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OUTWARD FOREIGN DIRECT INVESTMENT BY EMERGING ECONOMIES IN DEVELOPED COUNTRIES: THE CASE OF INDIA

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PhD 2012

OUTWARD FOREIGN DIRECT INVESTMENT BY EMERGING ECONOMIES IN DEVELOPED COUNTRIES: THE CASE OF INDIA

A thesis submitted for the degree of Doctor of Philosophy (PhD)

by

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at

University of Dublin, Trinity College

2012

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Summary

The ongoing globalization and liberalization by emerging economies have substantially enhanced foreign direct investment (FDI) activities. Multinational Enterprises (MNEs) from the emerging market economies, such as India, are actively undertaking outward FDI (OFDI) to expand into the global market, especially in the developed world. Several studies have been carried out in order to understand various aspects of FDI and a number of theories have been proposed. However, there exists a knowledge gap in the literature to fully explain the phenomenon of OFDI from the emerging market economies. Using a country-, industry- and firm- perspective, this thesis analyzed the characteristics, determinants, and motives of Indian OFDI, in developed countries with a particular focus on Ireland. The key questions were - what macroeconomic characteristics enable Indian firms to invest overseas? What are the drivers, motivations, mode of entry, challenges and success factors of Indian firms in Ireland? Do all Indian firms invest in Ireland for the same reasons, and if not, how and why are they different?

The study was performed in three phases. In the first phase, the possible influence of various macroeconomic variables on Indian OFDI was tested using standard econometric techniques such as the unit-root test, co-integration test, Granger causality test, and regression analysis. Following the Investment Development Path (IDP) theory, the relationship between Indian OFDI and its economic development was verified. Adopting a time-series framework of the Vector Error Correction Models (VECM), we demonstrated a dynamic (Granger) causality relationship between Indian OFDI and exports for the period 1981-2006. Regression analysis showed a significant association between Indian OFDI and economic growth. The openness of Indian economy as well as its indigenous technological capabilities were also found to be positively associated with Indian OFDI. The influence of trade weighted exchange rate, interest rate, and human capital of India on its OFDI was statistically insignificant.

The second phase of this thesis explains the motives behind the investment of multinationals with a focus on Indian MNEs. Based on the insights from the 'eclectic paradigm', we analysed the ownership, location, and internalization (OLI) advantages of FDI considering the case of Indian firms in Ireland. The challenges, barriers and the future prospects of Indian firms in Ireland were also explored. The questionnaire survey data revealed that Indian firms have distinct ownership advantages of capital and technological capacity. The internationalization experience of Indian MNEs plays a pivotal role in shaping their FDI motivation. Moreover, the choice of investment destinations of the Indian MNEs is influenced by a number of host country characteristics. Ireland offers a wide range of location advantages to Indian MNEs by providing a base to explore other European markets with a favourable tax regime. The findings of this study broadly support the OLI framework of the eclectic paradigm; whereas, the Uppsala model offers a partial explanation to the Indian firms' FDI decisions.

The last phase of this thesis was focused on FDI in the pharmaceutical industry by emerging economies. Using a case study methodology, we for the first time verified the FDI motivations of all the three Indian pharmaceutical firms present in Ireland, namely Ranbaxy Laboratories Ltd., Wockhardt Ltd., and Reliance Life Sciences. Based on the primary data collected through interviews and secondary information, the similarities and dissimilarities among the FDI motivations of the selected case firms were justified theoretically as well as empirically. Our data suggest a relationship between degree of internationalization and the FDI motivations pursued by Indian firms in Ireland.

Overall, this thesis enhances the understanding of OFDI by emerging market economies and contributes to the literature in various ways. The applicability of the IDP theory for India was demonstrated. We identified major macroeconomic determinants of Indian OFDI. This is amongst the first study, which deals with the drivers, motivations, mode of entry, success factors and barriers of emerging market firms in a developed country. A novel theory that extends the Uppsala model by considering the degree of internationalization and the FDI motivations of MNEs was developed.

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CHAPTER 1

INTRODUCTION

1.1. Outward foreign direct investment (OFDI)

Foreign direct investment (FDI) has been one of the main vectors of globalization and has grown in importance over the past three decades. In recent years, FDI is valued as a means of enhancing or jumpstarting economic growth and integrating the world economy. With the progress of globalization and ongoing policy reforms affecting world trade, foreign investments have become an increasingly important component in the economic strategies of firms and countries alike.

According to the International Monetary Fund (IMF) Balance of Payments Manual (1993) and the Organisation for Economic Co-operation and Development (OECD) Benchmark Definition of Foreign Direct Investment (1999), FDI refers to a long-term participation by a country into a foreign country that occurs when a firm undertakes an investment in an overseas enterprise, in which the foreign investor has both a lasting interest and substantial control. In other words, FDI is that investment, which is made to serve the business interests of the investor in a company, which is in a different nation distinct from the investor's country of origin. It is the creation or expansion of firms that operate across national boundaries and involves participation in ownership, management, transfer of technology and expertise (Schuller, 2004). This implies that the investor exerts a considerable degree of influence on the overseas enterprise. FDI can be in the form of a wholly owned (acquisition/greenfield) or joint venture. With FDI, the investing firm assumes greater risks, compared with licensing or exporting, but has considerably more managerial control over the foreign operations (Chadee and Rose, 2003). It can provide a firm with new markets and marketing channels, cheaper production facilities, access to new technologies, processes, products, financing, skills, organizational technologies and management skills, and as such can provide a strong impetus to economic development. FDI also plays a significant role in a country's economic development by mobilizing funds, providing an increase in capital formation, the transfer of skills, technology, sharing of information and ideas, market access and job opportunities that are extremely valuable for participating countries.

A firm's overseas involvement is mainly a function of its ability to create exclusively owned advantages. In turn, this ability is subject to two sets of factors:-

1) Factors that pertain to individual countries, are available to all firms, and facilitate their operations, *i.e.* external economies of scale. Such factors range from natural endowments to skilled labor and technological inputs (Dunning and Narula, 1996). 2) Factors which are internal and specific to individual firms. These factors refer mainly to the organization and management know-how the firm is able to apply in order to acquire, train and coordinate resources towards the development of methods, technologies and products, which effectively form the basis of its ability to supply markets (Dunning, 1993).

Multinational enterprises (MNEs) play a dominant role in the globalized world. MNEs from developed economies, where most FDI originated traditionally, have provided a massive infusion of capital, technology, marketing connections, and managerial expertise that have played a major role in economic transformation and growth in the developing countries. However in recent years, the rate of OFDI from emerging markets (please see section 1.9 for definition) has outpaced the growth from industrialized countries (UNCTAD, 2005). Emerging economies include the BRIC countries (Brazil, Russia, India and China), Argentina, Korea, Malaysia, Mexico, Singapore, South Africa, Taiwan, Thailand and Turkey. These emerging markets have sustained high levels of economic growth and are growing importance as future markets. They have amassed sufficient capital, knowledge and know-how to invest abroad on their own and are now important players in global business. For example Tenaris (an Argentinean company, although owned by an Italian family and also listed in New York) is the world's largest producer of seamless tubes; Cemex (a Mexican cement giant) has used acquisitions to become the largest cement producer in the USA; CP Group in Thailand is considered to be the largest single investor in China; Orascom (an Egyptian telecommunication company) purchased an Italian telecom company Wind, which is considered as Europe's largest ever leveraged buyout. Recently in October 2010, Orascom owned Wind Mobile have merged with a Russian company VimpelCom Ltd. to create the world's fifth-largest telecommunications company.

1.2. OFDI from emerging economies

Traditionally, OFDI was a phenomenon of the developed countries. Until the 1980s, more than 90% of global OFDI emerged from the developed countries (UNCTAD, 2009).

Even though, OFDI flows are still heavily dominated by the advanced industrialized nations especially the Triad countries [the United States of America (USA), the European Union (EU), and Japan], the total volume of outward investment flows from emerging and developing economies is becoming increasingly important in the global economy (Figure 1.1). Since early 1990s, there has been a significant change in the pattern and nature of international investments by firms from emerging markets, reflecting growing economic significance of their home economies. The number of firms from the emerging markets and their share in the total OFDI, as well as sophistication of their activities, has increased notably. Interestingly, the emerging markets have become important source of FDI for many developing and developed countries. Studies also suggest that emerging markets have a substantial catching up potential regarding their OFDI compared with developed economies (Young et al., 1996). Some of the emerging market firms have developed their own firm-specific assets and expanded their operations beyond other developing countries to developed countries. These firms managed to attain sales volumes and status of brand recognition on a par with developed country. The rise in FDI outflows from developing economies has also been characterised by increasing range of countries. While earlier episodes of outward expansion from developing countries involved mainly the newly industrializing economies of Asia, and some Latin American and West Asian economies, a wide range of developing countries, such as Argentina, Chile, India, Malaysia, Nigeria, South Africa, Thailand, Turkey and Venezuela, as well as several lower income economies, are now extending their reach.

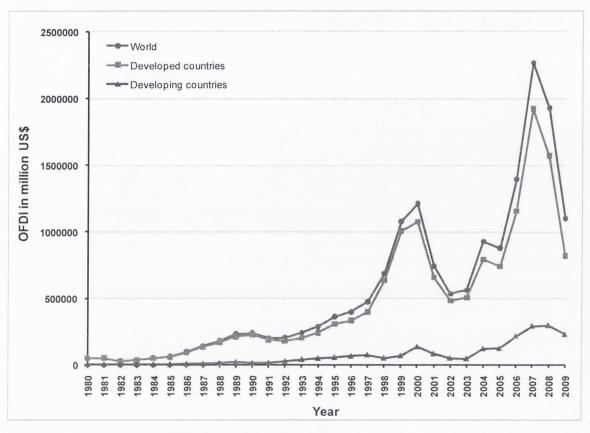


Figure 1.1. Trend of OFDI flows from the world, developed and developing countries. (Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

The MNEs from emerging markets are the visible manifestation of a sustained increase in OFDI stocks from developing countries, which have risen from US\$ 71 billion in 1980 to US\$ 145 billion in 1990, US\$ 862 billion in 2000, that reached US\$ 2,691 billion in 2009 (Table 1.1). OFDI stocks from developing countries accounts for more than 14% of the world's overall OFDI (Table 1.1).

Table 1.1. Share of developed and developing countries in world outward stocks (US\$ million)

Year	1980	1990	2000	2005	2009
World	548,933	1,785,584	6,069,882	10,603,662	18,982,118
Developed countries	477,203	1,639,845	5,186,178	9,167,925	16,010,825
Developing countries	71,730	145,179	862,358	1,283,694	2,691,484

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

The UNCTAD World Investment Report (2006) highlights the changing role of emerging markets in global FDI activities. The report suggests that emerging markets as a group has emerged as significant outward investors. Recent data indicate that the entry of firms from emerging markets into developed nations is increasing, changing the conventional direction of foreign investment flows. Since the early 1990s emerging market MNEs have shown a rapid growth in their overseas investment mainly in other developing or emerging countries (South-South). Since the last decade, emerging market firms are becoming increasingly diversified in developed countries as well (South-North). Very recently, analysis of OFDI based on country-of-origin indicated a shift in the investment destinations with South-South and South-North FDI flows growing faster than the conventional North-South FDI flows (Figure 1.2).

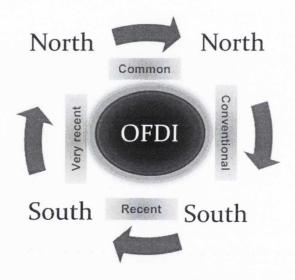


Figure 1.2. Schematic representation of international investment

Much research on OFDI from developing countries is of South-South nature. However, the focus of recent literature has shifted towards South-North investment in view of the increasing importance of OFDI from emerging markets, particularly from BRIC countries to the developed countries. Consequently, there has been renewed emphasis on treating emerging market firms as special actors within the global economy and studying them as agents of economic globalization. In terms of OFDI, the unique features of developing countries are - 1) fast and continuous growth in the amount of investment, 2) efforts to liberalize and globally integrate their economies to promote economic growth,

and 3) the remarkable shift of direction to the industrialized and economically developed countries rather than neighbouring developing nations.

As international markets are becoming more competitive, the firms from developing countries are evolving and changing their strategy to compete successfully. They are increasingly expanding and diversifying into international markets. Table 1.2 presents the share of global foreign investment by firms from the top 20 developing economies in 2009 (tax haven countries are excluded). India ranked as the 6th largest outward investor among developing countries after the Russian Federation, Singapore, Taiwan Province of China, Brazil, and the Republic of Korea and surpasses a number of OECD countries. With an investment of over US\$ 77 billion, the share of Indian OFDI among developing countries is 2.86% and its share in global OFDI is 0.4% (Table 1.2).

Table 1.2. OFDI stocks by top 15 emerging economies in 2009.

Economy	US\$ (million)	Rank	Share in developing countries (%)	Share in world (%)
Russian Federation	248,894	1	9.24	1.31
Singapore	213,110	2	7.91	1.12
Taiwan Province of China	181,008	3	6.72	0.95
Brazil	157,667	4	5,85	0.83
Republic of Korea	115,620	5	4.29	0.6
India	77,207	6	2.86	0.4
Malaysia	75,618	7	2.8	0.39
South Africa	64,309	8	2.38	0.33
UAE	53,524	9	1.98	0.28
Mexico	53,458	10	1.98	0.28
Chile	41,203	11	1.53	0.21
Saudi Arabia	40,314	12	1.49	0.21
Indonesia	30,183	13	1.12	0/15
Argentina	29,428	14	1.09	0.15
Venezuela, Bolivarian Republic of	17,670	15	0.65	0.09

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

Among the developing countries, India is emerging as one of the major investor in overseas markets. It has embarked on the path of globalization and has opened its door to both inward as well outward FDI. In recent years, overseas investment by Indian firms has attracted attention as an important aspect of increasing global economic integration of the Indian economy. Indian firms have increasingly surprised observers not only by how rapidly they are internationalizing, but also by their bold and aggressive methods in the early stages of their outward internationalization.

1.3. Indian OFDI in the global economy

India has succeeded in integrating with the global economy. This is evident by the growing OFDI flows and stocks in table 1.3. India has emerged as the 21st largest outward investor in the world, with an investment of US\$ 77 billion over the past decade (Pradhan, 2010; the Indian Express, 23rd Sept. 2010). The Investor Dashboard Sentiment Q1 Survey (2010) by a global financial services group ING (that measures and tracks investor sentiment and behavior of mass affluent investors each quarter from 12 Asia Pacific markets including China, Hong Kong, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, Thailand, Japan and Australia) indicated Indian investors as the most optimistic group in Asia. According to a recent survey by the Indian School of Business (ISB) and the Vale Columbia Center on Sustainable International Investment, Indian MNEs have become significant investors in global business (ISB survey, 2010; Satyanand and Raghavendram, 2010). India is rapidly staking a claim to being a true global business power, with its foreign assets growing by more than 100% annually in recent years (ISB survey, 2010).

Table 1.3. Indian OFDI flows and stocks (1980-2009).

Year	1980	1990	2000	2005	2009
Flows (US\$ million)	4	6	514	2,985	14,897
Stocks (US\$ million)	78	124	1,733	9,741	77,207

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

In recent years, Indian economy has shown high dynamism in its process of structural transformation and economic growth. India's economic growth rate moved from 5.8% in the 1980s to annual average of 6.2% in the 1990s, which has in the last few years been in excess of 8% per annum (Table 1.4). Although the recent global financial crisis caused decline in Gross Domestic Product (GDP) growth, the share of OFDI stock in GDP has maintained its growth. Such achievement has been the result of long concerted efforts made by the Indian government to develop strategic capabilities in economic production agents. Many of its trade based economic policies and supporting legal frameworks are in place, India became a member of World Trade Organization (WTO) since 1 January, 1995.

Table 1.4. GDP and OFDI share in GDP of India.

	1980	1990	2000	2005	2009
GDP (US\$ million)	184,761	326,796	467,788	813,321	1,265,688
OFDI stocks as percentage of GDP	0.04	0.03	0.4	1.2	6.2

(Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

OFDI from India has been a strikingly fast-growing phenomenon over the past two decades. Indian firms are investing abroad to access foreign markets, production facilities and international brand name. Access to technology and knowledge has been a strategic factor for Indian firms seeking to strengthen their competitiveness and to move up their production value chain. Table 1.5 presents relative position of Indian OFDI in a global context. In the early 1990s, India's share in OFDI from developing countries was the lowest compared to other three BRIC countries. Over the ensuing years, a very impressive growth of Indian OFDI has been recorded (Table 1.5). Pradhan (2005) and UNCTAD (2007) have emphasized that Indian OFDI has undergone long-term transformations in its character covering industrial structure, geographical composition, pattern of ownership controls, entry modes, motivations, sources of financing the overseas investments, and the government policies on overseas investment.

Table 1.5. Indian OFDI flow in a global context (US\$ million).

Measure economy/ Economy group	1991-1995	1996-2000	2000-2005	2006-2009
World	1,296,048	3,854,938	3,654,262	6,694,255
Developed countries	1,113,889	3,451,979	3,186,533	5,474,369
Developing countries	178,606	391,707	421,216	1,032,874
Brazil	3,430	7,473	12,797	45,642
China	13,313	10,000	34,384	143,779
India	214	989	10,112	65,849
Russia	3,475	10,762	42,342	171,215
Percentage share in total wor	rld outflows			
Developed countries	85%	89%	87%	81%
Developing countries	13%	10%	11%	15%
Brazil	0.2%	0.1%	0.3%	0.6%
China	1%	0.2%	0.9%	2.1%
India	0.01%	0.02%	0.2%	0.9%
Russia	0.2%	0.2%	1.1%	2.5%
Percentage share in total deve	eloping countries	outflows		
Brazil	1.9%	1.9%	3%	4.4%
China	7.4%	2.5%	8.1%	13.9%
India	0.1%	0.2%	2.4%	6.3%
Russia	1.9%	2.7%	1%	16%

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

Although, Indian OFDI is still small when compared to the world outflows, it is growing rapidly and becoming significant. A critical analysis of the values in table 1.5 clearly indicates while the average OFDI from the world, developed countries, or developing countries has increased about 5 fold during 2006-2009 as compared to that of 1991-1995, Indian OFDI has increased over 300 fold during the comparable period of time (Figure 1.3).

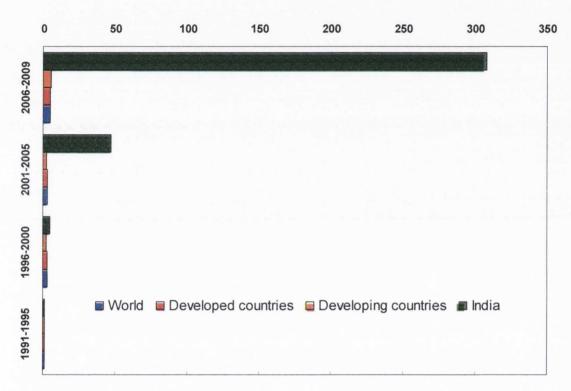


Figure 1.3. Growth of global OFDI (Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

1.3.1. History and evolution of Indian OFDI

India has a history of OFDI dating back to the 1920s, when Mafatlal invested in a cotton-spinning firm in Uganda. In 1959, the Birla group of companies (India's second largest business conglomerate at that time) established a textile mill in Ethiopia (Kudaisya, 2003). The following year, a number of industrial ventures were started in Kenya with assistance from the local Indian Embassy, and also in Uganda, Nigeria, Malaysia, Thailand and Ceylon. Most of these early investment projects were undertaken by the Birla group of

companies. In the early 1960s, few large Indian conglomerates such as Tata and Kirloskar expanded their activities into Europe, Africa and Sri Lanka. Ranbaxy Laboratories Ltd., India's largest pharmaceutical company, set up its first joint venture abroad in Nigeria in 1977. However, these investments were modest and hardly detectable in FDI statistics.

A sustained and profound increase in Indian overseas investment can be seen starting around the late 1970s, when the industrial licensing system became much more stringent as part of Indian government's move to control big business. By 1983, there were 140 foreign investment projects in operation and another 88 in various stages of implementation (Lall, 1986). The total number of approved projects reached up to 229 by 1990 (Kumar, 2007). Most of the foreign affiliates set up during this period were small- or medium-scale ventures and the total approved equity during the period 1975-1990/1991 amounted to US\$ 200 million (Athukorala, 2009).

During the early 1990s, in view of economic growth Indian government initiated an economic reform process implementing the liberalization policies. The economy was liberalized and gradually integrated with the world economy by the dismantling of tariff walls, the protection of FDI and upgrading the technology of production in various fields. The broad thrusts of the programmes were financial stability, outward-looking policies and deregulation of domestic markets. Since 1991, the country's economy has integrated well into the world economy. Its increased openness is mainly a result of the policies that were introduced to liberalize trade, by removing trade barriers and promoting FDI. India's economic growth rate has in the last few years exceeded by 8% per annum. Although India remains a net FDI recipient, the gap between outflows and inflows has been sharply narrowing over the past few years. In 1990, the amount of annual outflows was only 7% of inflows, which increased to about 30% during 2000-2005 and to 60% during 2005-2007 (UNCTAD, 2009). The number of approved projects increased from 220 in 1990/1991 to 395 in 1999/2000 and to 1,595 in 2007/2008 (Kumar, 2008).

The total OFDI from India increased from about US\$ 25 million in the early 1990s to U\$ 18.8 billion in 2007 (WIR, 2010). However, due to current global crisis, Indian OFDI flows decreased to nearly US\$ 15 billion in 2009 (WIR, 2010). Similarly mergers and acquisitions (M&A) deals by Indian firms also dropped both in number and in size,

resulting in a four-fifths drop in the value of manufacturing (including metals) (Satyanand and Raghavendram, 2010). The number of overseas M&A plummeted from 243 in 2007 to 82 in 2009 whereas the total cross-border M&A value fell from US\$ 32.8 billion in 2007 to US\$ 1.4 billion 2009. India's share in total developing economy OFDI flow remained below 0.2% throughout the 1990s, but has increased continuously since, reaching 6.3% in 2009 (Table 1.5).

It has been suggested that the evolution of Indian OFDI followed a two-wave principle (Pradhan, 2003a, 2005; Sauvant, 2005). The *first wave* denotes India originated OFDI from 1975 to 1990. The *second wave* of internationalization of Indian firms began from 1991 and gathered momentum as foreign exchange restriction on capital transfers for overseas acquisitions liberalized in successive stages from 2000 (Nagraj, 2006). The following sub-sections explain the internationalization waves in terms of size, growth, sectoral composition, regional distribution and mode of entry of Indian OFDI.

1.3.1.1. First wave: During 1975 to 1990, Indian OFDI was low as compared to that of other developing countries and its role in India's economic growth was quite limited (Pradhan, 2008). OFDI activities were confined to a few large-family owned business houses having huge resources and substantial technological experience like Tata, Mafatlal, Mahindra, Birla etc. During this period, most of Indian OFDI went to overseas markets by means of greenfield investments. The vast majority (more than 80%) of OFDI involved a handful of firms investing in other developing countries. Especially during the first wave, proximity in geography, languages, history and ethnicity had strong impact on the location decision of Indian outward investors. Developing South-East and East Asia were the largest host regions, followed by Africa, West Asia, Central Asia and South Asia. The developing country orientation of Indian OFDI reflects the nature of ownership advantages possessed by Indian firms at that point of time. According to Lall (1983a, 1983b), Indian firms rested in their capabilities to replicate a foreign technology in cost efficient modes, which was relevant and appropriate for the existing factor and demand conditions in developing countries. At that time, Indian firms mainly relied on reverse engineering of imported foreign technologies and equipment to develop their unique firm-specific advantages. These technological advantages generated competitive edge for Indian firms. Moreover, OFDI policies were highly restrictive mainly because of limited economic and political cooperation among foreign countries. The main motivation of Indian firms during the first wave was the "market seeking" that might have restricted Indian firms to expand their operations only in neighbouring countries. Most of the investment was in the form of minority participation and the vast majority of investments were made by manufacturing firms (Kumar and Mcleod, 1981; Lall, 1983b). The major reason for Indian firms having a minority stake was the Indian OFDI policy regime according to which equity capital was limited to 49% and getting approval above the limit was quite cumbersome.

1.3.1.2. Second wave: In the second wave Indian OFDI grew much faster as compared to the first wave. During this wave, larger proportions of Indian investments were made in the service and technology intensive sectors. A noticeable change in the geographical distribution could be seen as investments became increasingly oriented towards developed countries (Pradhan, 2005). In terms of location, a very significant shift took place as well, with about 60% of Indian OFDI directed towards developed countries. In particular, the United Kingdom (UK) and the United States of America (USA) were the main investment destinations (UNCTAD, 2004). It was suggested that the new destinations of Indian OFDI was because of growing sophistication of ownership advantages of Indian manufacturing firms and the emergence of service firms, such as software companies who were able to serve the demand of the developed world (Pradhan, 2008). Studies suggest that developed world have been the main source of opportunities for service firms especially in software industries - to grow, learn and integrate with the global economy (Pradhan, 2008). The growing importance of developed countries as host of Indian OFDI has also been related to rapid rise in Indian service firms (Pradhan, 2003). The top 15 Indian information technology and related services companies have invested abroad, mainly in developed world (Gammeltoft, 2008).

Indian OFDI in the second wave is more characterized by M&A. Studies suggest that since the 1990s, Indian firms have chosen M&A for foreign market entry and found it to be an easier method of acquiring new technology, skills and other intangible assets (Pradhan and Abraham, 2005). Although the Indian business environment became extremely competitive following the implementation of liberalization in the domestic policies and rapid globalization process (Pradhan, 2008), an increasing number of small and medium sized Indian enterprises have invested overseas to tap into the foreign market.

The ownership structure of Indian firms investing overseas in the second wave was distinct from that of first wave. Firms in this phase were more interested in complete control over the foreign production activities. Indian firms viewed this as an essential strategy to protect their ownership advantages from passing on to competing firms and to maximize associated revenue productivity (Pradhan, 2008). India's OFDI policies in the second wave were more relaxed compared to first wave and this provided the additional feasibility for Indian firms to gain full control on their overseas ventures. Now, OFDI is seen as a strategy for Indian firms to gain access to new skills, technologies and managerial capabilities to further improve their firm-specific competitive advantages. Table 1.6 summarizes the evolution of Indian OFDI.

Table 1.6. Evolution of Indian OFDI

First Wave	Second wave		
OFDI was largely led by the manufacturing sector.	OFDI originating from almost all sectors, Manufacturing and services sector remain dominant.		
Developing countries were major destination of Indian OFDI.	Developing and developed countries as major host of Indian OFDI.		
Indian equity participation was largely minority owned.	Indian equity participation was largely majority owned.		
Greenfield investment was quite common.	M&A became a favourite mode of entry to developed countries.		
OFDI were largely natural resource seeking and market seeking and a escape response from the home country constraints.	Motivation of Indian OFDI extended to strategic asset seeking other than market seeking and resource seeking.		
Ownership advantages basically derived from adopted technology.	Ownership advantages basically derived from innovation, improved efficiency and technological advancement.		

1.3.2. Recent geographic, sectoral distribution and entry mode of Indian OFDI

Recent geographical analysis of India's FDI outflow locations reveals that while regional distribution of overseas investment is evenly spread out across various countries, developed nations are increasingly emerging as Indian OFDI destinations other than developing countries such as Russia, Mauritius, Sudan, Vietnam (Figure 1.4).



Figure 1.4. Indian OFDI destinations (Source: Compiled from UNCTAD, 2007).

Since 2000, Indian firms have tended to use greenfield investments into developing countries and cross-border M&A as the main mode of entry into developed economies. Tables 1.7 presents top 15 greenfield investments by Indian firms during years 2000 to 2009.

Table 1.7. Top 15 greenfield projects by Indian firms (2000-2009).

Rank	Year	Company	Sector	Host country	Value (US\$ million)
1	2008/ 2009	National Thermal Power Corporation	Coal, Oil and natural gas	Iran	5,150
2	2007	GAIL India	Chemicals	Saudi Arabia	4,150
3	2008	Tata group	Metals	Vietnam	3,500
4	2008	ONGC	Coal, Oil and natural gas	Iran	3,000
5	2006	ONGC	Coal, Oil and Natural gas	Iran	2,000
6	2008	Era Group	Coal, Oil and natural gas	Zambia	1,800
7	2007	Mahindra Satyam	Software and ITES	Malaysia	1,714
8	2009	Essar Group	Coal, Oil and natural gas	Kenya	1,701
9	2007	Videocon Industries	Consumer electronics	Poland	1,700
10	2007	Ispat industries	Metals	Philippines	1,600
11	2008	Essar Group	Metals	s USA	
12	2007	Videocon Industries	Consumer electronics		
13	2008	National Aluminium Company	Coal, Oil and natural gas		
14	2008/ 2009	ONGC	Coal, Oil and natural gas		
15	2008	SKIL Infrastructure	Real estate	Oman	1,200

(Source: Compiled from Satyanand and Raghavendramn, 2010; and media reports).

Recent M&A have emerged as the main route for manufacturing and service sectors, the major recipient of FDI. As can be seen in Table 1.8, much of Indian OFDI *via* M&A route went to developed countries during 2000 to 2009. It is clear that Indian firms' entry mode strategies vary between developing countries and developed countries. It is also clear that Indian firms mainly operate in the natural resources sector in developing countries while there is a growing array of sectors they invest in developed country (Tables 1.7 and 1.8).

Table 1.8. Top 15 foreign acquisitions by Indian firms during 2000-2009.

Rank	Year Acquirer Foreign target firm		Target country	Value (US\$ million)	
1	2007	Tata Steel	Corus Steel	UK	12,695
2	2007	Hindalco (Aditya Birla)	Novelis	USA	6,000
3	2009	Sterile Industries Ltd.	Aserco Inc	USA	2,600
4	2008	Tata Motors	Jaguar and Land Rover	UK	2,500
5	2006	Suzlon Energy	Repower Systems	Germany	1,700
6	2007	Essar Global Limited	Algoma Steel Inc.	Canada	1,467
7	2006	ONGC Videsh	Petrobas	Brazil	1,400
8	2007	United Breweries Ltd.	White and Mackay	UK	1,110
9	2007	JSW Steel	Jindal United Steel Corp.	USA	940
10	2006	Mansovar Energy Columbia Ltd	Omimex de Colombia Ltd.	Colombia	850
11	2002	ONGC Videsh	Greater Nile Oil project	Sudan	766
12	2006	Videocon Industries Ltd.	Daweoo Electronics Corp.	Republic of Korea	729
13	2006	Tata tea and Tata Sons	Glaceau	USA	677
14	2007	Wipro Ltd	Infocrossing Inc.	USA	673
15	2007	Abcan Offshore Ltd.	Sinvest ASA	Norway	658

(Source: Compiled from Satyanand and Raghavendramn, 2010; Gopalan and Rajan, 2010; Arthurkola, 2009; Singh and Jain, 2009; and media reports).

1.4. Indian OFDI in the developed world

One of the striking differences between the first wave and second wave of Indian OFDI was that despite its low per-capita income (US\$ 800 per person), over 60% of Indian investment in the second wave, through 2006, went to developed countries (Ramamurty and Singh, 2009). Figure 1.5 shows the recent growth of Indian OFDI approvals in favor of developed countries such as the USA, UK, Canada, Germany and Japan. It is clear from figure 1.5 that diversification of Indian firms into the developed world is increasing.

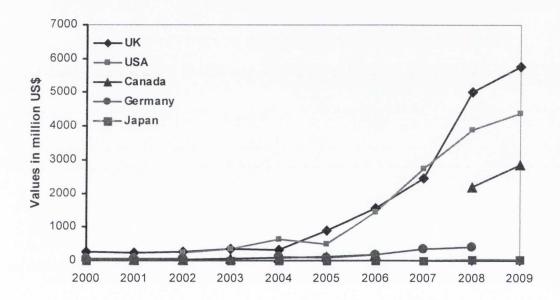


Figure 1.5. Growth of Indian overseas investment stocks in the developed world (Source: compiled from OECD.StatExtracts database, http://stats.oecd.org).

Mergers and acquisitions (M&A) have emerged as an important process of business restructuring among Indian firms while investing in developed countries (Pradhan, 2005, 2006, 2008; Kumar 2007, 2008). Figure 1.6 displays the geographic distribution of Indian OFDI *via* total M&A based on data for the duration from 2000 to 2007. The chart indicates increased interest of Indian firms in acquiring foreign firms in the developed part of the world particularly in North America and EU nations to rapidly access new markets, assets and capabilities (Figure 1.6).

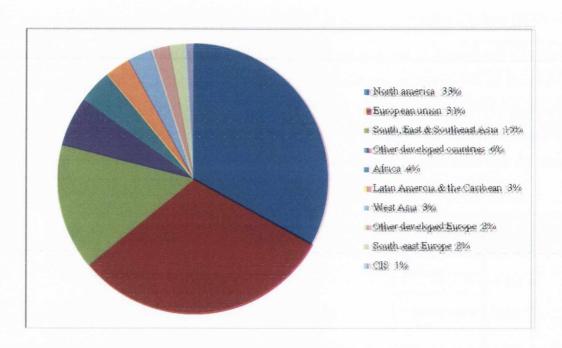


Figure 1.6. Geograhical distribution of Indian OFDI *via* total M&A during 2000-2007 (Source: Compiled from Accenture Reports, 2008).

In the year 2007, out of the total M&A deals by Indian firms, 75% accounted for cross border acquisition and majority of those transactions were in developed economies rather than in developing economies. The ratio stood for US\$ 20 billion: US\$ 2.6 billion respectively (Accenture Reports, 2008). Indian firms accounted for over 60% of all M&A undertaken by firms from the BRIC countries in the Triad countries between 2000 and 2007 (Bertoni *et al.*, 2007). Between 2005 and 2007, Indian M&A in the Triad countries increased almost seven-fold, from US\$ 4.2 billion to US\$ 27 billion (UNCTAD, 2008). In contrast, the value of purchases of Triad firms by Chinese, Hong Kong (China), and Russian MNEs decreased over the same period (UNCTAD, 2008).

The sectoral focus of Indian MNEs in developed countries has been concentrated primarily in information technology, pharmaceuticals and automobile industries (Athukorala, 2009). It should be noted that these sectors are mainly ruled by the developed world MNEs. The increasing competitiveness of Indian firms and their interest to expand globally in information and technology related services and pharmaceuticals are driving its

OFDI growth (UNCTAD, 2004). The data in Figure 1.7 clearly indicates that Europe and the USA are now preferred destinations for Indian investors.

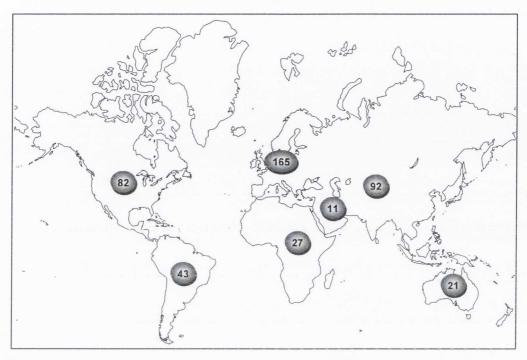


Figure 1.7. Region-wise foreign affiliates of Indian MNEs (Source: Compiled from Kapoor, 2011; based on number of affiliates in 2006).

Recent studies suggest that Indian MNEs would continue to invest in developed-country based companies, particularly now that they are more affordable due to the global crisis (Satyanand and Raghavendramn, 2010). It is expected that India's OFDI should continue its rapid upward trend over the next few years, as more companies seek to transfer their products and services innovations to new markets, and acquire strategic international know-how and market shares, particularly in crisis-hit developed economies (Satyanand and Raghavendramn, 2010).

1.5. Ireland as a destination of Indian OFDI

Beyond the current financial crisis, Indian firms are expected to invest more in the developed countries as reflected in the trends and analysis shown above in section 1.4. Indian firms are increasingly recognizing Ireland as an attractive investment destination. It is expected that, over the next 18 months, Indian companies will invest about US\$ 100

million in Ireland (IDA Ireland, 2010). The investment will mainly be in the information technology, information technology related services and financial services sectors (IDA Ireland, 2010).

Ireland is now recognized as one of the most innovative economies in the world as described in detail in our recently published reports (Brennan and Verma, 2010). Ireland has a long history of FDI. Since the opening up of Ireland's economy in the 1960s, Ireland has embraced FDI as an integral part of its strategy of economic development. Its efforts to attract such investment, in particular the knowledge intensive investment, have been highly successful. Recent changes in business taxation that have taken effect in 2010 have been designed to improve Ireland's attractiveness to knowledge intensive industries and as a location for company regional headquarters.

Ireland has been successful in attracting investment in information and communications technology, life sciences, financial services, and globally traded business, including digital media, engineering, consumer brands, and international services. This is a result of a strategy that has focused on three key areas: 1) high-value manufacturing, 2) global business services, and 3) research, development and innovation. Ireland now hosts affiliates from many of the leading global companies and operations from 8 out of the top 10 information and communication technology companies, 8 out of the top 10 pharmaceutical companies and 15 out of the top 20 medical devices companies (Brennan and Verma, 2010). The attraction and uniqueness of Ireland as a host country can be summarized in following three points:-

- 1. Ireland is among the world's most competitive locations for R&D investment among the top 20 countries in the world on the basis of the cost of global R&D initiatives after tax and other cost incentives.
- 2. Ireland has a low 12.5% corporation tax rate system, which is simple and transparent, and income taxes are relatively low.
- 3. Ireland has a huge talent pool that is very crucial for knowledge intensive FDI.

To date, virtually all of Ireland's inward FDI (IFDI) stock has emanated from the developed world, but increasingly Ireland is seeking to attract investment from developing

countries. Ireland is seen as a gateway to Europe and there is expectation that developing countries like China and India will increase their investment in Ireland.

Although only six Indian firms have invested in Ireland so far, five of them are present in this country for more than a decade. The six Indian firms in Ireland are Infosys Technologies Ltd., Tata Consultancy Services Ltd., Ranbaxy Ireland Ltd., Wockhardt Ltd., Reliance Life Sciences, and Crompton Greaves Ltd. According to a recent report in the Deccan Chronicle (20 June, 2010), Ireland is the number three recipient of Indian investment in Europe receiving €29 million. Based on the above mentioned facts, we selected Ireland as the host country location for Indian OFDI in this thesis.

1.6. Research rationale

As also explained above, emerging economies increasingly see FDI as a source of economic development, modernization and employment generation. Developing countries have emerged as significant participants in the global OFDI. Thus, massive increase in FDI originating from emerging economies raises new and important questions for the international business research agendas about its possible causes and effects (Luo and Tung, 2007; Gammeltoft, 2008; Athreye and Kapur, 2009; Gammeltoft, *et al.*, 2010).

The growth in OFDI from India over the past three decades represents the most dynamic aspect of its increasing integration with the world economy. An increasing number of Indian firms are undertaking large overseas projects across a wide range of sectors. Indian OFDI has undergone considerable change not only in terms of the magnitude but also the geographical focus and sectoral composition of flows. More recently, the focus of Indian OFDI is gradually shifting towards developed countries. The changing nature of Indian OFDI is likely to have a number of implications for the development of both host and home countries. Despite the above highlighted growth in Indian OFDI, the number of related studies is very small. No systematic study on Indian OFDI has been reported in the public domain. Not much information is available on the motivation and drivers that inspire the developing countries to invest in developed countries. This necessitates the importance to study various aspects of OFDI from India. The present study is focused on determining the macroeconomic and microeconomic factors influencing Indian OFDI.

As discussed above in sections 1.4 and 1.5, the recent phenomenon of increasing Indian OFDI and its unique characteristics present distinct features of India's internationalization path. Indian economy has been on an upward growth path during last three decades. A number of empirical studies have emphasized the effect of FDI inflows on the growth of Indian economy. However, there is limited research reported in relation to Indian OFDI. The fact that India has substantially increased its OFDI over the last decades has been neglected in the literature so far. Despite a large volume of econometric literature on OFDI from developing countries, the understanding of Indian OFDI is quite limited.

Notwithstanding the rapid expansion of the world trade and investments in recent years, Indian MNEs are still at the formative stage of their global operations. International business studies suggest three factors 1) the home country specific factors, 2) firm specific factors, and 3) the host country factors to be responsible for the success or the failure of firms that invest overseas to extend their foreign operations. Following an analysis of firms from six Western European countries, Wan and Hoskisson (2003) suggest that home country environment is an important component in the study of corporate diversification strategies. At the same time Rugman (2003) emphasizes that MNEs are the key drivers of globalization and firms will establish foreign affiliates in the case of strong firm specific advantages, location advantages in host countries and internalization advantages (Buckley and Casson, 1976; Rugman, 1981). The firms from emerging markets appear to develop patterns of FDI that are different from multinationals from mature market economies (Matthew, 2006; Yiu *et al.*, 2007; Ramamurti and Singh, 2009; Yang *et al.*, 2009). These suggest reassessing the determinants and international scope of emerging market firms.

Studies suggest that the competitive edge of Indian MNEs is still largely based on country-specific, rather than firm-specific advantages (Athukorala, 2009). At the same time Indian firms has been characterized by their strong and significant ownership advantages by many scholars in international business (Pradhan, 2004; Elango and Patnaik, 2007) as Indian firms belong to the advanced sector of the economy (Aggarwal and Agmon, 1990). Therefore there is a need to study of Indian OFDI on a country level as well as on a firm level. Although both of these approaches have been employed separately (Pradhan, 2006a, 2008; Kumar, 2007; Tiwari and Herstatt, 2010), no effort has been made to determine the

individual importance relative to each other. This paper fills that void by presenting hypotheses concerning these two approaches.

To this end, we examined the macroeconomic variables that have an influence on Indian OFDI. We analysed Indian OFDI behaviour with national macroeconomic variables, such as GDP, inward FDI, exports, exchange rate, interest rate, human capital, and openness of economy. We also empirically tested the macroeconomic theories of FDI such as Investment Development Path (IDP) model, exports-OFDI relationship *etc.* for their applicability towards Indian OFDI. The well researched IDP theory has not been empirically tested for India in the recent times after Dunning and Narula (1996). Also, there is no study on exports-OFDI relationship exclusively, a topic on which there has been a considerable debate among the international business scholars.

The case study of Indian firms in Ireland was performed to find out the firm specific factors and their investment in developed countries. As described in section 1.6, Indian OFDI is expected to increase in the developed countries. Ireland being one of the developed countries is recognized as an attractive investment destination. Thus, Indian investment in Ireland provides an interesting case to study. The study of Indian firms in Ireland is an opportunity to explore the world's extraordinary economies as they have embraced globalization by reducing restrictions on trade and investment. Though the development of these countries is multifaceted, FDI has been used as a primary tool for development and growth. Apart from that, there had been a growing number of studies on Indian OFDI for large developed countries such as the USA and the UK but there has been none for a country like Ireland, which is although developed in all aspects, remains a relatively small country.

1.7. Aims of the research

The recent fascinating phenomenon of OFDI from emerging markets to developed world has drawn a fresh theoretical attention of international business researchers (Yamakawa *et al.*, 2008). A more recent study by Gammeltoft *et al.* (2010) suggests that variety of features set emerging economies and their firms apart from their developed-world counterparts and a range of stylized differences needs to be identified. In this regard, researchers are trying to address key questions as evidenced by recent reports and publications: 1) what drive emerging market OFDI to the developed world, 2) what are the key resources and capabilities behind such investments, and 3) how do country level factors affect OFDI from emerging markets. However, we could not find any study on OFDI from India to a developed economy, except one very recent report by Tiwari and Herstatt (2010) in which Indian OFDI in Germany was studied.

