

**PROSPECTS AND CHALLENGES OF FOREIGN DIRECT INVESTMENT AND  
TECHNOLOGY TRANSFER ON INTERNATIONALISATION IN DEVELOPING  
COUNTRIES //**

**BY**

**ANGELA MWENDE MUSUVA**

**D80/8300/03**

**An Independent Conceptual Paper Submitted in Partial Fulfilment of the Requirements of  
the Degree of Doctor of Philosophy in Global Business Management, Department of  
Business Administration, School of Business, University of Nairobi.**

**June 2009**



## TABLES OF CONTENTS

DECLARATION.....	ii
1 INTERNATIONALISATION.....	6
2 TECHNOLOGY TRANSFER.....	12
2.1 Theoretical Approaches to Technology Transfer.....	13
2.2 Factors Expected to Influence the Amount of Technology Transfer.....	15
2.3 Internationalisation and Technology Transfer in Developing Countries.....	16
2.4 Benefits of Technology Transfer.....	17
2.5 Challenges Experienced during Technology Transfer.....	18
3 FOREIGN DIRECT INVESTMENT.....	21
3.1 Foreign Direct Investment and Internationalisation.....	22
3.2 Prospects of Foreign Direct Investment.....	23
3.3 Challenges of Foreign Direct Investment.....	25
4 CONCLUSIONS.....	26
REFERENCES	

## INTRODUCTION

Globalisation has introduced new opportunities to developing countries such as increased technological transfer, increased foreign direct investment, growth in markets for goods and services. The growth of international business has impacted economic conditions to the extent that domestic policies and markets are now geared towards global goals and initiatives. The context in which a firm operates has changed considerably and their survival is dependent on how they respond in an ever changing, competitive and global environment. (Axin & Matthyssens 2002). The globalisation of markets has changed the world economy (Levitt 1984; Bartlett & Ghoshal 1989).

Foreign direct investment (FDI) plays an extraordinary and growing role in global business. The most profound effect has been seen in developing countries, where annual foreign direct investment flows have increased from an average of less than \$10 billion in the 1970's to a yearly average of less than \$20 billion in the 1980's, to explode in the 1990s from \$26.7 billion in 1990 to \$179 billion in 1998 and \$208 billion in 1999 and now comprise a large portion of global FDI. Driven by mergers and acquisitions and internationalization of production in a range of industries, FDI into developed countries in 1999 rose to \$636 billion, from \$481 billion in 1998 (Source: UNCTAD). Global FDI peaked in 2007 at a record US\$1.9 trillion. It fell by roughly 15% in 2008, but most of the brunt was borne by advanced economies. Developing countries overall still experienced a slight increase in 2008. Many governments, especially in industrialized and developed nations, pay very close attention to foreign direct investment because the investment flows into and out of their economies can and does have a significant impact. Direct foreign investment allows companies to accomplish several tasks: these include avoiding foreign government pressure for local production; circumventing trade barriers hidden

and otherwise; making the move from domestic export sales to a locally based national office; capability to increase total production capacity and take advantage of opportunities for co production; joint ventures with local partners; joint marketing arrangements and licensing. Firms utilize a number of avenues in which to accomplish effective technology transfer. These include but are not limited to licensing and technology transfer, reciprocal distribution agreements, joint ventures and other hybrid strategic alliances and portfolio investments of significant proportions.

This paper seeks to review the theoretical framework of internationalization and the prospects and challenges of foreign direct investment and technology transfer as a means of assisting organizations going global.

## INTERNATIONALISATION

### 2.1 Introduction

Internationalization has been defined in varying terms in literature. One approach states that Internationalization is considered to be the process through which a firm moves from operating solely in its domestic marketplace to international markets (Andersen, 1993; Buckley and Casson, 1998; O'Farrell *et al.*, 1998). Another definition is the process of increasing involvement in international operations (Welch and Loustrarinen 1988) or the process of adapting firm resources to international environments (Calof and Beamish 1995 pg116). International services differ from domestic services in that they cross borders and embrace a foreign culture (e.g. Clark and Rajaratnam, 1999). Unlike international products which can enter foreign markets using a variety of modes including exporting, franchising, joint ventures, and build/buy, for services the crossing of borders is both diverse and difficult because of their inherent characteristics, for example inseparability and intangibility.

The internationalization process of firms has been subject to widespread research attention and empirical investigation and is founded on an evolutionary and sequential build-up of foreign commitments (Anderson, 1993). Welch and Luostarinen (1988) have comprehensively reviewed this literature and concluded that "...there is a wide range of potential paths any firm might take in internationalization" (p. 43). Arrays of approaches and perspectives have contributed to the contemporary understanding of firm internationalization. Much of the extant literature on internationalization has been inspired by the work of researchers who are collectively referred to as the Uppsala School (e.g. Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). This literature generally suggests that the process of internationalization is founded on an evolutionary and sequential build-up of foreign commitments over time.

An extensive volume of research has examined the way in which firms progress along the internationalization continuum and suggests that a sequence of discrete stages exists which proxy the “stop and go” (Dalli, 1994, p. 92), stepwise process exemplifying the evolution of international involvement. Implicit between each set of stages is the notion that fairly stable periods exist in which firms consolidate and generate an appropriate resource base to respond to fortuitous environmental conditions which allow them to proceed to the next internationalization stage.

