do not experience any noteworthy positive spillovers from FDI, signifying a higher entry barrier effect in manufacturing sector.

Danakol (2013) used a micro-panel of more than two thousand individuals disaggregated by industry in seventy countries including both developed and developing economies, 2000-2009. The theory yields ambiguous predictions about the relationship between FDI and entrepreneurship; positive spillovers via dissemination of technology or negative because of crowding out. They conducted empirical analysis at three levels of aggregation to find the relationship between FDI and domestic entrepreneurship in aggregate and intra-industry to be negative. Javorick's (2004) study reveals that vertical spillovers, exist when contracts exist between foreign firms and their indigenous suppliers. In this case as opposed to horizontal spillover the foreign firm is much keener to share its expertise with the local supplier.

FDI and Entrepreneurship:

While innovations help nations attain sustainable economic growth, it is the entrepreneur who acts as the agency of turning innovative ideas into reality. Schumpeter (1942) pioneered the notion of the role of entrepreneurs as the instrument of growth since they create technologically advanced new enterprises. It is his work which introduced the concept of innovation in economics. It is owing to this reason that with the passage of time new theories of economic growth have evolved to change the way growth is quantified. The entrepreneurs work on the principle of creative destruction, reinventing and replacing the technological and therefore the socio-economic infrastructure (Schumpeter, 1928). Entrepreneur is thus the enabler, catalyst and accelerator of growth. Literature has found FDI has exhibited an eminent role in initiating the cycle of innovation and in therefore bringing enhancement in capital stock both in the form of capital deepening and capital widening. Though for the entrepreneurs it is capital deepening which acts as the means of exerting its role on economic growth through establishment of

technologically advanced and therefore more efficient indigenous firms.

The role played by FDI as found by researchers is not always supportive of indigenous firm establishment and consequently entrepreneurial activity. The impact of FDI on host economy has two pronged effect. It plummets the number of domestic entrepreneurs by reducing the number of individuals opting to become entrepreneurs since; the prospects of higher earnings in foreign firms distract entrepreneurs from setting up their own firms (Grossman, 1984).

While the intangible assets are the basis for long term economic growth, the entrepreneur becomes the catalyst who puts knowledge and technology to innovative uses. With technological advancements put to use, it innovates the process of production and therefore increase efficiency. Enhanced knowledge regarding management practices is implemented in the organisation yielding greater effectiveness by restructuring the enterprise. Here, it must be emphasized that FDI acts as the source for bringing knowledge and technological advancements in the host country.

With an increase in the rate of competition, entrepreneurial activity shows an upward trend too. The increase in both these factors leads to rise in innovation and technological advent (Baumol, 1990). Also, Braunstein and Epstein (2002), using a regression model for industrial output of China for 1986-1999 data, concluded that FDI crowds-out domestic investment, thus acting as a deterrent to economic growth. Aitken and Harrison (1999) explained these contradictory findings as a "market stealing" or crowding out effect. The argument put forth by them is that even though technology spillovers do happen, the efficient foreign firms may draw demand from domestic firms, forcing them to cut production inducing losses. Girma (2002) found substantial heterogeneity in the way FDI-induced externalities are distributed across domestic firms in U.K. A considerable amount of work done on the relation between FDI and entrepreneurship suggests that FDI does generate positive spillovers effects but it can happen in certain cases only.

Using data from 1994-2000, for 245 industries in the Czech Republic, Ayyagari and Kosova (2006), reveal that foreign firms have an unambiguous positive impact on entry rates of domestic firms through both intra-industry (horizontal) and inter-industry (vertical) spillovers. They by comparing the magnitudes of these entry spillovers, assert that inter-industry spillovers dominate intra-industry spillovers and that FDI spillovers through forward linkages (that is contacts between foreign suppliers and downstream domestic firms) are more important for new firm creation than backward linkages (that is contacts between domestic suppliers and downstream foreign firms). Their study also brought to light the notion that these effects substantially vary across different types of industries. In particular, in competitive industries, domestic

entrepreneurs benefit only from inter-industry spillover effects, while in uncompetitive industries, positive intra-industry spillovers dominate. The opponents to the idea of positive effects of FDI assert that FDI may bring about crowding out effect on domestic investment (Bhattacharya, 2008), cause external vulnerability and dependence, lead to destructive competition of foreign affiliates with domestic firms and give rise to “market-stealing effect” as a result of poor absorptive capacity. In this case it causes lowering of production stock and loss of employment.