This thesis focuses on OFDI from emerging markets with special reference to Indian investment in Ireland. The overall aim of the thesis is to study the rapid expansion in OFDI from India and the spurt in foreign acquisitions by Indian firms situated in the wider context of international investment from developing countries particularly to developed world. The specific objectives of the present study are:-

- 1. To review literatures and government policies related to Indian OFDI.
- 2. To theoretically and empirically analyze the country level factors of Indian OFDI based on macroeconomic theories of international business.
- 3. To determine the firm level factors and their role(s) in Indian investment in Ireland.
- 4. To evaluate the current status of OFDI from India in Ireland and develop a deeper understanding of Indian firms in Ireland.

This thesis will make a contribution to the body of knowledge on FDI from emerging economies in their desire to catch-up with the developed world in the current era of globalization. This study will add to the ongoing debate by providing a systematic analysis of FDI cases originating from emerging markets and their operations in the developed countries.

1.8. Structure of the thesis

This thesis is structured as follows. Chapter 1 introduces the topic and rational of the present research. Chapter 2 reviews the related literature and the major theories on FDI. General methodology used in the present study is described in chapter 3. Chapter 4 discusses Indian government policies on foreign investments focusing on their influence on Indian OFDI. The research was carried out in three phases and the findings are presented in chapter 5 through 9.

Phase one: Phase one concentrates on the country level study of Indian OFDI and the findings are presented in chapters 5, 6 and 7. Each of these chapters tests the extant theories after a careful literature review. The methodology used in these studies is discussed in their respective chapters.

Phase two: The firm level study was carried out in phase two of the research. Chapter 8 includes the hypothesis and the findings of firm level survey of Indian firms in Ireland.

Phase three: The analyses of three case studies on the basis of primary and secondary data are presented in chapter 9.

The overall findings of the thesis, conclusion, research implications, limitations and future directions are discussed in chapter 10.

1.9. Definitions

Although the field of international business is considered to be not new, it has been not been more than a decade since the number of studies on emerging markets have flooded the International business journals and thus the scholars have always introduced new definitions and terms to the readers. For the purposes of this thesis, the following definitions have been used:

- 1) Emerging economies/markets: The term emerging markets was first used by Antoine W. Van of International Finance Corporation back in the early 1980s. These days this term is being used quite loosely (Pacek and Thorniley, 2007). In this thesis, we call emerging markets to the countries which are generally called developing countries.
 - Emerging markets are countries experiencing rapid economic development, with their economic institutions concurrently undergoing rapid institutional adaptation to free-market ideologies (Arnold and Quelch, 1998; Hoskisson *et al.*, 2000).
- 2) **FDI flows:** FDI flows are presented on a net basis (capital transactions' credits less debits between direct investors and their foreign affiliates).
- 3) **FDI stocks:** FDI stocks are presented at book value or historical cost, reflecting prices at the time when the investment was made. For a large number of economies, FDI stocks are estimated by either cumulating FDI flows over a period of time or adding flows to an FDI stock that has been obtained for a particular year from national official sources data series on assets and liabilities of direct investment.
- 4) **Internationalization:** Internationalization refers to the degree to which a firm's sales revenue or operations are conducted outside its home country.
- 5) Multinational Enterprises: A multinational enterprise is an enterprise that engages in FDI and owns or, in some way, controls value-added activities on more than one country.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The globalization of business, liberalization of the world economy and the internationalization of firms have brought about new interdependencies among firms along the value chain as well as among countries. Several theories and approaches have been put forward to explain the internationalization of business activities. This chapter reviews relevant theories and empirical research that contribute to the understanding of the phenomenon of OFDI from emerging economies including India. The published literature pertaining to the following three major aspects are reviewed:-

- 1) Theories of International Business that explain the overall dynamics of FDI.
- 2) Theories that have paid special attention to emerging economies on their involvement by the way of OFDI.
- 3) Studies which have focused on Indian OFDI in particular.

2.2. FDI theories

It has been suggested that no single theory can explain all cross-border transactions. Therefore, it is important to familiarize with several theories and viewpoints that aim to clarify the factors determining FDI (Dunning, 2001). Since, it is not convenient in this context to summarize the multitude of theories that have been offered to explain various parameters of FDI such as firms' behaviour, few most comprehensive frameworks and major theories of FDI are presented in this section. Theories discussed in this chapter serve as a comprehensive base for the understanding of FDI research, assist in selecting appropriate data series, give an indication of the expected signs of explanatory variables and support arguments used in the empirical estimation and discussion.

2.2.1. Market imperfection theory (Hymer, 1960; Kindleberger, 1969). Stephen Hymer was the first to define FDI and formulate the economic theory of the MNEs. He highlighted the characteristics of investing firms while explaining FDI. Until the early 1960s, although a considerable body of literature addressed foreign investment, no distinction was made between portfolio investment and FDI. The theory of foreign investment was essentially a theory of international portfolio or indirect capital movements. According to Hymer (1960), FDI is different from simple portfolio investment because it transfers the control power

over the investment to the investor. Later, Kindleberger (1969) further detailed the differences between FDI and portfolio investment. According to him, FDI does not necessarily require capital movement from the home country to the host country because it can be financed locally by borrowing, issuing stocks, or using retained earnings. Also, FDI does not have to be one way transaction from a home country to a host country because both the countries can be the home and the host simultaneously even in the same industry.

Hymer's theory is commonly known as the "market imperfection theory". It states that FDI is the direct result of an imperfect global market environment. Hymer claims that if incoming foreign MNEs are the same as their already established domestic counterparts, they will not gain from entering the domestic market. This is because the incoming MNEs will be hit by higher costs, including communication and transport, bringing in staff, cultural barriers, language and the lack of an established network with the government and local businesses. Therefore, he proposes that incoming firms must have some specific advantage which will counter the associated challenges of entering a new country (Moosa, 2002). Kindleberger (1969) suggests the advantage possessed by a firm needs to be firmspecific for FDI to be suitable and appropriate for transfer, and powerful enough to overcome the foreign disadvantages. Licensing such an advantage to a foreign firm could result in unwanted transfer of knowledge. In other words, to undertake value added activities in foreign countries MNEs must possess offsetting advantages in terms of monopolistic competition derived from their differentiated products and/or scale of economies that arise from production, distribution and marketing. This is because local firms have natural cost advantages based on location. MNEs exploit counterbalancing advantages and ownership specific advantages originated from the market imperfection. These enable MNEs to undertake their value added activities abroad based on their ownership advantages, and to make higher profits abroad than at home and as compared to local firms in host countries.

One of the major downfalls of this theory is that it does not clearly consider why expanding firms choose not to make the most of their advantages by increasing production in their home countries and exporting to foreign markets, which could be a substitute for FDI. The theory does explain why firms choose to invest in foreign countries, but it does not explain why investing firms choose country A over country B (Moosa, 2002).

According to Hymer (1960), the possession of ownership advantages in a particular industry by firms over its foreign competitors leads to undertake extensive value added activities. It means, his concept of the MNE is limited into a product of structural market imperfection, which dominates markets by exploiting one or more of advantages such as scale economies from production, distribution, marketing, knowledge advantages and product diversification. These imperfect markets could be artificial constructs in which firms create a "less uncertain competitive environment, enjoy greater market power, control better output and price, and reap above-normal returns" (Sharma and Erramilli, 2004). The "Hymer view" however does not take into consideration the so-called internalization aspect.

Later in 1986, Hennart suggested to modify this theory because of some drawbacks. The market imperfection theory failed to explain the presence of MNEs in highly competitive industries such as textile, car rental and fast food (Hennart, 1986). MNEs internalize their transactions to improve efficiency (Buckley and Casson, 1976; Rugman, 1981; Hennart, 1986) and to exercise strategic management advantages. They may use international vertical integration as a competitive weapon against non integrated firms rather than a monopolistic device for extra profits.

Another limitation of the market imperfection theory is that it concentrates on the relationship between MNEs and local firms assuming MNEs at disadvantages (Dunning, 1993). Hymer overlooked the issue of globalism and multi-nationality, which are important and confer special advantages to the MNEs. Finally, Hymer did not pay attention to the location matters of the MNE activities. He did not include the importance of geographical characteristics and spatial dimensions of the MNE activities into his theory. Location specific advantage is considered as a major interdependent determinant with ownership advantage in the process of FDI decision making process (Dunning, 1993). Despite crucial limitations, Hymer's theory is powerful nonetheless and provides a pioneering foundation (Pitelis, 2006).

2.2.2. Product life cycle theory (Vernon, 1966). The product life cycle theory, proposed by Raymond Vermon in 1966, was an effort to explain the overseas investment expansion behavior of American MNEs after the Second World War. It was focused on the dynamic

nature of trade and investment with an attempt to link comparative advantages of location to product differentiation. Vernon (1966) explained the growth of FDI from the USA in Western European countries using a microeconomic concept. In this theory, the justification for foreign investment and expansion is due to the stage in the product's life, not the country where the FDI takes place (Moosa, 2002). According to this theory, when demand for a new product in other countries become significant, it becomes worthwhile for the innovating firm to set up production facilities in those countries. Alternatively, the firm may establish production facilities in other areas where labor costs are lower than the home country and export to other regions. Vernon (1966) proposed three stages in the life of a product 1) new product stage, 2) maturing product stage, and 3) standardized product stage.

- 1) New product stage: In this stage, a firm introduces a new product in response to the felt need in the domestic market. As the fortunes of the product are not known, it is produced in a limited quantity and is sold mainly in the domestic market i.e. production happens at home due to the need for synthesis between the production and R&D teams, and close proximity to potential buyers. The price of the product in the home country is inelastic at this stage because of increased demand, and innovative products can command a higher price. Here, the product can be advanced with the help of feedback from home customers. Exports are either non-existent or take place in a limited way, gradually growing late in the new product stage.
- 2) Maturing product stage: As the product receives consumer acceptance and popularity, its demand rises both in domestic as well as in foreign markets. The innovating firm sets up manufacturing facilities abroad to expand production capacity, and to meet growing demand from domestic as well as foreign consumers. With the increase in demand, competition appears in both the domestic and foreign markets and firms resort to FDI in foreign market to meet the needs of the demand. At this stage, the country where the innovation was born is the net exporter, and the foreign countries are the net importers. Near the end of the maturity at this stage, attempts are made to produce the product in the developing countries.
- 3) Standardized product stage: This is the last stage in the product life cycle theory when the market for a product stabilizes. At this stage, the product becomes a commodity and

the market becomes price sensitive. The manufacturers start looking for low cost producing countries in order to bring down the cost of production. As a result, the product begins to be imported into the innovating firm's home country. In some cases, imports may result in winding up of domestic production facilities.

Thus, the value added activities of the foreign MNEs are sequential based on the product life cycle. During early stages of the introduction of a new product, the locations of its production are limited to the home country, whereas foreign markets are served by exports. Since the early stage product is characterized as unstandardized with high price and limited market-size, the location decision extends beyond simple factor costs analysis and transportation costs. In the maturing stage, the product becomes more standardized and enters into core markets. Firms may change their strategies of production - from limited production for restricted and home country markets to the large-scale production for broad and foreign markets. In the standardized stage, the low cost of labor may be the initial attraction for the location of production. Therefore, most markets are served by exports from subsidiaries in countries that have lower production cost.

The theory highlights how an innovative firm can not simply rely on home markets and home production to give it a lasting advantage. Reasons are advanced to explain why and when a firm should move into overseas markets (Moose, 2002). The theory sufficiently justifies the flow of FDI from innovating countries, such as the USA to developed nations, such as those in the EU, and also to developing countries. However, Vernon's approach offers only a partial explanation about international trade. Vernon does not address the reverse flow of FDI, from developing countries to developed countries; although the theory does explain how destinations for both imports and exports change (Sanyal, 2001). Mature products produced in the home country close to natural resources can compete globally, especially when economies of scale are pursued. Therefore, just because firms can produce overseas does not dictate they should (Mullor-Sebastian, 1983). However, MNEs now have the ability to unveil products to different markets around the world simultaneously; moreover, these products are not all standardized (Bende-Nabende, 1999). Vernon's observations were largely based on products developed and produced in the USA and thus cannot be readily applied to developing countries.

2.2.3. Transaction cost theory (Coase, 1937; Williamson, 1981; Caves, 1971, 1974). The roots of Transaction cost theory can be found in Coase (1937). Ronald Coase (1937) and Oliver Williamson (1981), stated that organizations experience enormous economic costs and corresponding economic advantages in each transactions (Slater and Spencer, 2000). This theory tries to explain why companies exist, and why companies expand or source out activities to the external environment. The transaction cost theory supposes that companies try to minimize the costs of exchanging resources with the environment, and that companies try to minimize the bureaucratic costs of exchanges within the company. Companies, therefore, weigh the costs of exchanging resources with the environment, against the bureaucratic costs of performing activities in-house.

This theory sees institutions and market as different possible forms of organizing and coordinating economic transactions. When external transaction costs are higher than the company's internal bureaucratic costs, the company will grow, because the company is able to perform its activities more cheaply, than if the activities were performed in the market. However, if the bureaucratic costs for coordinating the activity are higher than the external transaction costs, the company will be downsized.

Transaction cost theory takes into account the assertion that a firm exists because of its capacity to economize on the costs of market-oriented production (Slater and Spencer, 2000). The firm itself emerges as the most superior economic device for the reduction of market costs. Consequently, the efficiency advantages of any organization or firm are regarded by Coase as greatest where long-term contracts are negotiated (Coase, 1937). Long-term contracts, including contracts and other arrangements that address staffing and employment issues are preferred unless the costs of negotiation and enforcement of separate or short-term market contracts are low.

According to Coase (1937), every company will expand as long as the company's activities can be performed cheaper within the company, than by *e.g.* outsourcing the activities to external providers in the market. According to Williamson (1981), a transaction cost occurs "when a good or a service is transferred across a technologically separable interface". Therefore, transaction costs arise every time a product or service is being transferred from one stage to another, where new sets of technological capabilities

are needed to make the product or service. Transaction costs related to the exchange of resources with the external environment could be reflected by the following factors (the list is not exhaustive):-

- Environmental uncertainty
- Opportunism
- Risks
- Bounded rationality
- Core company assets

These factors potentially increase the external transaction costs, where it may become rather expensive for a company to control these factors. Therefore, it may very well be more economic to maintain the activity in-house, so that the company will not use resources on *e.g.* contracts with suppliers, meetings, supervision *etc.* Therefore, if companies see the environmental uncertainty as high, they might choose to not outsource or exchange resources with the environment.

Caves (1971) insisted that a firm can be successful if it is able to transfer its knowledge accumulated through the experience of domestic market to other national markets for the product at little or no cost (Caves, 1974). Later in 1982, he extended the concepts of transactional advantages of operating under common ownership across frontiers. A major drawback with this theory was that it heavily concentrated on static ownership specific advantage without paying attention to location specific advantage or strategic management concept.

2.2.4. Internalization theory (Buckley and Casson, 1976; Rugman, 1980; Hennart, 1986). Internalization was conceptualized by Buckley and Casson (1976). Internalization theory explains the existence and functioning of the multinational enterprise. It contributes to the understanding of the boundaries of MNEs, their interface with the external environment and their internal organizational design. FDI and associated internalization take place when transaction costs, *i.e.* the costs of negotiating, enforcing and overseeing a contract, are high, and in such cases firms internally can be a suitable substitute for markets. Alternatively, when these costs are low, they will positively support the case for working in partnership with other firms, being part of the market, and using mutually beneficial licensing and

franchising agreements. The firm is left to decide if it is more cost effective to own and run a facility overseas (internalize) or if it is better to establish a contract with a foreign firm to run, license or franchise it on their behalf (Wall and Rees, 2004).

The internalization theory is based on imperfections in markets (Coase, 1937). Internalization can be seen as a form of vertical integration, where a firm takes ownership of duties and/or goods that are formally relied on a third party to provide. The starting point of this theory is the idea that the modern business sector carries out many activities other than routine production of goods and services (Calvet, 1981). Based on the pre-existed ownership specific advantages, firm try to minimize transaction costs derived from imperfection in intermediate product markets by using common ownership and control (Hennart, 1986). In market economies, resources are allocated by the price mechanism, but in hierarchy by internal planning within the firm.

Magee (1977) argues that firms opt to exploit market opportunities as direct investors since it is the best way to appropriate maximum returns on its investment in new proprietary knowledge rather than through arm's length transactions.

The internalization theory explains FDI in terms of a need to internalize transaction costs so as to improve profitability and explicates the emergence of "efficiency-seeking FDI". It argues that because knowledge is a public good within the firm and the market for knowledge is highly imperfect, there are many opportunities to reduce cost, to improve efficiency to transfer knowledge within the firm, and to induce benefits in internalizing abroad value added activities. In addition, the firms desire to secure their properties and to maintain product qualities further motivates them to integrate cross-border transactions of intermediate products under common ownership. As a result, a basic hypothesis of this theory is that MNEs are likely to engage in FDI whenever they recognize any net benefits to use multinational hierarchies rather than to use market mechanisms.

Internalization theory treats ownership specific advantages derived from structural market imperfection as exogenous variables. It means that this story can only explain foreign value added activities of firms, which already have ownership specific advantages before they decide to invest and try to internalize intermediate transactions to reduce costs. This theory cannot explain other FDI motives such as strategic asset-seeking and market-

seeking. In addition, Buckley and Casson (1976) argue that MNEs tend to invest in some countries where they have appropriate labor skills to use and exploit the investing firms' ownership advantages and where they have enough people to consume the knowledge based products. At this point, they add location specific advantages into internalization theory: however the location advantages by are not related to those of macro- oriented theories, but strictly related to MNEs ownership specific advantages (Buckley and Casson, 1976).

Hood and Young (1979) argue that it is not just the ownership of a firm specific asset that gives it its advantage, it is the process of being able to internalize that asset, rather than selling it, that gives the MNE its overriding advantage. Overall, knowledge provides a firm with a monopoly advantage and only through discriminatory pricing, instead of licensing for example, can MNEs capitalize fully. In other words, Internalisation theory analyses the choices that are made by the owners, managers or trustees of organisations. The theory assumes that these choices are rational ones. In this context, rationality signifies that the decision-maker can identify a set of options, and has an objective by which these options can be ranked, and an ability to identify the top-ranked option and select it (Buckley and Casson, 2009). The internalization argument provides reasons why firms prefer FDI in some circumstances over importing and exporting, and why they may refrain from licensing or franchising (Moosa, 2002).

The internalization argument does not appear to have any theoretical foundations, and Rugman (1986) supports this by stating "due to its generality, internalization can be seen as more of an approach than a theory". Also, with internalization, centralization is promoted. This may not be beneficial in all firms, especially those that are innovative. The costs of internalization need to be taken into consideration; more accounting and ownership of information is required, the cost of communication increases, and the dislike of MNEs in some host countries causes political discrimination that could affect the firm adversely. All of these costs need to be offset by the overall advantage of internalization for it to be justified (Hood and Young, 1979). MNEs have to consider the full picture when making future FDI decisions and as Grosse (1985) asserts, MNEs are complex and the internalization principle features as a small part of a large picture in the FDI decision

making process. Nevertheless, FDI evidence across countries is in general support of the hypothesis (Moosa, 2002).

2.2.5. Comparative advantage theory (Kojima, 1978, 1982; Ozawa, 1990). Kiyoshi Kojima (1978) found that the extant theories based of American MNEs could not fully explain Japanese small and medium sized firms and came up with the comparative advantage theory. He alleged that the OFDI should be undertaken sequentially from the industries in disadvantage position to the ones becoming less advantaged. According to this theory FDI should originate in the investing country's comparatively disadvantaged industry, which is potentially a comparatively advantaged industry in the host country. However, in the real world the principle of comparative advantage cannot always provide the desired pattern of resource allocation among countries. Natural and artificial barriers to trade and government interventions in terms of pricing and output decisions of firms, the different objectives of firms, and imperfections of markets can introduce X-inefficiency and structural misallocation of resources and further deteriorate the applicability of comparative advantage theory. In addition, not only the efficiency of resource allocation, but also some other considerations such as equity and sovereignty may be critical criteria of governments' ultimate goals (Dunning, 1988). The principle of comparative advantage especially in terms of trade in that countries should export goods and services, which are produced more efficiently, derived from the countries resource endowments and import goods and services, which are produced more efficiently in foreign countries derived from their resource endowments. This principle can be adapted to FDI. A country's firms, which have comparative ownership advantages to produce some goods and services compared to foreign firms, should be stimulated to invest in overseas that have comparative locational advantages in resources to produce those goods and services. Also inward investments should be encouraged to countries that have comparative locational advantages to produce some products and services by other foreign countries that have comparative o-advantages in resources to produce those goods and services (Dunning, 1988).

2.2.6. Capitalization rate theory (Aliber, 1970). In the 1970s, the currency variation theory (1970) developed by R. Z. Aliber was also famous in the field of international investment. He analyzed quantitatively the choice of multinational enterprises between technology licenses and FDI and then indicated generally that when the host country's

market is relatively small, it is better to choose the technology licenses, when the market expands gradually with time, FDI is much better. However, if the MNEs possess a hard currency, for the same amount of cash inflow, its discount rate is higher than that of the enterprises in the host country. In this context, even if the host country's market is small, it is better for the multinational enterprise to adopt FDI. Aliber's theory says that MNCs invest in foreign assets because they give the MNE the ability to hold assets in different currencies and thus take advantage of structural and transactional imperfections in international capital and foreign exchange markets. The pattern of FDI reflects on the disperse capabilities of firms with different nationalities to borrow or raise capital in imperfect foreign capital markets. Firms from nations with strong currencies capitalize the same stream of expected earnings at a lower rate than other firms with weaker currencies. It means that the former firms can make foreign exchange gains through purchasing or selling assets in the latter firms or nations (Aliber, 1970; Dunning, 1993). As a result, outflows of FDI will tend to move from nations with strong currencies to nations where indigenous nations have strong currencies to nations in which indigenous firms have relatively low rates of capitalization (Gray, 1995).

2.2.7. The Uppsala model (Johanson and Vahlne, 1977). Much of the extant literature on internationalization has been inspired by the work of Scandinavian researchers Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977). Based on their empirical observations on Swedish manufacturing firms at the international business department of Uppsala University in 1977, Johanson and Vahlne theorized the "Uppsala model".

In contrast to the traditional perspective, Johanson and Vahlne (1977) describe the internationalization of a firm as a process of experiential learning and incremental commitments which leads to an evolutionary development in a foreign market. Their approach has its theoretical fundamentals in the behavioural theory which explains the nature of the firm through behavioural actions (Cyert and March, 1992). The Uppsala model has dealt fundamentally with knowledge acquisition and learning. It has been observed that the absence of market-specific knowledge has forced the Swedish manufacturing firms to develop their international operations in small steps, undertaking incremental commitment decisions and moving at the beginning to psychically close countries in order to reduce the market uncertainty (Johanson and Vahlne, 1977). They

suggest that the process of internationalization is founded on an evolutionary and sequential build-up of foreign commitments over time. In their study, Johanson and Vahlne (1977) found that those firms followed an evolutionary four-stage internationalization process. Initially the firm has occasional exporting activities. In the second stage, the firm exports regularly through agents due to its growing knowledge of the foreign market. In the third stage the firm has a deeper involvement abroad and exploits the market by setting up a sales marketing subsidiary and in the final stage, the firm engages in international production. This model is based on linear cumulative path where in absence of international experience the firms chooses not to engage in unknown foreign markets and to focus on national market in order to avoid unnecessary risks. Eventually, as the firm gains experience in foreign markets and manages to internalize the knowledge acquired, it engages in FDI committing more resources and controlling its operations abroad (Johanson and Vahlne, 1977).

Johanson and Wiedersheim-Paul (1975) used the concept of "psychic distance" which involves differences in culture, languages, education, industrial development, political systems, among other things across the nations to explain the progression of national firms in foreign markets. They found that firms generally internationalize to low psychic distant markets in the first movements abroad and once they gain experience in these markets they expand their activities to more psychic distant markets. Moreover, in opposition to the neo-classic standpoint, the Uppsala model has been depicted as a dynamic schema whilst the rational perspective is of a more static nature (Andersen, 1997). The Uppsala model deals fundamentally with knowledge acquisition and learning. The foundations and core concepts of this approach can be found in Carlson's analysis of the foreign decision process (Carlson, 1966). The backbone of his insight is the conviction that the lack of knowledge about how to conduct a business in a foreign market represents a handicap for companies which intend to internationalize (Carlson, 1966).

Nevertheless, although it still has important relevance within the international business community and has been supported by a number of empirical and theoretical research, the Uppsala model has been criticized due to its inability to describe and explain some rapid and contemporaneous internationalization process such as active online internationalization. E-commerce companies operating in a virtual domain overcome spatial

and temporal barriers to undertake international operations quickly and cheaply. The internationalization of these firms has indisputably nothing to do with the operations of the Swedish manufacturing firm of the Uppsala model. The process of knowledge acquisition is influenced by the new virtual domain and consequently the source of information has shifted from the market to the customers.

However, the above mentioned theories were not able to explain why FDI choose to exploit relevant assets in some countries but not others. In this regard, Dunning's Eclectic approach to international production gave locational issues explicit importance by combining them with firm-specific advantages and transaction costs elements (Dunning, 1993).

- **2.2.8.** The Eclectic paradigm (Dunning, 1977). The Eclectic paradigm offers a resource based view of FDI. According to this theory national factors and firm specific attributes affect international trade, production, and FDI. Dunning argues that the existence and growth of MNEs are the result of simultaneous presence of three sets of advantages relative to other firms, the advantages of Ownership, Location and Internalization (OLI), so called the **OLI theory**. Thus, this theory states that entry mode decisions are determined by the composition of these three sets of advantages as perceived by firms:-
 - 1) Ownership advantages: The ownership advantages are specific to the nature and the nationality of the owner. These advantages are attributed to a set of home country and firm specific factors that influence their firm's competitiveness in the foreign markets. According to Dunning (1977), there are three types of ownership advantages. The first is due to the ownership of particular, unique intangible assets, e.g., firm-specific technology, knowledge of markets, R&D, etc. over other firms in the market. Firm specific advantages are mainly intangible knowledge-based assets and advantages of oligopoly such as patents, technology, marketing and managerial skills, brand names, product innovations and process enhancement etc. The second is attributable to the collective ownership of complementary assets (e.g. joint ability to create new technologies, usage of raw materials, access to market, monopoly power and size). Home country includes natural endowments, human capital, labor, demand and supply conditions and institutions (Porter, 1990). The third type of ownership

advantage derives from the firm's multi-nationality (*i.e.* a firm operating in many countries is likely to be in a better position than a national firm to take advantage of different business situations). Such advantages include economies of scale and scope, private access to resources and first mover advantages.

- 2) *Internalization advantages*: Internalization advantages are derived from transferring ownership advantages and from the need to gain market power across national boundaries within own organization.
- 3) Locational advantages: Locational advantages arise from the fact that different locations feature different resources, institutions and regulations affecting the revenue and the cost of production. They determine the countries in which the MNE chooses to produce. Locational advantage can be divided into economic, social and political (Piteli, 2010). Economic advantages include a country's factor endowments such as market size, tax structure, capital, labor, infrastructure, technology, natural resources, managerial skills, transportation and communications. Social advantages include the language, culture, ethnicity, and business customs. Whereas the political advantages include government policies for foreign firms on trade barriers and investment regulation that may affect FDI positively or negatively (Dunning, 1981).

In this OLI paradigm, ownership and internalization advantages are more associated with the firm, whereas location advantages are associated with the host country. The more OLI advantages a firm possesses, the greater the propensity of adopting an entry mode with a high control level such as wholly owned venture. The aforesaid was updated by Dunning (1995, 1998, 2000) who argued that competitive advantages, market failure and collaboration, as well as dynamic environments should also be integrated into the model when decisions on international production are made.

Based on the OLI advantages, Dunning (1998, 2000) distinguished four main types of international production- Resource-seeking, market seeking, efficiency seeking and strategic asset seeking. The following table 2.1 summarizes the "why, where and how" of the four motivations and also explains the goals and activity of such investments.

Table 2.1. Types of international production

Types of international production	Ownership advantages (the "why" of MNE activity)	Location advantages (the "where" of production)	Internalization advantages (the "how" of involvement)	Strategic goals of MNEs	Illustration of types of activity that favour MNEs
Natural resource seeking	Capital, technology, access to markets, complementary assets, size and bargaining strengths	Possession of natural resources and related transport and communications infrastructure, tax and other incentives	To ensure stability of supplies at right price, to control markets	To gain privileged access to resources vis-à-vis competitor	a) Oil, copper, bauxite, bananas, pineapples. Cocoa, hotels b) Export processing, labor intensive products or process c) offshoring of some services
Market seeking	Capital, technology, information, management and organizational skills, surplus R&D and other capacity, economies of scale, ability to generate brand loyalty	Material and labour costs, market size and characteristics, government policy (e.g. With respect to regulations and to import controls, investment incentives etc.)	A desire to reduce transaction or information costs, buyer ignorance or uncertainty, to protect property rights	To protect existing markets counteract behavior of competitors, to preclude rivals from entering markets	Computers, pharmaceuticals, motor vehicles, cigarettes, processed foods, airlines, financial services
Efficiency seeking (a) of products (b) of processes	As above, but also access to markets, economies of scope, geographical diversification and/or clustering and international sourcing of inputs	(a) Economies of product or process specialization and concentration (b) Low labor costs, incentives to local production by host governments, a favorable business environment	(a) As for second category, plus gains from economies of common governance (b) the economies of vertical integration and horizontal diversification	As part of regional or global product rationalization and/or gain advantages of process specialization	(a) motor vehicles, electrical appliances, business services, some R&D (b) consumer electronics, textiles and clothing, pharmaceuticals
Strategic asset seeking	Any of first three that offer opportunities for synergy with existing assets	Any of first three that offer technology, organizational and other assets in which firm is deficient	Economies of common governance improved competitive or strategic advantages, to reduce or spread risks	To strengthen global innovatory or production competitivene ss, to gain new product lines or markets	Knowledge- intensive industries that record a high ratio of fixed to overhead costs and which offer substantial economies of scale, synergy or market

(Source: Dunning and Lundan, 2008).

As new challenges appeared causing major changes in the FDI flows recently, the OLI framework alone was not sufficient to explain the FDI trends, such as the increasing volume of FDI between from less developed countries. The new theoretical models demonstrated and highlighted the importance of country specific features, such as economic development, in explaining the FDI trends and flows (Brenton *et al.*, 1998).

2.2.9. The Investment Development Path (IDP) theory (Dunning, 1981, 1988; Dunning and Narula, 1996). Based on the Eclectic paradigm, Dunning (1981, 1988) put forward the IDP theory. According to this theory, the outward and inward FDI position of a country is systematically related to a country's level and structure of economic development. Along the IDP, OFDI is expected to be undertaken only when a country has reached a certain minimum level of development, at which time ownership advantages may have evolved among firms in that country. The OFDI pattern therefore reflects the evolving nature of ownership advantages of domestic firms as well as changes in the advantages of the home economy *vis-à-vis* potential host economies. The IDP theory has provided a longstanding explanation of OFDI flows that has undergone gradual refinement since 1975 (Dunning, 1981). As per the IDP theory, countries tend to evolve through five stages (from "least developed" to "developed"), in which the propensity of being a net FDI recipient to ultimately becoming a net source of FDI (Dunning, 1981, 2005; Dunning and Narula, 1996). This explains a country's evolution from early development through to the fully developed stage.

1) Stage 1: The first stage is associated with pre-industrialization. In this stage, there is likely to be very little inward and outward FDI. This is because, at this stage, there are very few country-level factors (i.e. location-specific advantages such as a sizeable domestic market or clusters of development, inadequate infrastructure, unattractive labor market, underdeveloped commercial and legal frameworks) that might attract inward FDI, with possible exceptions being assets such as natural resources. Ownership advantages of domestic firms tend to be rare. There is little or no indigenous technology accumulation and existence of very few created assets. The created assets that do exist are in labour-intensive manufacturing and may be influenced by the government through infant industry protection, such as import controls (Dunning and Narula, 1996). Due to the lack of created assets, foreign firms prefer to export or import from this domestic market rather than

directly invest in it. Thus, at this stage the net FDI stock, which equals the OFDI stock minus the IFDI stock, is around zero. The government's role in this stage is quite limited, which is usually one or both of two kinds: 1) providing basic infrastructure and upgrading of human capital *via* training and education, or 2) a variety of economic and social policies like import protection, domestic content prices and export subsidies (Dunning and Narula, 1996).

- 2) Stage 2: In the second stage, IFDI starts to rise (because of the increase of per capita incomes and other location-specific assets such as infrastructure and transportation), while OFDI remains low or negligible (firms are still developing). The majority of IFDI remains in labour-intensive and low-technology intensive manufacturing sector. In this stage IFDI is likely to be based upon the investing firms' possession of tangible assets like technology, trademarks and managerial skills (Dunning and Narula, 1996). The OFDI is still insignificant as the domestic firms lack ownership advantage. In this stage generally the level OFDI is influenced by the home country government-induced 'push' factors, such as subsidies for exports and technology development or acquisition (Dunning and Narula, 1996). The net stocks of outward investment remain increasingly negative.
- 3) Stage 3: The third stage is characterised by a decline in the growth rate of IFDI, as the local firms become more competitive. OFDI gradually start rising since the domestic firms have acquired ownership advantages over the period of time and they will now start making investments overseas for asset seeking etc. Although the net FDI stock still remains negative, the growth of OFDI starts becoming much higher than that of IFDI. This change is attributed to the development of ownership advantages achieved by the local firms that make them increasingly competitive. This leads to high technology intensive manufacturing, and the technological capabilities of the economy gravitates towards the production of standardized goods (Dunning and Narula, 1996). IFDI will shift to efficiency seeking production and away from import substituting production (Dunning and Narula, 1996). In some industries, where domestic firms have a competitive advantage, some strategic asset acquiring IFDI may arise. The initial ownership advantages of foreign firms; tangible assets, such as technology, trademarks and managerial skills, begin to diminish as domestic firms develop their own competitive advantages and are thus able to compete in the same sectors. The domestic firms have accumulated some ownership advantages which

will lead to a competitive domestic market. To exploit the gained ownership advantage the firms in this stage engage in resource seeking investment in less developed countries and in market and strategic asset seeking in the developed countries (Buckley and Castro, 1998). The net FDI stock starts to increase for the first time despite remaining negative sometime. In this stage, governments may encourage IFDI in order to enhance the ownership and location advantages within the economy.

- 4) Stage 4: The fourth stage of IDP is distinguished by a shift to a positive NOIP, as OFDI stock equals or exceeds IFDI stock. During this period, location advantages of the country are assumed to depend mostly on the location-bounded created assets that are not independent of natural resources. At this stage location specific advantages become solely dependent on created assets and indigenous firms increasingly seek to internalize the market for their ownership advantages by FDI rather than exporting (Dunning and Narula, 1996). Domestic firms are now, not only be able to compete with international counterparts in domestic sectors, but also to progress into foreign markets. As the ownership advantages of domestic firms become similar to the firms in other fourth stage countries, inter-industry trade and inter-industry FDI increases among these countries. In this stage, the role of the government becomes more supervisory and regulatory in order to reduce market imperfections and maintain competition (Dunning and Narula, 1996).
- 5) Stage 5: In the fifth or final stage, the country's economy shifts into an advanced period, when NOIP tend to fluctuate around zero with nearly equal amounts of IFDI and OFDI flows. This stage corresponds to the situation of today's leading developed countries (Buckley and Castro, 1998). The IFDI mainly are of two kinds in this stage; 1) market, and 2) knowledge seeking investment from countries at lower stages of development (Dunning and Narula, 1996). The ownership advantages of firms become less dependent on their home country's natural resources and more dependent on their ability to organize advantages efficiently and exploit benefits of multi-nationality. The government policy plays a key role in structuring the characteristics of an economy's markets and setting of macro-organizational strategies.

Dunning and Narula (1996) suggest that shape and position of the IDP vary widely across individual countries as a result of specific economic structure such as market size,

natural endowments *etc.* and the government policies. Beyond changes in the volume of IFDI and OFDI along the IDP, the approach also predicts structural changes in the composition of such investment. Inbound FDI is first directed to low/medium knowledge-intensive or resource based industries; later they may move into the high technology-intensive industries, and/or more efficiency-seeking FDI takes place. Similarly, outward FDI first takes place in low-technology or resource-based industries and then in high value added activities. This process of structural upgrading driven by inward and outward FDI reflects growing national competitiveness.

After the 1980s, new theories and paradigms of FDI studies well complementing the previous one emerged endlessly. For example, Michael Porter reported the diamond theory or the theory of competitive advantage in 1990. This theory creates a paradigm within which the determinants of national competitive advantages can be identified. On the basis of Porter's "stages theory of competitive development", a country's economic development are distinguished by four stages: 1) factor driven (e.g. natural resource extraction or labor intensive manufacturing), 2) investment driven (e.g. intermediated and capital goods manufacturing and infrastructural building), 3) innovation driven (e.g. human capital abundant and active in research and development), and 4) wealth driven. The first three stages are in fact a successive upgrading of nation's competitive advantages and normally be associates with progressively rising economic prosperity (Porter, 1990). Porter (1990) argues that each stage of competitive development is matched with a particular pattern of FDI, both inward and outward. On the side of OFDI, the transition from the first to the second stage generates a capital outflow towards lower wage countries, and most of the investments are focused on the natural resource extraction and labor intensive manufacturing industries. The transition from the second to the third stage gives rise to OFDI focused on intermediate goods industries (Ozawa, 1992).

The major limitation of the classical theories is that they are based on the studies of OFDI originated from the developed countries. All the theories discussed above were aimed to explain the foreign investment by the MNEs from developed countries. Although, these theories have been able to explain the phenomena of OFDI from the developing countries to some extent, but, there has always been a call for new theories to explain the OFDI from emerging markets. But, these have always been the starting point for scholars

researching on FDI originating from developing countries. Table 2.2 summarizes the list of major theories on FDI to date.

Table 2.2. Summary of major FDI theories.

Paradigm	Market imperfection paradigm	Behavioural Paradigm Uppsala Model	Market failure paradigm		Resource Based View
Theory	Market imperfection theory		Internalization theory	Transaction Cost theory	Eclectic theory
Explanation	Degree of market imperfection for monopolistic advantage	Physic distance, cultural distance and experience influence target market and resource commitment	Market failure leads to internalization with focus on firm specific knowledge	Market failure and transaction characteristics	Ownership advantage, Location advantage and internalization advantage
Drawbacks	Fails to account for exporting and collaborative modes	Fails to account for collaborative modes	Fails to account for location advantage	1) Separates transaction from overall strategy 2) Fails to explain investment when there is no market failure	Fails to account for idiosyncratic internal characteristics of firm

Time 1960s 1970s 1980s to present

2.3. Studies based on OFDI from developing countries

Although FDI from developing countries can be traced back to about a century ago (Katz and Kosacoff, 1983), it has only become a common phenomenon during the last three decades. Since the late 1970s, more and more developing countries have emerged as the net FDI investors. The emergence of multinational firms from emerging economies challenges the classic theories of the internationalization of a firm. In response to this puzzle, a number of studies, including those reviewed here, have pointed at a combination of environmental and organizational factors that help understand why emerging markets might enjoy a competitive advantage over developed country MNEs even when competing with these

firms in developed markets. Generally, OFDI theories applied to the developing and transition economies have two ways to follow up: the one is seeking competitive advantages; the other is to maximize the inter-period profit. Nevertheless, most of these competitive advantages appear to be temporary in nature and only provide plausible explanations as to how these emerging market MNEs are able to take their first steps into the international competitive arena. However, they are significantly silent when it comes to explaining if and how they can sustain their competitive edge. Only a small but growing number of emerging market MNEs has been able to not only sustain their initial competitive position *vis-à-vis* in developing countries but significantly improve it over time. This section reviews some of the relevant hypothesis and theories put forward to explain this phenomenon.

Louis T. Wells (1977, 1983) states that advantages of overseas investments from developing countries consist in small scale production (small market, low-technologies and low cost management fees), local purchases, special products (use of local resources, materials and innovations), and closeness to the market. The objectives of their OFDI are to protect export markets and quota, to strive for low cost production and to diversify assets *etc.* This theory proposed by Wells (1977) manages to explain the phenomena of OFDI from a less developed country to others least developed countries. Wells (1983) argues that MNEs from developing counties possess the same basic advantages as those from developed countries, but they are derived from different sources. For example, OFDI from emerging economies to other developing countries may be the result of similar technology and management expertise suitable or adaptable to local conditions.

Lecraw (1977) examined the characteristics of overseas firms in developing countries. On the basis of his survey of over 20 firms from various Asian developing countries in Thailand, Lecraw (1977) suggests that these firms tend to use labor-intensive technology and produce for both domestic and international markets. He also reports that networking with relatives and fellow countrymen can be a very important source of knowledge regarding profit-making possibilities.

Dunning (1981) argues that OFDI from developing countries is primarily influenced by country specific determinants such as the stage of development, along with the advantages of ownership, location and internalization.

The early theories of the emerging market firms pointed towards the fact that developing country-based firms enjoyed the gradual process of technological accumulation by interacting with developed country MNEs operating in their countries. Lall (1983) and Wells (1983) argue that learning from these companies has given emerging market firms the possibility to eventually venture abroad. Lall (1983) studied the competitive advantages and investment motivations of Indian transnational corporations. Based on his observations and findings, he advanced the theory of technological localization. He suggests that developing countries MNEs have wider scope of innovation based on a model of localized technology change. This view is quite opposite to the product life cycle theory (Vernon, 1966), which lies on the assumption that innovation take place in the capital rich countries. According to Lall (1983), although technologies from developing countries are characterized by small scale and labor intensive, it is easy for them to adapt to new conditional variations. In general, these technologies accommodate properly to the needs of others developing country markets. Hence, the technology learnt at home by the Indian firms was the major factor of investment in the developing countries at that point of time i.e. during the early 1980s. Lall (1983) also suggests that the learning process and the development of competitive capacities by a firm depend mainly on the characteristics of its domestic environment. The MNEs from developing countries are inclined to materialize their FDI via joint ventures with developed country firms to get access to technologies and skills that are not readily available in their home countries.

On the similar lines of Lall (1983), but with more advanced stage of internationalization process, Cantwell and Tolentino (1990) formulated the theory of technological accumulation to explain the third world MNEs. They argue that the technology accumulation is an ongoing process in the developing countries. They claim that the technology innovation is the fundamental driving force of industry and enterprise development. The technology innovations in the developing world are mainly to master and improve the existing technologies and the notion of technological accumulation provides a better explanation for FDI from developing countries. Therefore, with the

influence of technological accumulation, the regional and the industrial distributions of the developing countries OFDI can vary through time. They also acknowledged that FDI from developing countries, especially from the newly industrializing economies in Asia, had evolved towards more complex manufacturing activities, and was increasingly destined towards developed countries.

The IDP model was revisited to take into account the rising OFDI from developing countries (Dunning, 1996; Dunning and Narula, 1996). In the revised IDP theory Dunning and Narula (1996) underscored the importance of the government in the NOIP change during the five stages. The IDP model has also been tested for a number of developing countries including China (Marton and McCarthy, 2007; Egypt (Bongalia and Goldstein, 2006), Malaysia and Taiwan (Sim and Pandian, 2007). These studies are based on either country level or firm level analysis to test the IDP hypothesis.

Among the emerging markets, the four economies of BRIC countries have particularly become an important source of OFDI (Sauvant, 2005; Gammeltoft, 2008). These four countries have extended their OFDI in not only in emerging markets but also implanted their roots in developed nations. Among the BRIC countries, China has recently received increasing attention by the international business researchers as it has made great strides to become one of the major sources of FDI among developing countries (WIR, 2010).

Liu *et al.* (2005) focussed on the IDP theory to untangle the determinants of Chinese OFDI. They basically analyzed four variables GDP, IFDI, human capital and exports to understand their influence on Chinese OFDI. They demonstrate that FDI by China is largely consistent with the IDP hypothesis, as GDP per capita, investments in human capital, exports and IFDI have a direct influence on Chinese OFDI.