Cavusgil (1980) proposed taxonomy with five stages which were described as firms’ activities in: domestic marketing; pre-export involvement; active export involvement; and committed export involvement. This export development process was founded on management’s successive decisions regarding exporting over a period of time. Reid (1981) purported an explicit innovation adoption sequence of exporting. He conceived the innovation to follow the stages of a firm’s: export awareness; export intention; export trial; export evaluation; and export acceptance. In this context, export adoption was believed to require a favourable management attitude to exporting, an available foreign market opportunity and the presence of spare resource capacity within the firm. Wortzel and Wortzel (1981) were able to identify five stages of international market entry and expansion. Each of these stages was distinguished by the extent of control exercised by the exporter concerning its activities in overseas markets. That is, each successive stage was signified by a greater internalization of marketing, production and administrative functions previously performed by foreign market-based intermediaries.

Czinkota (1982) attempted to segment firms on the basis of an internationalization described as experienced large exporters. An empirical investigation revealed that firms, at various stages, significantly differed in terms of their organizational and managerial characteristics. Lim *et al*

(1991) expanded on the work of Reid (1981) and identified four levels of export innovation, these being: export awareness; export interest; export intention and export adoption. Strong evidence of support for this framework was found which suggested that innovation adoption does have considerable applicability in the context of export decision making. Rao and Naidu (1992) analysed groups of firms according to an a priori assignment of firms classed as: non-exporters; export intenders; sporadic exporters; and regular exporters. This taxonomy was empirically tested and validated on the basis that each stage captured the distinct attributes of firms' internationalization activities. All of these taxonomies possess a common theme in which they attempt to introduce a classification of export behaviours which generate heterogeneous profiles of firms that reflect different degrees of development.

The Eclectic Paradigm by Dunning (1979, 1980) also known as OLI Paradigm is grounded on international trade theory. It provides the theoretical framework that explains the different forms of international production and economic activity. . It also seeks to explain the selection of a country for foreign direct investment. The internationalisation process is determined by the realization of advantages of ownership, internationalization and location. The ownership advantage relates to a specific organisation and is related to the level of intangible assets, technological capabilities and product innovations. The internationalisation advantage stems from a firms ability to create value through management and coordination of internal activities through foreign direct investment. Location advantages relate to the production and institutional factors that are resident in a particular geographical location.

Porter (1998) studied the where and why nations internationalise and how this will impact on the internationalisation of firms within a particular nation. Porter (1998) highlighted that the ability of a company to be capable of constant innovation and competitive advantage in international



business lies in four broad attributes of a nation or as he called the model “Diamond of National Advantage”, which the environment each nation establishes and operates for its industries. They are factor conditions; demand conditions; related and supporting industries and firm strategy. Factor Conditions comprise of the nation’s position in factors of production. Porter (1998) argues that contrary to classical economic theory that states that a nation exports those goods that make most use of the factors with which it is relatively well endowed, (Adam Smith,1716 ), or that nations could benefit from free trade even if they are less efficient at producing all kinds of goods than their trading partners (David Ricardo, 1817), It is not only in having particular factors of production that can encourage innovation and competitive advantage but rather the lack there of. Disadvantage in the more basic factors can lead companies to innovate and upgrade if they can send them signals of future advances before foreign competitors and if other attributes of the diamond are favourable. Demand Conditions; The nature of the home market demand for the industry’s product or service does not diminish in importance in the global market arena. He argues that in practice, the composition and character of the home market usually has a disproportionate effect on how companies perceive, interpret and respond to buyer needs. Nations gain competitive advantage in industries that consider the following characteristics related to home demand. Related and Supporting industries: This relates to the presence in the nation of related and supporting industries that are internationally competitive. Internationally competitive home based suppliers create advantages in downstream industries in the following ways: They deliver the most cost effective inputs in an efficient, early rapid and preferential manner and tend to provide an innovation and upgrading through close working relationship, constant flow of information and exchange of ideas. Firm Strategy, Structure and Rivalry: Porter (1998) argues that the national circumstances and context create strong tendencies in how

companies are created, organised and managed as well as what the nature of domestic rivalry will be in the market place.

## **2.2 Theoretical Background on Internationalisation**

Several theories are used to describe or explain internationalisation. There exist three main theories depicting the internationalisation process in the context of emerging economies, and one theory on partnering. The first is stage theory, which focuses on the process of internationalization. Stage theory argues that initial internationalization activities take place in markets with small psychic distances to the home country, and that the less committed modes of entry tend to be used, (Johanson & Vahlne, 1977). This leads to an increase in commitments to the foreign market and the targeting of more distant markets (Johanson & Vahlne, 1977). This theory received much criticism from the scholarly world. It is pointed out that the theory is inappropriate for accelerated internationalization (Kundu & Katz, 2003; Crick and Spence, 2005; Ruzzier et al., 2006; Autio et al., 2000 and Rialp et al., 2005), which follow a different path than the gradual evolvement from domestic firm to Multinational enterprise (MNE) (Oviatt & McDougall, 1994 & 2005).