Role of Absorptive Capacity:

For the positive effects of FDI generated spillovers to imbibe and permanently penetrate the host economy, a multitude of factors must be present in place. It is only after the existence of these elements that the host nation can take advantage of foreign investment generated effects. Wong and Blomstrom (1992) showed that the level of operational risk in the form of political instability and poor macroeconomic environment determine the degree to which technological transfer takes place in the host nation. Bengoa and Robles (2003) confirmed a positive connection for countries from Latin America postulating that the beneficiary country must have adequate human capital, exhibit economic stability and must be following market liberalization policy to benefit from long term capital flows. This view is reiterated by Borensztein et al (1998). Borensztein et al studied about 60 LDCs for about two decades. Using Sensitivity Analysis along the lines of Levine and Renelt (1992) for 69 developing countries over two decades their study concluded that the magnitude of the effect of FDI depends on the stock of human capital available in the host country. FDI improves productivity by a greater percentage than domestic investment if the host country has a minimum threshold stock of human capital. Reiterating this conclusion, Li and Liu's (2005) study of 84 countries from 1970 to 1999 states that for FDI led positive effects to be generated, right mix of human capital must be present. In economies where the workforce is less educated, FDI exhibits a negative impact. Nowbusting (2009) talk about thrust being put by public policy makers on increasing absorptive capacity by using absorption capacity index.

Factors at the micro-level in the home country responsible for a firm's decision to invest in foreign land have been analysed by certain researchers. Froot and Stein (1991) consider exchange rate as one of the factors which determine a firm's decision to invest abroad. According to them, in imperfect market condition, as the value of currency (of home country) appreciates, the internal cost of capital lowers in comparison to borrowing from external sources. Further exploring the reason for a firm's decision to

opt for FDI, Buckley and Casson (1981) lay out that though exports involve higher variable costs (associated with transportation, etc), fixed costs are much lower. Once the market is serviced with the product for a certain span of time, which ensures a market (for sale of product) large enough to balance the fixed cost, setting up of production in that country gradually becomes the obvious choice.

Conclusion:

The diversity of results attained through expansive literature suggests that FDI could work either ways. It can act as an impetus or a deterrent for entrepreneurs. The reason behind FDI working in any one of these two directions depends on a host of factors. FDI forms the basis of introduction of innovative practices in the host economy, but again it is presence of FDI which leads to hostile competition and therefore closure of indigenous firms. The direction of effect is the one which dominates that particular host nation and directs the results generated by FDI induction. If local enterprises fail to adopt practices in line with those of the foreign establishments, it can lead to their exit.

There are policy implications associated with role of FDI in the host economy. The developing economies need to gauge the degree to which they open up their economy to foreign inflows since too many incentives towards foreign funding can act as a barrier to domestic entrepreneurial activity. Also, while laws are formulated to safeguard intellectual property of foreign firms, its effect of domestic firms must not be overlooked. When a foreign firm enters a host nation, it is usually done after ensuring intellectual property rights exist in place and so too stringently (Smarzynska, 1999; Blonigen, 2002). A firm needs to be assured that its superior technology is well guarded in the host country. Any deviation from this will deter the firms from setting foot in foreign land (Zenasi and Benhabib, 2010). These entry barriers placed on local entrepreneurs can push the economy in the reverse direction.

Although, a considerable amount of analysis, whether literary or empirical supports the notion of FDI fostering entrepreneurship and therefore economic growth, the diversity of results attained still makes liberal induction of FDI into the host nation questionable. From the review we can draw the gist that evidence on effects of FDI on economic growth and entrepreneurial activity is far from conclusive. The economists because of ambiguity associated with role of FDI cautiously ease the routes to foreign fund inflow.

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