Child and Rodrigues (2005) carried out multiple case studies on the market-seeking firms from China. They confirm that leading companies like Haier group, Galanz group, and Lenovo Group Ltd. do not attach priority to entering geographically proximate emerging markets. Rather these companies have invested in large developed countries to pursue their long-term globally-oriented strategies. Firms from China are using other advantages such as financial strength to offset their competitive disadvantages. Moreover,

Chinese firms appear to be significantly impacted by institutional factors. The CIMC Ltd., Haier group, and Lenovo group Ltd. have benefited significantly from government support at critical stages in their development. Contrary to previous studies (Cai, 1999; Deng, 2004), Child and Rodrigues (2005) do not find a strong support to cultural proximity for the internationalization process in their studied case firms. Based on their study, they argue that China presents an opportunity to extend, rather than replace, existing theories on the internationalization of firms, including those applied to developing country MNEs.

In a recent study, Buckley *et al.* (2007) while analyzing the determinants of OFDI from China attempted to find out the extent to which the mainstream theory that explaining developed country FDI was applicable to emerging country contexts. They argue that Chinese OFDI has both a conventional and an idiosyncratic dimension. They found that market size, geographic proximity, inflation, market openness and cultural proximity were important location determinants of Chinese OFDI for the period 1984 to 1991. They also observed that the firms' behaviour of Chinese OFDI was aligned with the state government policies of China during the period of their study.

In a study with Taiwanese firms, Makino *et al.* (2002) offer insights into location choices and emphasize the importance of asset-seeking over asset-exploitation. In an another study, Lien *et al.* (2005) describe the role of corporate governance in FDI decisions of Taiwanese firms, which is an important issue rarely discussed for firms from emerging economies.

In a cross-country study of OFDI, Kyrkilis and Pantelidis (2003) grouped 25 countries in the period of 1976-99 into three groups. Group I - advanced countries, group II - middle income countries, group III - developing countries and analyzed effects of a number of variables on their OFDI. They validate that in group I countries per capita income, exchange rate, low interest rate, international trade, technology and human capital of home country are significant factors. Empirically significant variables in group II countries are per capita income, interest rate and openness of the home country. Whereas for the group III countries, only the per capita income and the openness of the economy are significant. They argue that firms need a certain level of ownership specific advantages adequate to support product differentiation at home and market adaptation abroad. Firms

orient towards markets of similar development level because of similar demand structure as they face less barriers for market entry and have comparable competitive advantages.

After the early 1990s, significant changes at the country, industry and firm levels dramatically transformed the global economic landscape. Concomitantly, the classic theories of the MNEs were revised and expanded upon. International business researchers are increasingly trying to understand and explain how emerging markets firms are able to sustain their competitive position over time. Lessard and Lucea (2008) indicate the importance of mechanisms for knowledge creation, integration and diffusion within the organizations. Matthews (2002) argues that conventional FDI theory in general, and the OLI in particular, is not very helpful in explaining Asian late-comer firms. He suggests that emerging market MNEs typically represent instances of accelerated internationalization and that they use their late-comer position to their advantage through repeated applications of a process of 'Linkage, Leverage and Learning' (LLL) (Matthews, 2002). The LLL model is an alternate explanation for the emergence of MNEs from developing countries (Matthews, 2006).

A late-comer firm performs well by focusing, not only on its' own existing advantages, but also on how to acquire advantages externally through linkages (Linkages). Moreover, this firm has a strong ability to leverage resources in networks rather than gaining advantage from internalization (Leverage). Finally, such firms have a strong ability to learn and imitate and build advantage from experiences in linkage and leveraging processes (Learn). Mathews (2006) explains the rapid emergence of the "latecomer firm" in the 1990s in terms of prior linkages developed in the global economy which firms leverage through experiential learning and gain a foothold in the interconnected global network. Chang (1995) and Guillen (2003) support a similar understanding of incremental learning in the international expansion of Japanese and Korean business groups.

Mathews (2006) argues that there are three features, which make developing countries' firms distinctive from the developed countries. First, accelerated internationalization is a unique feature of developing countries' firms. Second, developing countries MNEs are able to achieve this accelerated internationalization not through technological innovation, but through organizational innovations that are well adapted to

the circumstances of the emergent global economy. Third, they are able to implement these approaches through strategic innovations that enable them to exploit their latecomer and peripheral status to advantage (Mathews, 2006).

2.4. Studies based on OFDI from India

There have been a increasing number of studies on Indian OFDI basically of empirical nature. The first explanatory investigation into the characteristics of Indian MNEs was reported by Lall in 1983. Lall (1983) studied the first wave of Indian OFDI and examined their possible ownership advantages at that point of time. He employed an interview methodology to test hypothesis for ownership advantages in 17 manufacturing firms during 1981-1982. He observed that these firms mainly large family owned business and has several decades' long existence. The ownership advantage of these firms were derived from their production experience, process know-how, design, product and process adaptations to local requirements and capital goods production in a few cases.

Later, Lall (1986) studied both firm and industry level determinants of Indian OFDI. He used a sample of 162 firms of which 24 were investing overseas averaged over two year period, 1977-78 and 1978-79. Employing cross sectional Logit and Tobit model, his analysis suggests that Indian firm's decision on overseas investment depends on firm size.

Kumar (1995) examined the trends and patterns of FDI inflows into India over the post-Independence period as well as the emergence of Indian enterprises as direct investors abroad in the background of changing policy regime. He noted that Indian government's attitude towards foreign investments has evolved over the post-Independence period in four distinct phases.

- Phase 1: 1948-67 as creating location advantages with import protection.
- Phase 2: 1968-79 as protecting the domestic base of 'created' assets.
- Phase 3: The 1980s as 'halting reforms' for improving international competitiveness.
- Phase 4: The 1990s as structural adjustment and globalisation.

Later, Kumar (1996, 1998) studied in depth the motivation for Indian OFDI. He found that overseas investments have been undertaken by Indian enterprises to improve their global competitiveness with local presence in major markets, acquiring strategic assets, and strategic access to markets. In an another study, Kumar (2006) points several sources of ownership advantages of Indian MNEs – 1) accumulated learning from production experience, 2) further technological effort and adaptations on the knowledge imported from abroad especially on development of cost-effective processes and products, 3) ability to differentiate product with brands and quality consciousness, among other factors. He argues that firms that are already in export markets are more likely to be outward investors.

Elango and Pattnaik (2007) studied 794 Indian firms to understand how these firms built capabilities to operate in international market. They attempted to answer the following questions utilizing empirical analysis:

- 1) What is the relationship between underlying firm characteristics and internationalization in the emerging market context?
- 2) How is this relationship facilitated by parental network capabilities?

Elango and Pattnaik (2007) support the hypothesis that as the developing countries firms' are in the early stage of internationalization, the Uppsala model of internationalization and network theory offers a valid context for explaining the internationalization process of these firms. They further support the hypothesis that knowledge of foreign markets and networks are important for Indian firms to build the capabilities of international operations.

In a series of recent studies, Pradhan (2006b) analyzed the global competitiveness of Indian pharmaceutical industry and highlighted the role of government on the growth of this particular sector. He emphasizes that Indian pharmaceuticals firms are strengthening their geographical presence by starting their own subsidiaries and affiliates in different strategic overseas markets in order to achieve their global growth. Not only market but strategic alliances, brand, R&D facilities and distribution channels have been among the reasons for Indian pharmaceutical companies to invest in the developed countries (Pradhan, 2006b).

Pradhan and Alakshendra (2006) analyzed whether overseas greenfield was more beneficial to Indian pharmaceutical firms for foreign acquisition. He suggests that overseas acquisitions are more effective internationalization strategy as compared to greenfield investments. They emphasized that government intervention is indispensable for developing countries, such as India, wanting to build their domestic base in technology intensive industries. With a case study of Ranbaxy, they concluded that overseas acquisition not only enhance competitive advantages by providing access to new product portfolios, technology and skills, but also ensure established marketing and distribution networks, an existing market and scope to benefit from operating synergies (Pradhan and Alakshendra 2006).

Pradhan (2003b) studied the trends and patterns of Indian service sector and identified determinants of such investment. He showed that firm age and size were among the major determinants of service sector OFDI from India. He argues that the innovativeness of the services firms especially in the case of computer segment of Indian service sector is a key element of Indian OFDI strategy. The financial strength of a service sector firm is another crucial factor affecting its outward expansion strategy (Pradhan, 2006c).

Later, Pradhan (2007) analyzed the two waves of Indian OFDI on basis of several themes such as size, growth, sector, and the investment policy. He argues that some of the aspects of home country such as home country exports, employments, and technological activities affect on Indian OFDI. He suggests that the emergence of the information technology MNEs from India is a result of growing sophistication of Indian national innovation system. He emphasizes a crucial role of Indian government in the innovation process by creating conditions for skills accumulation, infrastructure building and adopting a more conducive and systematic outward looking policy for software industry.

In a recent study on Indian OFDI in information technology sector, Varma (2009) supports the eclectic paradigm. She argues that the accumulated technological and other capabilities before 1990, characterized by pre-dominant dependence on protected home markets during India's import substitution policy regime were insufficient to make a way to global market. Due to this reason, Indian firms were forced to improve their competitive

strength and enlarge their position in the world markets. At that time, Indian companies have realized that OFDI was comparatively less risky and expensive costly than building capabilities by making large investments such as R&D, advertising, *etc.* at home.

There are a number of studies which gives an overview of Indian OFDI. There are an increasing number of sector specific studies that have been described in this chapter. A very few studies have focused on the magnitude of Indian OFDI to a specific location. We find only one recent study by Tiwari and Herstatt (2010) describing motives, operations, experiences, and future plans of Indian firms in Germany.

2.5. Research gap and conclusion

Most of the FDI theories including those discussed here, for developed or developing countries relate to the behavior and growth of MNEs. However, it has always been emphasized by several authors that emerging market firms follow a unique rationale. These MNEs have specific strengths and weaknesses which demand special attention to clearly understand the phenomenon (Luo and Tung, 2007; Matthews, 2002, 2006; Child and Rodrigues, 2005).

"What drives firm's strategy in international business?" "What determines the success and failure of firms around the world?" are among the few fundamental questions international business research. Traditionally there are two perspectives addressing these two questions (Peng, 2004). Porter (1980) proposed an industry-based view in which conditions within an industry, to a large extent, determine firm's strategy and performance. Barney (1991) advocates a resource-based view and suggested that it is firm-specific differences that drive strategy and performance.

The industry and firm based perspective assumed that government policies are the "background." This is not surprising, because industry and firm based views primarily arise out of research on competition in the USA, in which it may seem reasonable to assume a relatively stable, market-based institutional framework. Studying FDI from the industry-and firm-based views have been criticized for largely ignoring the formal and informal role of the government and country level factors (Peng, 2008). Peng and Wang (2007) argue that a macroeconomic-based view of international business strategy, in combination with

industry- and firm-based views, shed significant light on the most fundamental questions confronting international business.

More recently, researchers increasingly probe into emerging economies whose government policies differ significantly from those in developed economies and there is increasing appreciation that home country macro level factor, significantly shape the strategy and performance of both domestic and foreign firms (Hoskisson *et al.*, 2000; Wright *et al.*, 2005). There are a few but increasing number of literature on OFDI from emerging markets that has examined the home country level factors of their OFDI (Krykillis and Pantelidis, 2003; Buckley *et al.*, 2007; Tolentino, 2010).

It is apparent from the literature survey in this chapter that although there have been an increasing number of studies on Indian OFDI, an holistic approach which combines macro and micro level determinants in a economically developed location, has not been used as yet. This thesis analyzes country specific factors of the growing Indian OFDI and then combines it with the industry and firm specific advantages in order to achieve the better understanding of Indian OFDI in a developed country Ireland.

Based on the above arguments, it is important to understand the overall phenomenon of a country's OFDI. This thesis analyzes the home country level, industry level and firm level determinants of Indian OFDI in Ireland as presented in Figure 2.1 in context of the present foreign investment theories discussed in this chapter.

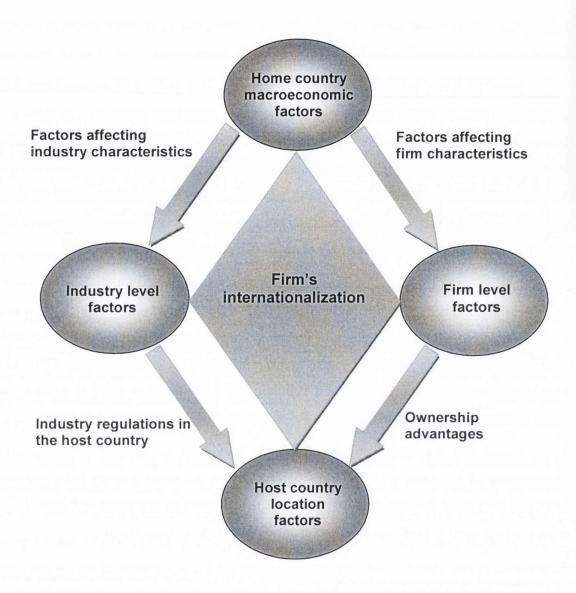


Figure 2.1. A research model developed on the basis of gap identified in the literature survey.

CHAPTER 3

GENERAL METHODOLOGY

3.1. Introduction

All research methods must provide answers to the problem of causal inference. A method permits its user to gather data concerning time, order and covariance between variables, and allows discarding of the rival causal factors (Denzin, 2009).

This chapter describes the general methodology used in this thesis. The chapter begins with the discussion of research philosophy outlining the differences between major paradigms of social science, providing how the research follows a specific paradigm criterion. Based on the research questions discussed in chapter 1 and an appropriate paradigm that would best suit to find the answers to the research questions are discussed. Later the support for use of mixed research methods is highlighted and the research design and analysis mechanisms for this research are discussed. A conceptual framework based on research question asked in this study is presented in Figure 3.1.

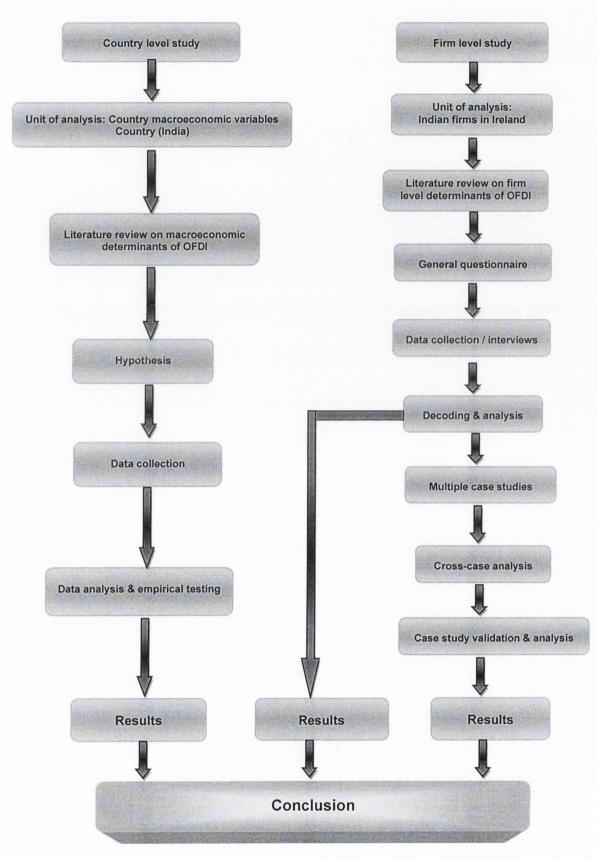


Figure 3.1. Conceptual representation of research methodology used in the study

3.2. Research philosophy

Easterby-Smith *et al.* (1991) identify three reasons why the exploration of philosophy may be significant with particular reference to research methodology:-

- 1) It can help the researcher to refine and specify the research methods to be used in a study, that is, to clarify the overall research strategy to be used. This would include the type of evidence gathered and its origin, the way in which such evidence is interpreted, and how it helps to answer the research questions posed.
- 2) Knowledge of research philosophy will enable and assist the researcher to evaluate different methodologies and methods and avoid inappropriate use and unnecessary work by identifying the limitations of particular approaches at an early stage.
- 3) It may help the researcher to be creative and innovative in either selection or adaptation of methods that were previously outside his or her experience.

Guba and Lincoln (1994) state that the basic beliefs that define a particular research paradigm may be summarised by the responses given to three fundamental questions:-

- 1) *Ontology:* Ontology relates to the nature of reality, that is, what things, if any, have existence or whether reality is "the product of one's mind" (Burrell and Morgan, 1979).
- 2) Epistemology: Epistemology is the relationship between the reality and the researcher. It is concerned with the relationship between the "knower" (the research participant) and the "would-be knower" (the researcher). Positivists emphasize dualism and objectivism. That is, the researcher and the research participant and topic are assumed to be independent of one another (dualism), and by following rigorous, standard procedures, the participant and topic can be studied by the researcher without bias (objectivism). Furthermore, positivists hold that the investigator can study her or his research participants without influencing them and vice versa.
- 3) *Methodology:* Methodology is the technique used by the researcher to discover the reality.

3.3. Research paradigm

A paradigm can be defined as a "set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organized study of that world" (Filstead, 1979). The paradigm selected guides the researcher in philosophical assumptions about the research and in the selection of tools, instruments, participants, and methods used in the study (Denzin and Lincoln, 2000) and a research paradigm sets the context for an investigator's study. According to Hughes (1990):

"Every research tool or procedure is inextricably embedded in commitments to particular visions of the world and to knowing that world. To use an attitude scale, to take the role of a participant observer, to select a random sample... is to be involved in conceptions of the world which will allow these instruments to be used for the purpose conceived. No technique or method of investigation is self validating... they operate only within a given set of assumptions about the nature of society, the nature of human beings, the relationship between the two and how they may be known."

During the past century, different paradigms have taken birth due to the remarkable growth in social sciences research. There are mainly two paradigms to the verification of theoretical propositions, *i.e.* positivism and phenomenological (or naturalistic inquiry).

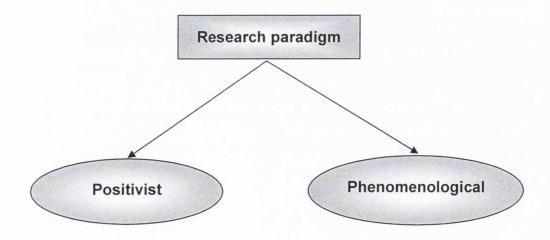


Figure 3.2. Research philosophy alternative

Positivism promotes a more objective interpretation of reality, using hard data from surveys and experiments, while phenomenology (or interpretivism) is concerned with methods that examine people and their social behavior (Gill and Johnson, 1997). Positivism has been more commonly associated with scientific research, while phenomenology has its roots in the social sciences (Veal, 2006). Some of the differences between these philosophies are outlined in Table 3.1.

Table 3.1. Research paradigms.

	Positivist paradigm	Phenomenological paradigm
Basic beliefs	The world is external and objective	The world is socially constructed and subjective
	Observer is independent	Observer is part of what observed
	Science is value free	Science is driven by human interests
Researcher should	Focus on facts	Focus on meanings
	Look for causality and fundamental laws	Try to understand what is happening
	Reduce phenomenon to simplest elements	Look at the totality of each situation
	Formulate hypothesis and then test them	Develop ideas through induction from data
Preferred methods include	Operationalizing concepts so that they can be measured	Using multiple methods to establish different views of phenomena
	Taking large samples	Small samples investigated in depth or overtime

(Source: Easterby-Smith et al., 1991).

3.3.1. Major research paradigms

In today's introductory paradigm discussions most authors focus on positivism and phenomenological and then mention a variety of other paradigms that have recently

emerged. However, there is no agreed upon delineation of this multitude of new paradigms as various scholars label and categorize them in a variety of ways. According to Guba and Lincoln (1994), Positivism and Post-positivism, constructivism—interpretivism, and critical theory are the main research paradigms based on which a researcher chooses a particular methodology.

The distinction between the philosophies is overstated (Webb, 1989) and triangulation of methods in current day research is common (Polit *et al.*, 2001). It is very important therefore, that an in-depth understanding of the strengths and weaknesses of research approaches and their underlying philosophy is obtained.

Positivism: Positivism is a form of philosophical realism adhering closely to the hypothetico- deductive method (Cacioppo et al., 2004; McGrath and Johnson, 2003; Sciarra, 1999). The scientific method involves systematic observation and description of phenomena contextualized within a model or theory, the presentation of hypotheses, the execution of tightly controlled experimental study, the use of inferential statistics to test hypotheses, and, finally, the interpretation of the statistical results in light of the original theory (Cacioppo et al., 2004). Relying on the hypothetico-deductive method, positivism focuses on efforts to verify a priori hypotheses that are most often stated in quantitative propositions that can be converted into mathematical formulas expressing functional relationships (Guba and Lincoln, 1994; McGrath and Johnson, 2003). The primary goal of positivistic inquiry is an explanation that leads to prediction and control of phenomena.

Post-positivism: Post-positivism arose out of dissatisfaction with some aspects of the positivist stance (Ponterotto, 2005). A goal for both is an explanation that leads to prediction and control of phenomena. Both perspectives emphasize cause-effect linkages of phenomena that can be studied, identified, and generalized, and both paradigms proffer an objective, detached researcher role. Positivism and post-positivism serve as the primary foundation and anchor for quantitative research. A key distinction between the positivist and the post-positivist views is that the former stresses "theory verification" and the latter "theory falsification" (Lincoln and Guba, 2000).

Constructivism-interpretivism: The constructivist (or interpretivist) paradigm can be perceived as an alternative to the "received view" or positivist paradigm. In marked

contrast to positivism's naive realism (a single objective external reality), constructivism adheres to a relativist position that assumes multiple, apprehendable, and equally valid realities (Schwandt, 1994). Essentially, constructivists hold that reality is constructed in the mind of the individual, rather than it being an externally singular entity (Hansen, 2004). The constructivist position espouses a hermeneutical approach, which maintains that meaning is hidden and must be brought to the surface through deep reflection (Schwandt, 2000; Sciarra, 1999). This reflection can be stimulated by the interactive researcher-participant dialogue. Thus a distinguishing characteristic of constructivism is the centrality of the interaction between the investigator and the object of investigation. Only through this interaction an explanation to an issue can be provided. The researcher and her or his participants jointly create (co-construct) findings from their interactive dialogue and interpretation. The goals of constructivism-interpretivism are both idiographic and emic.

Critical theory: Critical theory serves to disrupt and challenge the status quo (Kincheloe and McLaren, 1994). The critical-ideological paradigm is one of emancipation and transformation, one in which the researcher's proactive values are central to the task, purpose, and methods of research. Like constructivists, criticalists advocate a reality that is constructed within a social-historical context. However, more so than constructivists, criticalists conceptualize reality and events within power relations, and they use their research inquiry to help emancipate oppressed groups. Criticalists emphasize a dialectic stance on the researcher-participant interaction that aims to empower participants to work toward egalitarian and democratic change and transformation (Tolman and Brydon-Miller, 2001). Denzin (1994) has noted that "an emancipatory principle drives such research, which is committed to engaging oppressed groups in collective, democratic theorizing about" their common and different perceptions of oppression and privilege.

Given the research problem as outlined in the three phases of chapter 1, the study followed a positivist paradigm in phase one and two, and a interpretivist paradigm in the third phase of this study. This was done recognising the following parameters identified for positivist paradigm in this study.

1. Philosophical realism: the hypothetico-deductive method (Cacioppo *et al.*, 2004; McGrath and Johnson, 2003; Sciarra, 1999) for phase one and two. Internal realism:

- Reality-for-us is an inter-subjective construction of the shared human cognitive apparatus for phase three.
- 2. The Positivist method involves systematic observation and description of phenomena contextualized within a model or theory, the presentation of hypotheses, the execution of empirical study, the use of inferential statistics to test hypotheses, and, finally, the interpretation of the statistical results in light of the original theory (Cacioppo et al., 2004). An interpretive approach provides a deep insight into "the complex world of lived experience from the point of view of those who live it" (Schwandt, 1994). Interpretive research assumes that reality is socially constructed and the researcher becomes the vehicle by which this reality is revealed (Cavana et al., 2001; Walsham, 1995).
- 3. Relying on the hypothetico-deductive method, positivism focuses on efforts to verify a priori hypotheses that are most often stated in quantitative propositions that can be converted into mathematical formulas expressing functional relationships (Guba & Lincoln, 1994; McGrath and Johnson, 2003). The primary goal of positivistic inquiry is an explanation that (ultimately) leads to prediction and control of phenomena. On the other hand an interpretive paradigm focuses on theory building (Andrade, 2009) by investigating a contemporary phenomenon within its real-life context.

3.4. Research approaches

One of the first considerations of research is the pre-existing body of knowledge that exists in a particular field. This should be used as a source of reference for research previously conducted in the chosen field of enquiry, as well as a source of the body of theory which pertains to the selected subject area. The literature review formed the non empirical research of this study. The key academic theories within the chosen area was identified in chapters 2, 5, 6, 7, 8, and 9 and discussed in the respective chapters. This study was designed to take into account both the non-empirical and empirical research approaches. The non-empirical approach was used to inform the structuring and execution of the empirical research activities. Based on the non empirical research, empirical research was performed. Following three major dimensions of empirical investigation have been found in the research methodology in social sciences.

3.4.1. Deductive and inductive research

Deductive theory represents the commonest view of the nature of the relationship between theory and research. The researcher, on the basis of what is known about a particular domain and of theoretical consideration to that domain, deduces a hypothesis (or hypotheses) that must be subjected to empirical scrutiny.

The primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant or significant themes inherent in raw data, without the restraints imposed by structured methodologies. Inductive research begins with observation or examination of events or specific processes in order to reach wider and more general statements based on these events or processes. The assumptions are inferred from the research results (the findings) and create a theory.

Figures 3.3 and 3.4 illustrate schematic representations of deduction and induction approaches.

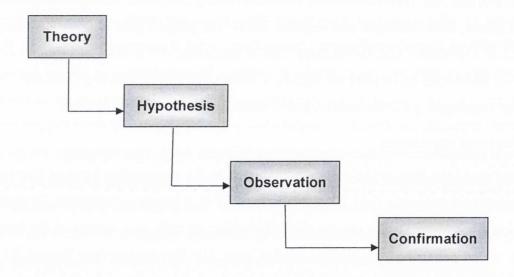


Figure 3.3. Schematic representation of deduction approach

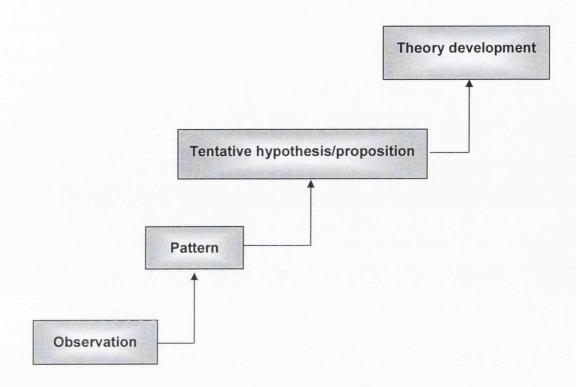


Figure 3.4. Schematic representation of induction approach

3.4.2. Quantitative and qualitative research

Quantitative research is often conceptualized by its practitioners as having a logical structure in which theories determine the problems to which researchers address themselves in the form of hypotheses derived from general theories (Bryman, 1988). The quantitative paradigm is based on positivism. Science is characterized by empirical research; all phenomena can be reduced to empirical indicators which represent the truth. The ontological position of the quantitative paradigm is that there is only one truth, an objective reality that exists independent of human perception. Epistemologically, the investigator and investigated are independent entities. Therefore, the investigator is capable of studying a phenomenon without influencing it or being influenced by it; "inquiry takes place as through a one way mirror" (Guba and Lincoln, 1994). Researchers who use logical positivism or quantitative research employ experimental methods and quantitative measures to test hypothetical generalizations (Hoepfl, 1997), and they also emphasize the

measurement and analysis of causal relationships between variables (Denzin and Lincoln, 1998). Quantitative research allows the researcher to familiarize him/herself with the problem or concept to be studied, and perhaps generate hypotheses to be tested. A quantitative researcher attempts to fragment and delimit phenomena into measurable or common categories that can be applied to all of the subjects or wider and similar situations (Winter, 2000). A quantitative researcher needs to construct an instrument to be administered in standardized manner according to predetermined procedures. Data are collected by a social survey, experiment, telephone interviews or other methods that allow quantitative predictions to be made. Once the survey or experimental data have been collected, they are then analyzed so that causal connection specified by the hypothesis can be verified or rejected. The resultant findings then feedback into, and are absorbed by, the theory that the whole process going (Bryman, 1998).

Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings, such as "real world setting, where the researcher does not attempt to manipulate the phenomenon of interest" (Patton, 2001). The qualitative paradigm is based on interpretivism (Altheide and Johnson, 1994; Kuzel and Like, 1991) and constructivism (Guba and Lincoln, 1994). Ontologically speaking, there are multiple realities or multiple truths based on one's construction of reality. Reality is socially constructed (Berger and Luckmann, 1966) and so is constantly changing. On an epistemological level, there is no access to reality independent of our minds, no external referent by which to compare claims of truth (Smith, 1983). The investigator and the object of study are interactively linked so that findings are mutually created within the context of the situation which shapes the inquiry (Guba and Lincoln, 1994; Denzin and Lincoln, 1994). This suggests that reality has no existence prior to the activity of investigation, and reality ceases to exist when we no longer focus on it (Smith, 1983). The emphasis of qualitative research is on process and meanings of the study. Techniques used in qualitative studies include in-depth and focus group interviews and participant observation.

3.4.3. Subjective and objective

Another significant choice which exists in the research paradigm to be adopted is the extent to which the researcher is subjective (involved in or has an influence on the research outcome) or objective (distanced from or independent) in the execution of the research work. Easterby-Smith *et al.* (1991) discussed the "traditional assumption that in science the researcher must maintain a complete independence if there is to be any validity in the results produced". As outlined in Table 3.1, the phenomenological research paradigm is, by its very nature, subjective. The use of this paradigm necessarily requires involvement in both real world circumstances as well as the involvement (sometimes directly) of the researcher himself. It is accepted that such a subjective approach, as used in the research, requires the recognition of any influence or limitation such subjectivity may have on the conduct or findings of the research. In a subjective approached the complexities of the social world is explored, whereas in an objective approach, complexities are reduced. Objectivity is widely recognized by the researchers and philosopher of science as the corner stone of science and reliable knowledge (Ethridge, 2004)

3.5. Use of mixed methods-Triangulation

Research methodology requires right balance between quantitative and qualitative (Feurer and Chaharbaghi, 1995). Mixed methods research has become increasingly articulated, attached to research practice, and recognized as the third major research approach or research paradigm, along with qualitative research and quantitative research (Johnson *et al.*, 2007). It recognizes the importance of traditional quantitative and qualitative research but also offers a powerful third paradigm choice that often will provide the most informative, complete, balanced, and useful research results (Johnson *et al.*, 2007).

Webb et al. (1966) coined the term triangulation. Denzin (1978) first outlined how to triangulate methods in a research study. Denzin defined triangulation as "the combination of methodologies in the study of the same phenomenon". Denzin outlined the following four types of triangulation: (a) data triangulation (i.e. use of a variety of sources in a study), (b) investigator triangulation (i.e. use of several different researchers), (c) theory triangulation (i.e. use of multiple perspectives and theories to interpret the results of a study), and (d) methodological triangulation (i.e. use of multiple methods to study a research problem).

Triangulation provides researchers with several important opportunities. First, it allows researchers to be more confident of their results. This is the overall strength of the multi-method design. Triangulation can play many other constructive roles as well. It can stimulate the creation of inventive methods, new ways of capturing a problem to balance with conventional data-collection methods. Triangulation may also help to uncover the deviant or off-quadrant dimension of a phenomenon. Different viewpoints are likely to produce some elements which do not fit a theory or model (Jick, 1979).

In this thesis, we employed a triangulation approach with multidimensional perspectives. The entire study was divided in three phases; 1) phase one - country level study, 2) phase two - firm level study, and 3) phase three - industry level study. Denzin (1970) and other researchers suggest that triangulation increases the validity, strength, and interpretative potential of a study. Moreover, it decreases investigator biases and is the best suited to provide multiple perspectives to the study.

3.6. Research design

A research design provides a framework for the collection and analysis of data. A choice of research design reflects decisions about the priority being given to a range of dimensions of the research process (Bryman and Bell, 2007). A research design includes the importance attached to:-

- Expressing causal connection between variables.
- Generalizing to larger groups of individuals than those actually forming part of the investigation.
- Understanding behavior and the meaning of that behavior in its specific social context.
- Having a temporal appreciation of social phenomena and their interconnections.

3.6.1. Research design-phase one

The phase one of this thesis is the study of macroeconomic determinants of Indian OFDI. The home country macroeconomic factors provide a natural unit of analysis here. The literature on the country level studies are generally quantitative with a positivist

approach, reason for this is mainly because the questions asked and the nature of the phenomenon, which doesn't generally offer to pursue a phenomenological approach. For example of this study, it is aimed to find out the characteristics of country that determines Indian OFDI. As discussed in chapter 1, there is still a research gap in studies related to home country determinants of Indian OFDI. This gap formed the first phase of the present research. Since the questions asked to explain Indian OFDI in this phase was quite broad, we divided the study into three parts. We carried out an extensive literature survey to narrow down the potential home country determinants of Indian OFDI. Relevant theories and empirical findings were critically reviewed to design the research plan. A number of hypotheses were developed and tested using various empirical methods. The econometric methods used in this thesis are discussed in the following sub-sections. Secondary data including the UNCTADstat database from various sources collected database (http://unctadstat.unctad.org), Nations Statistics Division the United (http://unstats.un.org), the OECD.StatExtracts database (http://stats.oecd.org), and the Ministry of Finance, India. Finally, the results were compared with the respected theories to find their appropriateness for Indian OFDI. A positivist-deductive-quantitative approach was applied in this phase of the study.

3.6.1.1. *Correlation coefficient*: Correlation coefficient often referred as 'r' measures the strength and the direction of a linear relationship between two variables. It can be calculated using following formula:

$$r = \frac{n\sum xy - \left(\sum x\right)\left(\sum y\right)}{\sqrt{n\left(\sum x^2\right) - \left(\sum x\right)^2}\sqrt{n\left(\sum y^2\right) - \left(\sum y\right)^2}}$$

Where x and y are the variables and n is the number of pairs of data.

3.6.1.2. *Unit root test:* The unit root test verifies whether a time series variable is non-stationary using an autoregressive model. For this purpose, an Augmented Dickey-Fuller (ADF) test was used. The ADF test involves estimating the equation:

$$\Delta y = \alpha + \beta t + \rho y_{t-1} + \sum \gamma_j \Delta y_{t-j} + \epsilon_t$$

where; t is a time trend, T is the sample length and k measures the length of the lag in the dependent variable and t = 1......T.

3.6.1.3. Ordinary Least Squares (OLS) Estimation: OLS or "linear least squares" is a method for estimating the unknown parameters in a linear regression model. This method minimizes the sum of squared vertical distances between the observed responses in the dataset, and the responses predicted by the linear approximation.

3.6.1.4. *Vector Error Correction Model (VECM):* A VECM can lead to a better understanding of the nature of any non-stationarity among the different component series and can also improve longer term forecasting over an unconstrained model. The VECM equation is:-

$$\Delta \mathbf{y}_t = \delta + \Pi \mathbf{y}_{t-1} + \sum_{i=1}^{p-1} \Phi_i^* \Delta \mathbf{y}_{t-i} + \epsilon_t$$

Where, Δ is the differencing operator, such that $\Delta y = y_t - y_{t-1}$

3.6.2. Research design-phase two

The second phase of this study comprises of a questionnaire survey of Indian firms in Ireland. Before designing the questionnaire, a literature review was performed to find out the firm specific characteristics that have been suggested by the extant literature on the decision of a firm to invest overseas in a particular location. Here, a deductive approach was used. The firm specific characteristics that help Indian firms overseas investment was aimed to understand at the end of the survey analysis. A positivist-deductive-quantitative approach was used in this particular phase.

3.6.2.1. *Questionnaire:* A questionnaire is a research technique consisting of a series of structured questions and other prompts for the for the purpose of gathering information from respondents (Bell, 1999). It is a method of data (primary data) collection which is completed by the respondent in written format.

The design of a questionnaire depends on whether the researcher wishes to collect exploratory information (*i.e.* qualitative information for the purposes of better understanding or the generation of hypotheses on a subject) or quantitative information (to

test specific hypotheses that have previously been generated). A questionnaire thus allows the researcher to adopt either an inductive or a deductive approach, or even a combination of both (Beiske, 2007). There are nine steps involved in the development of a questionnaire:

- 1. Decide the information required.
- 2. Define the target respondents.
- 3. Choose the method(s) of reaching your target respondents.
- 4. Decide on question content.
- 5. Develop the question wording.
- 6. Put questions into a meaningful order and format.
- 7. Check the length of the questionnaire.
- 8. Pre-test the questionnaire.
- 9. Develop the final survey form.
- **3.6.2.2.** *Types of questionnaire:* In general, there are two types of questionnaires, open ended questionnaire and close ended questionnaire.
- a) Open ended questionnaire: Open ended questions are those where the expected response is in words. These questions should only be asked if the researcher is seeking narrative, qualitative information. This involves analyzing the responses in a systematic and objective fashion, usually to convert the information into data that can be quantitatively measured
- b) Close ended questionnaire: In closed questions, respondents are offered choices of alternative replies. In the present study, we employed the close ended questionnaire due to its suitability. Among the various types of close ended questionnaires, the Likert scale is commonly used in social, behavioral and management studies.
- **3.6.2.3.** Questionnaire survey package: The complete survey package was comprised of a cover letter introducing the theme and objectives of the study (Appendix I), the questionnaire (as detailed in the following sub-section), and a reply envelope (pre-stamped

and addressed). The cover letter was addressed to the chief executive officer or senior managers of the firm. We agreed to provide the respondent with the summary of the result, if required. The respondents were requested to return the completed questionnaire as early as possible, although no deadline was specified. In the cover letter, we assured the confidentiality of the responses, as also suggested by Oppenheim (1992) according to his experience in interviews and questionnaire based data collection methods.

3.6.2.4. *Questionnaire design:* In the first page of the questionnaire, the respondent was requested to provide information about himself, and the background of the company. The questionnaire consisted of four sections. In section A, the respondent was requested to scale the importance of factors driving overseas investment in Ireland. Section B was related to the motivations behind their overseas investment in Ireland. In section C, the respondent was requested to choose the mode of entry into overseas market in Ireland. The last section D was aimed to gather details about success factors, challenges and future plans of the company (Appendix II).

3.6.2.5. *Scale*: Close-ended questions of the questionnaire were constructed using the Likert scale. This mode of data collection was selected because of several reasons. The Likert scale is easy to construct and can be easily understood by the respondents. It allows the respondents a wide range of choices, thus enabling the collection of structured information. Moreover, a Likert scale is easy to contemplate when answering the questions (Berdie *et al.*, 1986).

A five or three point Likert scale was used in the study. For the purpose of statistical analysis, numbers were assigned to each anchor. The anchors used in sections A, B, C and D were- "Not important at all" = 1, "Not so important" = 2, "Important" = 3, "Very important" = 4, "Extremely important" = 5 for a five point Likert scale; and "Not at all" = 1, "Minor" = 2, "Major" = 3 for a three point Likert scale.

3.6.2.6. *Pilot testing*: A pilot survey is usually carried out among a small sample before a full-scale industry-wide survey is implemented. It helps to clarify research question boundaries, and make the research more focused (Walker, 1997). Before sending the questionnaire to the respondents for the actual survey, it was pre-tested by distributing among three management professionals. The purposes of the pilot survey were to ensure

that the questionnaire is coherent and comprehensible; the data to be collected would be accurate; and a meaningful data analysis could be carried out subsequently. It was meant to obtain feedback on any difficulties that may be encountered in doing the survey.

The respondents of the pilot testing faced difficulties in understanding the requirements of some questions. They suggested rearranging the layout of the questionnaire to make it shorter and more appealing. Therefore, the initial questionnaire was modified accordingly.

3.6.2.7. *Sampling*: The population refers to the group from which the sample was drawn and to which the findings were to be generalized. The sample is referred to the subset of the population that is generally selected as respondents (Babbie, 1986). In this case as the population was only six, the whole population was regarded as the sample.

3.6.2.8. Administration of the questionnaire: The survey involved a self-administered questionnaire in which access and return was through the post. We adopted the postal survey method to collect data because: 1) this method reduces biasing error since the postal survey is impersonal whereby there is no face-to-face interaction involved that might result from the personal characteristics of the interviewers and the variability in their skills, 2) anonymity would be achieved as there is an absence of an interviewer, 3) it allows the respondents to have greater time to respond to the questionnaires, consider a question or to consult documents (Fowler, 2002; Hussey and Hussey, 1997).

Several ways to increase the response rate was employed. A covering letter was enclosed explaining the purpose of the study, the required role of the respondent, and a guarantee of the respondent's anonymity. The contact name, address and telephone number of the researcher was provided. We also assured to provide them with the summary of the result, if required. A pre-stamped and addressed envelope was enclosed with postal questionnaires to promote their return.

3.6.3. Research design-phase three

Following the questionnaire survey data analysis, it was observed that though the firms were similar on many grounds, like home country, industry and host country, there were major differences on various points, which needed an explanation. Since the study was initiated after an observation that was unique to this phase, an inductive strategy was

used. To understand the phenomena of the observed peculiarity of the firm, a multiple case study approach was chosen. This allowed us to understand and compare the reasons behind the peculiarity of the firm. In this phase, we employed an interpretivist-inductive-qualitative approach.

3.6.3.1. Case Study: The case study is a research strategy which focuses on understanding the dynamics present within single settings. A case study examines a phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities (people, groups, or organizations).

Case methodology is clearly useful when a natural setting or a focus on contemporary events is needed. As studies suggest that research phenomena that are not supported by a strong theoretical base may be fruitfully pursued through case research (), a case study was found to be most appropriate tool for the study in this section. Case studies can be used to accomplish various aims: to provide description (Kidder, 1982), to test theory (Pinfield, 1986; Anderson, 1983), or to generate theory (Gersick, 1988; Harris and Sutton, 1986). Our interest in this research was theory generation on the basis of case study evidence.

- **3.6.3.2.** *Unit of analysis*: The unit of analysis is a critical factor in the case study. It is typically a system of action rather than an individual or group of individuals. Case studies tend to be selective, focusing on one or two issues that are fundamental to understanding the system being examined. The logical units of analysis for the case study proposition are firms.
- **3.6.3.3.** *Single vs. multiple cases*: Case studies can involve either single or multiple cases, and numerous levels of analysis (Yin, 1984). Yin (1984) suggests single-case studies are appropriate if:
 - 1) It is a revelatory case, *i.e.*, it is a situation previously inaccessible to scientific investigation.
 - 2) It represents a critical case for testing a well-formulated theory.
 - 3) It is an extreme or unique case.

A single case study investigates a unique or a representative case that has a deep, broad, detailed and contextualised description.

A multiple case study aims to elaborate and to test some of the theoretical constructs or propositions in a set of cases (Eriksson and Kovalainen, 2008). Multiple case designs are desirable when the intent of the research is description, theory building, or theory testing. A multiple case design was adopted in this study as it yields more general research results (Benbasat *et al.*, 1987), allows for cross-case analysis and the extension of theory.

3.6.3.4. *Selection of cases*: Selection of cases is an important aspect of building theory from case studies. As in other methods of data collection, it is important to decide the target population that is to be used for the investigation. It includes firms, individuals, groups or elements that will be represented in the study. The next stage is to assess the accessible population, the population to which we can have the access (Ghauri and Firth, 2009).