The second theory used in transition economy context is transaction cost economics. Tradeoffs between costs and benefits are optimized to decide whether to cooperate or to internationalise. This approach is founded on the concept of bounded rationality and the risk of opportunism. Bounded rationality makes it impossible to fully understand all consequences of making a decision, and this influences the transfer of knowledge across organizational boundaries. The concept of opportunism implies that there is a risk in transferring knowledge, as others might behave in their own interests, using collaborative contracts for other purposes than those originally intended (Shrader, 2001).

The third theory utilized for internationalization of emerging markets is the resource-based view. This theory argues that sustained competitive advantage can be achieved through valuable, rare, inimitable and non-substitutable resources (Barney, 1991). To realize full competitive potential of these resources, the firm must be appropriately organized (Barney, 2001). In international operations, a firm should choose a structure that is consistent with the “firm’s emphasis on being responsive to local markets, on exploiting international integration opportunities, or both” (Barney, 2001). Empirical analysis shows that the degree of technological internationalisation is higher for small countries and for countries with low technological intensity. Finally, two countries are more likely to collaborate if they are geographically close to each other, if they have a similar technological specialisation and if they share a common language. Being member of the common market involves more cross-border ownership but does not entail more research co-operation than it is implied by the above factors. Countries within close proximity to each other, advanced technologically have a particularly high propensity to collaborate together.

## TECHNOLOGY TRANSFER

Technology refers to new and better ways of achieving economic ends that contribute to economic development (Stewart and Nihei, 1987, p.1). Most contemporary discussions of technology transfer assumes that technology and its advancement contribute to change and that this change fuels economic growth through productivity increases (Gee, 1981). Recent studies on technology diffusion and adoption have provided the theoretical basis for a viable behavioural framework of international technology adoption by integrating concepts and findings from the studies on innovation diffusion and international technology transfer. (Phillips, Calatone, Lee 1994). Literature generally refers to at least three types of technology: product, process and knowledge. Product technology is the knowledge used to produce any product – the information that specifies the products characteristic and its uses. Process technology is the knowledge used in production to organise the inputs and operate machinery; it relates to the process by which a given product or service is produced. Management technology is the knowledge used in operating a business - the managerial skills that enable a firm to compete by using its resources effectively. Each type of technology can create competitive advantage for the firm that, possess it. If all firms possess it, then advantage accrues to the firm that is able to obtain and deploy superior technology.

International technology transfers is the diffusion of technology from the place of it's origin to other markets around the world. This may take place through market transactions, with one firm selling a product, process or skill to another or it may be transferred within a firm through strategic alliances, a alliances between firms which agree to mutually use that technology as in a joint venture or a cross licensing agreement. Technology transfer may be categorised in two

forms: Vertical technology transfer and Horizontal technology transfer. Vertical technology transfer involves the process of moving technology from basic to applied research to developmental research. Horizontal technology transfer refers to the use of a technology in one place to its applications in another place.

## **2.1 Theoretical Approaches to Technology Transfer**

International inter-firm transfer of technology (IITT) has been approached from different theoretical angles. (Farhang, 1996). They include through technology supplying firm decisions; transfer from technology supplier to technology recipient and transfer in development stages.

Technology Transfer as technology-supplying firm's decision: The main line of research on international transfer of commercial technology has been closely identified with the theoretical body on internationalization of the firm and international production by the multinational enterprise (Farhang, 1996). It consists of a body of theory on the Multinational enterprise of monopolistic competition, internalization, location, and transaction costs. (Buckley and Casson, 1976; Casson, 1987; Caves, 1971; 1982; Hennart, 1982; Hymer, 1976; Kindleberger, 1969; Rugman, 1982). Dunning (1981; 1988) also explains international technology transfer within the context of the motives and the modes for firm's foreign operations. It should be noted that most of the above research is static in nature. Other research highlighted by Farhang (1996), namely the behavioural approach to internationalization, explains the motives for a firm's market-entry mode selection and its pattern of international movement, particularly for the inexperienced firms, through interplay between knowledge and commitment (Johansson and Wiedersheim-Paul, 1975; Johansson and Vahlne, 1977; 1990). This latter model, which does not address technology transfer directly, is dynamic in nature and is somewhat applicable to illustrating how multinationals make decisions. All the research illustrate that the process of technology transfer

is initiated by decisions of the technology-supplying firm, i.e. they are based on the exploitation of the firm's technological assets in new markets. However it should be noted that such a viewpoint overlooks the fact that for transfer to take place there needs also be a technology-recipient (TR) which is an organization; the nature of whose decisions also determine the outcome and the effectiveness of the transfer. This approach only however provides partial explanations.

Technology Transfer as Technology Supply (TS) to Technology Recipient (TR) interaction: This approach employs the tools of the buyer-seller relationship in the interaction approach to industrial marketing. According to the interaction approach (Ford, 1990; Håkansson, 1982; Hallén et al., 1987; Turnbull and Valla, 1986) the reality of industrial marketing, including marketing of technology, is one of exchange processes and adaptive behaviour of both parties taking place through organizational interaction over time (i.e. short-term exchanges and long-term bonds).