Apart from this, Ghauri and Gronhaug (2005) suggested that the time available for the study, financial resources for travelling, personal contacts and other practical issues are of great importance. The criteria can be modified by both pragmatic considerations and by the emergent theory. The important considerations in the selection process should not only differences but also similarities among the population.

In multiple case studies, the selection of cases becomes a relevant issue to consider. Yin (2003) suggests the use of replication logic in multiple case studies, meaning that each case should be selected for either the corroboration or refutation of priori propositions. Lincoln and Guba (1985) argue that cases should not be selected randomly but subjectively or theoretically. Similarly for theory building research, Eisenhardt (1989) proposes the use of theoretical selection logic to fill conceptual categories.

3.6.3.5. *Theoretical propositions*: According to Yin (1994) and Eisenhardt (1989) the first step in theory development in case study is the development of theoretical propositions. Eisenhardt (1989) describes the comparison with extant literature and emerging concepts as the "essential feature" of a case study. This involves asking what is this similar to, what does it contradict, and why. A key to this process is to consider a broad range of literature.

This process of comparison between existing and emerging concepts follows a constant cycling to and fro literature around particular unique piece of the case study.

Examining literature which conflicts with the emergent theory is important for two reasons. First, if researchers ignore conflicting findings, then confidence in the findings is reduced. For example, readers may assume that the results are incorrect (a challenge to internal validity), or if correct, are idiosyncratic to the specific cases of the study (a challenge to generalizability). Second and perhaps more importantly, conflicting literature represents an opportunity. The juxtaposition of conflicting results forces researchers into a more creative, frame breaking mode of thinking than they might otherwise be able to achieve. The result can be deeper insight into the emergent theory and also into the conflicting literature, as well as sharpening of the limits to generalizability of the focal research.

An extensive literature review was performed to cross examine the similarities and differences and their relation with the extant theories of international business. As suggested by Yin (2003) the goal was to develop preliminary concepts at the outset of the case study. When a case study is placed in an appropriate research literature, it is more likely to advance knowledge and understanding of a given topic.

3.6.3.6. The role of theory development: Development of theory is a central activity in organizational research. Traditionally, authors have developed theory by combining observations from previous literature, common sense, and experience (Eisenhardt, 1989). However, the tie to actual data has often been tenuous (Perrow, 1986; Pfeffer 1982). Glaser and Strauss (1967) argue that it is the intimate connection with empirical reality that permits the development of a testable, relevant, and valid theory.

Theory developed from case study research is likely to have important strengths like novelty, testability, and empirical validity, which arise from the intimate linkage with empirical evidence. Given the strengths of this theory-building approach and its independence from prior literature or past empirical observation, it is particularly well-suited to new research areas or research areas for which existing theory seems inadequate. (Eisenhardt, 1989). The steps involved in building a theory are summarized in Table 3.2.

Table 3.2. Process of building theory from case research study

Step	Activity	Reason
Getting started	Definition of research question Possibly a priori constructs	Focuses efforts Provides better grounding of construct measures
Selecting cases	Neither theory nor hypotheses Specified population Theoretical, not random, sampling	Retains theoretical flexibility Constrains extraneous variation and sharpens external validity Focuses efforts on theoretically useful cases <i>i.e.</i> those that replicate or extend theory by filling conceptual categories
Crafting instruments and protocols	Multiple data collection methods Qualitative and quantitative data combined Multiple investigators	Strengthens grounding of theory by triangulation of evidence. Synergistic view of evidence fosters divergent perspectives and strengthens grounding.
Field work	Overlap data collection and analysis including field notes Flexible and opportunistic data collection methods	Speeds analyses and reveals helpful adjustments to data collection. Allows investigators to take advantage of emergent themes and unique case features.
Analyzing data	Within-case analysis Cross-case pattern search using divergent techniques	Gains familiarity with data and preliminary theory generation Forces investigators to look beyond initial impressions and to view evidence through multiple aspects
Shaping hypotheses	Iterative tabulation of evidence for each construct Replication, not sampling, logic across cases Search evidence for "why" behind relationships	Sharpens construct definition, validity, and measurability Confirms, extends, and sharpens theory Builds Internal validity
Enfolding literature	Comparison with conflicting literature Comparison with similar literature	Builds internal validity, raises theoretical level, and sharpens construct definitions Sharpens generalisability, improves construct definition, and raises theoretical level
Reaching closure	Theoretical saturation when possible	Ends process when marginal improvement becomes small

(Source: Eisenhardt, 1989).

3.7. Quality of the research design

The researcher must use the designated data gathering tools systematically and properly in collecting the evidence. Throughout the design phase, researchers must ensure that the study is well constructed to ensure construct validity, internal validity, external validity, and reliability.

Construct validity requires the researcher to use the correct measures for the concepts being studied. Internal validity (especially important with explanatory or causal studies) demonstrates that certain conditions lead to other conditions and requires the use of multiple pieces of evidence from multiple sources to uncover convergent lines of inquiry. The researcher strives to establish a chain of evidence forward and backward. External validity reflects whether or not findings are generalizable beyond the immediate case or cases; the more variations in places, people, and procedures a case study can withstand and still yield the same findings, the more external validity. Techniques such as cross-case examination and within-case examination along with literature review help ensure external validity. Reliability refers to the stability, accuracy, and precision of measurement. Exemplary case study design ensures that the procedures used are well documented and can be repeated with the same results over and over again.

- **3.7.1. Phase one:** To ensure the construct validity extensive literature review was performed to find out the method used in similar empirical studies. Internal validity was checked by ensuring that the collected, used in the study is comparable with other sources of data. Since the tests carried out in this phase have been performed by many scholars for different countries, hence it was easy to ascertain its external validity. Standard statistical methods were used to ensure the reliability of the phase one.
- **3.7.2. Phase two:** Before embarking on designing a questionnaire, background work needs to be undertaken to ensure that it is the best tool. As suggested by Kelley *et. al.* (2003) a literature search for valid reasons for questionnaire survey was performed.

An extensive literature review was performed forward and backward, based on which the questionnaire was constructed. Sources from relevant literature were used in the questionnaire development in order to improve comparability with previous studies of similar orientation. This gave construct validity to this survey. Internal validity was

established by including all the major questions and factors that would lead to answer the research questions of phase two and by ensuring the no factor is omitted that may be responsible for variation in the dependent variable. Generalizability was one of the features of this survey for its external validity.

Marshall (2005) also suggests that a piloting must occur before the questionnaire is administered to the research sample to ensure the reliability and validity of the questionnaire. Accordingly a pilot test was performed. The top managers were surveyed in order to make sure that questions on internationalization are being asked to the people involved in the decision making.

3.7.3. Phase three: The purpose of the case study research performed in the phase three evolved from the initial survey questionnaire. Reporting results from the questionnaire provided an in depth understanding on Indian firms operations in Ireland. The most interesting result was that the Indian pharmaceutical firms have different reasons for their investment in Ireland. In order to understand why the firms pursued different motivations and how can this be explained, a multiple case study was performed. Yin (1994) proposed three remedies to counteract this: using multiple sources of evidence, establishing a chain of evidence, and having a draft case study report reviewed by key informants. Multiple data collection methods were carried out to establish the construct validity in the case study. Internal validity is a concern in causal or explanatory cases and was dealt with using pattern-matching. The case study protocol was developed to achieve the reliability.

3.8. Data collection and analysis

- **3.8.1. Phase one:** The purpose of the phase one to consider the country level factors to estimate and understand Indian OFDI. Due to the nature and purpose of this phase, using secondary data was the only source of the methodology. Thus the whole of phase one study builds on secondary data. The source of these data and the statistical software used has been discussed in the respective chapters.
- **3.8.2. Phase two:** In the phase two of this study, the aim was to evaluate Indian OFDI in Ireland. The data was collected by a questionnaire survey to the Indian MNEs in Ireland. The benefit of using this mode is that it sheds some light on the contextual aspect of Indian

investment in Ireland. A paper based questionnaire was distributed to the Indian firms operating in Ireland and further analysis was performed.

- **3.8.3. Phase three:** Multiple data collection methods are typically employed in case research studies. Ideally, evidence from two or more sources will converge to support the research findings. Yin (1989) identifies several sources of evidence that work well in case research:
 - Documentation written material such as memoranda, newspaper clippings, formal reports etc.
 - 2) Archival records organization charts; service, personnel and financial records.
 - 3) Interviews these may be open-ended or focused.
 - 4) Direct observation absorbing and noting details, actions, or subtleties of the field environment.
 - 5) Physical artifacts devices, outputs, tools.

The goal is to obtain a rich set of data surrounding the specific research issue, as well as capturing the contextual complexity.

Data analysis in case study is not well developed. Methods of analyzing qualitative data include content analysis, analytical induction, constant comparison and phenomenological analysis. It depends much on an investigator's own style and rigorous thinking and careful consideration of alternative interpretations (Yin, 1989).

3.9. Conclusion

A review of philosophy is a vital aspect of the research process as it opens researchers' minds to other possibilities, which can lead to both an enrichment of their research skills and an enhancement in their confidence that they are using the appropriate methodology.

This chapter has described the overall approach of the research. The philosophical viewpoint of the research is identified as positivist perspective. Both the perspectives has guided the research design decisions of this three phased study. In the first and second phase a deductive approached has been applied, where as in the third phase which is

multiple in-depth case studies using an inductive approach has been applied. Primary and subsidiary questions are developed throughout the three phases of the study.

The first phase is a country level study in which the main focus is to find the determinants of Indian OFDI based on the theories that have given explanation to the OFDI emanating from developing countries. Once the role of those determinants is clear in determining Indian OFDI, the study starts looking at firm level determinants. The study of firm level determinants is again derived from theories and empirical studies which as focused on the similar lines. Once the firm level determinants are carved out and the similarities and differences are figured out. Since the firms are common on various nodes, the study attempts to address the differences between the firms perspective on few particular points through case study research. Yin's (1994) case methodology has been used as the basis of the research design in the last phase.

The overall validity and reliability of the three phases has been discussed, in the context of the philosophical viewpoint adopted. Validity and reliability of phase one and two are discussed relative to the nature and objectives of these phases. The validity and reliability of phase three is discussed in detail. Considerable focus is given to the issues of generalizability, as a problematic area in case research and as an important differentiating factor in the overall research. Generalization is viewed in terms of transferability, analytical generalization and developing theoretical inference. Data collection method and analysis is based on theoretical propositions are outlined.

CHAPTER 4

INDIAN FDI POLICY: AN OVERVIEW

4.1. Introduction

The trade and investment policy of a nation, especially emerging markets like India, play a key role in the economy. It provides the firms with privileged access to certain inputs, preferential financing, subsidies and other support to internationalize in order to strengthen international competitiveness (Gammeltoft *et al.*, 2010). A firm tends to be more attuned to government priorities and preferences (Dunning and Narula, 1996). This chapter reviews salient features of India's foreign direct investment (FDI) policies and their evolution that are directly or indirectly relevant in explaining outward FDI (OFDI) from India. The developments in the Indian economy over the last six decades are summarized by throwing light on its past milestone reforms. The current policies and procedures of FDI are discussed in depth.

The government policies that may influence the inflow and outflow of FDI can be broadly categorised into three types. First, the overall economic policy that increases ownership and locational advantages for FDI by improving the economic fundamentals of the host country. Second, national FDI policy that increases or reduces the transaction costs of domestic and foreign firms operating and entering the economy respectively. The national FDI policy works at the domestic level and regulates entry and exit of FDI along with creation of incentives and restrictions on operations of firms in different sectors of the economy. Third, international FDI policy that deals with agreements (whether bilateral, regional or multilateral) on foreign investments. The international FDI policy works at the international level and deals with agreements on the issue of treatment of FDI from a particular partner or region. Overall economic policy works at the macro level and aims at improving fundamentals of the economy like the market size, availability of skilled labour, infrastructure, technology etc. These influence the attractiveness of the country to FDI inflows and the ability of domestic firms to invest abroad.

The strong expansion of Indian economy over the last three decades leaves no doubt about their impact globally. It is expected that continued growth in Indian economy will have a major influence in shaping global markets in coming years. India has the world's second largest population and is one of the most rapidly growing economies, expanding at an annual rate about 7% over the past decade. In India, there has been a consensus for long

on the role of government in maintaining stable macroeconomic policies. There have been several reports and research papers on varied issues of FDI policies with reference to India such as Singh (2007) and Palit (2009). However, most of these publications emphasize India's industrial policies and its industrialization process; describing more about globalization in India but less about globalization of India. Therefore, it is necessary to revisit India's past and present FDI policies in order to better understand causes and consequences of Indian OFDI.

Economic policy reforms in India over recent decades have played an important role in the inflow and outflow of FDI. Traditionally, the main objective of India's FDI policies has been to protect its market from foreign competition. Up until the 1980s, India was not interested in exporting its goods and services abroad and not ready to open its economy to foreign investments in order to ensure the country's independent development. At the end of the 1980s, India was one of the most closed economies in the world and was left out of the Asian economic boom. With the Soviet Union's collapse and the first Gulf War, as well as the implementation of the IMF's 1991 Structural Adjustment Program, India launched a new policy of privatization, deregulation and globalization of its economy. It initiated a multifaceted trade and investment policy composed of multilateral, regional and bilateral relations, which has now become a major plank of India's economic development. India has launched important structural reforms to liberalize its market and promote FDI, the two main drivers of economic growth. The following sections describe the historical perspective of globalization process of the Indian economy and reformatory measures undertaken by the Indian government after independence.

4.2. The chronology of Indian FDI policies since independence 1947 to 1991

The globalization process in India mainly emerged as a result of the financial crisis of the early 1990s. But, it is imperative to discuss the FDI policies of the Indian government after independence, so as to be able to understand the importance of globalization in the Indian economy. Tracing the history of the Indian government policies on international trade and investment reveals much about the globalization process in India. At the time of its independence in 1947, India was a host of significant stock of FDI largely owed by the UK. India was largely insulated from the world trading system for more than

four decades after independence. It embarked on a strategy of import substituting industrialization in the framework of development planning. According to Bhagwati and Desai (1970) "the scope of import substitution extended literally to almost everything that could be manufactured in the country". The domestic industry was accorded considerable protection in the form of high tariffs and quantitative restrictions on imports.

In the mid-1948, when the first survey of India's assets and liabilities was undertaken by the Reserve Bank of India (RBI), the stock of FDI in the country stood at ₹ 2,560 million (~ US\$ 50 million). The bulk of FDI stock was of natural resource seeking and of trading type and had concentrated in raw materials or service sectors (Kumar, 1995). India's approach to foreign investment during the 1950s and 1960s was cautiously pragmatic. Below the major milestones of FDI policy are discussed.

4.2.1. Foreign Investment Policy, 1949: The official position on foreign investment was articulated in a statement (India Investment Centre, 1965) made to the Constituent Assembly on 6th April 1949, by then the Prime Minister of India, Jawaharlal Nehru. It was favourable to the foreign companies in India. Foreign investment was recognized as an important supplement to domestic savings for facilitating national economic progress and for securing scientific, technical and industrial knowledge and capital equipment; although majority local ownership was preferred. Foreign investors were allowed full freedom of repatriation with the assurance of compensation in the unforeseen event of nationalization but the ownership and enterprise control remained primarily with local partners. Within such limitations, foreign investment was sought to be utilized in a manner beneficial for the economy. Foreign investors were assured of no restrictions on the remittances of profits and dividends, fair compensation in the event of acquisition, and were promised a "national treatment" (Kapila and Kapila, 2002). However, foreign investment proposals were sanctioned only after careful scrutiny necessitated by India's fragile "balance of payments" and scarce foreign exchange reserves. The tight monitoring ensured that there was hardly much FDI in the economy (except in the oil sector) till the mid-1950s.

4.2.2. The Industrial Policy Resolution (IPR), 1956: This was the first comprehensive statement on the strategy for industrial development in India after independence and emphasized on heavy industries. The IPR of 1956 emphasized increasing technological

capabilities of indigenous industry for producing high quality capital, intermediate and consumer goods. This policy reserved a few industries, based on their strategic nature for public investments and foreign companies were restricted from investing in these industries such as infrastructure, mining, *etc*.

During the foreign exchange crisis of 1957-58, Indian government realized that foreign exchange resources were inadequate for importing large-scale machinery and equipment for domestic industry. This led the government of India to further liberalize its policy towards FDI. In a bid to attract overseas investment and finance foreign exchange component of projects, several incentives and concessions were extended to promote foreign investments in India. The Indian Investment Centre was set up in 1961 with offices in the major investing countries. The government issued a list of industries in 1961 to plan targets where foreign investments were to be welcomed. The inward FDI was encouraged with fiscal incentives with foreign capital also allowed in industries reserved exclusively for the public sector. For example, Phillips Petroleum of USA had a minority stake in Cochin Refinery Ltd. (a public sector undertaking), The International Telephone and Telegraphs Corporation of the USA collaborated with the Indian government for manufacturing telephone equipment (India Investment Centre, 1965). However, OFDI from India was negligible until the early 1960s.

4.2.3. Monopolies and Restrictive Trade Practices (MRTP) Act, 1969: After independence, many new and big firms entered the Indian market. They had little competition and they were trying to monopolize the market. In order to safeguard the rights of consumers, the government of India passed the MRTP bill which came into existence in 1969. It was designed to ensure that the operation of economic system does not result in the concentration of economic power to the common detriment and to prohibit such monopolistic and restrictive trade practices prejudicial to public interest (UNCTAD, 1978). This law gave MRTP commission the power to stop all businesses that create barrier for the scope of competition in Indian economy. The companies that fell under the MRTP act were seldom allowed to diversify (Martinussen, 1988). However, a perusal of the MRTP Act also shows that there was neither a definition nor a mention of certain offending trade practices which are restrictive in character. For example, abuse of dominance, cartels,

collusion and price fixing, bid rigging, boycotts and refusal to deal and predatory pricing were not covered under the Act.

The 1970s was strictly an inward-looking phase of foreign investment in India and was heavily regulated. The deliberate attempt was made to direct FDI to the industries requiring sophisticated technology, and not to consumer goods. Restricting FDI was a part of efforts aiming to extend state control in various sectors of the economy and was consistent with promulgation of restrictive legislations such as MRTP Act (1969), the Patent Act (1970) and allied measures such as nationalization of banks, insurance companies and coal mines (Palit, 2009). While growth did pick up in the latter half of the 1970s, Indian economy was trapped around low productivity and the performance of Indian economy was well below the targets set by the planning authorities. The country was left lagging in terms of economic growth and development relative to its East Asian neighbors such as China and Korea, which had broadly similar levels of per capita income at the time of India's independence (Kelkar, 2001).

4.2.4. The Industrial Policy Resolution (IPR), 1973: This policy limited foreign participation to export-oriented industries that were strategically important for long term growth prospects of the country. With a view to preventing excessive concentration of industrial activity in the large industrial houses, the IPR of 1973 gave preference to small and medium entrepreneurs over the large houses and foreign companies in setting up of new capacity particularly in the production of mass consumption goods. New undertakings of up to ₹10 million (~ US\$ 0.2 million) by way of fixed assets were exempted from licensing requirements for substantial expansion of assets. This exemption was not allowed to MRTP companies, foreign companies and existing licensed or registered undertakings having fixed assets of ₹50 million (~ US\$ 1 million) and above.

4.2.5. Foreign Exchange Regulation Act (FERA), 1973: The most restrictive control on FDI was enforced through the FERA in 1973, passed by the government led by Indira Gandhi at that time. This Act imposed stringent regulations on certain kinds of payments particularly in dealings involved foreign exchange and securities, and the transactions. These regulations had an indirect impact on the foreign exchange and the import and export of currency. Activities of foreign companies (along with those of local large industrial

houses) were further restricted to a select group of core or high priority industries. FERA consciously discriminated between domestic and foreign investors making it mandatory for branches and subsidiaries of foreign firms to convert foreign equities to minority holdings. There were, however, some exceptions such as predominantly export-oriented firms, or those producing items requiring sophisticated technology. But even these firms had to fulfil export obligations by exporting certain minimum parts of their annual turnovers. All foreign companies that owned more than 40% equity in their Indian operations were required to get the permission of Reserve Bank of India (RBI) to continue their business in India. Exceptions were made only for companies operating in high priority or high technology sectors, or those producing predominantly for exports. The law required the foreign firms to include local participation in equity of foreign companies in India. With this Act, foreign companies were treated on par with MRTP companies. The foreign companies also had to meet the export obligation under Industrial Licensing Guidelines of 1970 for MRTP companies. At the same time, FERA severely restricted the ability of domestic firms to acquire prompt access to new technology or import raw materials requiring payments in convertible currency. The situation was further compounded by Indian regulators preference for outright purchase of imported technology by Indian firms.

The implementation of FERA in 1973 came as a major setback to many foreign companies operating in India. Foreign companies that did not want to increase equity participation of Indian firms had to cease their operations in India. As many as 54 companies applied to wind up their operations by 1978 following the implementation of the FERA and 9 companies wound up operations between 1980-1981 (RBI annual reports 1977-78, 1980-81). Some well performing foreign companies like Coca-Cola and IBM ceased operations in India. For instance, IBM started operation in India in 1951 and set up a manufacturing facility in 1956. India was its largest business destination in the whole of Asia by 1976. However, it decided to close operation in 1978 with the new policy of the Indian government. IBM finally returned to India only after the economic liberalization in 1991.

The government policy did encourage outward investments by Indian firms but overseas investment was expected as means of promoting exports of Indian capital goods, technology and consultancy services. A systematic treatment of overseas investments, however, started only since 1974 when an inter-ministerial committee on joint ventures abroad was created within the Ministry of Commerce to approve proposals from Indian companies. The guidelines for approval were formulated in 1978 which required the Indian participation to be in accordance with the host country regulations. The guidelines encouraged the joint venture form of operation with local enterprises and required that Indian equity participation be made by way of capitalization of export of indigenous plant, machinery, capital goods and sometimes even know how to the joint venture from India. In view of scarcity of capital resources in the country, cash remittances of capital to overseas ventures were discouraged but could be allowed in exceptional cases. Indian OFDI showed a considerable growth around this period. The majority of Indian OFDI during this period went to developing countries in South Asia, Southeast Asia, and Africa.

4.2.6. The Industrial Policy Resolution (IPR), 1977: The IPR of 1977 further specified industries where no foreign collaboration (financial or technical) was considered necessary emphasizing the decentralization of industrial sector with a increased role for small scale, tiny and cottage industries. Fully owned foreign companies were allowed only in highly export oriented sectors or sophisticated technology areas. Basic goods, capital goods, high technology industries important for development of small scale and agriculture sectors were clearly delineated from large scale sector. Foreign companies that diluted their foreign equity up to 40% under the FERA of 1973 were assured of treatment at par with their Indian counterparts. For all approved foreign investments, firms were completely free to repatriate capital and remit profits, dividends, royalties, *etc*.

4.2.7. The Industrial Policy, 1980: Although, the Industrial Policy Statement, 1977 had announced the relaxation in remittances of profits, royalties, dividends and repatriation of capital of foreign companies, the Industrial Policy introduced in 1980 was to set the tone of liberalization in a slow but steady pace. Industrial licensing was streamlined and made easier. The Industrial Policy of 1980 announced a liberalization of industrial licensing (approval) rules, a host of incentives, and exemption from foreign equity restrictions under FERA to 100% export-oriented units. Provisions in MRTP Acts were modified to simplify business transactions. Export-import norms were also changed. The government of India transferred most of the items that were earlier imported through State Trading Corporation to Open General License, wherein these imports and exports could be routed through

private firms. Increasing the number of items in the Open General License meant a greater liberalization on the export and import of items to and from India. The trade policies in this period gradually liberalized the imports of raw materials and capital goods by gradually expanding the list of items on the Open General License. During 1984-1985, 150 items and 200 types of capital goods were added to Open General License list. Tariffs on imports of capital goods were also slashed. The rules concerning payments of royalties and lump-sum technical fees were also relaxed. In 1986, tax rates on royalties were reduced from 40% to 30%. Policy guidelines were issued to streamline the foreign collaboration approvals also. A degree of flexibility was introduced in the policy concerning foreign equity participation, and exceptions from the general ceiling of 40% on foreign equity were allowed on the merits of individual investment proposals. The approvals for opening liaison offices by foreign companies in India were liberalized and procedures for outward remittances of royalty, technical fees and dividends etc. were streamlined. A 'fast channel' was set up in 1988 for expediting clearances of FDI proposals from major investing countries including the USA, the UK, Japan and Germany. The impact of the reforms became evident as the tripling of inward FDI stocks in the 1980s.

The above mentioned milestones may not have focused on FDI regulations but they definitely had an impact on the magnitude and nature of FDI particularly inward FDI. Table 4.1 presents a summary of major economic policies which have played an important role in the evolvement of Indian FDI policy.

Table 4.1. Summary of major milestones around Indian FDI policy

Policy/resolution	Year	Goal	Very low level of FDI in the economy	
Foreign Investment Policy	1949	To monitor of inward FDI		
Industrial Policy Resolution	To strengthen the domestic industries		Indian investment centre was established was established and FDI was encouraged	
Monopolies and Restrictive Trade Practices	1969	To prohibit monopolistic and restrictive trade	Low inward FDI and poor growth of Indian economy	
Industrial Policy Resolution	1973	To promote small and medium industry	Export oriented FDI was encouraged	
Foreign Exchange Regulation Act	1973	To control foreign exchange transactions in India	Foreign companies ceased operations in India	
Industrial Policy Resolution	1977	To further promote small scale industries	An attempt was made to limit the foreign ownership to 40% by giving some additional benefits.	
Industrial Policy	1980	To liberalize the industrial licensing rules		

4.3. India's FDI policy in the 1990s

The year 1991 marked a key transition in India's foreign investment policy initiating the liberalization-cum-structural adjustment reforms. These included industrial deregulation, trade liberalization, and relaxation of regulations governing foreign investments. This transformation was induced by the government's decision to encourage stable non-debt creating long-term capital flows as a major source of funds for supplementing domestic savings.

The balance of payments crisis in 1991 precipitated a paradigmatic shift in the policy perspective on future development of the country resulting in reforms aiming to move away from a rigidly controlled, inward-looking, state dominated economic framework to a decontrolled, outward-oriented and market-friendly system. In particular, the capacity to compete with foreign firms and face import competition in the domestic market was instrumental in building Indian firms' confidence to compete with foreign firms in the world market (Gopinath, 2007; Nayyar, 2008). India's conscious shift in the early 1990s from an inward-looking development strategy to a globalized market-based approach resulted in significant changes in its foreign investment policy. Till the 1990s, the policy was heavily restrictive with majority foreign equity permitted only in a handful exportoriented, high technology industries. Outward-oriented reforms radically changed such perceptions with foreign investment policy becoming progressively liberal following steady withdrawal of external capital controls and simplification of procedures. The new economic policy of 1991 introduced the concepts of liberalization and globalization of the Indian economy. Since 1991, FDI policies and procedures are being progressively relaxed from time to time. The positive outlook towards FDI was a key part of the liberalization policy. Indian firms' access to international financial markets was also progressively liberalized and they were granted permission to use "special purpose vehicles" in international capital markets to finance acquisitions abroad (Federation of Indian Chambers of Commerce and Industry, 2006).

4.3.1. Industrial Licensing Policy, 1991: In 1990 India was in serious economic trouble as Indian foreign exchange reserve reached to rock bottom. The IMF and the World Bank agreed to provide loans on the conditions that India make major changes to liberalize trade and investments in India. The domestic pressure to meet the imports of essential commodities and the external pressure to liberalize forced the government to change its protectionist stance of the domestic industries. The foreign investment policy for a reforming Indian economy was articulated in the new industrial policy announced on July 24, 1991. The Industrial Policy Statement of 1991 stated that "the Government will continue to pursue a sound policy framework encompassing encouragement of entrepreneurship, development of indigenous technology through investment in research and development, bringing in new technology, dismantling of the regulatory system,

development of the capital markets and increased competitiveness for the benefit of common man". The objectives of this policy were to maintain sustained growth of domestic productivity by supporting the Indian industry, to enhance gainful employment, to achieve optimal utilization of human resources, to attain international competitiveness, and to transform India into a major partner and player in the global arena.

Unlike previous industrial policies, this policy was different in its emphasis on private entrepreneurship with a view to ease restraints on capacity creation, respond to emerging domestic and global opportunities by improving productivity. The entry barriers to private participation in different industries were removed by reducing the scope of industrial licensing, restricting the public sector to areas of vital national importance, and withdrawing several prohibitions under the MRTP Act of 1969, which constrained expansion of industrial investment. Compulsory licensing was required only in respect of 18 industries including coal and lignite, distillation and brewing of alcoholic drinks, cigars and cigarettes, drugs and pharmaceuticals, white goods, hazardous chemicals. Custom duties on the imports were removed in a phased manner. The policy allowed foreign investment in 35 high-priority industries while removing several procedural controls on inflow of FDI. The thrust was to attract foreign capital and technology in large segments. Norms for setting up industries (except for industries subject to compulsory licensing) in cities with more than one million populations were further liberalised.

The Industrial Policy Statement of 1991 recognized that the Government's intervention in investment decisions of large companies through MRTP Act had proved to be deleterious for industrial growth. Accordingly, pre-entry scrutiny of investment decisions of MRTP companies was abolished. The thrust of policy was more on controlling unfair and restrictive trade practices. The provisions restricting mergers, amalgamations and takeovers were also repealed. Recognising the complementarily of domestic and foreign investment, FDI was accorded a significant role in policy announcements of 1991. Entry of foreign investment was streamlined in two distinct channels. Apart from the automatic route, a Foreign Investment Promotion Board (FIPB) was set up for negotiating with investors and approving investments. Subsequent developments in FDI policy focused on altering the scale and scope of foreign investment between these two routes. Foreign equity in high priority industries requiring large investments and advanced technology was

permitted with foreign ownership capped at a maximum of 51% of enterprise capital. Foreign equity up to 51% was also allowed in trading companies primarily engaged in export activities. These important initiatives were expected to provide a boost to investment besides enabling access to high technology and marketing expertise of foreign companies. With a view to inject technological dynamism in the industry, the government of India provided automatic approval for technological agreements related to high priority industries and eased procedures for hiring of foreign technical expertise. Major initiatives towards restructuring of public sector units were initiated, in view of their low productivity, over staffing, lack of technological up-gradation and low rate of return. In order to raise resources and ensure wider public participation in public sector units, the Indian government decided to offer its shareholding stake to mutual funds, financial institutions, general public and workers. Similarly, in order to revive and rehabilitate chronically sick public sector units, the government decided to refer them to the Board for Industrial and Financial Reconstruction (BIFR). The policy also provided with a greater managerial autonomy to the Boards of public sector units.

FDI was allowed in some high-priority industries with up to 51% of foreign ownership through automatic route such as pharmaceuticals and automobiles industry. While automobiles were de-licensed in April 1993, most bulk drugs and formulations were freed from licensing in 1994. The measures have yielded dividends with leading global automobile assemblers (*e.g.* Benz, Honda, Hyundai, Toyota) setting up production facilities in India and the pharmaceutical industries witnessing entry of major global players such as GlaxoSmithKline, Eli Lily, and Monsanto.

4.3.2. Trade and Investment Policies, 1994-1995: In the Uruguay round of negotiations of the General Agreement on Tariffs and Trade (GATT), 1994, India signed the agreement on trade related investment measures that has forced India to do away with protection of Indian industry from severe global competitions within 5 years. Of the 13 investment measures that were identified to distort global trade, India has been using as many as 11 of the measures to meet the myriad needs of social and economic development of the country. Signing of this agreement removed major trade barriers and directed India towards globalization. In the meantime the custom duties on imports have been steadily brought down as per the industrial Licensing Policy, 1995, as a founder member of GATT, India

joined the World Trade Organization (WTO) and agreed to stand by the regulatory framework of free global trade and competition.

4.3.3. Foreign Exchange Management Act (FEMA), 1999: The FEMA of 1999 replaced the FERA, 1973 that regulated all foreign exchange transactions. The objectives of FEMA have been to facilitate external trade and payments and to promote orderly development and maintenance of foreign exchange market. All residents can now put foreign exchange on current account transactions through an authorized dealer. Foreign firms also qualify for this under resident status. But for sectors like banking, Non banking financial companies (NBFC) and civil aviation, petroleum, real estate, venture capital funds, investing companies in infrastructures and service sector, atomic energy, defense, agriculture and plantation, print media, broadcasting and postal services, automatic approval of FDI is allowed in all other sectors. The role of RBI and the Secretariat of Industrial Assistance has become more than that of facilitator.

4.3.4. Liberalized outward investment procedures and policies after 1991: Although overseas investment by Indian firms was permitted before 1978, the India's OFDI policy regime was yet to take concrete shape. India's OFDI policy has been changing since 1978 when the "Guidelines for Indian Joint Ventures and Wholly Owned Subsidiaries Abroad" were issued by the Ministry of Commerce (RBI Exchange Control Manual, 2005; Pradhan, 2005). The Indian government policy towards OFDI had been motivated by two main objectives: 1) using OFDI as a strategy for fulfilling India's commitment to South-South cooperation; and 2) promoting Indian exports through OFDI at minimum possible foreign exchange cost. OFDI was regarded as a vehicle to share India's development experience, technology and skills, which were far lower than those of developed countries, but more suitable and appropriate to the needs and socio-economic environment prevailing in developing countries. In accordance with the spirit of South-South cooperation, the policy explicitly required that Indian equity participation complied with the rules and regulations of the host country. The 1978 policy was designed to encourage the association of local parties, local development banks and financial institutions in the host countries with Indian OFDI ventures. This was to ensure that Indian capital in other countries does not operate in ways which India as a host country would not accept for inward foreign investments. The policy sought to promote OFDI only in the form of joint ventures with minority Indian

ownership participation. The promotion of joint venture-led OFDI ensured that local capital also participated with Indian capital in the development process of host countries and this was at lower foreign exchange costs. To further minimize the foreign exchange costs of OFDI, the policy required that Indian ownership participation be in the form of capitalization of exports or financed by Indian-made plant, machinery and know-how. The motivation for minimizing foreign exchange costs also found its practical form in not permitting cash remittances for OFDI, except for deserving cases.

After pursuing a restrictive policy regime during the 1970s and 1980s, India shifted to a new, transparent and liberal OFDI policy regime during the 1990s. By the 1990s India had attained a higher level of development with strong competencies in knowledge-based industries such as pharmaceuticals, software and automobiles. It accumulated significant levels of technological expertise and knowledge, entrepreneurial development, management skill and infrastructure. The "Guidelines for Indian Joint Ventures and Wholly Owned Subsidiaries Abroad" was amended in October 1992, in May 1999 and in July 2002 with the objective of making OFDI policy more transparent and commensurate with current global developments and Indian business realities. It was motivated to use OFDI in promoting exports, acquiring technology abroad, building trade-supporting networks and gaining insider status in emerging trading blocs with the strategic objective of global competitiveness. The 1992 policy removed the restriction on ownership participation and the Indian entity is free to decide on the exact level of ownership it wants to hold in overseas ventures. For a speedy and transparent approval system, the automatic clearance route under RBI was put in place for a specified investment limit. Under this route no prior approval from the regulatory authority such as the RBI or government of India is required for setting up a joint venture or a wholly owned subsidiary abroad. The maximum limit of the automatic approval of OFDI was expanded progressively from US\$ 2 million in 1992 to US\$ 15 million in 1995.

4.4. Recent changes in Indian FDI policies

India's present FDI policy that was introduced in 1991 has subsequently evolved and enlarged in line with the reforms and structural developments of the economy. It has changed significantly after 2000 and special attention has been paid to OFDI. The limit for

overseas investment was also raised to US\$ 50 million. Indian firms were allowed to invest 100% of the proceeds of their American Depository Receipt/ Global Depositary Receipt issues for acquisitions of foreign firms and OFDI. In March 2002, the limit was further raised to US\$ 100 million for automatic route. Many industries were de-licensed and subsequently opened to FDI except five activities: alcoholic beverages, electronic aerospace and defence equipment, cigarettes & tobacco, industrial explosives and hazardous chemicals (Palit, 2009) as FDI these industries required clearance from the FIPB. Almost the entire sweep of manufacturing ranging from basic and capital goods to intermediates and consumer durables are now open to FDI.

For the ease of inward foreign investors, in February 2000 all industries were channelized to the automatic route barring activities. This step resulted to simplification of rules relating to FDI. The FIPB is also no longer required to decide on proposals pertaining to transfer and acquisition of resident shares by non-residents with the process now being delegated to the automatic route (Palit, 2009).

Foreign investment is now seen as a source of scarce capital, technology and managerial skills that are considered necessary in an open, competitive, world economy. Now, India sought to consciously 'benchmark' its policies against those of the rapidly growing south-east Asian economies to attract a greater share of the world FDI inflows. Over the 2000s, sectors such as mining, banking, telecommunications, highways construction and management have been thrown open to private, including foreign owned, companies. These relaxations and reforms of policies have been accompanied by active courting of foreign investors at the highest levels. Further, laws were changed to provide foreign firms the same standing as the domestic ones.

While globalisation of the world economy has fostered the outward orientation of Indian companies, significant policy liberalisation and renewed support in recent years have provided the impetus in this direction. India has made impressive strides in building a policy environment to encourage both domestic and foreign investment, in particular to attract FDI and facilitate outward investment (OECD, 2009). As a result, India's FDI inflows have accelerated sharply in recent years (until the current economic crisis). FDI inflows have grown from relatively insignificant levels in the early 1990s to magnitudes

now greater than most developing countries. These inflows have begun to play an important role in providing employment, diversifying consumer choice and adding competitive stimulus to domestic investment.

India's OFDI has grown apace with its IFDI during the 2000s. Indian companies are active in M&A as well as greenfield investments in developing and developed countries. This role is also evidenced by India's increasingly active investment treaty practice. The importance of OFDI in increasing the competitiveness of domestic firms has also resulted in the creation of financing facility for such activities through the Export-Import Bank of India. The Export-Import Bank has extended term loans to Indian companies for funding their investments in overseas affiliates ever since its inception in the early 1980s. Currently, the bank's "Overseas Investment Finance" program provides financing for both equity as well as loans for Indian companies for their affiliates abroad. Since April 2003, Indian commercial banks have also been permitted to extend credit to Indian companies for outward investments. In November 2006, the prudential limit on the bank financing was raised from 10% to 20% of overseas investment. From 2005, Indian firms were allowed to float special purpose vehicles in international capital markets to finance acquisitions abroad facilitating the use of leveraged buyouts in international financial markets. Therefore, they were provided access to the expanding international capital market (Kumar, 2008).

In a significant liberalization of policy governing outward investments in March 2003, government allowed Indian companies to invest under automatic route up to 100% of their net worth. This limit was raised further to 200% of net worth in 2005, to 300% of net worth in 2007, and finally to 400% of net worth in 2008 to facilitate large acquisitions as the foreign exchange reserves of India built up (Gopinath, 2007). The policies of the government of India on privatization, liberalization, trade and investment with regard to Indian overseas investment since 2004 (Nayyar, 2008) can be described as open-minded. Table 4.2 provides a summary of recent changes in the OFDI policy by the Indian government.

Table 4.2. Recent changes in Indian OFDI policy

Year	Policy changes				
2000	The limit for OFDI was raised to US\$ 50 million. Indian firms were allowed to invest 100% of the proceeds of their American Depository Receipt/GDR issues for OFDI.				
2002	The limit for OFDI was raised from US\$ 50 million to 100 million for automatic route.				
2003	The government allowed Indian firms to invest under automatic route up to 100% of their net worth.				
2004	An Indian company with a satisfactory track record allowed investing up to 100% of its net worth within the overall limit of US\$ 100 million by way of market purchases for investment in a foreign entity engaged in any bona fide business activity. Furthermore, Indian firms can now invest or make acquisitions abroad even in areas unrelated to their business at home.				
2005	Banks were permitted to lend money to Indian companies for acquisition of equin overseas joint ventures, wholly owned subsidiaries or in other overs companies as strategic investment.				
2006	The automatic route of disinvestments was further liberalized. Indian firms are now permitted to disinvest without prior approval of the RBI in select categories. To encourage large and important exporters, proprietary/unregistered partnership firms have been allowed to set up a JV/WOS outside Indian with the prior approval of RBI.				
2007	The limit for OFDI was revised from 100% of the net worth to 200% of the net worth of the investing company under the automatic route of overseas investment. This was further extended to 300% of the net worth in June 2007 under automatic route (200% in case of revisited partnership firms). In September 2007, this was further enhanced to 400% of the net worth of the Indian party. The aggregate ceiling for overseas investment by mutual funds, registered with SEBI, was enhanced from US\$ 4 billion to US\$ 5 billion in September 2007.				
2008	The aggregate ceiling was further raised to US\$ 7 billion in April 2008. Registered Trusts and Societies engaged in manufacturing/educational sector and hospitals have been allowed in June 2008 to make investment in the same sector(s) in a Joint Venture or Wholly Owned Subsidiary outside India, with the prior approval of the Reserve Bank				
2009- 2010	Introduction of a "Consolidated FDI Policy" circular, which combines in one document all the prior policies/regulations on FDI in an effort to make FDI policies more transparent, predictable, simpler and clearer.				

4.5. Conclusion

The Indian economy has been on an upward growth path during the past three decades. The gradual and sustained improvement in the underlying conditions for growth has resulted in raising the economy from the bottom of the growth heap to one of the fastest growing economies in the world. Especially during the last two decades, India has been successful in establishing a broadly pro-poor growth pattern and has put a much appreciated effort and readiness to accept as well as implementing an outward looking strategy. The government has been constantly reviewing the FDI policies in the interest of the Indian economy.

Indian OFDI activities have emerged as distinguishing features of the Indian economy since the 1990s. The number of OFDI approvals, as well as the size of OFDI flows, has increased significantly in the past decade. This new wave of OFDI described in Chapter 1 of this thesis as the "second wave", was accompanied by significant changes in the structure, characteristics and motivations which differ from those of OFDI in the pre-1990s. Indian firms have played a significant role in this growing Indian OFDI phenomenon. Indian OFDI has been growing since the 1990s, and Indian firms are investing in both developed and developing countries. There is also a growing tendency for Indian companies to pursue overseas acquisitions to expand markets and access to technology and other strategic assets.

An important structural difference can be seen in the Indian economic policy since its independence. Traditionally, the main objective of the India's FDI policy has been to protect its market from foreign competition. The government policy after the 1947-1990 was majorly industrial development and has inward looking strategy. Up until the 1980s, India was not interested in exporting its goods and services abroad and not ready to open its economy to foreign investments, whereas the present economic reforms initiated in 1991 represented the liberalization of both the inward as well outward FDI regimes. Overall, the new economic policies of the 1990s seek to prepare Indian industry for meeting the challenges of global integration in trade and investment. The government policies introduced after 2000 gave special attention to Indian OFDI. In other words, India has

moved incrementally from highly inward-looking policies with strong restrictions on internationalization, to liberalization of external trade and investment regulation.

Although there has been significant increase in the amount of FDI to and from India in recent years, Indian enterprises have not achieved the required productivity and competitiveness in the global economy. One reason cited in the literature is that India's policies towards FDI have been more ambivalent. On one hand, the government promotes FDI, on the other it maintains significant regulations against full foreign ownership, or insists on lengthy approval processes (Ferro et al., 2002). The Indian experience clearly demonstrates of the importance of globalization in the modern era which has not only cut down on trade barriers between nations of the world but has also led to several other benefits. It has increased employment opportunities with the coming in of multinational and transnational corporations. It has generated benefits and profits which have helped accelerated economic growth in India and added to the national income. It has also brought about provision of better facilities and greater quality of services to the people of the world in general by way of effective competition. There has also been transfer of better technology and labor across borders.

The opening of OFDI regimes has helped Indian firms acquire a portfolio of assets and gain experiences that have enabled them to face the growing competition in the Indian market and become global companies in their own right so far (Sauvant, 2005). While India definitely has opened up, there has been very little active promotion of OFDI. India has mainly pursued an 'Open Door Policy', as opposed to the 'Selective Targeting Policy' which is known from East and South East Asian countries (Altenburg, 2000). India has not yet actively promoted OFDI through e.g. support for OFDI, information about investment opportunities, political insurance schemes, or even financial subsidies (Sauvant, 2005) such as China. Though, the Indian government has played a facilitator role for OFDI. The significant liberalization of policies by the Indian government and the growing competitiveness of Indian enterprises in industries such as software and pharmaceuticals have played a significant role in supporting the rapid growth of Indian OFDI in recent years. The need to secure natural resources abroad, such as oil, gas and minerals, to support the rapid growth of industrial development at home has led the Indian government to actively encourage both public and private enterprises to venture abroad. Against this

background, the prospect for Indian OFDI is promising. Fortunately, India's foreign investment policy has progressed in spite of political opposition and lobbyist pressures, primarily due to favourable dispositions of key decision-makers towards foreign investment. With the government more liberalisation measures across a broad range of sectors and continued support to indigenous firms, Indian OFDI is likely to further accelerate.

CHAPTER 5

THE IDP THEORY: EVIDENCE FROM INDIA

5.1. Introduction

India has been successful in attracting a large amount of foreign direct investment (FDI) in recent years. FDI into India has grown rapidly since the liberalization of the policy regime in the early 1990s. The World Investment Report (WIR) 2006 has noted that India ranked second as the most attractive investment location in the world, after China. The recent growth of Indian outward investment, which involves domestic enterprises participating in international capital markets and investing overseas directly, represents a dynamic aspect of India's growing economic integration with the world.

The fact that the investment relationship is not a one way relationship but that India has increased its outward foreign direct investment (OFDI) substantially over the last decade has been neglected in the literature so far. Data from the United Nations for Conference on Trade and Development (UNCTAD) show that Indian OFDI relative to its inward FDI (IFDI) has increased substantially since 1991. This development of Indian OFDI in relation to its IFDI from 1991-2006 is displayed in Figure 5.1. Indian IFDI has always been greater as compared to its OFDI over the entire period of study (1991-2006), while the ratio of OFDI/IFDI flows has steadily increased reaching 0.57 in 2006 (Figure 5.1). The similar ratio of FDI stocks has not fluctuated greatly, but there is evidence of an increasing trend (Figure 5.1). The negative ratio of Indian OFDI/IFDI can be explained because FDI mainly consists of Equity capital, Reinvested earnings and Intra-company loans. FDI flows with a negative sign indicate that at least one of the three components of FDI is negative and not offset by positive amounts of the remaining components. These are called reverse investment or disinvestment.

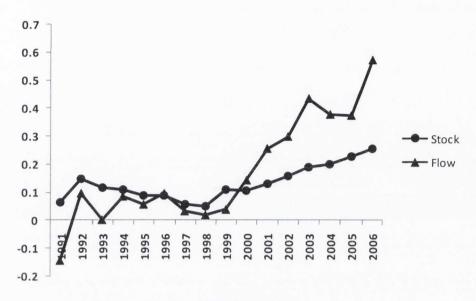


Figure 5.1. Ratio of Indian OFDI and IFDI

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org)

The phenomenon of increasing Indian OFDI is the focus of this chapter. This study is based on the Investment Development Path (IDP) hypothesis (Dunning, 1981; Dunning and Narula, 1996). The IDP model has provided a longstanding explanation for OFDI. The basic argument of this particular theoretical model is that, with increasing economic development, a country's net outward investment position (NOIP) defined as the difference between outward and inward investments, changes and this relation can be expressed by means of a quadratic function (Dunning, 1981). This raises the question as to whether Indian OFDI or NOIP can be predicted by GDP per capita. If it can, this raises the further question as to whether the relation satisfies the quadratic specification and at which stage of the IDP India resides. Given the fact that there is little research on Indian OFDI, the purpose of this chapter is to explore OFDI from India and potentially stimulate further research on this topic.

This chapter presents the theoretical background of the IDP model including a detailed description of the main features of its five stages. Next, some aggregate statistics on Indian OFDI are described followed by an exposition of the methodology employed to analyze the relationship between Indian NOIP and GDP per capita of India. This is

followed by the results of the analysis. Finally, conclusions are presented and suggestions for further research are made.

5.2. The Investment Development Path Model

One of the most widely employed models in the analysis of OFDI is the IDP theory that was originally introduced by Dunning in 1981 and thereafter refined several times (Dunning, 1986, 1988, 1993, 1997; Dunning and Narula, 1996; Narula, 1996; Durán and Úbeda, 2001, 2005), while maintaining its basic philosophy. In this section three aspects of this much researched topic is discussed (i) the original IDP model (ii) the empirical research on the IDP model (iii) the revisited IDP theory focused on the government role in the IDP.

5.2.1. The original IDP Model

The basic idea of the IDP is that with increasing economic development measured by GDP per capita, conditions for inward and outward investment in a country change. This is reflected in the country's NOIP, which is hypothesized to evolve from being highly negative in the early stages of development to becoming positive and eventually fluctuating around zero once the country is fully developed and industrialized. The IDP theory distinguishes five different stages of development which are outlined below (Dunning and Narula, 1996; Dunning *et al.*, 2001). The stages are discussed in chapter 2 and Table 5.1 summarizes the characteristics of the IDP model.

Table 5.1. Summary of characteristics of the IDP model

Stage	Inward FDI	Outward FDI	NOIP	
I	No inward FDI except natural resource-seeking FDI	No outward FDI	Around zero	
II	Faster growth of IFDI	Little OFDI	Increasingly negative	
III	Decrease in the rate of growth of IFDI	Increase in the rate of growth of OFDI	Negative but increasing	
IV	Less IFDI compared to OFDI	More OFDI than IFDI	Positive	
V	High level of IFDI	High level of OFDI	Around zero	

Figure 5.2 illustrates the five stages of the IDP model, in the first stage of the IDP (GDP per capita below US\$ 1000 at 1994 prices) the countries are net FDI receivers. In the second stage (GDP per capita US\$ 1000-3000) the country develops and a growth in IFDI is evidenced in this stage. The *third stage* (GDP per capita US\$ 3000-10,000) of the IDP is depicted by a growing NOIP, due to an increased rate of growth of OFDI and a gradual slowdown in IFDI. The *fourth stage* of the IDP (GDP per capita exceeding US\$ 10,000) is characterized by a country's OFDI stocks exceeding or equaling the IFDI stocks with the growth of OFDI still exceeding than that of IFDI. The *fifth and final stage* of the IDP (Dunning, 1986) can be characterized by the most advanced countries and NOIP tends to fluctuate around zero reflecting high levels of IFDI and OFDI (Figure 5.2).

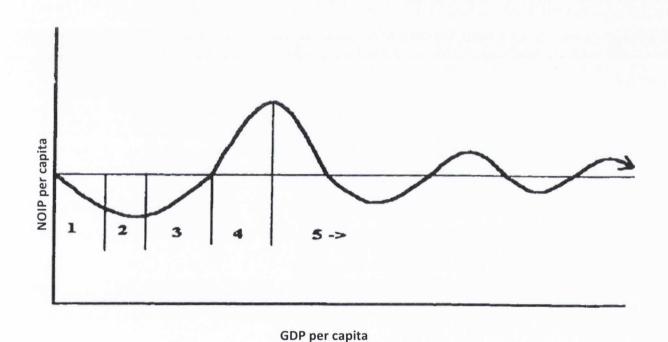


Figure 5.2. The IDP model

(Source: Dunning and Narula, 1996)

5.2.2. The empirical studies on the IDP model

During the last two decades, several econometric and descriptive studies have been made in order to test if the postulated relationship between a country's international investment position and its level of development can be empirically confirmed.

Dunning (1986) analysed 25 developing countries' NOIP, concluding that the ownership advantages of their MNEs derive from the owning of individual or unique assets, which distinguishes them from those of developed countries that result from internalizing a series of separate overseas activities, avoiding transaction costs of the market.

Tolentino's study in 1993 is particularly important because it tested the NOI of 30 countries, for the periods 1960-1975, 1976-1984 and 1960-1984, on a cross sectional and longitudinal basis, using FDI flow data. Their results were consistent with the IDP theory for the first and third periods, but it was obtained an inverted J-form between 1976 and 1984, concluding that the structural change that occurred during the period surveyed was sufficiently large to nullify the relationship between NOIP and GDP *per capita*.

Dunning and Narula (1994) applied the IDP model to explain the level and structure of US- Japanese FDI. They highlighted the difference between natural and created assets and proposed two modifications to the original model: first, the inclusion of macroorganisational policy variables and secondly, the importance of acquisitions of ownership advantages, where the latter suggests that a negative NOI position points to a strength of an industry, rather than a weakness.

Narula (1996) analysed FDI stock data of 40 developing countries for years 1975 and 1988, based on the quadratic equation used by Tolentino. However, his study doesn't support Tolentino's results, confirming in both periods the U or J-shape relationship predicted by the IDP concept (first, the NOI position decreases though with further development increases again), probably because he used FDI stock data instead of flow data.

Dunning and Narula (1996) estimated the same equation used by Narula (1996), using cross-section data of 88 developed and developing countries for years 1980 and 1992. Their results generally confirm the IDP, although the small countries present an above

average NOIP in earlier stages, as the lack of economies of scale inhibits inward FDI and stimulate domestic firms to international markets in order to improve their production scale.

While Zhang and Van Den Bulcke (1996) did not estimate a model, they did analyze the changes in China's investment development path for the 1979-1993 period. During this period, the rate of inward flow surpassed that of outward flow and resulted in a growing negative inward position. By presenting data on the structural changes in the characteristics of inward and outward flows, both on an industry and on a regional level, they argue that during this period there was a significant improvement in the ownership, location and internalization advantages of Chinese firms. They attributed this improvement to the intervention of the government and they assume that this will continue to impact future development of these advantages (Zhang and Van Den Bulcke, 1996).

Buckley and Castro (1998) applied the IDP theory to study the relationship between net FDI and per capita income for Portugal for the period 1943-1996. The results of this study supported the IDP theory, which states that international investment follows a more or less predictable path, accompanying and influencing economic growth. However, their analysis of Portuguese conditions suggested that apart from the government policy to improve infrastructure and encourage inward FDI, some external factors like European Union integration and the fall of the Berlin Wall, also influenced the IDP of this nation.

Bellak (2001) analysed Austrian IDP for the period 1990-1999, founding that its NOIP does not reflect the high level of development of the country in terms of GDP and largely varies according to industry-type and type of partner country. These results suggest, given the small domestic market size, the determining factors of the IDP seem to be the geographical and the industrial structure of domestic industries and the policies pursued, rather than the general level of development.

Duran and Ubeda (2001) used FDI inward and outward stock data as separate variables rather than the net outflow variable NOIP and they applied several structural variables as a proxy for development instead of measuring development by per capita GDP. Their findings based on factor analysis showed a significant relationship between the level of development and inward investment for developing countries. This, however, did not

hold for outward investment which, they argue, is more the function of government policies.

Recent theoretical contribution to the IDP literature is the study of based on 24 developed countries by Duran and Ubeda, (2005). They studied the characteristics and dynamics of countries at stages 4 and 5. The findings spotted important differences between countries at stage 4 and 5 in terms of their ability to generate outward FDI. These findings revealed that it is not the ability of these two groups of countries to receive FDI inflows which differentiates them. Rather, the weaker technological and institutional infrastructure of group 4, late-industrializing developed countries, limits their firms' outside investment potential. While these findings of the IDP pertain to developed countries, they highlight the crucial importance of technological and institutional factors which has implications for developing countries as they want to move along the IDP.

Table 5.2. Summary of recent research carried out to test the IDP hypothesis

Author (Year)	Scope of the study	Results		
Dunning (1986) 25 developing countries		-Support for the IDP model -emphasis on the ownership advantages of the firm		
Tolentino (1993)	Cross-section of 30 countries	Nullify the IDP hypothesis		
Narula (1993)	6 industrialized countries over a decade Japan and the USA over 40 years	Decreasing significance of country-specific determinants of the ownership advantages of TNCs and increasing significance of firm-specific determinants		
Dunning and Narula (1994)	The USA-Japanese FDI relationship	Modifications of the IDP paradigm: inclusion of macro-organizational policy variables and importance of acquisition of ownership advantages		
Zhang and Van den Bulcke (1996)	China, 1979-1993	Support for the role of the government in the early stages of the IDP		
Narula (1996) Cross-section of 40 countries, 1975 and 1988		- Support for the J-shaped curve of the IDP - Polarisation of countries around two points due to the convergence among industrialised countries, and the divergence of developing countries away from industrialised countries.		

Dunning and Narula (1996)	Cross-section of 88 developed and developing countries, 1980 and 1992	-Confirmation of the IDP's idiosyncratic nature - Polarization of countries into three groups - Support for the IDP when supplemented by the technology development path - Idea of a 'ratchet-like upscaling of the industrial structure stage by stage'		
Ozawa (1996)	Japan			
Buckley and Castro (1998) Portugal, 1943-1996		 Confirmation of the IDP's idiosyncratic nature Beyond a country's level of development, non-economic variables affect FDI Replacement of the quadratic equation 		
Bellak (2001)	Austria, 1990-1999	Confirmation of the IDP's idiosyncratic nature: the Austrian NOIP is below avera and largely varies according to industry type and type of partner country		
Dunning et al. (2001)	1981-1997 and Taiwan Province of China, 1968- 1997	Interface between the IDP and the trade development path		
Durán and Ubeda (2001, 2005)	- 85 developed and developing countries, 1997 - 95 countries, 2000 Industrialized countries over 20 years	New approach to IDP using factor analysis Test of the power of structural variables to explain inward and OFDI		
Barry, Görg and McDowell (2003	Irish-US FDI relationship, 1980-1999	Confirmation of the IDP's idiosyncratic nature but Irish FDI outflows are disproportionately horizontal and concentrated in non-traded sectors		
Svetlicic and Bellak (2003)	Austria and Slovenia, 1993-1999	- Confirmation of the IDP's idiosyncratic nature - Importance of macro-organisational factors		
Durán and Ubeda (2005) 24 developed countries		- Reformulation of the fourth and fifth stage - highlighted the importance of technological and institutional factors		

5.2.3. The revisited IDP model

The IDP model has been revisited a number of times keeping the basic philosophy unchanged (Dunning and Narula, 1996; Dunning, 2002) and they suggested including few important factors that has a great influence on the growing globalization from both the developing and developed world. The augmented version of the IDP model considers the interaction between inward and outward FDI, the role of governments, and the upgrading and restructuring of the indigenous assets of countries, from a dynamic or developmental perspective. They also insist that this measure should now be modified to take account of human capital. In terms of 1994 US\$ values, Dunning et al. (2001) present a modern refinement of the IDP hypothesis, involving types of product and industry, but still the development stages, mainly measured by GDP per capita, determine IFDI and OFDI. The IDP model gives special attention to the government role in FDI (Dunning and Narula, 1996). This theory focuses on the role of government and economic development in determining the pattern of competitive advantages of foreign investors relative to those of local firms (ownership advantages), relative competitiveness of location-bound resources and capability of the country (locational advantages), and the propensity of foreign and local firms to utilize the ownership advantages internally rather than through markets (internalization advantages). With a country's development and government interventions the configuration of these advantages changes and reflects on the NOIP of the country (Dunning and Narula, 1996). Dunning suggests that the IDP differs for countries mainly according to the pattern and efficacy of government interventions and that the theory should take account of this (Dunning and Narula, 1996).

Aggarwal and Agmon (1990) offer a view on government's role in outward investment. They explained government's role in outward investment by means of a model of economic growth and outward investment based on the concept of government directed dynamic comparative advantage. They identified three interconnected sequential stages in such a process of internationalization of an economy and its business firms, i.e. import substitution, export promotion, and foreign direct investment. They also suggest that while the government may initiate the process and control its initial stages, the role of the government diminishes as the country and the corporate sector move successfully through the development stages. They found that the three-stage dynamic comparative advantage

model of government business relationships was consistent with the development experiences in India and they considered India to be at the end of phase one moving into phase-two in the 1990s.

5.3. The Role of Government and India's Foreign Direct Investment Position

Before discussing whether the IDP concept is applicable to the analysis of Indian OFDI, this section considers the role of government in relation to India's FDI and presents some aggregate statistics that chart the development of India's FDI position over the period 1991 to 2006. Studies suggest that IFDI is an engine of OFDI and government efforts in increasing FDI, both inward and outward, should be taken account while analyzing a country's OFDI (Dunning, 1981, 1986; Lui *et al.*, 2005). One of the fundamental premises of the IDP model is that the inward and outward flows of FDI are influenced by the state of economic development of the country and its growth over time. And this state and growth is in turn influenced by government policy and its administration. Hence government has a major role within the IDP framework of analysis.

The important role that the Indian government has played in influencing both inward and outward FDI is discussed in this section. This heavy emphasis on the role of government is for two reasons. First, government has indeed, played a significant role in influencing FDI flows in many countries. Second, although the influence of government is firmly imbedded in both the eclectic paradigm and the IDP models, its role in influencing macroeconomic variables- growth rates, exchange rates, educational levels, infrastructure development and trade barriers has received more attention than its role in regulating FDI directly at the industry and firm level (Dunning and Narula, 1996).

Dunning and Narula (1996) have highlighted the government's role in influencing macro economy-wide variables, such as inflation rates, growth rates, infrastructure development, education and training levels, and the tariff levels and structure. In the case of India, the government's role in the micro management of the economy at the firm and industry level has also been an important influence on both the inflows and outflows of FDI. In particular, government regulations on foreign ownership in an investment project, sectoral restrictions, phase down of foreign ownership over time, and limitations on the duration of foreign investment licenses and government enterprise ownership have had a

major impact on FDI flows. This section traces the role of Indian government in carving its FDI position over the past sixty years.

At the time of its independence in 1947, India was a host to a significant stock of FDI largely owed to her erstwhile colonial master, the UK. Soon after its independence, India implemented an inward looking strategy that emphasized planning, nationalizations, an import substitution policy and involving a complex tax structure. As early as 1949 and 1956, two industrial policies were introduced. The core objective of the policies was that the control of industrial undertakings should remain in Indian hands. Foreign capital was preferred in specific areas to bring in new technology and establish joint ventures with Indian partners.

In the case of 100% export of output, foreigners were allowed to establish industrial units. However, it can be noted that under the Foreign Exchange Regulation Act (FERA) of 1974 only up to 40% of the equity holding by foreign firms was permitted. Foreign investment was permitted within designated industries along with restrictions in terms of local content clauses, export obligations, promotion of R&D and prohibition by law of the use of foreign brands. Notwithstanding this restrictive environment, some relaxations were also granted. A process of gradual liberalization of government policy towards foreign capital ensued. This is reflected in the continuous increase in the number of approvals granted. During the period 1961-1971, the number of foreign collaborations approved was 2475. This number increased to 3041 during the period 1971- 1980. The number of foreign collaboration approved further increased to 7436 during the period 1981-1990.

From the mid-1980s with Rajiv Gandhi's outward oriented industrialization policy, India started liberalizing the economy to the rest of the world. The liberalization process was intensified following a balance of payments crisis in 1990-91. The FDI policy of 1991 proposed to achieve the objective of an efficient and competitive world class Indian industry. Foreign investment was seen as a source of scarce resource, technology and managerial and marketing skills. The major feature of policy regarding foreign investment permitted the holding of up to 51% of equity holding. Automatic approvals were also allowed to foreign investment with up to 51% equity in 34 industries as well as to foreign technology agreements in high priority industries. The Foreign Investment Promotion

Board (FIPB) was set up to speedily process applications for approvals of the cases which were not covered under the automatic route. Laws were amended to provide foreign firms the equivalent status as the domestic ones. Further liberalization measures with regard to foreign investment were taken during 1992-93. Non Resident Indian (NRI) and Overseas Corporate Bodies (OCB) were permitted in high priority industries to invest up to 100% equity along with repatriation of capital and income. The existing companies were also allowed to increase equity participation up to 51% along with disinvestment of equity. One of the important reform measures undertaken allowed IFDI across a wide spectrum of industries and encouraged non-debt flows. This resulted in a significant IFDI into India (Table 5.3). Since then, FDI inflows have been playing an increasingly prominent role in the economy.

The story of Indian outward investment has been little different. Although a few Indian enterprises invested abroad in the mid-1960s (Lall, 1983), the official estimate of investment is not known because the annual data for Indian OFDI is only available from 1980. The early policy of the Indian government towards OFDI in force during the 1970s permitted only minority participation by Indian companies by way of export of capital goods rather than cash outflows in view of domestic capital and foreign exchange scarcity. In April 1978, an Inter-Ministerial Committee in the Ministry of Commerce was set up to clear proposals for overseas investments. During the 1980s Indian OFDI was very low when compared to other developing countries. Not only was OFDI lagging, but in 1980s economic growth was fuelled by a build up of external debt that culminated in the crisis of 1991. Bradford (2001) suggests that before the reforms of the early 1990s Indian growth was "stuck at a drastically low level" during nearly three decades of illiberal and autarkic policies. This failure in economic growth can be attributed to two factors, the first and less important "cultural" and the second and more important "political" (Lal, 1998).

During the 1980s, outward investment by Indian companies usually evoked two types of policy perceptions - 1) such investments are viewed as India's contribution to the 'south-south' cooperation where Indian multinationals are visualized to play a constructive role in the development of host southern regions in non exploitative and mutually beneficial ways unlike the developed country multinationals; and 2) they are also conceived as a

vehicle of promoting Indian exports in the form of Indian-made machinery, raw materials, know-how and consultancy (Pradhan, 2007).

It was not until 1991 that the government signalled a systemic shift to a more open economy with greater reliance upon market forces, a larger role for the private sector including foreign investment, and a restructuring of the role of government. In sharp contrast to the 1980s, growth in the 1990s was accompanied by remarkable external stability despite the East Asian crisis. Poverty also declined significantly in the post-reform period and at a faster rate than in the 1980s (Ahluwalia, 2002).

The magnitude of outward investment activity also became notable following the onset of economic reforms in 1991. During the 1990s a more favourable approach towards OFDI was adopted by the government and policy makers generally interpreted such investment as a tool of global competitiveness for Indian companies (Pradhan and Sahoo, 2005). The "Guidelines for Indian Joint Ventures and Wholly Owned Subsidiaries Abroad" was amended in October 1992, in May 1999 and July 2002. This provided the automatic approval of OFDI proposals up to a maximum limit that was expanded progressively from US\$ 2 million in 1992 to US\$ 100 million in July 2002. In March 2003, the limit of US\$ 100 million was removed and Indian MNEs were permitted to invest abroad up to 100% of their net worth on an automatic basis. This limit was further raised up to 200% of net worth in 2005 to facilitate large acquisitions as the foreign exchange reserves of India built up. It has been argued that government policy therefore seems to have been guided by the relative foreign exchange scarcity in the country while being cognizant of the importance of outward investment for the overall competitiveness of Indian industry (Kumar, 2008). Government policy has three distinct phases of evolution, viz. restrictive policy during 1978-92, permissive policy during 1992-2003, and liberal policy since 2003 (Nayyar, 2007). These three phases can be easily distinguished by their OFDI stocks which jumped from US\$ 78 million in 1980 to US\$ 294 million in 1992 reaching up to US\$ 5826 million in 2003.

Indian firms, irrespective of ownership and size, have been realizing that the market cannot be local under a globalized policy regime and that their survival depends on their ability to capitalize on the opportunities offered by a global market. Even public enterprises are at the forefront of these investments (Hay, 2006). Since the late 1990s and particularly the early part of this decade, Indian multinationals have begun to aggressively use overseas acquisition as a preferred expansion strategy into the world market (Pradhan, 2007). The policy measures enacted by the Indian government have helped to create an enabling environment for Indian companies in their internationalization endeavors. Thus the economic reforms post-1990 is believed to be very important (Virmani, 2001).

The data in Table 5.3 illustrate the development of real Indian OFDI stocks in comparison with real IFDI from 1991-2006. In real terms, the annual OFDI stock from India increased from US\$ 0.113 billion in 1991 to US\$ 12.9 billion in 2006 (UNCTAD, 2007). According to UNCTAD's OFDI performance index rankings covering 132 economies, India improved its rank from 80 in 1990 to 56 in 2006 and ranked 4th among developing countries (UNCTAD, 2007). For a developing country with a very short history of foreign direct investment, the development of Indian OFDI is remarkable.

Table 5.3. Indian OFDI and IFDI (1991-2006)

Million US\$/Year	1991	1995	2000	2005	2006
OFDI	113	495	1859	10,033	12,964
IFDI	1,732	5,641	17,517	44,019	50,680

(Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org)

5.4. Applying the IDP to Indian OFDI

The Indian economy has grown rapidly since 1991. As India has steered its economic policies towards increased participation in the global economy, a real increase in Indian OFDI and IFDI can be observed since the 1990s (Pradhan, 2007). In most narratives on India's liberalization, 1991 has acquired a revolutionary status as a time of change in the planning of India's future (Singh, 2005). This recent improvement and growth has been widely analyzed and commented upon in a number of books and journal articles (Virmani, 2004). In the case of India, economic growth started only after liberalization in 1991. According to the IDP concept, economic growth should change a country's inward and outward investment positions. Government intervention plays an important role in the

NOIP of a country (Buckley and Castro, 1998; Duran and Ubeda, 2001). The government role should also be taken into account while testing the IDP model for any country (Dunning and Narula, 1996; Liu et al., 2005). Developing and transition economies are typically characterized by an active governmental involvement in business, both through ownership and through regulation (Peng, 2000). The liberalization of government policies and relaxation of regulations after 1991 has facilitated the growth of OFDI and IFDI in India (UNCTAD, 2004) as expected by Dunning and Narula (1996). To allow for the influence of Indian government's role we have used data only after 1991 in this study. In this section, we examine the relation between economic growth and FDI positions for the Indian economy, taking account of the government role around FDI policies. Since the IDP concept relates a country's total net outward investment position (NOIP) to its economic development it is worthwhile to examine how Indian NOIP has developed over its period of economic development since 1991.

Figure 5.3 plots the development of the NOIP defined as outward FDI stocks per capita minus inward FDI stocks per capita (Bellak, 2001) over the period 1991 to 2006. The plot of NOIP and GDP per capita in figure 5.3 raises some difficulties in establishing the stylized relationship as proposed by the IDP model for India (Figure 5.2). It is important to note that on a macro level, the NOIP has been negative throughout since IFDI stocks have been constantly been higher than OFDI, thus suggesting either a stage 2 or stage 3 positioning for India (Dunning and Narula, 1996).

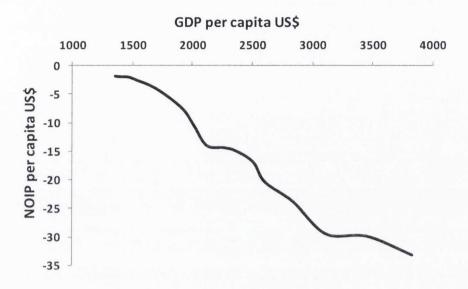


Figure 5.3. India's NOIP per capita and GDP per capita (1991-2006) (Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

For a better understanding of NOIP, OFDI and IFDI were individually analyzed. Figure 5.4 shows the inflow and outflow stock levels of FDI in India for the period 1991-2006. OFDI stocks from India was almost negligible in 1991, but increased thereafter showing a continuous rising trend until 2001 when it reached US\$ 2.6 billion. The growth rate of Indian OFDI increased sharply after 2001 and reached US\$ 12.9 billion in 2006 (Figure 5.4). This recent upward trend in OFDI suggests that India is beginning the third stage of IDP (Dunning and Narula, 1996). IFDI into India experienced strong growth after 1991 increasing from US\$ 1.73 billion to US\$ 50 billion in 2006. Although the OFDI level varies over the years, the OFDI stocks remain below the IFDI level (Figure 5.4). Whereas the growth of FDI stocks had been at a relatively slow pace, since 1999 the growth of outward and inward FDI stocks has greatly accelerated (Figure 5.4) with the former even more.

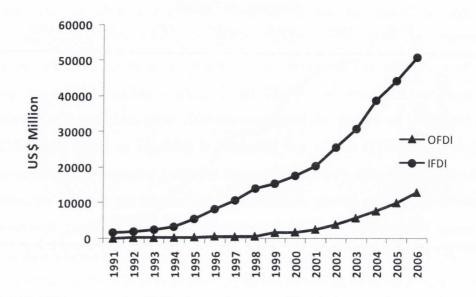


Figure 5.4. India's OFDI and IFDI stocks (1991-2006).

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

By contrast, a relatively constant rising trend of GDP per capita was observed during the entire period under study, although it was somewhat higher during 2001-2006 (Figure 5.5). Following Dunning et al. (2001), in terms of GDP per capita, India had barely emerged from stage 1 in 1987, occupied stage 2, 1987–2004, and has entered stage 3 recently. A casual inspection of Figure 5.5 supports the earlier contention in relation to the IDP stage of development of India given its recent rapid growth of OFDI. This will now be subject to analysis.

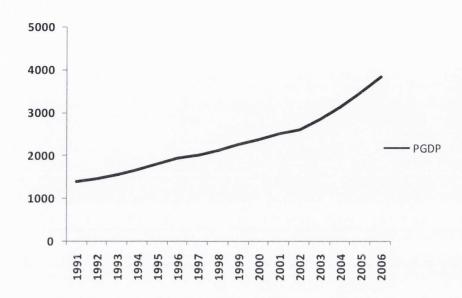


Figure 5.5. India's GDP per capita (1991-2006)

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

To analyze the relationship between the NOIP and economic development empirically, the regression of NOIP on GDP utilizing a quadratic specification to allow for the nonlinearity in the relationship has been suggested (Dunning, 1981). Dunning and Narula (1996) suggests regressing net outward investments on GDP and GDP², using a quadratic specification to estimate the non-linear function giving the U-shaped relationship between NOIP and GDP.

A number of studies have estimated this relationship for a cross-section and time series data of different developed and developing countries (Tolentino, 1993; Dunning and Narula, 1996), and find statistical support for the use of such quadratic specifications. These studies were carried out using the following model:

$$NOIP = b_0 + b_1 GDP + b_2 GDP^2 + e$$
 (5.1)

Where GDP is real gross domestic product of the country and e is a regression error term. Buckley and Castro (1998) found that for the Portuguese economy, a quadratic function did not seem to fit the characteristics of the Portuguese development of the relationship between NOIP and GDP. Instead they estimated an equation in following form;

$$NOIP = b_0 + b_1 PGDP^3 + b_2 PGDP^5 + e$$
 (5.2)

Their study gave some support to the IDP paradigm. However, the findings for Portugal suggest that the IDP does not follow the previously assumed quadratic function. Whereas, Bellak (2001) used a polynomial model (eq. 5.3) to test the IDP theory for Austria and found a negative correlation between the level of development and NOIP on a macro level.

$$NOIP = b_0 + b_1 PGDP + b_2 PGDP^2 + b_3 PGDP^3 + b_4 PGDP^4$$
 (5.3)

The IDP model has been cited as idiosyncratic (Bellak, 2001). The investment development path for developing countries has been reported to be different from that of developed countries because of different ownership advantages of the firms (Dunning, 1986). The IDP model has been tested on the developing countries and developed countries as well using the same quadratic equation (Narula, 1996; Dunning and Narula, 1996).

Since India is a developing country, we apply the model (eq. 5.1) which Dunning has already applied to 25 developing countries (Dunning, 1986). The basic model explored here relates a country's NOIP measured by the difference of annual per capita outward and inward FDI stocks to the proposed level of development. The latter is reflected by the GDP per capita and is measured in real terms. A quadratic model is estimated as follows:

$$NOIP = b_0 + b_1 PGDP + b_2 PGDP^2 + e$$
 (5.4)

5.5. Data

The time series data for all the variables defined above for the periods from 1991 to 2006 were obtained from the *UNCTADstat* database (http://unctadstat.unctad.org). The dependent variable is NOIP which is the difference of OFDI stocks per capita and IFDI stocks per capita. The independent variable is GDP per capita (PGDP). The GDP is converted to international dollars using purchasing power parity (UNCTAD 2007). Narula (1996) advocates use of the stock data while analyzing the IDP theory as use of flow in such studies provides a biased picture of the NOIP due to the lack of consistent series on reinvested earnings. FDI stocks are a better proxy than flows for the extent of international production. Stock data generally yield better results than flow data. Please refer to Appendix IV for explanation of variables.

The earlier published data on investment projects abroad and home understates the true magnitude of Indian investments for several reasons. Some existing foreign investment projects have not been properly registered, subsidiaries were generally left out, and the measurement of the size of the investment has been inadequate (Morris, 1987). As a consequence of these shortcomings, the Government of India revised (starting November 2002) its computation of FDI figures in line with the best international practices and based on the recommendations of a committee set up to examine this issue. This has led to a substantial improvement in FDI figures (Jha, 2003). The UNCTAD data which follows such rectifications is used here for the period chosen for investigation.

5.6. Results

Given that we are working with time series data we must consider the possibility that the series are not stationary. It is well known that standard regression techniques may produce spurious results if the variables under consideration contain unit-roots and are non-stationary. In spurious regressions, the results suggest that there are statistically significant relationships among the variables when in fact they merely reflect a contemporaneous correlation, not causal relations. Studies in domestic investment, foreign investment and business cycles suggest that macro-variables may be co-integrated (King *et al.*, 1991).

Therefore, before proceeding we conduct unit root tests on our data. For the level form of the GDP and NOIP we fail to reject the null hypothesis of a unit root. For a log transformation of the data we can reject at the 5% level of significance the null hypothesis of a unit root in an Augmented Dickey Fuller (ADF) unit root test with a constant and trend for GDP per capita and with a constant for NOIP (Table 5.4).

Table 5.4. Augmented Dickey-Fuller tests for unit roots: (null hypothesis: log NOIP and log GDP per capita contain a unit root)

	Specification	Lag	Test statistic	P Value
l_NOIP	Constant	1	-3.39476	0.01117
l_PGDP	constant and trend	5	-4.08677	0.006518

Given our rejection of unit root for the log transformation of data we proceed to consider regression of the NOIP and GDP relationship using the data for equation 5.4. For this purpose the statistical software package SPSS (version 15.0) was used. The estimated results are presented in table 5.5.

Table 5.5. Model Summary

Dependent variable: NOIP

R	R-square	Adjusted R- square	F	F(sig)	DW
0.991	0.982	0.979	354.445	0.000	1.204
	Links the second	dardized icients	Standard coefficients	t	Sig.
(Constant)	28	.985		6.364	0.00
PGDP	-0.	-0.023		-6.097	0.00
$PGDP^2$	1.74	E-006	0.608	2.333	0.036

Estimating this equation utilizing data for the period 1991 to 2006 yields the following result:

$$NOIP = 28.985 - 0.023 PGDP + 1.74E - 006 PGDP^{2}$$
 (5.5)

A measure of the quality of fit R square is 0.982 which indicates that NOIP is highly predictable by the given GDP per capita.

The negative sign on GDP and positive sign on GDP squared signifies a quadratic function which leads to a U shape plot (Barry *et al.*, 2003; Fonseca *et al.*, 2007). In the case of India, the negative sign of the coefficient on GDP (which is statistically significant), and the positive sign on the GDP-squared coefficient (which is statistically significant), provides evidence of a U-shaped relationship between Indian GDP and the country's NOIP, a pattern consistent with the IDP concept.

5.7. Conclusion

In this chapter we present evidence on FDI into India over the post-independence period as well as the emergence of Indian enterprises as direct investors abroad in the background of a changing policy regime. Until the 1990s, the levels of IFDI and OFDI for India were very low. However, following extensive policy changes by the government of India during 1991, its IFDI and OFDI have shown a remarkable increase.

The main research question addressed in this chapter was concerned with whether the emergence of significant OFDI outflows from India represented a different or unique phenomenon, as a result of India economic reforms, or whether they could still be explained in terms of India's stage of development and the established IDP hypothesis. The theoretical importance of this question is raised by earlier studies suggesting that new theories are needed for developing and transitional economies (Lui *et al.*, 2005).

The economic reforms in India that started in 1991, gradually removed the obstacles for FDI inflows and outflows. This shows that India was keeping in line with the IDP theory denoting its first stage, as both the inflows and outflows of FDI were small in the beginning and gradually advanced to second stage with the increase in outward and inward FDI. The graphical analyses in this study suggest that today India lies on the third stage of the IDP model. Stage three of the IDP has been depicted as involving an increasing growth in OFDI as the country develops further and becomes more open to the outside world. Firms are able to compete internationally and start to explore the possibilities of exploiting their own specific assets elsewhere (Liu et al., 2005). This we also observe in the case of India. However, the country is still a net recipient of FDI. It does not however show a typical U shape curve of NOIP and GDP per capita at this stage. A concern might relate to the atypical shape of this curve for India. Any country's IDP has been described as idiosyncratic (Bellak, 2001), and so can the shape of NOIP vs. GDP per capita. In the case of India, this idiosyncrasy can be partially explained by the three staged dynamic competitive advantage theory (Aggrawal and Agmon, 1990) - the import substitution after independence till the early 1970s, export promotion during the 1970s and 80s and finally the relaxation in rules and restrictions on inward and outward investment, which became quite frequent to make both inward and outward investments easier. While the involvement

of the Indian government has greatly lessened in recent years, it continues to serve a monitoring role while Indian industry/firms exploit their location and ownership advantages to attract FDI and invest overseas. There has been a more synchronous trend between inflows and outflows in recent years because of a greatly less restrictive set of regulations for investment along with growing opportunities for foreign companies to invest in India on the one hand, and for Indian companies to start and expand operations overseas on the other (Milleli, 2006). It should be noted that apart from government policies, other home country factors such as market size, trade conditions, costs of production and local business conditions in the developing country have also been among the major determinants of OFDI, and thus of the NOIP (Kayam, 2009).

India is a net receiver of FDI up to the present but at the same time inward and outward investment has started to grow at similar rates. So one can expect an extended third stage of the IDP model in the case of India before it enters into the fourth stage of the IDP, where outward investment exceeds inward investment. The reason for such expectation could be the specific market conditions of India. The sectoral pattern of FDI into India reveals a shift in favor of more technology and skill intensive industries as the country industrialized itself (Kumar, 1995) suggesting a high absorptive capacity of the Indian economy. Therefore the IDP hypothesis might not hold given that investment opportunities in India tend to absorb additional investment funds being created rather than being invested abroad via OFDI. Another explanation could be Indian government policies that were not encouraging OFDI until quite lately (UNCTAD, 2006) and this might have distorted the pattern of investment in the case of India.

The empirical findings support the expectation that Indian NOIP follows the IDP theory as suggested for the different stages-of-development on the macro level. An increased level of development has led to a lower NOIP. The analysis indicates that regressing NOIP on PGDP yields a U shape model, supporting the hypothesis that Indian NOIP and GDP per capita has a quadratic relationship.

The analysis performed with the given data in this chapter supports the IDP model. However, this study of the Indian IDP also highlights some aspects, which may lead to a deviation from the robust five stages IDP model in the future. It has been noted that during

the 1990s India's progress toward integration in the global economy was modest and it was not attracting the attention from foreign investors commensurate with its size and economic potential (Brahmbhatt et al., 1996); however, more recently there has been a rapid increase in IFDI. Even though India has been a latecomer to the FDI scene compared to many East Asian countries, its significant market potential and a liberalized policy regime has sustained its attraction as a favorable destination for foreign investors (Srivastava and Sen, 2004). India has established itself as the second most attractive FDI destination in the world (WIR, 2008) and has attained all the facilities that a FDI recipient country should have. Recent studies are optimistic about the Indian economy and its sustainability (Ahluwalia, 2002; Wolf, 2009), so it can be expected that Indian IFDI will keep increasing. It has been argued that India looks poised to reap significantly more FDI into the future than it has attracted in the past (Huang and Khanna, 2003). At the same time OFDI is being undertaken and is growing at the same rate as IFDI. Studies show that not only on the aggregate level but also at the sectoral level Indian firms are aggressively transnationalizing their business through strategic alliances, exports and OFDI (Pradhan, 2008). According to the IDP model, in the third stage the growth in IFDI is expected to slow with respect to that of OFDI. However for the moment, the acceleration of FDI inflows and FDI outflows appear to have converged, marking a break with the conventional IDP theory. This may suggest the need to reframe the IDP hypothesis for countries that show a different investment path from the ideal investment development path.

Despite these shortcomings, it can be acknowledged that the study presented here supports the IDP hypothesis of a relationship of the NOIP constituents with the early stages of country development. Beyond these early stages of development, India's evolution will need further research to ascertain the extent to which it is consistent with the IDP model. This means that it is not the structure of the IDP itself that needs to be questioned, but its nature that changed and became idiosyncratic, i.e. country-specific. Each country tends to follow their own path and the speed and direction of movements along IDP stages depends on a sort of idiosyncratic elements (like the existence of natural resources, the geographical and cultural distances from home economies, the size of the country, the economic system or the development model), that influence its economic structure and the inward and outward FDI of a country. Such research could provide important policy insights around

the legislative and institutional factors favoring OFDI and the need for an active government role in promoting Indian firms' internationalization.

In addition to the methodology employed in this study, future studies in relation to India's outward investment could focus on the internationalizing firms with a combination of data analysis and company case studies to assess to what extent and how Indian firms are internationalizing, as already performed by Bongalia and Goldstein (2006) in the case of Egypt. Other potential areas of research could include sectoral and bilateral level analysis to ascertain if GDP per capita is an important factor at these levels. The sectoral IDP reflects an industry's position vis-à-vis its entire competitors abroad. It is ownership-advantage driven and compares outward FDI of the industry in question to the inward FDI of the same industry in the rest of the world. According to theory, it is expected that OFDI from developing countries to be first in manufacturing and only later in service industries. This is partly because service industries are correlated with advanced economies, partly because service industries typically are late internationalizers (UNCTAD, 2004). However, in the case of India we find that non-financial services became the dominant outward investor at a very early stage in the IDP, exceeding manufacturing in the second half of the 1990s. This is obviously related to the particular Indian industry structure with services playing a relatively large role. An in-depth empirical examination will be very interesting to understand the sectoral IDP of India. Similarly, the bilateral IDP reflects a country's NOIP vis-à-vis one other country. It is location-advantage driven. Therefore, a sectoral IDP study covers a single industry but all countries while a bilateral IDP covers all industries but a single home/host country. Such studies could provide a more comprehensive understanding of Indian OFDI.

CHAPTER 6

THE INFLUENCE OF INDIAN EXPORTS ON ITS OFDI

6.1. Introduction

Trade and investment have been two important factors in national economic relations. This chapter analyses the role and relationship between Indian exports and its outward FDI (OFDI). Investing in other countries has important implications not only at a firm level but also at a macroeconomics level over both host and home economies. From an aggregate perspective, the effects of FDI have long been focused on activity level and employment. However, a full assessment of the impact of FDI on the home country critically depends on the nature of these investment projects, and more concretely on their connection with trade. In this line, exports and OFDI have usually been treated as alternative modes of supplying foreign markets. From this point of view, FDI represents a substitute for the home country's exports. Conversely, OFDI by international firms that look for better access to the final market may lead to a complementary relationship with exports in goods and services.

The past decade has witnessed a growing internationalization of economic activities from the developing countries. This has become a permanent, sizeable and rising feature of the world economy. This phenomenon has taken place in the context of a progressive liberalization of international economic relations, which has led to a spectacular increase in both goods and services exchange as well as in capital movements (Kumar, 2007). India has recently embarked on the path of globalization through outward investment. At the same time India's exports have grown much faster than GDP over the past few decades (Sharma, 2000). In nominal terms Indian OFDI increased by about 160 fold, from US\$ 80 million to US\$ 12.9 billion and exports increased by about 14 fold, from US\$ 8 billion to US\$ 120 billion between 1981 and 2006 (UNCTAD, 2007). The question addressed in this chapter is whether exports have been a significant determinant of OFDI growth in India?