Technology Transfer as development stages: The process of inter-firm transfer of technology can be described not only by way of decisions and interactions, but also in terms of stages through which transfer takes place (Farhang 1996) For example, the decision to transfer technology is usually preceded by a period of information collection and evaluation. Once the decision to go ahead with the transfer is made, it is followed by a set of well-defined activities that occur sequentially, although there will generally be some overlap. As the process of technology transfer unfolds, Technology supply and technology recipient move from problem to problem carrying out the short-term exchanges and developing the long-term bonds and changing the level of resource commitment. Each stage embraces some of the decisions and interactions discussed above. The basic mechanics of technology transfer process, moving through different

stages, are sufficiently consistent under a variety of circumstances to make a general description possible for researchers. Based on previous research a four-stage approach could be identified, namely, pre-negotiation stage; negotiation stage; technology transfer and start-up stage; and long-term development stage (Behrman and Wallander, 1976; Ford, 1980; Teece, 1976; Thunman, 1987).

## **2.2 Factors Expected to Influence the Amount of Technology Transfer**

Existing literature has highlighted the factors that influence the amount of technology transfer to be implemented. These factors include but are not limited the following: ownership, experience, internationality, joint provision of technology and country size. As regards ownership, Behrman and Wallander (1976) argued that greater ownership of the affiliate and thus greater ability to control it is expected to result in greater technology transfer. The length of experience is considered a factor in terms of the longer the affiliate has been in place, the lesser/greater the amount of technology transfer expected and the greater the experience between affiliates would lead to a greater level of cooperation between affiliates and thus greater transfer of technology. As relates to Internationality, the more global a firm the more likely that it has faced opportunities to transfer technology (Telesio 1979). As relates to joint as a factor, Kogut and Zander (1990) argued that the more firm specific and jointly provided the technology is an industry, the easier for the firm to protect that technology and thus the greater amount of technology transfer expected. Another factor, Country, is expected considered to influence the level of technology transfer in that larger countries would encourage technology transfer because of desirable markets. Stobaugh (1988) measured largeness of a country in terms of Gross Domestic Product (GDP) of the host country and as a result it was expected that a larger country is expected to be associated with greater technology transfer.

### **2.3 Internationalisation and Technology Transfer in Developing Countries**

The concept of the global village has led to organisations doing business all around the world. Rapid changes in technology of communication, transportation and production were key drivers in development of international business around the world. Vernon (1997) argues that in spite of the various differences in national origin; management style and strategy of the firms, the behaviour, motivations and responses were similar with most factors being exogenous in nature. The key factors that Vernon (1997) highlighted as factors affecting multinational enterprise behaviour irrespective of national origin were the rate of change of technology, threat of competition, demand for products in the various markets, need to grow market share, actions of other firms in same industry and the nature of players in the industry and the need to acquire new technological skills.

The interface between the firm and its country environment continues to be a complex and changing one. With the increase in capital flows over the past decades, capital controls have been eased in many cases, but not eliminated. Other international business risks remain, generated by economic and political forces outside the firm's control. To be able to be successful in international business, proactive international firms maintain an up to date profile of the business environment of the countries in which they maintain operations or have plans for future investment. The level of Multinational activity in emerging market economies has had varying impact on the host country. The growth of globalised manufacturing has been especially rapid over recent years and international technology transfer, coupled with cross border manufacturing, is now seen as an effective means of accessing foreign markets and resources. This is especially the case with transfers between developed and developing countries (Kaplinsky, 1990; Roessner and Porter, 1990).



The effective transfer of technology often requires an adequate infrastructure, which may include scientific institutions, Research and development (R&D) facilities, vocational, technical and management training institutes, and skilled personnel of different specializations within the recipient country. It also requires a suitable cultural environment (Behrman and Wallander, 1976; Marton, 1986).

Technology transfer has three distinctive stages. The process is set in motion by invention, followed by innovation that ultimately leads to diffusion (Kennedy and Thirlwall 1972). Literature is yet to explain how these stages are linked to the internationalisation process of a firm. The channels and approaches available for technology transfer include but are not limited to Hardware/machinery; Software; People transfer; People training; Documentation; Communication and Agreements/permission. Firms in developing countries have used avenues such as foreign direct investment; licensing; technical assistance contract; training contract; turnkey contract; representation contract; exporting; franchising; management contract; research & development contract; co- production agreement; subcontracting.

#### **2.4 Benefits of Technology Transfer**

Technology transfer is an important aspect of the internationalization of firms. Prior to looking at the prospects available to developing country firms for technology transfer is it best to outline its benefits. Technology transfer strengthens domestic industry by identifying new business opportunities and this contributes to enhancing the know-how and competitiveness of firms, as they broaden their business area and re-focus to serve several different markets globally.

Technology transfer is deemed to ease the burden imposed on public resources through research and development by adapting technologies, systems and know-how developed in the different

sectors and industries. Another benefit of technology transfer is its ability to maximise the return on investment and minimise the duplication of research within similar sectors and industries. It also provides cross-disciplinary opportunities for researchers to collaborate with other organizations. Technology transfer provides economic potential and motivation for both technology suppliers and technology receivers where the social impact is high and the potential market is large. In addition, technology transfer brings economic benefits by increasing revenues for both technology suppliers and receivers.