The conceptual models of FDI and international trade have traditionally been developed separately (UNCTAD, 1996). The integration of FDI and trade theories is still at its infant stage and their possible linkages are relatively understudied. Before addressing the scope of this chapter and the methodology used in this study, it is important to highlight the relevance of this study. Any country's OFDI-exports relationship may depend on the industry or sector type. But there is a great need to explain the OFDI-exports relationship

on a macroeconomic level, so that similarities and differences can be figured out in relation to industry or a sector. Other than making comparisons across countries, the question is whether OFDI from countries pursuing export oriented policies is likely to grow faster than those not pursuing such policies. Thus, studies using aggregate data are required for an appropriate answer to explain the relationship on a macroeconomic level. An understanding of linkages between OFDI and exports will help governments harmonize their FDI and export policies for growth and development. Studies suggest that there is a close link between international trade and investment. The closer the relationship between trade and investment, the better chance the home country has of realizing the benefits from trade and investment liberalization in terms of welfare improvement. Trade liberalization implies a freer (less costly) movement of goods and services, while investment liberalization implies a better environment for the movement of resources. Both trade and investment liberalization can be harmonized only when the causality is understood. The aim of this chapter is to analyze the empirical relationship between OFDI and exports for India at a macroeconomic level, by means of Granger-causality tests in a co-integration framework. In this approach, the existence of a long-run relationship among two or more non-stationary processes is tested by examining the stability of deviations from the relationship using the coefficients estimated by fitting static regressions. India, being the second largest emerging economy after China, provides a natural setting for OFDI by way of exports.

The outline of this chapter is as follows. Section 6.2 reviews the growth of Indian OFDI and exports and the policy changes in the past four decades. Section 6.3 considers the literature around this topic, section 6.4 describes the data and methodology employed, section 6.5 contains the results of the analysis undertaken and finally conclusions are considered in section 6.6.

6.2. Overview of Indian OFDI and Exports

6.2.1. Indian OFDI

The old policy guidelines that came into existence in 1969 heralded a restrictive regime for Indian OFDI activities. The concept of two waves has been described as more appropriate for Indian OFDI. The first wave occurred from 1970 to 1991 and the second wave relates from 1991 and onwards. There were major differences between these two

waves. The first wave was entirely different from the second wave in terms of both the policy objectives of the Indian government and the strategies adopted by Indian firms to invest abroad. In the first phase, the goal of the Indian government was to use OFDI as a tool of 'south-south' cooperation (Pradhan, 2007). The policy of the Indian government towards Indian companies investing abroad was largely restrictive in its approach. Restrictions on the extent of ownership participation, cash transfer against overseas investment, exports of second-hand and reconditioned machinery for OFDI, etc. were noticeable policy features. The approval procedure for OFDI was also quite cumbersome. It should be noted however that during the first wave, the Indian policy regime included a number of mechanisms to promote Indian OFDI abroad specifically for exporting purposes. The exports of Indian made machinery and equipment against OFDI were provided with normal fiscal benefits granted to commodity exports under the trade policy like grant of import replenishment licenses, Cash Compensatory Support for exports, deferred payment facilities, tax exemption for dividend receipts, technical payment and other service payments received from abroad, etc.

The basic objective of OFDI policy shifted from 'south-south cooperation' to the strategic objective of 'global competitiveness' in the second wave of Indian OFDI after 1991. The Indian policy makers realized that OFDI other than merely supporting home exports is a strategic tool that can help Indian firms to acquire new technologies, skills and other competitive assets urgently required for survival and growth in a globalizing world economy. In the second phase of OFDI policy, India has expanded the geographical scope of bilateral investment agreements (BITs) to a large number of countries. BITs provide reciprocal encouragement and facilitation for bilateral investment flows between two countries and contain a legal framework for investment protection. The rapid growth of the Indian economy in the last decade has bolstered the confidence of domestic enterprises to go across borders with relatively aggressive investments, resulting in a spate of acquisitions (Gubbi *et al.*, 2009).

6.2.2. India's export performance

Two notable developments have taken place in India's exports since the 1970s. First, exports have grown much faster than its GDP. Second, there has been a substantial

change in India's export mix. Several factors appear to have contributed to these developments, namely the real depreciation of the exchange rate, liberalization in investment policy especially from the early 1980s and the provision of export subsidies to reduce the anti-export bias created by the import substitution policy. Export subsidies which took many forms such as duty draw-back, subsidized credit and direct subsidies helped reduce the bias against exports. Whenever real devaluation in the currency was maintained, the growth in exports continued. Joshi and Little (1994) attribute a considerable part of the success in export expansion during the second half of the 1980s to the management of the real exchange rate. Starting from 1986-87, Indian exports grew considerably faster than world trade and as fast as the exports of comparable developing countries (Joshi and Little, 1994). A sharp devaluation of the rupee since the early 1990s further strengthened export growth although there was some slowdown and or decline in exports during the macro economic crisis of the early 1990s. Export growth also slowed down in 1997-98 due partly to the Asian crisis. Indian exports are dominated by manufactured goods which account for about 76% of total exports by 1997-98. This was an increase from 50% in 1970-71.

While India's manufacturing exports lag far behind those of other Asian countries, both in quantity and quality, India's exports in services are rapidly catching-up. India's share in world exports of services doubled from 0.6% in 1990 to 1.2% in 2001, while during the same period its share of world goods exports rose only from 0.5% to 0.7% (UNCTAD, 2004). The rapid growth of the service sector observed in the domestic economy has thus been associated with an increased competitiveness in world markets.

Historically one of the important policy objectives of promoting Indian OFDI was that it should act as a vehicle for promoting Indian exports with minimal adverse effect on foreign exchange reserves (Pradhan, 2007). In the first wave, the government policies on OFDI insisted that Indian overseas investment had to be in non-cash mode like exports of Indian made machinery, equipment, technical knowhow, *etc.* and a small amount of cash remittance that was permitted for meeting preliminary expenses related to the setting up of the overseas unit. Thus Indian equity participation in overseas project was intended to exploit the potential export benefits. In the second wave also, OFDI was increasingly resorted to as a means of developing trade-supporting networks abroad. The creation of

customer care and service centres abroad was to ensure timely after sales services to global customers so as to improve exports from the home country (Pradhan, 2007). In the last few years especially after 2001, Indian firms are investing overseas for many other motivations and not just for export promotion.

Figures 6.1 and 6.2 show that Indian exports and OFDI started growing rapidly (but at a different magnitude), almost in the same time frame around the mid-1990s. The effect of this accelerated internationalization on growth and domestic employment within the Indian economy depends, among other factors, on the relationship of FDI and exports (Pfaffermayr, 1994). One major potential impact of OFDI is the trade effect, particularly on the exports of the home country. As for the relationship between FDI and trade, theoretical arguments have been made that the two complement or substitute each other.

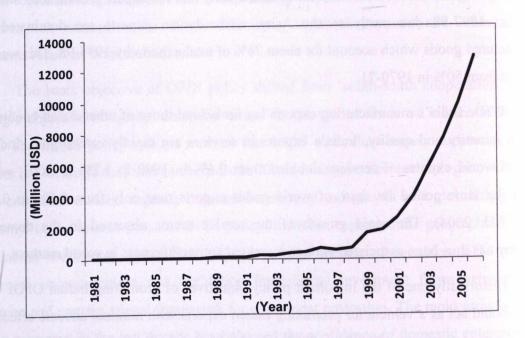


Figure 6.1. Indian OFDI (1981-2006).

(Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

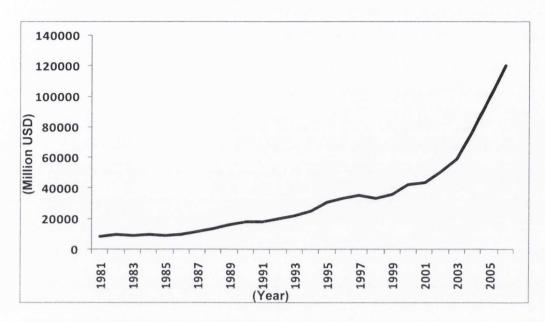


Figure 6.2. Indian exports (1981-2006).

(Source: Compiled from UNCTADstat database, http://unctadstat.unctad.org).

In the case of the substitution-complementary issue, the causal relationship between trade and FDI is complicated and depends largely on the types of trade and FDI being considered. It is basically country, industry, and even firm-specific. Studies suggest the empirical investigations in assessing true FDI–trade relationships are warranted (Liu *et al.*, 2001). However, despite the important growth experienced by both exports and OFDI, the relationship between them has not been extensively explored (Bajo and Montero, 2001). Taking the Indian economy as a case study, the purpose of this chapter is to take a first step in attempting to understand how exports affect OFDI.

6.3. Literature review

In the international economics and business literature, the following two aspects of possible linkages between OFDI and exports are sometimes discussed: 1) whether OFDI is a substitute for, or a complement to, exports, and 2) whether OFDI causes exports or the other way round. The literature around these two aspects can further be divided according to the level of aggregation used such as country-level studies, industry-level studies and firm-level studies.

The theoretical literature on both international trade and the behaviour of multinational firms does not give a clear indication as to whether foreign production is a substitute for, or complement to, international trade (Pain and Wakelin, 1998). A substitutive relationship indicates that an increase in FDI will decrease exports to foreign countries and vice versa. In contrast, a complementary relationship indicates that FDI and exports move in the same direction. The traditional view (Mundell, 1957) is stated in the context of the Heckscher-Ohlin trade model (two-good, two-factor, two-country) that goods movements and factor movements are substitutes. Factor mobility induced by differences in factor prices between countries would eliminate price differentials in both goods and factor markets, so removing the basis for trade. Then, trade impediments would enhance factor movements and conversely, so that exports and FDI would be alternative ways of involvement in foreign markets. However, this result would be highly dependent on the specific assumptions made (Schmitz and Helmberger, 1970). In this model production functions are assumed to be identical in all countries and regions. International trade and the international mobility of factors of production, which includes FDI, are substitutes rather than compliments for each other where there are barriers to trade.

Overseas investment is postulated to follow the initial exploration of overseas markets through exports in the product cycle theory (Vernon, 1966). OFDI in the form of building trade-supporting infrastructure abroad, like distribution networks, customer care centers, service centers etc., by the home country firms to give local presence to ensure timely after-sales services to global customers could help to improve and complement exports of the final product from the home country (Vernon, 1966). It has been argued that the boom of overseas investments during the 1990s by developing country enterprises such as by Indian enterprises has been motivated to support and assist export markets with local presence, develop marketing networks, provide after-sales services etc. (Kumar, 1998).

The Uppsala Internationalization model also suggests that the internationalization process of the individual firm is most closely associated with its exports in foreign countries (Johanson and Wiedersheim, 1975). The model distinguishes between four different modes of entering an international market, where the successive stages represent higher degrees of international involvement:

Step 1: No regular export activities.

Step 2: Export via independent representatives (agents).

Step 3: Establishment of an overseas sales subsidiary.

Step 4: Overseas production/manufacturing units.

In a cross-sectional study based on foreign production data of fourteen industries for 1970, Lipsey and Weiss (1981) found positive coefficients among those that were significant in equations in which US exports to a certain country in a certain industry were related to the USA subsidiaries' production in that country and industry. The complementarity was stronger in a subgroup of developing host countries. In Lipsey and Weiss (1984), the complementary relationship was also evident in equations for individual US firms' exports. Markusen (1984) also showed that OFDI and exports can be complementary, provided that the basis for trade is something other than differences in factor endowments. Helpman (1984) and Helpman and Krugman (1985) illustrate that the degree of specialization is a positive function of relative factor endowments. If differences in factor endowments are not substantial, a capital-abundant country will produce capital intensive differentiated goods at home and exchange them for the labor-intensive homogeneous goods from a labor-abundant country. However, if there are substantial differences in factor endowments, the capital-abundant country tends to export headquarters services (such as R&D) into the labor-abundant country in exchange for finished varieties of a differentiated good and a homogeneous good, rather than simply exporting the differentiated good. Thus, FDI generates complementary trade flows from the labor-intensive country. In addition, parent firms may export intermediate inputs to their subsidiaries if vertical integration is involved. Blomstrom et al. (1988) conducted a cross sectional study using data for 1978 and 1982 from the USA and Sweden. They studied both the levels and changes over time in home country exports to each destination in order to avoid any specification error problems. The complementarity was more evident when changes in exports were used instead of levels.

Later contributions showed that trade and foreign investment might be complements rather than substitutes. The positive relationship of OFDI and exports has been mentioned in Wagner (1991). He estimates a pooled time series cross section model of FDI, measured

by the proportion of firms with international production, and exports using German data. His estimated results also demonstrate that both variables must be interpreted as part of a system and, therefore, be modelled by a simultaneous equation approach.

Veugelers (1991) analyzes exports and FDI flows between OECD countries for 1980. Her two stage least squares (2SLS) estimation shows a significant impact of FDI on exports. Petri (1994) argues that the relationship is not predictable because the trade impact of FDI can be influenced by a range of factors, such as firm strategies, motivation for FDI and government policies. Therefore, the relationship between FDI and trade remains a subject requiring empirical investigation.

Eaton and Tamura (1994) used data from the USA and Japan for 1985 and 1990. They thereby control for the country determinants such as income per capita, population and the endowment of human capital of the partner country and find a strong complementary relationship. In particular, Japanese data showed that OFDI is correlated more to the future exports than to past exports. On the other hand, for the USA, OFDI was found to be correlated more to the past exports. They presumed that this phenomenon is due to the fact that Japanese OFDI is more of cost-oriented nature and the OFDI of the USA is more of the market-oriented.

Also, Lin (1995) estimates exports and imports equations augmented with several FDI variables for Taiwan *vis-à-vis* four ASEAN countries (Indonesia, Malaysia, the Philippines and Thailand), and finds a positive and significant effect for OFDI on exports.

Pfaffermayr (1996) argues that OFDI and exports can have common determinants such as capital, labour, skill, and R&D intensities. Within this endogenous framework, Pfaffermayr (1996) estimates a simultaneous equations system using time series and cross-sectional industry-level data from Austrian manufacturing and finds a significant complementary relationship between FDI and exports in the 1980s and early 1990s. Blonigen (2001) detects a substitution effect between the production of Japanese automobile parts in the USA and the Japanese exports of automobile parts to the USA.

Several studies have attempted to integrate FDI and trade theories and have addressed the possible substitute and complementary effects between FDI and trade in serving foreign markets. Markusen (1998) and Markusen *et al.*, (1996) suggest that the

impact on trade depends on the type of FDI it stimulates. Two types of FDI have been discussed in the international business literature - vertical FDI and horizontal FDI. "Vertical FDI" refers to when MNEs locate each stage of the production process in different countries according to relative cost advantages, which results in FDI and trade being complements. Whereas "Horizontal FDI" refers to when MNEs are aimed to gain easier access to foreign markets (for reasons of transport costs, or being closer to the final customer), which can lead to FDI and trade being substitutes rather than complements. In other words, Vertical MNEs engage in trade and seek to exploit international factor price differentials. They locate their headquarters in the skilled labour-abundant parent country and engage in unskilled labour-intensive production in an unskilled labor-abundant host. This type of MNEs serves the parent market via foreign affiliate exports (Helpman, 1984; Helpman and Krugman, 1985). If FDI is vertical, where multinational firms geographically split stages of production, this is likely to stimulate trade. Whereas, if FDI is horizontal, where multinational firms produce final goods in multiple locations, this is likely to substitute for trade. Horizontal MNEs seek to save on trade costs by serving markets locally rather than trading. This results in higher fixed investment costs than those incurred by exporting national firms (Markusen, 1984; Markusen and Venables, 2000).

Helpman (1984) and Helpman and Krugman (1985) explain that the degree of specialization is a positive function of relative factor endowments. If differences in factor endowments are not substantial, a capital-abundant country will produce capital-intensive differentiated goods at home and exchange them for the labour-intensive homogeneous good from a labour-abundant country. However, if there are substantial differences in factor endowments, the capital-abundant country tends to export headquarters services (such as R&D) into the labour-abundant country in exchange for finished varieties of a differentiated good and a homogeneous good, rather than simply exporting the differentiated good. Thus FDI generates complementary trade flow from the labour-intensive country. In addition, parent firms may export intermediate inputs to their subsidiaries, if vertical integration is involved. Markusen and Maskus (1999) contend that the Helpman (1984) and Helpman and Krugman (1985)'s analysis captures the notion of vertically integrated firms and their foreign investments but it does not explain the FDI between similar counties.

Based on the firms' motivation behind overseas investments, Beugelsdijk *et al.* (2008) refer to horizontal FDI as market-seeking and vertical FDI as efficiency seeking. MNEs take advantage of international factor price differences and geographically split up their production process and engage in vertical FDI. On the other hand horizontal FDI arises as a substitute for exporting and a desire to place production close to customers and thereby avoid trade costs, being both transportation costs and trade barriers (Buckley and Casson, 1981; Beugelsdijk *et al.*, 2008).

Literature suggests that most of the outward investments are undertaken by Indian MNEs through horizontal acquisitions (Kumar, 2008). Dasgupta (2008) states that Indian firms undertake horizontal OFDI projects to exploit firm specific advantages in the host economy, leading to the substitution of exports of final products by the parent firms. He suggests that vertical OFDI projects by Indian firms seeking to acquire sources of raw materials and inputs from abroad directly result in higher imports into the home country (Dasgupta, 2008). Based on the World Development Indicators 2007, Dasgupta (2008) highlights that exports, as percentage of GDP in India, showed an increase from 10% to 23% during 1994 to 2005 and OFDI as a percentage of GDP showed a rise from virtually zero to around 0.3% over the same period. In this study, he examined the long run causal effect of Indian exports, imports and IFDI on the OFDI over 1970-2005 (Dasgupta, 2008). The results demonstrate a unidirectional causality from the trade variables (export and import) to Indian OFDI whereas IFDI was not found to cause OFDI from India (Dasgupta, 2008). He finds that Indian imports and exports are a driving force of its OFDI, and suggests that exports and OFDI are generally complementary in the case of India (Dasgupta, 2008).

In summary, the impact of FDI on exports is not straightforward and varies across countries, industries and over time, depending on wide range of factors both for home and host countries. Thus, whether FDI substitutes trade (serves as alternative means of supplying foreign markets) or complements trade (facilitates exports of host country) depends critically on the motives of the foreign investor, type of industries (industry-mix) and the nature of investment undertaken (Kojima, 1973; Dunning, 1988; Kumar, 1998). Lipsey (2004) explains that a problem with most studies of effects of FDI on home-country exports is that the terms "substitution" and "complementarity" are not clearly defined. That

is because no policy measures are specified as determining the changes in investment or production on a macro level. Thus it is rare to find data on horizontal and vertical FDI on a country level.

From the above literature, it is also clear that in order to understand the substitution-complementarity relationship between OFDI and exports, the type of FDI plays a crucial role. Dunning (1998) suggests that the relationship between trade and FDI is conditional on the kind of trade and FDI being considered and the conditions under which each takes place. However, the role of hybrid "complex" MNEs, which are neither purely horizontal nor purely vertical, has been emphasized by several studies (Ekholm *et al.*, 2003; Grossman *et al.*, 2003; Yeaple, 2003; Egger *et al.*, 2004). Yeaple (2003) suggests that in recent years more MNEs are both horizontally and vertically integrated, establishing affiliates in some foreign countries to conserve on transport cost and establishing affiliates in others to take advantage of factor price differentials. MNEs following "complex" integration strategies blur the lines between traditional clusters of economic determinants as the boundaries between types of FDI disappear. Egger (2001) particularly emphasizes the need for an understanding of the relationship between exports and OFDI at an aggregate level as country specific factors may have major influences.

In the case of OFDI-export relationship, while some attention has been paid to the substitution-complement relationships, explicit testing for causality between FDI and trade is extremely rare except in the cases of Pfaffermayr (1996) and Liu *et al.* (2001). A summary of the relevant empirical studies is shown in Table 6.1. The investigation of the relation between FDI and trade that is diversified by destination country or region is an under-researched issue in the empirical literature. Some studies investigating the relationship between FDI and exports from developed to developing countries find them to be complementary. Furthermore, the same relation is found to be substitutive between developed countries. There has been no study undertaken to examine the causality relationship between Indian exports and its OFDI so far, but a few studies have been carried out to understand the importance of exports for OFDI. For example, Lall (1986) surveyed 162 Indian enterprises including 24 foreign investors for the years 1977-79. The survey revealed that impediments to exports appeared to provide an incentive for OFDI. Dasgupta and Siddharthan (1985) and Agarwal (1985) found interdependence between

Indian exports and OFDIs in the late 1970s and the early 1980s and found them to be concentrated in sectors comprising largely standardized goods and with relatively low skill and technological content. Another study on the same topic has been carried out by Pradhan (2007), where he applied data from 3951 manufacturing firms. The sample period of this study was 1990-2000. However, Figure 1.1 suggests that there has been a large growth in Indian OFDI especially after 2001. Since the study covers only manufacturing firms, this study doesn't give any comprehensive results on the export-OFDI relationship on a macroeconomic level. Thus, the current study employs a time series approach to fill this gap using descriptive and empirical analysis for India.

Table 6.1. Studies on the relationship between OFDI and exports

Author (Year)	Level of aggregation	Data	Methods	Results
Lipsey and Weiss (1981)	Industry-level data (14 countries)	1970	Regression analysis	Complementary relationship
Lipsey and Weiss (1984)	Firm-level data	1970	Regression analysis	Strong complementary relationship for intermediate goods, weaker for final goods, possible substitution effects for final goods
Blomstrom, Lipsey and Kulchycky (1988)	Country level data (the USA and Sweden)	1978, 1982	Regression analysis	Complimentary relationship
Pfaffermayr (1994)	Country-level data (Austria)	1969-1991	Time series, OLS, Granger causality tests	Complemetarity relationship from FDI to exports
Eaton and Tamura (1994)	the USA and Japan	1985 and 1990	Causality test	Positive relationship between OFDI and exports
Lin (1995)	ASEAN countries		Regression analysis	a positive and significant effect for OFDI on exports

Pffafermayr (1996)	Country-level (Austria)	1980-1994, Time series cross sectional data	Dynamic fixed effects model, GMM estimation	Stable bi-directional complementarity results
Bajo-Rubio and Montero-Munoz (1999)	Country-level data (Spain)	Quarterly Data 1977-1992	Cointegration, Granger causality tests	Long-run Granger causality from OFDI to exports, no short-run effects
Blonigen (2001)	Product-level data (automobile parts)	1978 - 1994 Japanese automobile parts to the USA market	Time-series, SUR regressions	Complementarity effect for vertical production relationships, otherwise substitution
Alguacil et al. (2002)	Country-level data Spain (FDI flows)	Quarterly Data 1970– 1992	Time series, VAR with Granger causality	Positive long-term Granger causality from FDI to Exports
Marchant et al. (2002)	Industry data (US processed food industry)	Pooled data, cross-section and time- series data, 1989-1998	Full- information maximum likelihood (FIML) method	Complementary relationship
Oberhofer and Pfaffermayr (2007)	Firm-level data	19,079 companies, 10 countries, Amadeus database	Bivariate Probit Model with Maximum Likelihood approach	Complementary relationship
Dasgupta (2008)	Country-level data India	1970-2005	Johanson cointegration and Granger Casualty test	Unidirectional causal relationship

6.4. Data and methodology

Our analysis is based on yearly data covering FDI stocks outflows and exports of India from 1981-2006. Both the variables are in logs form. Two variables are identified as follows:-

EX: Total exports in Year i

OFDI: Outward Foreign Direct Investment stocks in Year *i*.

The earlier published data on investment projects abroad and home understates the true magnitude of Indian investments for several reasons. Some existing foreign investment projects have not been properly registered, subsidiaries were generally left out, and the measurement of the size of the investment has been inadequate (Morris, 1987). As a consequence of these shortcomings, the Government of India revised (starting November 2002) its computation of FDI figures in line with the best international practices and based on the recommendations of a committee set up to examine this issue. This has led to a substantial improvement in FDI figures (Jha, 2003). The UNCTAD data which follows such rectifications is used here for the period chosen for investigation.

The reason for using the data from 1981 is mainly because it was only around that time Rajiv Gandhi introduced an outward oriented industrialization policy and India started liberalizing the economy to the rest of the world. Though the Indian economy only truly opened up after 1991, the period of 1980s cannot be ignored in this study because of two reasons:

- (i) The growth of Indian exports during this time was immense. The exports increased two fold between 1981-1990 and 1991-2000.
- (ii) Policy makers introduced OFDI in the 1980s as an export promotion tool, so it is likely that there was some outward investment undertaken in order to benefit from the extra facilities provided by Indian government to exporters.

Given the unavailability of time series data on Indian OFDI by sector and destination, a study on sector-level or destination-level could not be performed here. Nevertheless, the data which is available for recent years on Indian OFDI by sectors and destinations can be compared with exports data. Table 6.2 presents the sectorwise distribution of OFDI

(approvals) and exports for the years 2005-2006 and 2006-2007. Table 6.2 clearly shows that there is a substantial rise in Indian OFDI approvals from 2005-2006 to 2006-2007, particularly in the services sector. OFDI from the service sector has increased approximately by a factor of 10 from the previous year. Data on Indian exports shows that the merchandise and services exports have also increased over the previous 12-month interval but have not matched to the growth in OFDI.

Table 6.2: Sector-wise distribution of Indian OFDI and exports (US\$ million).

	2005-2006	2006-2007
OFDI		
Manufacturing	1,711	3,748
Services	1,143	11,312
Total	2,854	15,060
Exports		
Merchandise exports	99,620	1,20,861
Services	55,831	75,354
Total	1,55,451	1,96,215

(Sources: Ministry of Finance, India and UNCTAD, 2009).

A potential limitation of this study may arise if OFDI does not always follow exports (for example, if exports were going to country X while all FDI went to country Y). Table 6.3 contains the data on Indian exports and OFDI approvals for top five country destinations for the periods 2005-2006 and 2006-2007. From Table 6.3, it is clear that three of the top five destinations of Indian exports are also among the top five destinations of Indian OFDI approvals. Thus, Indian OFDI (approvals) generally follows exports and *vice versa*.

Table 6.3: Destination of Indian exports and OFDI for year 2005-2006 and 2006-2007.

Economies	2005-2006	2006-2007
USA	17,353.06	18,863.47
UAE	8,591.79	12,021.77
China	6,759.10	8,321.86
Singapore	5,425.29	6,053.84
UK	5,059.28	5,622.93
OFDI (US\$ million)		
USA	270.26	830.28
UK	158.27	1869.56
Mauritius	332.67	1162.79
Netherlands	284.62	1286.13
Singapore	200.49	1085.61

(Sources: Ministry of Finance, India and UNCTAD, 2009).

We proceed with the analysis in the light of the following conditions: (i) Since the opening up of Indian economy, the government has used OFDI as a tool to support its home country exports, thus it is possible that Indian OFDI has followed its exports. (ii) Studies such as Pradhan (2006, 2007) and Kumar (2007) have already established that exports and OFDI in the goods and services sector have grown simultaneously in recent years. (iii) There is a need to understand the exports-OFDI relationship as no study can be found on such relationship apart from the unpublished work of Dasgupta (2008). Thus, we believe this study will shed some light at the relationship between early stage of Indian OFDI and its exports.

Our two variables are expressed in logarithms in order to include the proliferative effect of time. The potentially important influence of government intervention on OFDI is necessarily omitted as Indian government has consistently encouraged FDI and trade

particularly exports during the sample period of 1981–2006. Hence, this influence is taken as given.

For time series data, therefore, the first step is to test the stationarity property of the variables. It is well known that standard regression techniques may produce spurious results if the variables under consideration contain unit-roots and are non-stationary. In spurious regressions, the results suggest that there are statistically significant relationships among the variables when in fact they merely reflect a contemporaneous correlation, not causal relations. Studies in domestic investment, foreign investment and business cycles suggest that macro-variables may be co-integrated (King *et al.*, 1991; Love and Lage-Hidalgo, 2000). Therefore, it is important to test whether the variables under the study are co-integrated and have a long-run relationship.

Augmented Dickey-Fuller (ADF) tests are applied to detect the integration order of the variables and co-integration is tested using the Johansen and Juselius (1990) procedure in which two tests are conducted based on the maximal Eigen value and trace test and the maximum likelihood method is used to test for the presence of co-integration relationship between the economic variables.

To investigate the causality between OFDI and exports we perform a simple Granger causality test augmented with an appropriate error-correction term (ECT) derived from the long run co-integrating relationship of OFDI and exports. The concept of causality was initially defined by Granger (1969) in a Vector autoregressive (VAR) representation. But the standard VAR which are derived from difference data are misspecified if the variables are co-integrated because the ECTs are excluded (McDonald and Kearney, 1987). In a bivariate framework, the Granger causality tests are performed by the following two equations:

$$x_{t} = \alpha_{0} + \sum_{i=1}^{k} \alpha_{i} y_{t-i} + ECT_{t-1} + \varepsilon_{t}$$
 (6.1)

$$y_{t} = \gamma_{0} + \sum_{i=1}^{k} \gamma_{i} x_{t-i} + ECT_{t-1} + \sqrt{t}$$
 (6.2)

In (6.1), H_0 : $\alpha_i=0$ for i=1,...,k and H_1 : $\alpha_i\neq 0$ for at least one i, and

In (6.2), H_0 : $\gamma_i=0$ for i=1,...,k and H_1 : $\gamma_i\neq 0$ for at least one i.

The variable 'x' Granger causes variable 'y' if the null hypothesis (H_0) in equation is rejected. Similarly, the variable 'y' Granger causes variable 'x' if the null hypothesis in equation (6.2) is rejected. The variable 'x' can be exports while 'y' is OFDI, where as α and γ represent short run influences on dependent variable and ECT is derived from long run co-integrating relationship. Based on the above arguments we hypothesize:

Hypothesis 1: Indian OFDI does not cause exports from India.

Hypothesis 2: Indian exports do not cause OFDI from India.

We now consider the results of the tests of hypothesis 1 and hypothesis 2.

6.5. Results

Prior to testing for a causality relationship between the time series, it is necessary to establish that they are integrated of the same order. First, the ADF test for unit roots in both the variables was performed for levels and first differences of the natural log values. Interestingly, both the variables under consideration are not stationary in their levels and become stationary when they are first differenced. The results with both level and first differenced form are presented in Table 6.4.

Table 6.4. Augmented Dickey-Fuller tests for unit roots (null hypothesis: log OFDI and log Exports contain a unit root).

Variables	Specification	Lag	Level	<i>p</i> -value	First difference	<i>p</i> -value
L_OFDI	Constant	0	1.48351	0.9987	-5.44198	0.001***
	Constant	1	1.88405	0.9998	-3.54418	0.006953***
	Constant and trend	2	-1.74998	0.7289	-3.51885	0.03733**
L_EX	Constant	3	1.12061	0.9977	-3.11195	0.02571**
	Constant with trend	3	-2.05473	0.5705	-3.42998	0.04742**

Henceforth, the first differenced data for both variables have been used. Once the absence of a unit root was confirmed, we performed the Johansen co-integration test. It is well documented in the econometric literature that a crucial factor in using the Johansen

procedure is the lag length. Cheung and Lai (1993) also point to the importance of proper lag specifications in estimating co-integrated systems. Though questions about optimal lags are raised in the literature, the issue of the best statistical method to use in determining the optimal lags in Granger causality tests is unsolved (Amoateng and Amoako-Adu, 1996).

Cheung and Lai's (1993) study suggested that for autoregressive processes, standard lag selection criteria such as the Akaike's information criterion (AIC) can be useful for choosing the right lag order for Johansen's tests. AIC has been found to be a better criterion than the other criteria under study in the case of small samples (Liew, 2004). In examining the co-integration between exports and imports in Malaysia, Baharumshah *et al.* (2003) confirmed a two-lag length of VAR for the Johansen tests based on the AIC. Following these studies we found a seven-lag length appropriate for our study. The results of the co-integration test are presented in Table 6.5.

Table 6.5. Co-integration tests (null hypothesis: the variables are not co-integrated).

Null	Eigen value	Trace test	p-value	Lmax test	p-value
Rank=0	0.99366	99.397	0.0000***	91.103	0.0000***
Rank≤1	0.36919	8.2934	0.0040***	8.2934	0.0040***

From the results of Table 6.5, we find that the two variables are co-integrated with rank 1 and have a long run relationship. The evidence of co-integration between variables rules out the possibility of Granger non causality, albeit it does not say anything about the direction of this causal relationship. The application of a vector error correction model (VECM) will in this case allow the direction of the causality to be determined while at the same time allowing us to differentiate between short run and long run influences.

The results derived from these methods are presented in Table 6.6. From Table 6.6, a clear pattern emerges for the causal links between exports and OFDI. The first hypothesis that Indian OFDI does not cause exports from the home country cannot be rejected at any

lags, so the growth of Indian OFDI does not cause growth in exports from India either in the short run or in the long run.

The second hypothesis that Indian exports do not cause OFDI from the home country can be rejected at all the lags. The evidence shows that it is true for both short run and long run dynamics. Thus, the findings offer empirically support that growth of Indian exports causes growth in OFDI from India.

Table 6.6. Granger causality tests for OFDI and exports based on VECM

Test for causality of	By	Lag	t-statistic	p-value
L_OFDI	L_EX	1	4.967	0.00767 ***
		2	5.449	0.00551 ***
		3	4.324	0.01241 **
		4	3.870	0.01799 **
	1 4 4 3 1 3 4	5	5.073	0.00711 ***
		6	5.931	0.00405 ***
ECT			-5.844	0.00428 ***
L EX	L OFDI	1	0.110	0.91804
		2	-0.211	0.84298
		3	0.455	0.67262
		4	1.181	0.30300
		5	1.339	0.25169
		6	0.581	0.59214
ECT			-1.264	0.27489

However, we find positive as well as negative t-statistics in various lags while performing causality tests for OFDI and exports. Therefore, the estimations do not point to any clear-cut conclusion on Indian exports being substitute for, or complementary to OFDI and *vice versa*.

6.6. Conclusion

This chapter examines causal linkages between Indian OFDI and exports based on a time series data over 1981-2006. The main findings of our analysis suggest that there is unidirectional causal relationship from Indian exports to its OFDI, but we do not find any casual link from Indian OFDI to its exports. The empirical results indicate that more exports from India will lead to more OFDI from the home country. Dasgupta (2008) also found unidirectional relationship between exports and OFDI.

In terms of causality, the existing literature suggests that many firms follow the traditional step-by-step sequence of servicing foreign markets: they trade in a foreign market in the first instance because trade is easier and less risky than FDI. After learning more about the economic, political, and social conditions and gaining more experience, home country firms may establish production subsidiaries in the foreign market. However, foreign subsidiaries may eventually begin to export (Johanson and Wiedersheim, 1993; Nicholas, 1982). Thus, there can be a two-way causal link: trade will first cause FDI and FDI may eventually cause trade. Kumar (2006) also suggests that during the 1990s, Indian OFDI was clearly concentrated in the countries that are key destinations for Indian exports and finds empirical evidence for Indian outward investments undertaken by exporters to support their exporting activity with local presence, develop a marketing network and provide after-sales service for the period of 1990-2001. However, our analysis shows that growth in OFDI may not lead to growth in exports. The results of this study also contradict the findings of Pradhan (2007) that Indian OFDI promotes exports growth from home country.

Two reasons can be attributed for India's OFDI having no effect on its exports. It has been suggested that the demand for Indian exports increases when its export prices fall in relation to world prices and is not affected by even inward FDI (Sharma, 2000). Thus we can say that at a macroeconomic level, export prices mainly drive/determine Indian exports rather than inward and outward FDI. Secondly, at the microeconomic level, the firm specific factors such as the type of technology and the skill intensity of the workforce play an important role in Indian exports (Lal, 2004). Further the growth of exports, an element of India's economic growth has dominated to a far greater extent than OFDI in the last three decades. The findings in this study also suggest that the motivation for overseas investment has been more than just export promotion for Indian firms. Several studies support this conclusion (Pradhan, 2007; Kumar, 2007; Gubbi *et al.*, 2009). Exports were predominantly the means towards globalization. Now, the scenario has changed. There is a growing realization that the future growth of Indian companies will be influenced by the share that they can garner in the world market, not only by producing in the country and exporting, but also by acquiring overseas assets, including intangibles like brands and

goodwill, to establish overseas presence and to upgrade their competitive strength in the overseas market (Gopinath, 2007).

Compared to other empirical research we do not find a clear support for a single theoretical model such as the "substitute" or the "complementary" model of exports and stocks of OFDI. But it has also been argued that OFDI can substitute and complement exports depending upon the type of FDI *i.e.* vertical FDI or horizontal FDI (Markusen, 1996). Further theoretical and empirical analysis is needed in order to achieve a better understanding of substitute-complementary relationship of Indian exports and OFDI.

Because of the data limitation, this research is carried out at the economy level only. It would be desirable to carry out causality tests at the detailed industry or even firm level, given that the FDI—trade linkage can be industry- and even firm-specific. The investigation of the relation between Indian OFDI and trade that is diversified by destination country or region is also called for. Despite the limitation, the results have relevant policy implications and are of central importance to development planning and strategies.

To summarize, this study adds to the growing stream of research on emerging-economy firms by empirically testing some of the recently proposed theoretical arguments related to their internationalization paths. While there is a large body of research examining international expansion of these firms through acquisitions and joint ventures and strategic alliances, exports as a mode of internationalization for emerging-economy firms are relatively understudied. This study contributes important insights to the internationalization literature of India, as well as complementing some of the findings in the literature on trade and FDI.

CHAPTER 7

SELECTED MACROECONOMIC DETERMINANTS OF INDIAN OFDI

7.1. Introduction

The growth of international business facilitates FDI and is driven by economic and technological factors. While, foreign investors benefit by utilizing their assets and resources efficiently through FDI, the recipients benefit by acquiring technologies and by getting involved in international production and trade networks. The internal factors associated with a firm's assets and competencies constitute its major ownership advantages and predominately influence its performance (Hawawini et al., 2004). At the same time, external or environmental factors associated with a firm's country of origin play a crucial role in the development of firm's ownership advantages (Dunning, 1980; Porter, 1990). The influence of home country specific factors on the generation of ownership advantages of firms has been suggested and empirically analyzed for several countries (Dunning and Narula, 1996: Buckley et al., 2007; Kim and Lynn, 1987; Lall and Siddharthan, 1982). However, the multivariate country-of-origin approach to studying ownership advantages has mostly been applied to the developed countries. Considering the fact that ownership advantages are the building blocks of FDI in the global economy (Erramilli et al., 1997), it becomes increasingly important in the global economy to analyze home country specific macro-economic determinants that may influence OFDI of a country, particularly an emerging market such as India.

There is a considerable body of literature on ownership advantages of Indian MNEs and their internationalization process. Nevertheless, still there exists a knowledge gap in the literature on the question of home country determinants that motivate Indian firms to internationalize. Previous studies have identified various factors that motivate OFDI flows by the firms from emerging markets. In term of the macroeconomics perspective, the main determinant contributing to the OFDI can be associated to the income or economic development of a country (Dunning, 1993). It is interesting to note that the macro-level characteristics of emerging markets such as India are dynamically changing in all aspect. This suggests a time series analysis of home country macro-economic factors for their influence on OFDI.

Today, it is widely recognised that economic uncertainties compel a firm to look for markets in other geographical locations. For example, an unstable exchange rate, high

interest rate, poor human capital, restrictions on trade and technological backwardness of the country all contribute to the increased cost of production in the home market. Because of the higher production cost, firms may engage in OFDI in order exploit location advantages of a country. This phenomenon is increasingly being observed in emerging markets including India.

The purpose of this study is to empirically analyze some of the key macroeconomic factors that affect Indian OFDI. This chapter is organized as follows. In the following section, the literature around the above-mentioned aspects of OFDI is reviewed and hypotheses on their ability to explain Indian OFDI patterns are stated. The methodology to analyze the data and to test the model based on the extant literature is described in section 7.3. In the subsequent sections, the results of the analysis are presented and accordingly discussed.

7.2. Literature review and hypotheses development

We have already presented our analysis on other major factors of Indian OFDI including exports, GDP, and IFDI in chapters 5 and 6 of this thesis and published (Verma and Brennan, 2011a, 2011b). However, as also suggested by Pradhan (2000) there remains a few more macroeconomic factors other than the much researched factors such as GDP, IFDI and exports that may play direct or indirect role on emerging market OFDI. A number of factors have been suggested as FDI determinants in previous literature. This chapter analyzes macroeconomic factors of Indian FDI which may have a substantive influence on the decision making processes of Indian firms to invest abroad. More specifically, we test the relationship between Indian OFDI and five selected macroeconomic determinants that include 1) exchange rate, 2) interest rate, 3) human capital, 4) technology, and 5) openness of the economy. The overall proposed relationship of the explanatory variables to influence Indian OFDI hypothesized in this study is illustrated in Figure 7.1 and discussed in the following subsections.

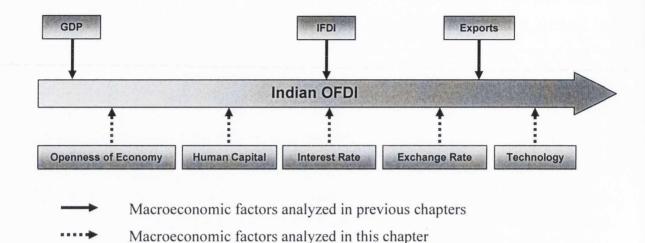


Figure 7.1. A framework of macroeconomic determinants of Indian OFDI.

7.2.1. Dependent variable

7.2.1.1. Annual OFDI stocks: In this study, the OFDI from India is explained in terms of a few macro economic variables that have not been included in the previous chapters. Here the FDI stocks are used for this purpose. The stock of OFDI used in this study is defined as the amount of cumulative FDI at the end of the year. The yearly data was collected from the UNCTAD dataset (Figure 7.2).

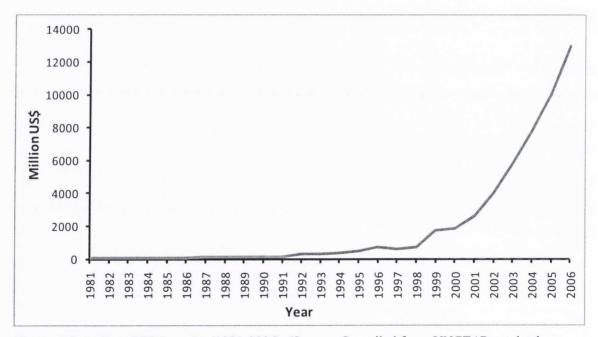


Figure 7.2. Indian OFDI stocks (1981-2006). (Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

7.2.2. Explanatory variables

7.2.2.1. Gross Domestic Product: There is a longstanding support to the FDI led growth view. Studies such as Borensztein et al. (1998) explain how the inward FDI plays a crucial role in a country's economic growth. In case of India, there is substantial evidence that suggests the Indian inward FDI is central to its growth (Chakraborty and Basu, 2002). In a study Zhang (2001) suggests that the extent to which FDI enhances the economic growth depends on country-specific characteristics. Particularly, FDI tends to be more likely to promote economic growth when host countries adopt liberalized trade regime, improve education and thereby human capital conditions, encourage export-oriented FDI, and maintain macroeconomic stability. From the chapter 4 we affirm that FDI inflows have played an instrumental role in promoting economic growth and development of the Indian economy as a result of the adoption of a series of industrialization initiatives. Also as discussed in chapter 5, according to the investment development path model (Dunning, 1981, 1986), a steady high economic growth in the home economy could foster higher level of economic development, in which domestic firms would have established ownership advantages before they would expand their operations abroad. Thus a sustainable economic growth is a prerequisite for OFDI. Studies such as Desai et al., (2005) suggest that OFDI allows firms to enter new markets, to import intermediate goods from foreign affiliates at lower prices, to produce a greater volume of final goods abroad at lower cost, and to access foreign technology. Outward investing firms combine home production with foreign production to reduce costs and to increase their competitiveness both internationally and domestically, stimulating domestic factor demand and domestic output. However, the evidence on the domestic output effects of OFDI is limited (Herzer, 2007).