## **2.5 Challenges Experienced during Technology Transfer**

Most challenges experienced by organisations in developing countries relate to institutional, legal and transfer mechanism issues. Before an organization decides on technology transfer, the first step for the organization is to evaluate whether, when, where and how to operate overseas. The second challenge is the development of longer-term planning processes and business systems to cope with the consequences of the decision to internationalize. Finally, regulatory issues and the need to secure payment and manage overseas intermediaries must be dealt with by the internationalising firms.

### **2.5.1 Lack of Institutional Framework for Technology Transfer**

Although most developing countries have set up institutions mandated with the aim of overseeing research and development within the national borders and enhancing international trade and exchange, most of them are involved basically in skill development training for firms at the micro enterprise level. Most developing countries have limited human resource and physical infrastructure that supports the internationalization of firms.

### **2.5.2 Limited Technological Infrastructure**

Most of the technology developed in industrialized countries is created in a higher level of technological development with varying economies of scale and different technological requirements as compared to that of developing country firms. This necessitates that most technology recipients in developing countries adapt the technology to avoid negative impacts on culture, employment patterns and the social economic environment which may lead to a dependence on imported raw materials and human resource to enable the technology to be applied successfully. Technology development and transfer mechanisms are needed for continuous innovation at the firm level as the organization goes through the internationalization process. This will support the success of how a firm internationalizes. It is also necessary for the recipient country to create a favourable climate to facilitate an effective incorporation of the imported technology into the socio-economic environment of the country.

### **2.5.3 Lack of a Technology Assessment Mechanism**

More often than not, the issue of acquiring technology is not the problem. The key challenges surround the socio economic framework within which most organisations within developing countries operate. Most technology recipients may lack knowledge and information on the level and characteristics of technology available. They may also not be able to pay for technology assessment as most of the resources within the organisations have been committed to ensuring the internationalisation process succeeds.

#### **2.5.4 Financial Constraints**

Technology transfer and development is an area where a lot of investment is needed because it requires adequate infrastructure and a long duration to develop and test the technology. Most firms in developing countries opt for mechanisms and approaches for adoption of technology which are financially sustainable but which may not be the most beneficial in the long run. This may impact on the level of technology transfer that is implemented within particular phases.

## FOREIGN DIRECT INVESTMENT

Foreign direct investment (FDI) plays an extraordinary and growing role in global business. It can provide a firm with new markets and marketing channels, cheaper production facilities, access to new technology, products, skills and financing. For a host country or the foreign firm which receives the investment, it can provide a source of new technologies, capital, processes, products, organizational technologies and management skills, and as such can provide a strong impetus to economic development. Foreign direct investment, in its classic definition, is defined as a company from one country making a physical investment into building a factory in another country. The direct investment in buildings, machinery and equipment is in contrast with making a portfolio investment, which is considered an indirect investment. In recent years, given rapid growth and change in global investment patterns, the definition has been broadened to include the acquisition of a lasting management interest in a company or enterprise outside the investing firm's home country (Eglin, 2001; Mallampally & Sauvant, 1999)

The most profound effect has been seen in developing countries, where annual foreign direct investment flows have increased from an average of less than \$10 billion in the 1970's to a yearly average of less than \$20 billion in the 1980's, to explode in the 1990s from \$26.7 billion in 1990 to \$179 billion in 1998 and \$208 billion in 1999 and now comprise a large portion of global foreign direct investment. Driven by mergers and acquisitions and internationalization of production in a range of industries, foreign direct investment into developed countries rose to \$481 billion in 1998 (Source: UNCTAD, 2000). Proponents of foreign investment point out that the exchange of investment flows benefits both the home country (the country from which the investment originates) and the host country (the destination of the investment). Opponents of

FDI note that multinational conglomerates are able to wield great power over smaller and weaker economies and can drive out much local competition.

### **3.1 Foreign Direct Investment and Internationalisation**

Foreign Direct investment (FDI) is an important component of capital flows in financial globalization. Though the vast literature lacks consensus on the benefits of financial globalization, foreign direct investment is believed to be one of the most important channels through which globalization benefits the economy (Prasad and others, 2003). Various studies find evidence in support of the benefits of a positive effect on growth via technology spillovers. Foreign direct investment is also the least volatile form of capital flows, making countries less vulnerable to sudden stops or reversals of flows (Kose, 2006). Against this background, many countries consider attracting FDI as an important element for economic development. The theory of internationalization of firms views exporting and overseas production by either foreign direct investment or arm's length licensing as alternative means of doing business abroad for a firm. Two decisions, therefore, confront firms seeking to serve foreign markets: first, whether it is more profitable to produce in the home country and export or to produce in the targeted markets; and second, if overseas production is chosen, how to transfer technology to its overseas affiliate. Empirical evidence, however, suggests that exports and foreign direct investment could be complementary (Lipsey and Weiss, 1984). Using elaborate product level data, Blonigen (1999) found that exports of intermediate goods by the parent company and sales of final goods by affiliates are complements whereas exports of final goods by the parent firm and affiliate sales of the same goods are substitutes. Initial exports may yield learning and information and help the firm to decide over FDI. Horstmann and Markusen (1996) and Nicholas et al. (1994) find that

foreign firms first license local agents or export to a country as a way of information acquisition before investing locally to avoid agency fees.