Based on the above studies, it is proposed that:

Hypothesis 7.1. Indian OFDI is influenced by the home country gross domestic product.

In chapter 5 we have analyzed the NOIP of India in terms of its economic development. Since GDP is considered as one of the most important factors explaining FDI by a country, here GDP is included again in this analysis for the time period 1981-2006 (Figure 7.3).

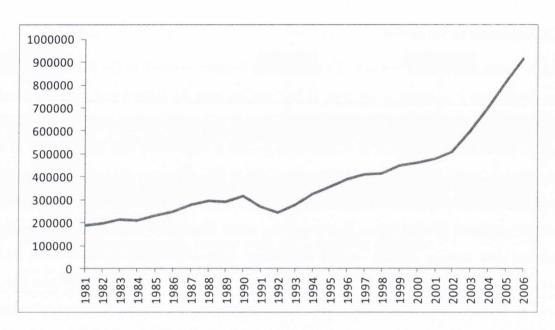


Figure 7.3. India's Gross Domestic Product (1981-2006) (Source: Compiled from UN Statistical Division, 2008).

7.2.2.2. Trade Weighted Exchange Rate: The currency area hypothesis postulated by Aliber (1970) states that the pattern of FDI can be best explained in terms of the relative strengths of the various currencies. The stronger the currency of a certain country, the more likely is that firms from that country will engage in foreign investment, and the less likely it is that foreign firms will invest in the domestic country. This argument is based on capital market relationships, exchange rate risks and the preferences of the market for holding assets in selected currencies. By lowering the capital requirements of OFDI in domestic currency units and reducing the nominal competitiveness of exports, the appreciation of the home country's currency encourages OFDI. Kohlhagen (1977) and Stevens (1993) suggest that a low exchange rate encourages exports but discourages OFDI. As the home country exchange rate appreciates, more profitable opportunities for OFDI occur as foreign currency denominated assets become cheaper (Buckley *et al.*, 2007). In other words, a depreciation of the host country currency raises the relative wealth of home country agents and can raise multinational acquisitions of certain host country assets.

The literature suggests that scholars have different views on OFDI-exchange rate relationship. Froot and Stein (1991) showed that the depreciation of the US\$ increased the propensity of foreign firms to invest in the USA by lowering their capital costs for FDI, and

encouraging the aggressive acquisition of US\$-denominated foreign assets. Blonigen (1997) also found strong correlation between weaker US\$ and higher level of Japanese acquisitions in the USA, but no effect was found in case of greenfield investments. Baek and Kwok (2002) demonstrate that firms with a stronger home currency have a higher propensity to establish a subsidiary in a foreign market. Based on five European Union members and four non-European Union countries Kyrkilis and Pantelidis (2003) showed a mixed support for a link between exchange rate and OFDI. They suggest that exchange rate is an influential factor in determining OFDI for a few countries such as UK, Germany, Brazil and Singapore, where as exchange rate was insignificant for Italy, The Netherlandss and Korean OFDI. In a recent study, Russ (2007) shows that a MNE's response to exchange rate volatility vary depending on whether the volatility arises from shocks in the firm's home or host country. Based on the above studies it is proposed that a depreciated currency will increase inward FDI and decrease OFDI in a country.

The use of trade weighted exchange rate has been advocated in international business (Blonigen, 1997; Globerman and Shapiro, 2003), thus we use a trade weighted exchange rate for this study (Figure 7.4).

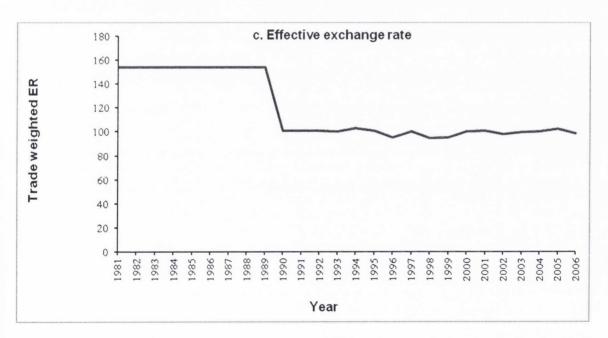


Figure 7.4. Trade Weighted Exchange Rate (1981-2006). (Source: Compiled from Reserve Bank of India, 2011).

Hypothesis 7.2. Indian OFDI is influenced by the trade weighted exchange rate.

7.2.2.3. Interest rate: Foreign operations require significant commitment in capital, especially if they are undertaken in capital intensive sectors where production is characterized by extensive economies of scale. The capital abundance of the home country may provide the necessary background for establishing a firm with adequate financial means and relatively easy access to capital markets. Capital abundance is associated with relatively low interest rates *i.e.* the level of interest rate is a proxy for the capital abundance or scarcity of a country. Relatively low interest rate associated with a home country's capital abundance decreases the opportunity cost of capital and enhances the profitability of investments abroad. Therefore, we may hypothesize that:-

Hypothesis 7.3. Indian OFDI is influenced by the home country interest rate.

Previous studies suggest that relatively low interest rate in the home country leads to higher tendency of OFDI (Prugel, 1987; Lall, 1980; Hong and Kim, 2003). Moreover, interest rate is one of the significant determinants of the choice of FDI location also (Billington, 1999; Jeon and Rhee, 2008). In the case of India, we observe that interest rate has decreased over the time from 1981 to 2006 that may explain Indian OFDI (Figure 7.5).

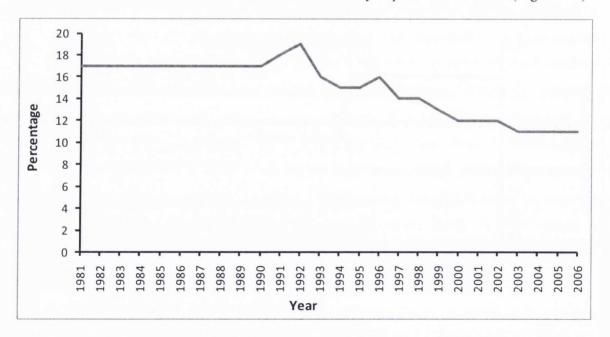


Figure 7.5. Interest rate (1981-2006). (Source: Compiled from UN Statistical Division, 2008).

7.2.2.4. Human capital: It is now widely recognized that presence of sophisticated human capital is one of the most important factor of FDI attractiveness in emerging markets (Dunning, 1988, Narula, 1996; Zhang and Markusen, 1999; Balasubramanyam and Mahambare, 2003). It is also one of the major foundations of firms' capability to invest abroad. The more human capital of a country advances, the more country's firm are able to retain qualified staff, absorb latest technologies, and thus enhance their productivity in home and foreign countries (Meyer and Sinani, 2009). Firm level studies also confirm a crucial role of the human capital in OFDI motivations (Lall and Siddarthan, 1982). Therefore, we hypothesize that:-

Hypothesis 7.4. Indian OFDI is influenced by the home country human capital.

A high level of education is regarded as the most important element in human capital development (UNCTAD WIR, 1994; OECD, 1998). Previous studies suggest the number students in the tertiary level education as the proxy of human capital (Meyer and Sinani, 2009; Kyrkilis and Pantelidis, 2003; Paloni and Youssef, 2001). Therefore, we used the number of students in the tertiary level education in India to approximate Indian human capital in this study. Thus this variable captures high level technical and managerial skills available in the country (Paloni and Youssef, 2001). Data shows an upward trend of human capital during the period of 1981 to 2006 (Figure 7.6).

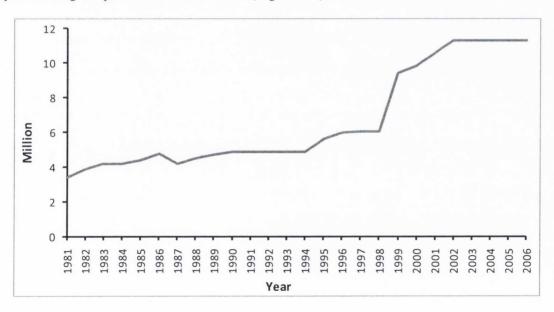


Figure 7.6. Human capital based on number of students (in million) enrolled for tertiary education (1981-2006). (Source: Compiled from UN Statistical Division, 2008).

7.2.2.5. Technology: Firms may exploit their technological superiority in the world market. Depending upon relative technological benefits and costs, firms may decide to manufacture the products in home country and export to overseas markets, license out their technology to host country players in the foreign market, or produce the product in the overseas host location by themselves (Pradhan, 2007). Firms embedded in technological efforts have a stronger chance to succeed, locally or internationally (Barnard, 2008).

There is also evidence that Asian firms with higher levels of technological advantage are more likely to undertake OFDI especially in the developed countries (Chen and Chen, 1998; Makino *et al.*, 2004). Accumulated technological capabilities is considered as an important competitive advantage of Indian firms to invest in more advanced countries particularly in pharmaceutical and information technology sector (Pradhan, 2005, 2006, 2007). An upward trend in the technological advances by Indian firms approximated by the number of patent applications from India can be seen during the periods of 1981 to 2006 (Figure 7.7)

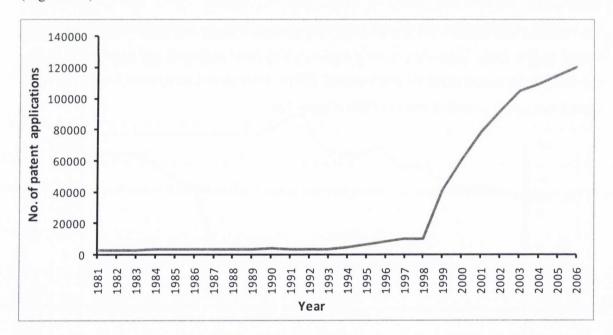


Figure 7.7. Technology movement based on number of patent applications (1981-2006). (Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org).

Therefore, it is imperative to hypothesize that:-

Hypothesis 7.5. Indian OFDI is influenced by the home country technological capability.

7.2.2.6. Openness of economy: The influence of the trade liberalisation of a country's economy on FDI is another subject in the international business empirical literature, given the concentration of most FDI in the tradable sector. The liberalization of a country's foreign economic transactions is expected to positively influence the OFDI activities of its firms. In other words, the higher degree of openness of a country is expected to be associated with a higher level of its FDI activity (Chakrabarti, 2001; Lall, 1996). The trade openness of a country is considered to improve its capacity to respond to the opportunities offered by global economic integration (OECD, 1998) and is, thus, the main determinant of economic growth in developing countries (Cuadros *et al.*, 2001). An export-oriented economy permits firms to acquire information about foreign markets and organize foreign operations (Kogut, 1983). OFDI of the USA and Japanese MNEs was found to be positively associated with their market openness during 1982-1994 (Kumar, 2001). We observed the openness of Indian economy gradually increased during 1981 to 2006 as approximated by its exports plus imports level relative to the GDP (Figure 7.8).

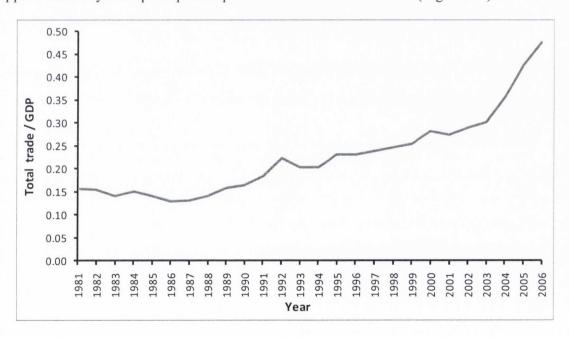


Figure 7.8. Openness of economy (1981-2006). [Source: Compiled from *UNCTADstat* database, http://unctadstat.unctad.org by dividing total trade (export + import) to GDP].

The observed data and the above explained evidence that country's openness is more likely to be correlated with FDI suggest us to hypothesize that:-

Hypothesis 7.6. Indian OFDI is influenced by the degree of openness of the home country.

7.3. Methodology and Data

7.3.1. Model: Based on the hypotheses, the proposed model for Indian OFDI is as follows:-

$$OFDI = \beta_0 + \beta_1 GDP_+ \beta_2 TWER - \beta_3 IR + \beta_4 HC + \beta_5 TECH + \beta_6 EXIM$$
 ----- (7.1)

Where,

OFDI = Indian Outward Foreign Direct Investment stocks

GDP = Home country gross domestic product

TWER = Home country trade weighted exchange rate.

IR = Home country interest rate.

HC = Human capital. It is approximated by the number of enrolments of students in tertiary education.

TECH = Technology capability of home country. It is approximated by the number of patents application by the home country.

EXIM = Openness of the economy. It is approximated by the ratio of exports plus import to the GDP of that year.

The signs (negative or positive) before the variables indicate the expected type of correlation between the independent variables and the OFDI.

7.3.2. Data: The time series data on the above mentioned variables for the period from 1981 to 2006 are presented as scatter plots to clearly demonstrate the growth pattern (Figures 7.2 to 7.8). All the variables except 'trade weighted exchange rate' and 'interest rate' showed an upward trend. The year-wise data on Indian OFDI stocks, exports and imports is obtained from the UNCTAD Handbook of Statistics. The values for human capital, exchange rate and interest rate are compiled from the yearly data obtained from the United Nations and Reserve Bank of India official websites.

7.3.3. Statistical analysis: Correlation coefficient of the variables was determined using a simple regression model. The multi-collinearity of the time series variables was analyzed following the Augmented Dickey Fuller (ADF) test. A simple linear regression method ordinary least squares (OLS) was used to estimate the relationship between dependent and explanatory variables. Details about these analytical methods are described in the methodology chapter 3.

7.4. Results

The results of correlation coefficient matrix are presented in Table 7.1. The analysis indicates that there exists a high order serial correlation between the dependent and independent variables and also among the independent variables. There exists a negative correlation between Indian OFDI to its trade weighted exchange rate and interest rate, while human capital, technology, GDP and openness of Indian economy is positively correlated to the OFDI. Since these variables are highly correlated, they do not contribute independently toward explaining the variations in Indian OFDI.

Table 7.1. Correlation coefficient matrix of the variables

	L_OFDI	L_GDP	L_TWER	L_IR	L_HC	L_TECH	L_EXIM
L_OFDI	1	0.9634	-0.7118	-0.9447	0.9535	0.9594	0.9695
L_GDP		1	0.7103	-0.9053	0.9337	0.9176	0.9378
L_TWER			1	0.5890	-0.7024	-0.6130	-0.7885
L_IR				1	-0.9482	-0.9717	-0.8803
L_HC					1	0.9760	0.9021
L_TECH						1	0.8949
L_EXIM							1

To examine the stationarity property of the time series variables selected in this study, we carried out unit root tests as described in the methodology chapter 2. The results of the Augmented Dickey–Fuller (ADF) statistic unit root test are presented in Table 7.2. In

this test, the more negative value has the stronger the rejection of the hypothesis that there is a unit root at some level of confidence. Our estimations show that all the economic variables except 'technology' are not stationary at their levels. However, it is rejected after first differencing for all the variables at 5% or 10% significance levels as indicated in Table 7.2 confirming that they are integrated in order one. Thus, the robustness of the result allows this study to treat the variables as I(1) to proceed with further analysis.

Table 7.2: Unit root test (ADF test)

Variables	Level 0	First difference	
L_OFDI	-5.90648***	-3.91077**	
L_GDP 0.98933		-2.91855*	
L_TWER	-29.2438***	-4.50092***	
L_IR	-12.2204***	-6.83859***	
L_HC	-4.95032**	-3.64004*	
L_TECH	-6.58484*	-3.87093**	
L_EXIM	1.1154	-3.32598**	

^{***, **,} and * indicate significance at 1, 5, and 10% acceptance levels respectively.

The results of the estimation of the linear equation (7.1) using the Ordinary Least Squares (OLS) are shown below in Table 7.3.

Table 7.3: OLS estimates of Indian OFDI for period 1981-2006

Variables	Coefficient	Standard error	t-stat	p-value
Const.	-3.33632	7.08891	-0.4706	0.6433
L_GDP	0.852185	0.400073	2.130	0.0465 **
L_TWER	0.185135	0.496546	0.3728	0.7134
L_IR	0.787222	1.13034	-0.6964	0.4946
L_HC	-0.167179	0.739748	-0.2260	0.8236

L_TECH	0.397972	0.227851	1.747	0.0968 *
L_EXIM	2.22824	0.494559	4.506	0.0002 ***
R ² stat	0.986694			

***, **and * indicate significance at 1%, 5% and 10% acceptance levels respectively.

Considering the general statistics of the estimation, the adjusted R²-statistic indicates that over 98% of the variance of the dependent variable is explained by the variables. Looking at the coefficients of the variables, the results show expected signs (indicated by the positive coefficient) with highly significant values for the variable 'openness of economy' at the 1% acceptance level, 'technology' at the 10% and for GDP 5 % acceptance level. Other variables 'trade weighted exchange rate', 'interest rate' and 'human capital' are statistically insignificant for Indian OFDI. Thus, we accept the hypotheses 7.1, 7.5 and 7.6 that Indian OFDI is associated positively with the degree of openness of the home economy to international trade and investment, and technology capability. Our analysis rejects hypotheses 7.2, 7.3 and 7.4 that Indian OFDI is associated positively with its trade weighted exchange rate, interest rate and human capital.

7.5. Discussion

This study empirically analyzes potential macroeconomic determinants of FDI in order to understand their relationship with Indian OFDI. It is important to note that unlike the study by Tolentino (2010), this study does not aim to understand the causal relationship among variables but focuses to understand the correlation between dependent and independent variables and then to quantify the relationship. The study employed time series data of the selected macro-economic factors for the period from 1981 to 2006. The major contribution of this chapter is testing the previously theorized relationships between a selected set of macroeconomic variables and OFDI from an emerging market economy, with the case of India. The results show that the theorized relationships that may influence the FDI of an emerging market do not all hold in the context of India.

The findings of our analysis indicate that the GDP has a significant relationship with Indian OFDI. This study also supports the finding of chapter 5 which empirically

examined and found that GDP has played a central role in India's investment development path. Other than GDP, the openness of Indian economy is amongst the important determinant of OFDI. The openness of the Indian economy shows a positive and highly significant (1% acceptance level) relationship to its OFDI (Table 7.5). This may be due to the economic policy adopted by the Indian government particularly export-oriented approach during the 1980s and the 1990s. The expansion of Indian export activities as a result of robust trade liberalization momentum in the 1990s enabled Indian firms to obtain information regarding foreign markets and knowledge as well as skills in establishing operations abroad. It has been argued that the uptrend of overseas investments during the 1990s by Indian firms was motivated to support and assist export markets with local presence, to develop marketing networks, and to provide after-sales services among others (Kumar 1998). However, we find at least one study by Chiou Wei and Zhu (2007), which does not support the hypothesis that openness of economy is a significant determinant of FDI.

In this study, we find a positive correlation between the technology capability of India and its OFDI. As also explained in the chapter 1 of this thesis, India has significantly improved from its initial status of mere adaptor of foreign technologies to continuously move nearer to the global frontier of technology in many of the knowledge-based industries like information technology, telecommunications, transport, and pharmaceuticals. In this regard, Indian government's strategic interventions in the form of large-scale public investment in skill formation through general, technical and management education, public funded R&D establishments and fiscal incentives for innovating firms like duty-free imports of inputs had contributed greatly in strengthening indigenous technological capabilities. The analysis presented here support these efforts of by the Indian governments to enhance technological capabilities of India leading to its increased OFDI.

It is generally assumed that human capital accumulation of a country leads to growth of the economy, followed by IFDI and finally OFDI. The presence of sophisticated and improved human resources elevate the volume and also the quality of the FDI that a country can attract (Paloni and Youssef, 2001). Lall (1998) argues that high level of human capital skills attract high-technology activities and thus may achieve faster economic growth and *vice-versa*. According to the IDP theory, a good economic condition of a

country is a prerequisite for it to start overseas investment. Human capital as a determinant of developing country FDI has been embodied in the previous theoretical literature (Zhang and Markusen, 1999; Dunning 1988). However, the role of human capital in FDI outflows from emerging markets has not been properly verified as yet, except a few studies such as Liu *et al.* (2005). Therefore, we considered it imperative to analyze the relationship between Indian OFDI and its human capital. Surprisingly, we do not find a statistically significant relationship between Indian OFDI and its human capital in our analysis; although they are positively related. It should be noted that this does not necessarily imply that human capital is not important. Educational attainment of a country is a very slowly evolving variable. It is also possible that the relationship between OFDI and human capital is likely to be quite complex and may require further investigation using different models.

Among several researchers, Prugel (1981), Lall (1980) and Grubaugh (1987) suggest that a low interest rate in the home country may encourage OFDI. However, a few studies including a recent one by Kueh *et al.* (2009) failed to demonstrate any direct causal relationship between OFDI and the interest rate. The impact of interest rates on FDI may vary across host countries. An influence of long-term interest rates explains FDI in Canada but not in Japan, the UK, or the USA (Chowdhury and Wheeler, 2008). In this study, although we find that the interest rate has a positive sign but is insignificant to explain OFDI from India, supporting the finding of Kueh *et al.* (2009). There have been considerable number of studies which have attempted to explain the financing arrangements of Indian MNEs from different perspective (Khanna and Palepu, 2000; Ghosh, 2006). Ghosh (2006) particularly points that the liberalization of financial market in India has no effect on the investment by the domestic firms. Thus, further studies are required to understand the financing capability of the Indian MNEs in order to understand the role of interest rate in Indian OFDI.

We find exchange rate as a positive but an insignificant factor of Indian OFDI. Previous study by Blonigen (1997) suggests that the effect of exchange rate movement is more visible in the OFDI made in the form of acquisition than greenfield. Since the data used in this study does not differentiate between different forms of OFDI, further investigation is warranted to comprehensively understand the influence of exchange rate on Indian OFDI.

In summary, this chapter verifies the role of few characteristics of the home country on Indian OFDI. We analysed the time series data of various macro-economic determinants for their influence on Indian OFDI. The series data was checked for the stationarity using ADF test and the OLS estimation was employed to find out the relationship between these factors to Indian OFDI. We observed that openness of the economy and the technology of India to be significant determining factors of Indian OFDI.

CHAPTER 8

A FIRM-LEVEL ANALYSIS OF INDIAN MNEs IN IRELAND

8.1. Introduction

Traditional views on internationalization of firms are embedded in the exploitation perspective where firms make the most of their ownership advantages expanding into overseas markets (Buckley and Casson, 1976; Hymer, 1976). In contrast, recent studies on multinational enterprises (MNEs) originating from developing countries present an intriguing perspective. For these firms, foreign expansion is motivated by considerations of gaining access to, and internalizing strategic resources. Pointing to such firms' rapid and unconventional paths of international expansion, scholars have called for a reassessment of the traditional exploitation-based perspective of international expansion (Almeida, 1996; Chang, 1995; Hutzschenreuter et al., 2007; Luo and Tung, 2007; Makino et al., 2002; Mathews, 2006). In the context of international trade literature, empirical analysis of globalizing corporate activities certainly requires the viewpoint of individual firms. Internationalization provides a firm with both enhanced competitive pressure and new opportunities in business. How firms adapt to a foreign business environment depends heavily on the heterogeneous characteristics of individual firms. For example, some firms may start exporting to a foreign country before they actually invest through acquisition, joint venture or subsidiary. To generate insights regarding how firms respond to the opportunities and challenges that internationalization presents, a firm level research utilizing detailed micro-level data and analysis is necessary.

As discussed in chapter 1, India is increasingly becoming an important investor in developed countries including the USA and the UK. In spite of the recent growth of Indian OFDI in the developed world, relatively little research has been undertaken on this topic. Indeed, there exist some notable reports on Indian OFDI in the developed country, not much is known about its detailed composition, underlying strategic intent or the direction of its development. It should be noted that sectoral distribution of Indian firms is strikingly different between the USA and the UK. In the USA, 80% of Indian investment is in the information technology (IT) sector and the majority of the remaining 20% is in the pharmaceutical and chemical sectors. In the UK, a larger array of sectors can be seen for Indians firms. The IT (19%) and pharmaceutical (32%) sectors are at the forefront but at lower levels than in the USA. Many Indian firms from other sectors such as chemical

(17%), electronics and computer (10%), and transport (9%) industries are also investing in the UK (Milelli, 2006).

As indicated in chapter 1, Indian MNEs are expanding their operations in Ireland as well. According to a recent report by IDA Ireland, Indian firms plan to invest more in Ireland (IDA Ireland, 2010). Ireland presents an interesting case on several counts. Ireland has actively competed to attract FDI to support its economic development objectives over the past several decades. We have recently profiled FDI in Ireland, which provides a unique economic environment for foreign investors in terms of domestic market size, infrastructure and access to markets (Brennan and Verma, 2010). Equally, historical trading relationships and levels of political commitment to the European Union (EU) might have been factors influencing Indian investment patterns in the Republic of Ireland. This chapter focuses on some of these emerging issues and studies the magnitude, characteristics, motives and determinants of Indian OFDI in Ireland. Next section elaborates on the Republic of Ireland as a host country location.

8.2. Ireland's FDI attractiveness

Ireland is among the top locations in Europe for inward foreign investments. The success of the Republic of Ireland in translating heavy infusions of foreign direct investment has been cited as one of the most remarkable developments in the global economy over the past two decades (Casey and College, 2011).

After its independence in 1922, till the late 1950s high tariff barriers and a strict prohibition on foreign ownership of firms operating in Ireland were the cornerstone of policies designed to promote growth of indigenous manufacturing (Barry and Bradley, 1997). The post-war boom of the 1950s saw Western Europe achieving growth rates of almost 6% per annum while protectionist Ireland stagnated with a growth rate of less than 2% (Barry, 2008).

By the 1950s it was clear that protectionism had long outlived its usefulness and the domestic firms were quite competitive to generate exports. This led the opening up of the economy (Barry and Bradley, 1997). According to Ruane (2003), since the late 1950s, Ireland's economic development strategy has focused on employment creation and has been characterised by actively promoting:

- (i) The development of a modern export-led-growth manufacturing sector (and latterly internationally traded services) through financial and fiscal supports.
- (ii) New greenfield investment by foreign companies in the manufacturing and internationally-traded service sectors, producing output specifically for export markets.
- (iii) The establishment of up-stream linkages between foreign and indigenous companies.
- (iv) The deliberate creation of industrial clusters by foreign and indigenous companies in certain sub-sectors of manufacturing and internationally traded services.
- (v) A pattern of economic development that would bring private sector investment to the less-developed (Western) areas of the country.

Since the opening up of Ireland's economy in the 1960s, Ireland has embraced FDI as an integral part of its strategy of economic development. Ireland benefited from the increased scale of global FDI in the 1960s, by having established a more fiscally- and financially-welcoming environment than other countries in Europe.

In the early 1970s the electronics and pharmaceutical sectors were identified as providing the most promising opportunities for foreign investment projects for Ireland and policy towards FDI encouraged investments into the production of modern high technology goods (Ruane, 2003; Buckley and Ruane, 2006). Furthermore, the USA was identified as the most likely market source for such projects and Ireland was very aggressively promoted as an export base for US companies within the EU. While intra-EU FDI has been important, Ireland's entry into the European Community in the 1973 enhanced its attractiveness to extra-EU investors, and particularly US investors seeking production bases within the Common External Tariff area.

The growth of FDI in Ireland has occurred particularly in the high-technology sectors such as machinery and computers, pharmaceuticals, and instrument engineering. Its efforts to attract such investment have been highly successful. There has been substantial growth in FDI in Ireland, since the mid-1980s (O'Malley and Gorman, 2001). FDI policy in Ireland has continued to evolve since the 1980s, in response both to the evolving MNEs

and to limitations set by the EU on the use of incentives to attract industry. These limitations led to the replacement of the original tax holiday and grants policy by a low corporate tax rate on all manufacturing profits.

The decade of the 1990s witnessed the heaviest infusion of growth fuelled FDI. The attractiveness of Ireland as an investment location was consolidated in the early 1990s with the creation of the Single Market. Ireland offered a low cost manufacturing base within Europe for maturing US firms, which were already exporting products to growing European markets. In such an environment Ireland, with its low tax incentives designed to make it an export platform, was the most FDI attractive country among the developed economies (Buckely and Ruane, 2006). During this decade, Irish growth, which was particularly impressive on a per capita basis, exceeded the performance of the other EU countries and actually ranked at the top of the 29 OECD member states (Casey and College, 2011). Casey and College (2011) emphasize that Ireland was successful in bidding FDI away from its European partners. The authors highlight that between 1992 and 1996, Ireland attracted 37% of all U.S. FDI in the EU and 31% of all UK investments. By 1995, Ireland had surpassed the U.K. as the favourable FDI destination in Europe for the USA FDI, securing 30% of new projects in Europe. By the end of the millennium, Ireland enjoyed remarkable success in outbidding other EU host countries for inward FDI in pharmaceuticals, software services, electronics and tele-services sectors (Casey and College, 2011).

According to the OECD Factbook 2010, the country has the fifth highest ratio of IFDI stock to GDP among the OECD countries, and the highest ratio of employment in foreign affiliates in the manufacturing and services sectors. Ireland now hosts affiliates from many of the leading global MNEs and hosts operations from 8 out of the top 10 ICT companies, 8 out of the top 10 pharmaceutical companies and 15 of the top 20 medical devices companies.

Table 8.1 presents the IFDI stock in Ireland and shows that the country's inward FDI stock grew by just over 50% between 2000 and 2009. Ireland's ratio of IFDI stock to GDP increased sharply in the later years of the 1990s and into the early years of the past decade, peaking in 2002 at 149%. Since 2003, the ratio has turned downward, with the

exceptions of 2007 and 2009, when it rose again. For 2009, the ratio stood at 85% (Brennan and Verma, 2010).

Table 8.1. Ireland IFDI stocks for years 2000, 2008 and 2009 (US\$ billion).

Economy/Year	2000	2008	2009
Ireland IFDI stock	127	168	193
IFDI stock as a percentage of GDP	132	62	85

Table 8.2 presents the geographical distribution of Ireland IFDI stock. It shows that to date, virtually all of Ireland's IFDI stock has emanated from the developed world, with the major economies of the European Union (Netherlands, UK, Germany, Italy, France), along with Luxembourg and Switzerland, accounting for the total emanating from Europe (83% in 2008); the United States and Canada (and to a much lesser extent Japan) accounted for most of the remainder (16% in 2008) (table 8.2). However, it should be noted that the data in table 8,2 only correspond with the immediate investment source country; it does not necessarily equate to the ultimate investment source country (Brennan and Verma, 2010).

Table 8.2. Geographical distribution of Ireland IFDI stock (2003-2008) (US\$ billion).

Region/economy	2003	2004	2005	2006	2007	2008
World	222	207	163	156	193	163
Developed economi	es					
Europe	170	171	131	128	128	136
European Union	149	154	129	122	117	128
Austria	0.1	0.6	0.2	0.2	0.4	0.5
Belgium	-0.068	2.4	-0.08	-0.6	-1.3	6.6
Cyprus	n.a.	0.79	1.4	0.5	0.4	0.6
Czech Republic	-0.03	-0.099	-0.62	n.a.	-0.9	-0.7

Denmark	0.1	-0.4	-1	-0.5	-1	-0.1
Finland	.07	8	-1	n.a.	-1	0.2
France	2	3	6	8	6	3
Germany	10	7	1	4	4	6
Italy	6	6	6	7	8	8
Luxembourg	21	33	34	46	42	35
Netherlands	71	70	65	37	48	42
Poland	-0.180	-0.173	n.a.	0.019	-0.21	-0.2
Portugal	0.5	0.8	1.6	1.9	1.7	1.3
Slovakia	-0.002	-0.008	-0.07	n.a.	n.a.	-0.1
Spain	-0.9	-0.9	-2	-2	-6	-0.2
Sweden	3.8	-0.6	-0.2	5.2	3.5	6.9
UK	34	31	20	15	11	16
ther European ec	conomies					
Isle of Man	0.44	-0.551	-2.1	2.7	1.3	n.a.
Jersey	n.a.	6.8	-0.238	-0.769	0.83	-1
Norway	0.1	0.7	0.2	0.09	0.4	-0.06
Switzerland	6	7	4	5	7	7
Turkey	0.087	0.104	-0.001	0.10	n.a.	n.a.
ther developed ed	conomies					
Australia	-0.69	-0.53	-0.69	0.2	-0.02	-0.2
Canada	8.7	n.a.	6.1	10.9	17	12
Japan	-0.4	1.8	3.6	3.5	1.5	1.1
New Zealand	0.008	-0.001	0.016	0.1	-0.2	-0.09

USA	30.2	14.5	13.8	7.6	29	12.3
Developing economic	es					
China	-0.176	0.3	0.11	0.2	0.3	0.2
Hong Kong	0.178	n.a	n.a.	-0.9	-0.9	-0.4
India	0.001	-	-0.09	-0.14	-0.063	-0.05
Indonesia	-0.001	-0.001	n.a.	n.a	0.008	0.02
Mexico	-1	-0.5	0.2	-0.2	-0.1	-0.3
Republic of Korea	-0.051	-0.7	-1	-2	-2	n.a.
Russian Federation	-0.02	-0.02	-0.04	-0.1	0.6	0.1
Singapore	1	1	-0.2	-0.152	0.1	0.5
Unspecified destination	-2	-2	-0.5	-3	-0.4	-10

(Source: OECD, 2009).

In recent years, Ireland has been successful in attracting investment in information and communications technology (ICT), life sciences, financial services, and globally traded business, including digital media, engineering, consumer brands, and international services. The FDI in these sectors have proved to be of particular economic importance in the provision of skilled jobs, export earnings, and engagement in the virtuous circles of globally competitive networks (Cassidy *et al.*, 2010).

Table 8.3 shows the sector-wise breakdown of Ireland's inward FDI for the recent years.

Table 8.3. Ireland: distribution of inward FDI stock, by sector and industry, 2003-2008 (US\$ billion).

Sector/industry	2003	2004	2005	2006	2007	2008
All sectors/industries	222	207	163	156	193	163
Primary		1				
Agriculture, farming, fishing and forestry	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mining	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Secondary						
Manufacturing	98	89	82	45	65	63
Textiles, wearing apparel, wood, publishing and printing	14	7	8	7	12	10
Food products	5	6	5	5	6	4
Chemical products	66	60	54	16	n.a.	1
Office machinery and computers	4	4	4	4	3	4
Metal and mechanical products	0.6	0.7	1	0.4	1.2	1.2
Motor vehicles and other transport equipments	0.1	0.2	0.2	0.3	0.4	0.4
Radio, TV, communication equipments	3	4	4 .8	5	4	3.9
Services						
Total services	124	117	80	110	127	99
Transports, storage and communication	2	2	1	3	4	2
Financial intermediation	110	104	64	88	108	62
Financial intermediation, except insurance and pension funding	87	76	38	53	67	33
Monetary intermediation	24	29	31	38	55	49
Activities auxiliary to financial intermediation	3	4	3	3	1	1

Other financial intermediation	63	46	6	14	12	-15
Insurance	20	24	21	31	38	26
Computer activities	1	1	1	1	5	4
Business and management consultancies	0.2	0.7	1	1	1	3
Other business activities	n.a.	n.a.	4	5	n.a.	20

(Source: OECD.Stat Extracts, available at: http//:stats.oecd.org).

Ireland's success in attracting FDI can be ascribed to a range of factors, including: (i) EU membership, macroeconomic stability, Western European governance standards, an English-speaking environment and a legal and business system familiar to US corporations, (ii) a low corporation tax rate, (iii) the skills and experience of the Industrial Development Agency (IDA), (iv) the quality of the telecommunications infrastructure, (v) an educational system that is integrated to a large extent with the country's FDI-oriented development strategy, and (vi) an institutional system configured to respond rapidly to changes in the global FDI environment (Barry, 2008).

Ireland's governmental policies have played a very important and strategic role in its FDI attractiveness. Since the 1960s, the Irish government policies have served to continually support and promote the nation's competitiveness by adjusting economic policies to encourage FDI. The implementation of appropriate policies has created an attractive investment environment for MNCs.

Rios-Morales and Brennan (2008) highlight the Irish government's active role in promoting FDI through various ways:-

- 1) Macroeconomic stability has been a great asset for the FDI climate of Ireland. At the beginning of the 1960s, Ireland opened up to the international market. Ireland's membership to the European Economic Community (EEC) in 1973 boosted its exports and imports. Ireland also profited from financial assistance from the EEC, contributed to the development of modern infrastructure.
- 2) The potential to gain competitive advantage through investment in human capital was recognised by Irish policy since the 1960s. The quality of the Irish education system

and the existence of a high skills labour pool have long been recognised as being critically important to the attraction of inward investment (Gunnigle and McGuire, 2000). Irish governments have been providing financial resources to education allowing for the expansion of third level education and the creation of vocational and technological colleges and heavily invest in education and knowledge creation.

- 3) Fostering competitive advantages by promotion of scientific research and industry innovation as the means to upgrade the labour force. Science Foundation Ireland (SFI) was created to carry out the task of establishing Ireland as a centre of research excellence. It has ensured Ireland's leadership in scientific research, particularly in the areas of biotechnology and information and communications technology and has attracted scientists and engineers from around the world.
- 4) The Irish government through the creation of an institutional framework launched an aggressive marketing programme to promote Ireland's competitive advantages. The Investment Development Authority (IDA)-Ireland has been charged with carrying out this role. Since its creation, this institution has been facilitating investors with information through its network of overseas offices; effectively minimising costs and time for foreign investors and thus making Ireland as a hassle-free FDI destination. IDA-Ireland has been very successful in attracting foreign investment. Much of IDA-Ireland' success can be attributed to the substantial financial support received from the Irish government.
- 5) Since the 1960s the tax system in Ireland has been designed to be attractive to foreign investors and has gone through three different stages since then. During the period 1954–1980, a zero tax rate on profits was applied. For the period 1980–2010, a 10% tax rate on manufacturing profits has been applied for those companies that have invested in the country before July 1998. Today, a corporate tax rate of 12.5% applies.
- 6) Financial assistance was provided to international companies planning to invest in Ireland. Financial support was given in the form of employment grants, training grants, low-interest loans, *etc*.

Apart from the FDI-oriented strategy by the government, Ireland's other advantages include an Atlantic location and English-speaking environment, relatively low labour costs

by Western European standards, cultural connections with the USA, and Western European standards of governance (Barry, 2008).

The Irish economy has boomed in recent years and become a model economy, particularly for EU accession countries (Cassidy *et al.*, 2010). Given the importance of inward FDI for the Irish economy, studies on FDI from emerging economies into Ireland are required. Although, the investment made by emerging economies particularly Indian firms in Ireland is relatively small, the number of new firms coming forward to invest in Ireland every year is on the increase (IDA Ireland, 2010). Indian companies in Ireland are mainly in the IT and generic drugs sectors and are increasing their investment to access the unique features of Irish incentives for overseas investors. Therefore, it becomes important to examine the motivations of Indian firms to invest in Ireland. Accordingly, we performed a firm-level analysis based on our questionnaire (Appendix II) survey to address the motives of investments made by Indian firms in Ireland. This study fills some of the knowledge gaps present in the literature and develops an appreciation of Indian firms' internationalization motivations and mode in Ireland.

Here, we present an empirical analysis of firms from developing countries investing in the developed world. In this study, Ireland represents a case of developed countries and India represents a case of emerging economies. The use of firm level data enables us to directly examine the characteristics of Indian firms investing in Ireland. It provides unique insights into the motives, operations, experiences, and future plans of Indian firms in Ireland. We establish a number of stylized facts about Indian firms. Data shows that Indian firms have generally performed well and intend to further strengthen their operations in Ireland. Our survey highlights several challenges faced by Indian firms in Ireland, including but certainly not limited to cross-cultural issues, which need to be mastered. We also describe sectoral differences in the motives, experiences, and entry mode selection criteria of Indian MNEs investing in Ireland.

8.3. Literature review

It is worthwhile conducting a series of literature surveys in an organized manner, because microdata analysis on the motivation and drivers of firms from various countries has been substantially accumulated. Studies suggest that MNEs present a paradox.

Operating overseas business is usually more costly than operating at home, because a foreigner does not have the same contacts and knowledge of local customs and trade practices as indigenous competitors. Hence, it is difficult to understand why firms based in one country would do business in another country. Firms with unique assets of value overseas have the choice to sell or rent these assets to local entrepreneurs, who could then combine them with local factors of production at lower costs than those by the foreign investors.

The answer to the paradox is that there might be circumstances under which using market exchange to coordinate the behavior of agents located in two separate countries is less efficient than organizing their interdependence within a multinational firm. When this is the case, a firm located in one country may find it profitable to incur the additional costs of operating in a foreign environment (Pitelis and Sugden, 2000).

Among the modern theories of MNE, Dunning's eclectic paradigm (1980) or OLI theory is widely accepted for a better understanding of a firms' decision to invest overseas, on the location of operation, and on a particular route of investment. As discussed in chapter 2, this theory explains how a domestic firm on the basis of OLI advantages decides to invest in a particular location by a specific mode of investment. For more than two decades, the eclectic paradigm has remained the dominant analytical framework for accommodating a variety of operationally testable economic theories of the determinants of FDI and the foreign activities of MNEs (Dunning, 2000).

The eclectic paradigm is a simple, yet profound construct (Dunning, 2000). It avers that the extent, geography and industrial composition of foreign production undertaken by MNEs is determined by the interaction of three sets of interdependent variables (O, L, and I) which, themselves, comprise the components of three sub-paradigms. The first relates to the competitive advantages of the enterprises seeking to engage in FDI (or increase their existing FDI), which are specific to the ownership of the investing enterprises, *i.e.* their ownership (O) advantages. This sub-paradigm asserts that the greater the competitive advantages of the investing firms, relative to those of other firms and particularly those domiciled in the country in which they are seeking to make their investments, the more they are likely to be able to engage in, or increase, their foreign production. These

advantages are composed of both home country specific advantages and firm specific advantages. Ramamurti (2009) argues that firms are likely to rely on home country specific advantages in their early stages of internationalization and these advantages become less important at later stages, when the firms' operations have expanded into many countries and they have acquired more firm specific advantages.

The second is the locational advantages (L). The firm must use some foreign factors in connection with its native firm specific advantages in order to earn full rents on these advantages. Therefore, the locational advantages of different countries are key in determining the host countries for the MNEs. Clearly the relative attractiveness of various locations can change over time so that a host country can, to some extent, engineer its competitive advantage as a location for FDI.

The third sub-paradigm of the OLI tripod offers a framework for evaluating alternative ways in which firms may organize the creation and exploitation of their core competencies, given the locational attractions of different countries or regions. Such modalities range from buying and selling goods and services in the open market, through a variety of inter-firm non-equity agreements, to the integration of intermediate product markets, and an outright purchase of a foreign corporation. The eclectic paradigm, like its near relative, internalization theory, avows that the greater the net benefits of internalizing cross-border intermediate product markets, the more likely a firm will prefer to engage in foreign production itself, rather than license the right to do so, *e.g.* by a technical service or franchise agreement, to a foreign firm.

While in the eclectic paradigm, the advantages or disadvantages of particular locations are treated separately from the ownership advantages of particular enterprises, and while the market for these advantages are internalized; the decision on where to site or mine, factory or office, is not independent of the ownership of these assets nor of the route by which they or their rights are transacted (Dunning, 1998). Thus this theory encompasses all the factors involved in the process of overseas investment by a firm.