## **3.2 Prospects of Foreign Direct Investment**

### **3.2.1 Technology Transfer and Licensing**

Transferring more advanced technology and organizational forms directly to Multinational Corporations affiliates in the host country and therefore triggering technological and other spillovers to domestically owned enterprises promotes internationalisation (Blomström et al., 2000). Licensing and technology transfer have been essential in promoting collaboration between the academic and business communities. Ever since legal hurdles were removed that allowed universities to hold title to research and development done in their labs, licensing agreements have helped turned raw technology into finished products that are viable in competitive marketplaces. With some help from a variety of government agencies in the form of grants for research and development as well as other financial assistance for such things as incubator programs, once timid college researchers are now stepping out and becoming cutting edge entrepreneurs. These strategic alliances have had a serious impact in several high tech industries, including but not limited to: medical, agricultural, biotechnology, computer software engineering, telecommunications, advanced materials processing, ceramics, thin materials processing, photonics, digital multimedia production and publishing, optics and imaging and robotics and automation. Industry clusters are now growing up around the university labs where their derivative technologies were first discovered and nurtured (OECD, 2002))

### **3.2.2 Human Capital Formation**

The countries that get foreign direct investment from another country can also develop the human capital resources by getting their employees to receive training on the operations of a particular business. The profits that are generated by the foreign direct investments that are made in that country can be used for the purpose of making contributions to the revenues of corporate taxes of the recipient country (Oman, 2000). Foreign direct investment helps in the creation of new jobs in a particular country. It also helps in increasing the salaries of the workers. This enables them to get access to a better lifestyle and more facilities in life. It has normally been observed that foreign direct investment allows for the development of the manufacturing sector of the recipient country (Oman, 2000).

### **3.2.3 Contribution to the Gross Domestic Product of a country**

Foreign direct investment assists in increasing the income that is generated through revenues realized through taxation. It also plays a crucial role in the context of rise in the productivity of the host countries. In countries that make foreign direct investment in other countries, this process has positive impact as well. In case of these countries, their companies get an opportunity to explore newer markets and thereby generate more income and profits. It also opens up the export window that allows these countries the opportunity to cash in on their superior technological resources. It has also been observed that as a result of receiving foreign direct investment from other countries, it has been possible for the recipient countries to keep their rates of interest at a lower level (OECD, 2002; Blomström et al., 2000)



### **3.3 Challenges of Foreign Direct Investment**

Foreign direct investment is associated with potential shortcomings. These include importation of capital intensive and outdated technology, exploitation of local labour, increase in local wage cost through payment of high wages by Multinational Corporation affiliates and contribution to economic leakage and deterioration of balance of payments through preference of imported inputs to local ones. Other challenges include a lack of linkages with local communities through the development of 'enclaves' which have an adverse effect on competition in the national market, use of transfer prices to escape local taxes and to cheat local partners on returns which may encourage corruption. In some cases, there is pollution of the environment, especially in extractive and heavy industries, social disruptions associated with accelerated commercialization and creation of tastes for expensive foreign consumer goods. Political dependency on Foreign direct investment source countries and, therefore, loss of sovereignty (Wells Jr., 1993; OECD, 2002)

## CONCLUSIONS

Organisations in developing countries are experiencing the push and pull factors to internationalise. The key challenges they experience sometime influence the rates and success of the internationalisation process. For organisations that undertake limited international activity, existing structures, cultures and management approaches can often be maintained. However, where global business becomes more significant, managers need to develop cultural appreciation and empathy to underpin their expertise and consolidate their market position. Sustained global development may require a significant reorientation of the business, backed up by management and organizational learning, to develop a new international mindset that supports global relationships. International technology transfer is important for economic development and the acquisition of technology and its diffusion fosters productivity growth. Most developing countries must rely largely on imported technologies as sources of new productive knowledge (Hoekmann, Maskus and Maggi 2004). Developing countries have long sought to use both national policies and international agreements to stimulate technology transfer and should continue so as to encourage development and competitiveness of its firms' goods and services within international markets.

Depending on the industry sector and type of business, a foreign direct investment may be an attractive and viable option. With rapid globalization of many industries and vertical integration rapidly taking place on a global level, at a minimum a firm needs to keep abreast of global trends in their industry. From a competitive standpoint, it is important to be aware of whether a company's competitors are expanding into a foreign market and how they are doing that. At the same time, it also becomes important to monitor how globalization is affecting domestic clients.

Often, it becomes imperative to follow the expansion of key clients overseas if an active business relationship is to be maintained.

Developing countries face a number of challenges that hinder further increase in foreign direct investment flows and technology transfer as mode of internationalisation. While the size and significance of these challenges may differ from one country to another, they all suffer from other issues such as high inflation rates, weak enforcement of legislation, high levels of bureaucracy and corruption, a dominant Government sector and slow implementation of privatization programmes. Whatever mode of internationalisation a firm take the cost benefit of the decision implemented needs to be considered.

## REFERENCES

- Anderson, E. and Coughlan, A. (1987). International market entry and expansion via independent or integrated channels of distribution *Journal of Marketing*, Vol. 51, January, pp. 71-82.
- Anderson, E. and Gatignon, H. (1986). Modes of foreign entry: a transaction costs analysis and proposition, *Journal of International Business Studies*, Fall, pp. 1-26.
- Andersen, O. (1993). On the Internationalisation Process of Firms: a Critical Analysis, *Journal of International Business Studies*, Vol. 24 pp.209 - 231.
- Autio, E., Sapienza, H.J., and Almeida, J.G. (2000). Effects of knowledge at entry, knowledge intensity, and imitability on international growth. *The Academy of Management Journal*, 43 (5), 909-924.
- Axinn, C. N. Matthyssens, P. (2002). Limits of internationalization theories in an unlimited world, *Journal of International Marketing Review*, Vol 19 (5), pp. 436 – 449.
- Barney, J. (1991), Firm resources and sustained competitive advantage, *Journal of Management*, Vol. 17 No.1, pp.99-120.
- Bartlett, C.A. and Ghoshal, S. (1989). *Managing Across Borders: the Transnational Solution*, Harvard Business School Press, Boston, MA.
- Bartlett, C.A. and Ghoshal, S. (1987a). *Managing across borders: new strategic requirements*, Sloan Management Review, Vol. 28 No. 4, pp. 7-17.
- Bartlett, C.A. and Ghoshal, S. (1987b). *Managing across borders: new organizational responses*, Sloan Management Review, Vol. 29 No. 1, pp. 43-53.
- Behrman, J.N. and Wallander, H.W. (1976). *Transfers of Manufacturing Technology within Multinational Enterprises*, Ballinger, Cambridge, MA.
- Blomström, m., a. kokko and m. zejan (1994). *Host country competition and technology Transfer by Multinationals*, Weltwirtschaftliches Archiv, Band 130, 521-533.
- Blomström, m., a. Kokko and M. Zejan (2000). *Foreign direct investmet. Firm and host country strategies*, london: macmillan.
- Buckley, P.J. and Casson, M. (1976). *The Future of the Multinational Enterprise*, Macmillan, London and Holmes-Meier, New York, NY.
- Buckley, P.J. and Casson, M. (1998). Analyzing Foreign Market Entry Strategies: Extending the Internalization Approach, *Journal of International Business Studies*, Vol. 29 pp.539 – 562.

- Calof, J., Beamish, P.W. (1995). *Adapting to foreign markets: explaining internationalisation*, *International Business Review*, Vol. 4 No.2, pp.115-31.
- Casson, M. (1979). *Alternatives to the Multinational Enterprise*, Macmillan, London.
- Casson, M.C. (1987), *The Firm and The Market*, MIT Press, Cambridge, MA. Caves, R.E. (1971). *International corporations: the international economics of foreign investment*, *Economica*, Vol. 38 No. 149, February, pp. 12-17.
- Caves, R.E. (1982). *Multinational Enterprise and Economic Analysis*, Cambridge University Press, Cambridge.
- Clarke, W.M. (2000). The use of foreign languages by Irish exporters. *European Journal of Marketing*, 34(1/2), 80-90.
- Contractor, F.J. (1985). A generalized theorem for joint venture licensing negotiations, *Journal of International Business Studies*, Summer, pp. 23-47.
- David Bennett and Hongyu Zhao (2004). International technology transfer: perceptions and reality, *Journal of Manufacturing Technology Management* Volume 15 · Number 5 410–415.
- Dunning, J.H. (1980). Toward an eclectic theory of international production: some empirical tests, *Journal of International Business Studies*, Vol. 11, pp. 9-31.
- Dunning, J.H. (1981). *International Production and the Multinational Enterprise*, London: Allen & Unwin.
- Economist (1995). A survey of China, Special Supplement, Vol. 334 No. 7906, 18 March.
- Eglin, R. (2001). *Trade and Investment in the WTO*, Background Note for the Panel Discussion, WTO Secretariat.
- Ford, D. (1980). The development of buyer-seller relationships in industrial markets, *European Journal of Marketing*, Vol. 14 Nos. 5/6, pp. 339-54.
- Frame, J.D. (1983). *International Business and Global Technology*, Lexington.
- Ghoshal, S. (1987). Global strategy: an organizing framework, *Strategic Management Journal*, Vol. 8, pp. 425-40.
- Håkansson, H. (1982). *International Marketing and Purchasing of Industrial Goods: An Interaction Approach*, Wiley, New York, NY.
- Hallén, L., Johanson, J. and Mohamed, S. (1987), Relationship strength and stability in international and domestic marketing, reprinted in Ford, D. (1990), *Understanding Business Markets: Interaction, Relationships, Networks*, Academic Press, London.

- Hawkins, R.G. and Prasad, A.J. (1981), “*Research in International Business and Finance*”, Vol. 2, JAI Press, Greenwich, CT and New York, NY.
- Hayden, E. (1976), “*Technology Transfer to East Europe: US Corporate Experience*”, Praeger, New York, NY.
- Hennart, J.F. (1982), *A Theory of Multinational Enterprise*, University of Michigan Press, Ann Arbor, MI.
- Hymer, S.H. (1976), “*The International Operations of National Firms: A Study of Direct Foreign Investment*”, MIT Press, Cambridge, MA.
- Hennart, J.F. (1982), “*A Theory of Multinational Enterprise*”, University of Michigan Press, Ann Arbor, MI.
- Hennart, J.F. (1989), Can the 'new forms of investment' substitute for the 'old forms'? A transaction cost perspective, *Journal of International Business Studies*, Summer.
- Horst, T.E. (1972), Firm and industry determinants of the decision to invest abroad: an empirical study, *Review of Economics and Statistics*, pp. 258-96.
- Horstmann and Markusen (1996) Horstmann, Ignatius J & Markusen, James R, 1996. Exploring New Markets: Direct Investment, Contractual Relations and the Multinational Enterprise, *International Economic Review*, Department of Economics, University of Pennsylvania and Osaka University Institute of Social and Economic Research Association, vol. 37(1), pages 1-19.
- Ikiara, M. M. (2002), ATPS SPECIAL PAPER SERIAL NO 16: Foreign Direct Investment (FDI), Technology Transfer and Poverty Alleviation: Africa's Hope and Dilemma Oman, C. (2000), *Foreign Competition for Foreign Direct Investment Organisation for Economic Co-operation*.
- Johanson, J. and Vahlne, J. (1977), The internationalization process of the firm: a model of knowledge development and increasing foreign markets commitments, *Journal of International Business*, Vol. 8, pp. 23-32.
- Johanson, J. and Wiedersheim-Paul, F. (1975), The internationalization of the firm: four Swedish cases, *Journal of Management Studies*, October, pp. 305-22.
- Kalantaridis, C. (2004). Internationalization, strategic behavior, and the small firm: a comparative investigation, *Journal of Small Business Management* 42 (3), 245-262
- Kaplinsky, R. (1990), Technology transfer, adaptation and generation: a framework for evaluation in Chatterji, M. (Ed.), *Technology Transfer In the Developing Countries*, Macmillan Press, London.
- Kundu, S.K. and Katz, J.A. (2003). Born-international SMEs: BI-level impacts of resources and intentions, *Small Business Economics*.

Kothari, C.R. (2003) *Research Methodology, Methods and Techniques*, second edition, New Delhi, Wishwa Prakashan Publishers.

Lipsey, Robert E & Weiss, Merle Yahr, 1984. Foreign Production and Exports of Individual Firms, *The Review of Economics and Statistics*, MIT Press, vol. 66(2), pages 304-08.

Lisa A. Phillips, Roger Calantone and Ming-Tung Lee International Technology Adoption Behaviour Structure, Demand Certainty and Culture, *Journal of Business & Industrial Marketing*, Vol. 9 No. 2, 1994, pp. 16-28, © MCB University Press, 0885-8624.

Mallampally, P. and K.P. Sauvart (1999). Foreign Direct Investment in Developing Countries, *Finance & Development* 36 (1), March 1999. Behrman and Wallander, 1976; Ford, 1980; Teece, 1976; Thunman, 1987).

Marton, K. (1986), Technology transfer to developing countries via multinationals, *World Economy*, December, pp. 409-26.

Olson, H.C. and Wiedersheim-Paul, F. (1978), Factors affecting the pre-export behaviour of non-exporting firms, in Leontiades, J. (Ed.), *European Research in International Business*, North Holland.

OECD, 2002- *Organisation for economic co-operation and development* (OECD) Publication on Information Technology Outlook.

Porter, M.E. (1990), "*The Competitiveness of Nations*", Free Press, New York, NY.

Roessner, J.D. and Porter, A.L. (1990), Achieving technology based competitiveness in developing countries, in Chatterji, M. (Ed.), *Technology Transfer in the Developing Countries*, Macmillan Press, London.

Ramaswamy Kannan K Galan Kreok and willaim Renforth 1996 Measuring the degree of internationalisation of a firm. A comment. *Journal of international business studies* 167-77.

Reid, S.D. (1981). The decision-maker and export entry and expansion *Journal of International Business Studies*, 12(2), 101-112.

Rugman, A.M. (1982), "*New Theories of the Multinational Enterprise*", Croom Helm, London.

Schneider, F. and B.S. Frey. 1985. "*Economic and political determinants of foreign direct investment*". *World Development*, 13: 161-75.

Teece, D.J. (1986), Transactions cost economics and the multinational enterprise', *Journal of Economic Behavior and Organization*, Vol. 7, pp. 21-45.

Turnbull, P.W., and Valla, J.P., eds. *Strategies for International Industrial Marketing* London: Croom-Helm, 1986.

- UNCTAD (2000). World Investment Report 2000, Geneva: UNCTAD Secretariat.
- Welch, L.S. and Luostarinen, R. (1988), "*Internationalization: Evolution of a Concept*", *Journal of General Management*, Vol. 14 pp.34 - 55.
- Wells, L.T. Jr. (1993). Foreign Direct Investment, David L. Lindauer & Michael Roemer Chapter 10 (eds., 1993), "*Development in Asia and Africa: Legacies and Opportunities*", International Centre for Economic Growth (ICEG). Pp 293-323.
- Williamson, O. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York, NY. Wolf, B.M. (1977), Industrial diversification and internationalization: some empirical evidence, *Journal of Industrial Economics*,
- Wortzel L. H. and Wortzel H.V. 1981. Export Marketing Strategies for NIC and LDC-based Firms, *Columbia Journal of World Business*, Spring: 51–60.
- Wright, M., Filatotchev, I., Hoskisson, R.E., and Peng, M.W. (2005). Strategy research in emerging economies: challenging the conventional wisdom. *Journal of Management Studies*, 42 (1), 1-33.