Dunning's approach to the complex phenomenon of the MNE has proved robust and, over time, has become one of the most influential streams of thought in the international business literature (Buckley and Hashai, 2009). Eclectic paradigm is still

relevant to the extent that developing countries MNEs expand internationally, especially into other developing countries, in search of location-specific advantages by leveraging their unique capabilities (Luo and Tung, 2007). Though the questionnaire was developed after a careful review of the major firm level studies on FDI, the basic purpose of this firm level analysis was to determine the OLI factors of Indian firms investing in Ireland. Figure 8.1 illustrates a framework for the present study.

8.4. Methodology

In order to explain Indian investments in Ireland, and to understand Indian firm's behaviour while they invest in Ireland, a questionnaire survey was carried out. As discussed in chapter 3, a questionnaire is believed to be an excellent medium of communication between the researcher and the subject. In the questionnaire, the researcher articulates the questions to which he/she wants the answers, and the subjects' answers are conveyed back to the researcher. The reason for choosing a questionnaire approach in this study rests on its suitability and feasibility as far as attaining the research objective. Apart from that, the questionnaire provides a standardized interview across the population.

A methodological feature of this study is the use of the survey technique to obtain information on the determinants and other factors. An important advantage of this technique is that it provides a direct measure of ownership, location and internalization factors. The direct measure is obtained by evaluated managerial perception about market potential and investment risks (location advantages). Managerial perceptions are also relevant for the assessment of the location advantages of a specific country. While previous research has assumed that the location advantages are exogenous and hence constant across firms for a given host country, this study allows us to measure these variables as a function of the perceptions of managers from different sectors. It should be noted that these perceptions may be different due to variations in managers' past experiences in that country (and other countries), level of knowledge about that country, individual biases, *etc*.

The questionnaire was prepared with closed-choice and open-end questions (Appendix II). A five- or a three-point Likert-type scale was employed in the questionnaire, with the categories ranging from 1 = 'not important' to 5 = 'extremely important' or 1 = 'not at all' to 3 = 'major' to access the magnitude of the parameters under investigation.

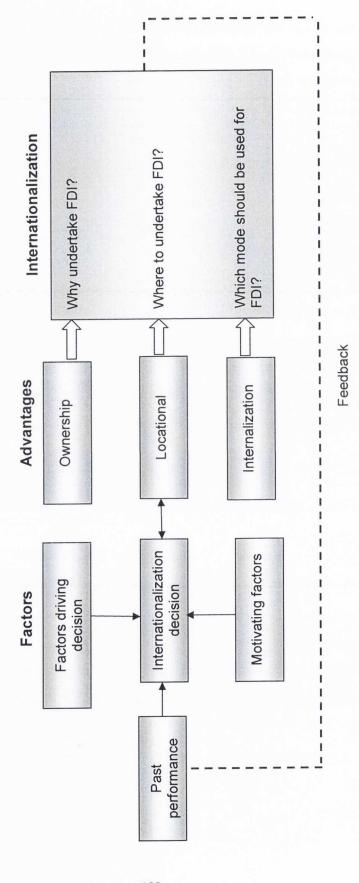


Fig 8.1. A framework of firm level determinants of internationalization process.

The firms received a paper-based questionnaire and cover letter in English explaining the objectives of the research together with a prepaid return envelope. The mailing was directed to the top level managers of Irish based Indian firms. The questionnaire was followed-up with a number of emails and mailings to explain the project and to encourage participation.

The survey was analyzed in order to fulfil the following three main research tasks:

- 1) Determination of the factors that drive and motivate Indian firms to invest abroad particularly in Ireland.
- 2) Analysis of the preferred route of outward investments by India firms.
- 3) Exploration on how satisfied the firms are with the results of their hitherto investments, their success or failure factors and their future plans about further investments in Ireland.

In order to perform the above tasks and also examine the differences and similarities in the strategies which Indian firms from different sectors have pursued in Ireland, a number of specific hypotheses were tested in seven areas, namely drivers, motivations, market entry mode, prior involvement, success factors, barriers and future plans.

The questionnaire employed in the study was designed for two basic purposes, firstly to allow a better understanding of the characteristics and dynamics of Indian OFDI in Ireland. Secondly, to understand the internationalization patterns of Indian firms in Ireland and to test the applicability of major firm level FDI theories such as the OLI theory the Uppsala model.

Six Indian MNEs in Ireland were identified, which were active as of January 2010. Among the six, three firms belong to the pharmaceutical sector (pharmaceuticals and biotechnology) and among the remaining three, two were from information technology sector and one was from automation engineering. The cover letter (Appendix I) and questionnaires (Appendix II) were addressed by name to those individuals identified as the chief executives of the firms. The survey was kept anonymous thus the name and details of Indian firms are not disclosed in this chapter.

8.5. Questionnaire development

As discussed above in section 8.3, in order to gather primary information on activities, motives, challenges and experiences of Indian firms in Ireland an empirical survey was conducted. For this purpose seven relevant research issues were identified on the basis of an extensive literature review. Apart from the literature on OFDI from emerging economies in general, and India in particular, as referred in this section, scholarly works on internationalization of firms and theories of MNEs, (e.g. Kumar and Mcleod, 1981; Dunning 1992, 1994; Dunning and Narula, 1996) were consulted for the purpose of identifying and formulating the research questions.

8.5.1. Drivers of FDI

Generally, FDI drivers and motivations are used as synonyms. In this study a differentiation was made between drivers and motivations. The Longman Dictionary of Contemporary English defines the term 'motivation' as "eagerness and willingness to do something without needing to be told or forced to do it". On the other hand, 'drivers' refers "to factors responsible for forcing someone to take a certain action" (Longman, 1995). However, the use of these terms in academic literature on FDI has failed to recognize this distinction. There has been a growing number of studies on the drivers and motivations of Indian firms for overseas investment and they suggest that motivation differs from sector to sector.

In general, the improving ownership-specific advantages are among the key drivers of home grown Indian firms for overseas investment (UNCTAD, 2004). Studies suggest that few ownership advantages drive FDI from developing countries (Banga, 2006; Kim and Rhe, 2009). UNCTAD (2004) notes that financial capability is a major driver of Indian OFDI. Blonigen (2005) also suggests that FDI is more likely to originate from countries abundant in capital and skilled labour which are necessary for generating the firm-specific assets that create the need to internalize through overseas investment. Indian firms are known for being self-sufficient and not being dependent on the external finance, so we propose that capital availability within Indian firms may be a driving force for them to invest abroad.

When a firm has an experience in investing abroad and is well aware about the advantages and disadvantages, it is more likely that firm will use its experience to exploit the location advantages of some other country. Studies show that firms benefit from learning and experience in foreign operations, which improves the chances of success for subsequent foreign investments (Li, 1995). The economic presence of the company through its subsidiaries in overseas market ensures closer interaction between sellers and buyers and better after-sale services, which contribute an important ingredient for international competitiveness (Kumar, 1998). Thus, many firms are committed to their presence on an international level, and this could be another driving factor for international venture.

The classic 'ownership' advantage involves some form of technological superiority: thus where a firm has some competitive advantage over its rivals, and where for reasons of property rights protection licensing is unsafe, a firm will set up production facilities in a foreign country through FDI, as long as there are specific advantages in the host country that make FDI preferable to exporting (Buckley and Casson, 1976; Dunning, 1979, 1988, 1993). The emergence of a knowledge-based sector within the Indian economy such as pharmaceuticals, software and broadcasting as the leading outward investors indicate the rapid pace at which India is enhancing its global position in the knowledge based economy. Indian firms especially IT and pharmaceutical companies are reported to be driven by the technology and patent rights of the firms (Pradhan, 2005).

Firms may decide to manufacture or provide a service at the location of demand and the firms' intention of being more responsive to customers demand could be another reason for Indian firms to invest overseas. Thus rising exports can be one of the drivers for internationalization of firms.

Cohen and Levinthlal (1989), Glass and Saggi (2002), Keller (1996), and Borensztein *et al.* (1998) argue that adsorptive capacity is a function of technology accumulation and human capital in that investment in new technology. Kathuria (2008) suggests that the FDI reforms in India have made technology imports cheaper and easier. Thus it has prompted Indian firms to deploy the accumulated technological advantages in overseas markets. On the other hand, India has always been regarded as rich in human capital. One firm may have highly skilled managers that would help the firm in their

endeavor in international expansion. Studies also suggest that FDI mobilizes technology transfer (Glass and Saggi, 2002; Chung, 2001; Young and Lan, 1997). Similarly, India has benefited from the technology transfer by the MNEs that invest in India. India firms can use these acquired technologies in their expansion into the international market and this could also be a driving factor.

Section A of the questionnaire comprises drivers of Indian OFDI. Table 8.4 presents 10 possible factors driving Indian OFDI.

Table 8.4. Drivers of Indian OFDI

SI No.	Drivers		
1.	Sufficient capital availability in the firm		
2. Expertise in international expansion			
3. International presence as a part of firm's mission			
4. Level of specialization of the firm			
5.	Technology know how of the firm		
6.	Patent rights of the firm		
7.	Huge exports to the Irish market		
8.	Speed of response to customer demand		
9.	Managerial capability of the firm		
10.	Deploying acquired technologies in the Irish market		

8.5.2. FDI Motivations

In order to understand the motivating factors behind the decision of Indian firms to locate in Ireland, the logic on which location for international expansion is decided needs to be reviewed. Location choices can be modelled as the outcome of a process where firms compare alternative locations and choose the profit maximizing one. Within this context, theoretical literature has identified a number of variables affecting firms' profits. In this section, we discuss the traditional literature on firms' location, contributions which are

more specific to international investments, and the 'new economic geography'. In the traditional literature (Beckman and Thisse, 1986), determinants of firms' location choice comprised a measure of costs and accessibility of production costs (labour and raw materials), transportation costs, size and characteristics of the markets. Classic contributions on FDI and multinational investments activities have included 'location specific' factors as determinants of the geographical direction of FDI (Dunning, 1981). The traditional literature of location has also emphasized the role of regional promotion incentives and public infrastructure in affecting the firms' cost function and thus its location decision. Policy incentives may take different forms: (a) financial incentives (public subsidies), (b) tax incentives, and (c) labour-promotion incentives.

The location aspect of the mainstream or general theory, as encapsulated in Dunning's eclectic paradigm, suggests four primary motivations (Dunning, 1977, 1993):-

- Resource seeking FDI
- Foreign-market-seeking FDI
- Efficiency (cost reduction)-seeking FDI
- Strategic-asset-seeking FDI

These groups of motives also determine the type of outward investment. Although overlapping, these motives reflect historical development of a country as well as a firm's capabilities. The motives and their rankings also change with a company's international experiences. Factors that determine the motives for outward investment are ownership/firm specific advantages and the company's strategic goals. However, many MNEs pursue a number of different motives and a combination of each of the above motives.

Pradhan and Abraham (2005) in their study on Indian firms' overseas acquisitions observed that Indian overseas acquirers possessed a set of diverse motivations from market entry to the acquisition of firm specific strategic assets, to reap operational synergies and to overcome limitations of home country market.

There is, therefore, an expectation that some of Indian firms may have a single motivation for investment in Ireland, where as some Indian firms may have more than one

reason for investing in these countries. In section B of the questionnaire, Indian firms were asked to choose the appropriate motivation of investment in Ireland.

8.5.2.1. *Resource seeking*: Firms invest abroad to acquire resources that are not available in the home country, such as natural resources, raw materials, or low-cost labour. Especially in the manufacturing sector, when multinationals directly invest in order to export, factor-cost considerations become important. In contrast to horizontal FDI, vertical or export-oriented FDI involves relocating parts of the production chain to the host country. Moreover, FDI in the resource sector, such as oil and natural gas, is attracted to countries with abundant natural endowments. Resource seeking is a very common motivation for FDI in developing countries because of cheap labour and natural resources. Resource seeking FDI is very much based on the government laws and regulations on the available resources in the country for example, wage laws, environmental protection laws. Thus providing the right laws and regulations is quite crucial for inward FDI.

Pradhan (2005) suggests that Indian OFDI was more resource seeking in the 70s and 80s than today. Pradhan (2007) finds that although the share of primary sector in India in the recent years especially in the 2000s is relatively low as compared to the other two economic sectors, it reflects a special characteristic about the rise of Indian multinationals. The number of natural resource seeking Indian multinationals has risen recently from oil, natural gas and mining sectors. For example, during 2000, Oil and Natural Gas Corporation (ONGC) has set up large businesses abroad (notably in Russia and in Angola) and Indian Oil Corporation (IOC) invested massively in Libya in 2004-2005. These MNEs are aggressively looking at securing the exhaustible natural resources over the globe.

In 2000, the Government of Ireland and the Government of India signed a double taxation treaty in order to avoid double taxation and to prevent any fiscal evasion with respect to taxes on income and on capital gains. Interest in the effects of taxes on FDI has been considerable from both international and public economists. Though there is no study on Indian bilateral treaties and its effect on OFDI, studies such as Neumayer (2007) showed that taxation treaties between developing and developed countries benefit developing economies particularly, it may lead to an increase in FDI in the developing country. There is also evidence that bilateral treaties do not increase FDI in the case of developed countries

(Blonigen and Davies, 2004). Thus, taxation may not be a factor for investment decisions for Indian firms in relation to Ireland.

Better financing bargains (Giavazzi and Stonehill, 1989), as well as capital availability (Shapiro, 1989) are also possible through internationalization. Thus easy access to finance can be a motive for resource seeking FDI.

Availability of low-cost labour is a prime driver for FDI. The economics literature also consistently shows empirically that factor cost differentials, and in particular unit labor cost differentials, are an important determinant of FDI flows. This is a major factor for FDI from developed countries to developing and less developed countries. This is evident in FDI from and between advanced industrialized economies also (Bajo-Rubio and Sosvilla-Rivero, 1994; Barrell and Pain, 1996; Love and Lage-Hidalgo, 2000; Love, 2003). Given that we are studying Indian OFDI in the developed countries particularly in Ireland, where labor cost is much higher than in India, we do not expect that this would be a motivating factor for Indian firms to invest in Ireland.

A major resource for a firm is capital. Schmukler and Vesperoni (2001) found that domestic firms that participate in international markets obtain better financing opportunities and extend their debt maturity.

Section B1 of the questionnaire deals with resource seeking FDI. The resource seeking motivation was further divided into 6 motives, based on the discussion above. Table 8.5 presents the list of resource seeking motives.

Table 8.5. Motives of resource seeking FDI

Sl. No.	Motives
1.	Less strict laws and regulation in Ireland
2.	Lower taxes, duties, tax relief and other incentives offered by Ireland
3.	To acquire natural resources in Ireland
4.	Lower cost of raw materials in Ireland
5.	Lower unit labor cost in Ireland

8.5.2.2. Market seeking: The purpose of market seeking FDI is to serve local and regional markets. It is also called horizontal FDI, as it involves replication of production facilities in the host country. Tariff-jumping or export-substituting FDI is a variant of this type of FDI. Because the reason for horizontal FDI is to better serve a local market by local production, the market size and market growth of the host economy are the main drivers. Impediments to accessing local markets, such as tariffs and transport costs, also encourage this type of FDI. Studies suggest that firms are also involved in international expansion to maintain the existing domestic buyer supplier relationships in host countries; to either pre-empt or avoid being pre-empted by the rivals' entry into a particular host country; to produce products close to local markets, to lower transportation costs and to benefit from investment incentives (Makino et al., 2002). Kumar (1998) suggests that the an increasing number of emerging country manufacturers (Korean firms) have made numerous trade supporting investment in developed countries, establishing affiliates to develop marketing networks in the host country and provide after sales activities. Van Hoesel (1999) conducted case studies on Korean and Taiwanese firms and concluded that emerging countries MNEs invest overseas mainly in those countries where market potential is large than in countries with small market potential. Building on the above arguments, we expect that the MNEs from India seeking market opportunities would invest more in Ireland where market size may not be large but have an access to the large European market.

Given the potential of preferential trade agreements to affect the location choices of foreign investors governments may find it tempting to intervene to try to attract new firms (Raff, 2002). There is considerable empirical evidence that preferential trade agreements such as Free trade areas and custom unions also affect firms' FDI location decision (Motta and Norman, 1996; Pain, 1997). A good example is the case of the North American Free Trade Agreement (NAFTA), which particularly boosted FDI into Mexico (Raff, 2002; Kim 2007). Studies suggest that Ireland has been considered as a low cost location for the preferential agreements with the investing countries (Raff, 2002). Section B2 of the questionnaire deals with market seeking FDI. The market seeking motivation was further

divided into 14 motives, based on the literature discussed above. Table 8.6 presents the list of market seeking motives.

Table 8.6. Motives of market seeking FDI

Sl. No.	Market seeking motives
1.	Access to the markets of developed world countries
2.	To enlarge existing market share in Irish market
3.	Growing demand in Irish market
4.	Need to adapt to local tastes in Ireland
5.	To provide a better after sales services
6.	Presence in the critically important markets of Ireland
7.	Access to the neighbouring markets of the Ireland
8.	Follow the domestic competitors that have invested in Ireland
9.	Lack of market in India
10.	Saturated market in India
11.	Follow the customers that have invested in Ireland
12.	Diversification of market risk
13.	Avoid tariff and other trade restrictions
14.	Preferential agreements

8.5.2.3. *Efficiency seeking*: Efficiency-seeking FDI is motivated by creating new sources of competitiveness for firms and strengthening existing ones (Nunnenkamp, 2002). Efficiency-seeking FDI will occur when outward investors seek locations where the cost of operations can be reduced. Efficiency-focused FDI is generally conducted to generate economies of scale and scope and/or to secure access to cheaper input factors, especially labour, by dispersing design and production facilities globally. In so doing, firms take advantage of institutional convergence and factor endowment differences between locations

to improve efficiency levels. Given the limited reach of Indian firms at present, and the considerable supply of low cost labour at home, it is unlikely that Indian firms are currently reorganizing activities to generate greater cost efficiencies through FDI. However, in time this strategy may grow in importance to Indian MNEs.

Firms not only invest in a particular location to achieve the scale or scope but also because of suitable facilities available for their business. A suitable facility such as R&D facilities, distribution facilities etc. helps to increase the efficiency of the MNEs. MNEs also invest overseas for the reason that the host country firms are superior or specialize in particular processes and products (Chung, 2001).

As international competitiveness is increasingly determined by non-price factors such as access to information and market presence, MNEs may set up affiliates to develop and support marketing networks in particular countries to be served by exports. These investments could be termed as trade supporting investments. In certain markets a local presence may be instrumental for entry because of cultural and other informal barriers to trade (Kumar, 1995).

With the export-led growth strategies pursued by the governments in emerging economies, export-seeking FDI is undertaken by emerging-economy MNEs to promote their exports in the host markets. In his study of Indonesian MNEs, Lecraw (1993) found that the advantages of export-enhancing MNEs come from their FDI in export markets, where they gain access to foreign product and process technology, management expertise, and distribution channels. Empirical evidence from the Korean MNEs showed that OFDI has a positive effect on exports at home, and this is especially the case for MNEs going to less developed countries (Lim and Moon, 2001). This has been true in case of India also. The Indian government has encouraged outward investments by Indian companies as means of promoting exports of Indian capital goods, technology and consultancy services especially since 1974 (Pradhan, 2005). In the late 1980s, a significant proportion of service FDIs were in trading which usually took the form of a subsidiary set up in major export markets of the firm to support the export activity (Pradhan, 2005).

Section B3 of the questionnaire deals with efficiency seeking FDI. It was further divided into 6 motives, based on the literature discussed above. Table 8.7 presents the list of efficiency seeking motives.

Table 8.7. Motives of efficiency seeking FDI

1.	Economies of scale (e.g. reduced cost of production)
2.	Economies of scope (e.g. more promotion on same marketing cost)
3.	Suitable facilities in Ireland
4.	Product specialization in Ireland
5.	Restructuring of your firm to eliminate financial risk
6.	Export-promotion from India

8.5.2.4. Strategic asset seeking: Previous studies (lecraw,193; Wesson, 1994, Chen and Chen 1998, Dunning, 1995; Kumar 1998, Van Hoesel, 1999; Frost 2001) suggest that emerging market firms engage in FDI not only to transfer their resources to a host country, but also to learn or gain access to, the necessary strategic assets available in the host country. This form of FDI is referred as a 'strategic asset-seeking' FDI. These studies suggest that firms' specific advantages would arise not only from the possession of proprietary assets but also from the capacity to acquire, or the efficient coordination of, the complementary assets owned by other firms in a host country (Dunning, 1995, 1998, 2000). Firms that intend to build advantages through FDI therefore have a natural incentive to seek opportunities to invest in a particular location (host country) in which their needed strategic assets are available. Developing countries MNEs use international expansion as a springboard to acquire strategic resources and reduce their institutional and market constraints at home (Luo and Tung, 2007).

In support of this perspective, a growing amount of literature has suggested that much of inward foreign direct investment (IFDI) in the US is motivated by strategic asset seeking purposes (Kogut and Chang, 1991; Chang 1995; Almeida, 1996; Shan and Song, 1997). Studies also suggest that MNEs from emerging countries have also engaged in

strategic asset seeking FDI (Kumar, 1998; Chen and Chen, 1998; Van Hoesel, 1999). Lecraw (1993) found that export enhancing Indonesian firms tended to invest in developed countries primarily to acquire management, technology and marketing expertise. Kumar (1998) also investigated a trend in strategic asset seeking FDI conducted by firms from Asian developing countries. He suggested that the increasing rapid outward investment by Asian firms in the developed countries tended to use OFDI to strengthen their competitiveness. Chen and Chen (1998) found a similar pattern in OFDI of Taiwanese firms. Many other studies also state that developing countries MNEs investing in developed countries have gained access to established brand names, novel product technology, and extensive networks of distribution (Kumar, 1998; Van Hoesel, 1999).

Arguably, firms from developing countries do not necessarily possess competitive capabilities that can be exploited in a host market through FDI but are rather 'multinationals without advantages' (Fosfuri and Mottari, 1999). The strategy of such firms is often to invest in another country to obtain tacit and tangible knowledge which helps them to develop firm-specific advantages and to elevate existing domestic advantages to an international level (Dunning *et al.*, 1998; Bartlett and Goshal, 2000; Makino *et al.*, 2002). In general, emerging market MNEs are eager to acquire technology and brands through internationalization to fill their resource void. Foreign firms' willingness to sell or share their technology, know-how or brands due to financial exigency or restructuring needs makes it possible for developing countries MNEs to fulfil this need (Child and Rodrigues, 2005). Such companies are therefore more likely to pursue a strategic-asset seeking FDI to obtain technologies, brands and so forth.

Recent theoretical work has given renewed impetus to something long recognized in the literature that a possible motive for FDI is not to exploit proprietary technology, but to access it. Thus technology sourcing may be the motive for FDI. Fosfuri and Mottari (1999) question the need for firm-specific advantages to give rise to multinational activity, and provide a formal model of FDI in which the motivation is not to exploit existing technological advantages in a foreign country, but to access such technology and transfer it from the host economy to the investing multinational corporation *via* spillover effects.

Access to technology and knowledge has been a strategic consideration for Indian firms seeking to strengthen their competitiveness and to move up their production value chain. In addition, the growing competitiveness of Indian firms involved in providing outsourced business and IT services to foreign clients has provided a push for these firms themselves to go offshore to operate near their clients and to expand their growth opportunities in markets abroad. The success of Indian firms as service providers in meeting the outsourcing needs of IT services and call centers by developed-country companies has exposed them to knowledge and methods for conducting international business, and induced OFDI through demonstration and spillover effects.

Whereas the study on Indian pharmaceutical sector carried out by Pradhan (2006) suggest the Indian pharmaceutical companies choose to invest abroad not only for additional sources of revenues, but also access to new technologies, R&D infrastructure, marketing networks and best business practices abroad. There is a growing willingness among MNEs to locate their production site close to leading centres of research and innovation, specifically with a view to absorbing learning spillovers from geographical proximity to such sites (Niosi, 1999; Pearce, 1999).

Section B4 of the questionnaire deals with strategic asset seeking FDI. It was further divided into 7 motives, based on the points discussed above. Table 8.8 presents the list of strategic asset seeking motives.

Table 8.8. Motives of strategic asset seeking FDI

1	Increasing the revenue of your firm
2	Strengthening overall competitive position in India
3	Expectation of high profit margins
4	Acquisition of brand names and goodwill
5	Access to local expertise
6	Access to local knowledge and technology
7	Better R&D environment

8.5.3. Prior Involvement

The Uppsala model (also discussed in chapter 2) contends that firms develop their activities abroad over time and in incremental fashion, based on their knowledge development. This development is explained by the concept of psychic distance, with firms expanding first into markets which are psychically close (Johanson and Vahlne, 1977). Based on Swedish owned companies, they show that Swedish firms frequently began internationalizing with *ad hoc* exporting. The Uppsala model emphasizes on the aspect that the increased commitment to any country unfolds through four successive stages:

Stage 1: No regular export activities

Stage 2: Export via independent agents

Stage 3: Creation of an offshore sales subsidiary

Stage 4: Overseas production facilities

The Uppsala model is a well-researched topic and has received mixed results as far as its applicability is concerned. Many studies have supported the concept of the stage-theory of international involvement in relation to the development of exporting (Bilkey and Tesar, 1977; Cavusgil, 1980). Johanson and Vahlne (1990) cited studies of German, US, Japanese, Turkish and Australian firms which show strong support for the model particularly in the early stages of internationalization. In a study Roots (1987) gives an example of high technology firms, for whom licensing may be the mode of entry into the international market. Given the importance of the Uppsala model in international business studies it would be interesting to explore whether Indian firms follow the model or not. In section C1 of the questionnaire, Indian firms were asked their previous form of involvement before they made an investment in Ireland.

8.5.4. Entry mode

The choice of appropriate mode of entry into new markets is a key strategic decision for international business (Meyer and Estrin, 2001). Firms grow through various ways of combing internal and external resources (Penrose, 1995; Meyer and Estrin, 2001). There are three types of entry modes:- 1) brownfield investments/ acquisitions, 2) joint-ventures, and 3) greenfield investments. Brownfield investments/ acquisitions refer to the purchase of stock in an already existing company in an amount sufficient to confer control.

All of the acquisitions in this study consist of a controlling equity share with the remaining shares dispersed across many investors. A joint venture is the pooling of assets in a common and separate organization by two or more firms who share joint ownership and control over the use and fruits of these assets. A greenfield investment is a start-up investment in new facilities. Such an investment can be wholly owned or a joint venture. For purpose of simplifying the exposition, we classify all start-up investments which are wholly owned under Greenfield and those which involve shared ownership under joint venture. Because all of these modes involve resource commitments (albeit at varying levels), firms initial choices of particular mode are difficult to change without considerable loss of time and money (Root, 1987). Entry mode selection is therefore, a very important strategic decision.

Normative decision theory suggests that the choice of foreign market entry mode is based on trade-offs between risks and returns. A firm is expected to choose the entry mode that offers the highest risk adjusted return on investment. However, behavioural evidence indicates that a firm's choices may also be determined by resource availability and need for control (Stopford and Wells, 1972). Resource availability refers to the financial and managerial capacity of a firm for serving a foreign market (Anderson and Gatignon, 1986). Control is desirable to improve a firm's competitive position and maximize the returns on its assets and skills. Higher operational control results from having a greater ownership in the foreign venture. However, risks are also likely to be higher due to assumption of responsibility for decision making and higher commitment of resources.

Dunning (1977, 1980, 1988) suggests that the choice of an entry mode for a target market is influenced by the ownership (O) advantages of a firm, location (L) advantages of a market and internalization (I) advantages of integrating transactions within the firm. Several empirical and theoretical studies have used Dunning framework to explain the entry choices of the firms (Dunning, 1980; Kogut and Singh, 1988). Section C2 of the questionnaire deals with the mode of investment of Indian firms in Ireland.

8.5.4.1. *Greenfield investment:* Greenfield investment is a more useful strategy when firms possess a pool of competitive and monopolistic assets (Caves, 1971). The firm-specific assets, which could be product, technology, brands, managerial and marketing skills and so

on, offer the firms some competitive and monopolistic advantages vis-à-vis their competitors. These advantages in turn can be commercially exploited the most through greenfield ventures in the host countries rather than by exporting from home country or licensing out to third parties. Hence, Greenfield investments for overseas production as a useful internationalization strategy is critically linked to the competitive resource endowments of Indian firms (Pradhan and Alakshendra, 2006).

A greenfield investment needs more capital commitment than any other form of investment as the firms have to invest in the construction of new production facilities in the host country. Hennart and Park (1993) suggest that if the firm has strong competitive advantages such as a unique technology, any monopolistic asset or a well-established brand name, greenfield investment is the most efficient way to transfer these advantages to the host country. With acquisition, firms come with its own management and legacy (Hennart and Park, 1993) and greenfield investments provide a fresh approach.

The optimal entry mode decision is affected by the competition intensity in the overseas market. A greenfield entry is more suitable in the market where there is a very little or weak competition (Muller, 2007). Firms prefer a greenfield entry in order to get an access to the natural resources and intermediaries available in the foreign market.

Section C3 deals with greenfield FDI. Based on the literature discussed above, it was further divided into 7 reasons for which one firm might choose a greenfield investment. Table 8.9 presents the list of factors that influence greenfield investments.

Table 8.9. Factors of greenfield investment

Sl. No.	Factors
1.	Capital availability in the firm
2.	To benefit from the existing strategic asset(s) of the firm
3.	Technological specialty/ monopolistic asset of the firm
4.	Knowledge of product demand in Ireland
5.	Fresh approach – unencumbered with legacy issues
6.	Little/weak competition in Ireland

7. To bring raw materials/intermediates from Ireland to India

8.5.4.2. Brownfield investment: Overseas acquisitions have been embraced as an important mode of internationalization that enables emerging-economy firms to gain critical assets required for complex problem solving and strategic renewal (Capron et al., 1998; Ethiraj and Levinthal, 2004). Gubbi et al. (2009) cited two reasons for choosing M&A as an entry mode by the firms from emerging countries in the developed world. First, the nature of strategic opportunities afforded by global markets and the role that internationalization can play in strategic renewal are factors that are likely to create positive market expectations, and thereby lead to better valuations. Second, the magnitude of shareholder returns will be higher when the target firms are located in developed countries where advanced economic and institutional environments carry the promise of higher quality of resources, and/or lead to enhanced resource complements in the combined entity.

The general evidence from investment attraction agencies in the Europe and the British Isles seemed to point to Indian companies showing a high propensity to enter the market by brownfield investments compared to greenfield investments and joint ventures (Milleli *et al.*, 2010) as acquisition is believed to be less riskier than a fresh investment (Andersson, 1994).

Indian firms from pharmaceuticals and the automotive industry have targeted European firms in order to rapidly capture a significant market share and also to acquire well-known brand names. For example Reliance Life Sciences acquisition of GeneMedix in 2006, Tata Motors acquisition of the UK icon brands, Jaguar and Land Rover in 2007.

Section C4 of the questionnaire deals with brownfield FDI. Table 8.10 presents the list of factors that influence brownfield investments.

Table 8.10. Factors of brownfield investment

Sl. No.	Factors
1.	Entry to Irish market with relatively less risk
2.	Brand name of the pre-existing firm

3.	Strong technology of the pre-existing firm
4.	Acquisition of firm specific created asset
5.	Past performance of the pre-existing firm
6.	Opportunity to extend the core business of the firm
7.	Moving up the value chain

8.5.4.3. *Joint Venture*: Narrowly defined, a joint venture occurs when two or more firms pool a portion of their resources within a common legal organization. Conceptually, a joint venture is a selection among alternative modes by which two or more firms can transact. Thus it should be explained why this particular mode of transacting is chosen over such alternatives as acquisition, supply contact, licensing, or spot market purchases (Kogut, 1988).

For several reasons a joint venture can be an attractive strategy for some firms. The benefits include the pooling of complementary resources provided by the involved partners such as technological skills and assets, knowledge of the market, help in providing financing, familiarity with local administration, market conditions etc. One of the most frequent motivations behind JV is the ability to spread the costs and risks between the partners (Hladik, 1985).

Section C5 of the questionnaire deals with joint venture FDI. Based on the literature on joint venture investment, it was further divided into 10 reasons for which one firm might choose a joint venture investment. Table 8.11 presents the list of factors that influence joint venture investments.

Table 8.11. Factors of joint venture investment

Sl. No.	Factors
1.	International distribution network of foreign partner
2.	Satisfactory control with less commitment
3.	Risk sharing

4.	The only legal possibility
5.	Technological and marketing capacities of the foreign partner
6.	Foreign partner has better access to capital
7.	Distribution channels of foreign partner
8.	Foreign partner has better connection with local administration/business
9.	Foreign partner knows the local market conditions
10.	Your firm knows the foreign partner very well

8.5.5. Challenges

Studies show that irrespective of the development level of a country and company size, firms usually find the internationalization process difficult and accompanied by many barriers (OECD, 1997). Expansion of a firm by OFDI is more demanding than growth within the domestic setting only, as it involves more funds, more demanding management, organization and control. Pioneering steps of internationalization imply additional difficulties which are not uniform, but vary depending on a firm's size, sector and external factors such as industrial structures and the direction of OFDI.

The institutional environment, the set of norms and rules that constrain human behaviour, such as culture, language, religion, and the political, legal, and economic systems (North, 1990), affects all firms operating in a country. A firm's home country institutional environment induces it to develop certain resources to operate effectively in that environment and interact with other social actors (Tallman, 1992; Oliver, 1997). However, when the firm moves into a new country with a different institutional environment, it may lack the complementary resources, such as understanding, relationships, and social capital needed for dealing with other entities and prevailing rules of behaviour (Calhoun, 2002). This is often termed as a liability of foreignness (Zaheer, 1995). This lack of complementary resources needed for understanding the new institutions creates difficulties.

Johanson and Vahlne (1977) in their Uppsala model also suggest that a lack of knowledge of the market and psychic distance are the major barriers for Swedish companies investing abroad. The larger the psychic distance the larger is the liability of foreignness. In their recent article in which they revisited the Uppsala model (2009) they argue that outsidership, in relation to the relevant network, more than psychic distance, is the root of uncertainty and this can be a major barrier to a firm's investment success.

Cross-border business transactions involve interaction with different societal value systems. Adapting to local cultural values that are transmitted through nations' politics, economy, education, religion, and language may create a host country barrier for MNEs operating in different countries (Schwartz, 1999). Underlying the employment of cultural distance in international business research is the assumption that differences between foreign and home country cultures increase the cost of entry, decrease operational benefits, and hamper the firm's ability to transfer core competencies to foreign markets (Bartlett and Ghoshal, 1989; Palich and Gomez-Mejia, 1999). Differences in national culture systems or the relative 'cultural distance' between countries have been an important concern in the study of MNE strategies and organizational characteristics (Barkema *et al.*, 1996; Brouthers and Brouthers, 2001). Researchers focusing on the transaction costs and risks associated with cross-border business operations and managerial decision-making in MNEs tend to consider the implications of cultural distance. Cultural distance in recent research most often refers to the underlying differences in national cultural values for managers between their MNE's home and foreign operations.

Host governments are rarely neutral towards inward FDI. Virtually all host governments have barriers to FDI of greater or lesser formality, and greater or lesser transparency. At the same time, many of those governments offer explicit and implicit incentives to foreign-owned MNEs to establish affiliates in their host markets (Globerman and Shapiro, 1999). Thus, the host government policies significantly influence the inward FDI pattern, sometimes intentionally and sometimes inadvertently (Feldstein *et al.*, 1995).

International activities require both general knowledge and market specific knowledge. Market specific knowledge such as distribution channels is assumed to be gained mainly through experience in the market, whereas knowledge of operations can be transferred from one country to another; the latter will thus facilitate lateral growth (Andersen, 1992). But if the firm doesn't possess knowledge about the host country market

system, it can lead to failure also. Thus, it was also aimed to find out what are the main barriers for Indian investors are while they go for investment in Ireland based on the previous literature on barriers to OFDI. Section D1 of the questionnaire deals with the challenges. Based on the above discussion, Table 8.12 lists the challenges faced by a firm while they invest in a foreign country.

Table 8.12. Challenges in overseas investment

Sl. No.	Challenges
1.	Cultural differences
2.	Nationalist attitudes of customers and public authority
3.	Corruption in Ireland
4.	Low margins in Ireland
5.	Limitation on setting price in Ireland
6.	Lack of support from Indian government
7.	Unfavourable legislation in Ireland
8.	Lack of access to financing
9.	High cost of financing
10.	Lack of familiarity to distribution channels in Ireland

8.5.6. Success factors

The success or otherwise of an overseas investment can be the result of two set of factors, 1) home and host institutional factors, and 2) factors that are internal to the firm. Studies have also confirmed that the institutional environments at home and abroad (e.g. cultural, legal, market and political factors) play a critical role in shaping international business institutions (Henisz, 2000; Kogut and Singh, 1988; Oxley, 1999). On the other hand, Chen (2010) suggests that the choice of the optimal international business institution is tantamount to the selection of the most efficient market to conduct cross-border transactions. Verbeke (2010) exclusively studied the success factors of acquisitions. He

advocated that every acquisition reflects the bundling of assets and capabilities such as skilled management, technological know-how, product *etc*. from two different firms and suggested that co-ordination between the acquired and acquiring firm is one of the crucial factor for success of any acquisition.

Jaklic and Svetlicic (2003) found that skills and knowledge were the most important preconditions for the success of Slovenian OFDI, and the lack of them was the reason for failures.

The host country government support also plays an important role in the performance of foreign MNEs. Section D4 of the questionnaire deals with the success factors. Fourteen factors were identified in the study that potentially could have an impact on a firm's performance. Table 8.13 presents the list of possible factors for success of overseas investment.

Table 8.13. Success factors of overseas investment

Sl. No.	Success factors
1.	Quality of products of the firm
2.	Knowledge of competition and foreign market
3.	Personal contacts with customers and representatives
4.	Previous international experience of the firm
5.	Following clients, adapting to foreign market
6.	Skilled management of the firm
7.	Market conditions in foreign market
8.	Political and economic changes in Ireland
9.	Technological knowhow of the firm
10.	Strategic planning of the firm
11.	Market condition in India
12.	Price compared to competition

13.	Government co operation in Ireland	
14.	Co-operation of business partners in Ireland	

8.5.7. Performance and future plans

At the end of the questionnaire the respondents were asked about the performance and future plans of Indian firms in Ireland.

8.6. Findings

Basic information including names of the Indian MNEs in Ireland and their contact details was gathered with the help of the FAME software, Indian embassy in Ireland and Mumbai Office of the Industrial Development Agency (IDA), Ireland. The survey was conducted during January 2010 to March 2011, and it targeted senior-level management in Irish subsidiaries of Indian MNEs. After careful research applying the scope criteria specified earlier, six Indian MNEs were contacted by post. The survey questionnaire was also e-mailed to selected managers in the firms to enable comfortable participation. We received responses from a total of four out of six Indian MNEs. Amongst the respondents, all were of senior-level management; two Indians and two Irish. It is noteworthy that all the six firms operating in Ireland are large MNEs of India. Two of them belong to a business conglomerate and the remaining two are independent firms *i.e.* not a part of any business group. The broad characteristics of the samples are described as follows:-

Industrial sector: Amongst the four case firms, which responded to the questionnaire, 3 were in the pharmaceutical sector, and 1 was from the information technology (IT) sector. Overall, this is a reasonable reflection of the total Indian OFDI as far as sector distribution is concerned.

Age of the affiliate: All the Indian firms in Ireland were established within the last 14 years. We could not find any recent investment by the Indian firms in Ireland; one obvious reason could be the economic downturn.

Employment: The Indian firms have generated substantial employment in Ireland with one firm employing up to 700 workers. The number of employees was in the range of 26 to

700. Table 8.14 summarises the sector, age and employment generated by Irish subsidiaries of Indian MNEs.

Table 8.14. Sector, age and employment generated by Indian firms in Ireland.

Firms	Sector	Age (Years)	No. of employees
Firm A	Pharmaceuticals	14	83
Firm B	Pharmaceuticals	9	26
Firm C	Pharmaceuticals	10	700
Firm D	Information and technology (consultancy)	10	60

The small size of the samples and population of the Indian MNEs in Ireland precluded sophisticated statistical analysis. In particular, multiple regression analysis to isolate the variables that were significant in determining investment behaviour was not possible. In order to statistically analyze the findings of this survey, the average response of 5 point Likert scale was calculated in three dimension *i.e.* overall, pharmaceutical firms and IT firms. It helped to understand the differences in the findings between sectors, if any.

8.6.1. Drivers

Among the various drivers the senior managers of Indian firms in Ireland indicated that the mission of their firm was to establish a presence in major countries, which led them to invest in Ireland (Table 8.12). Mission statements are considered to be a great management tool (Bain & Co., 1996). They answer some fairly simple yet critically fundamental questions for every organization such as why a firm exists; what is its purpose; what a company is trying to accomplish? A mission statement captures an organization's unique and enduring purpose (Bart *et al.*, 2001). The majority of studies on mission statement and its impact on a firm's performance have been carried out in developed countries (Bart *et al.*, 2001). Though there is no evidence on whether the developing countries firms follow the mission statement or operate ad hoc, the findings of this survey

suggest that similar to the developed country, firms from developing countries also follow their mission.

The technological capability of Indian firms has been another main driver for their investment in Ireland (Table 8.15). While a firm from an emerging economy invests in a developed country, it is often expected to be technologically capable to survive in the advanced market. However, Mathews (2002) argues that emerging market MNEs internationalize to acquire capabilities and advantages rather than to exploit pre-existing capabilities. Luo and Tung (2007) take a similar view in their "springboard model" of emerging market MNE internationalization. They suggest that emerging market MNEs internationalize to obtain new advantages rather than use initial advantages as a springboard for internationalization. The results of this survey greatly supports the hypothesis that the firms' technological capability is one of the crucial ownership advantages, which is also a major driving force for Indian firm to invest in Ireland. This study also supports Pradhan and Alakshendra (2006), who suggest that the major competitive advantages of Indian pharmaceutical firms lay in their technological capabilities to develop most efficient processes and to a limited extent, in innovating new ways of delivering drugs.

Table 8.15. Drivers of overseas investment by Indian firms.

Criteria	Overall (n = 4)	Pharma (<i>n</i> = 3)	IT (n = 1)
International presence as a part of firm's mission	4.5	4.66	4
Technology know how of the firm	4.5	4.66	4
Level of specialization of the firm	4	4.66	2
Managerial capability of the firm	4	4	4
Sufficient capital availability in the firm	3.75	3.33	5
Expertise in international expansion	3.75	3.66	4
Speed of response to customer demand	3.25	3	4
Deploying acquired technologies in the Irish market	3.25	3.33	3
Huge exports to the Irish market	3	3	3

Patent rights of the firm	2.75	3	2
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(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

Kumar (2007) has developed an analytical framework for explaining the probability of an Indian enterprise investing abroad. He found that Indian enterprises draw their ownership advantages from their accumulated production experience. The results of this survey confirm that the specialization and experience of the Indian firms was also a major factor for their investment in Ireland.

8.6.2. Motivation

Among the four motivations behind the FDI (market-seeking, resource-seeking, efficiency-seeking or strategic asset-seeking) suggested by Dunning (1977, 1993), we found that all the Indian firms invested in Ireland for market-seeking (Table 8.15). According to Pradhan (2006), the overseas activities of Indian firms are likely to be motivated by a set of firm specific objectives. It can be just a market entry strategy or market entry plus strategy (e.g. accessing strategic asset) implying a multipurpose overseas acquisition. In this survey, while all the firms showed their clear intention for market-seeking, two firms had more than one motives behind their investment decision. The results, thus, indicate that Indian firms are investing in Ireland for market-seeking motivation. At the same time, they are looking at more than just the market while they invest in Ireland (Table 8.16). Indian firms did not seem to invest in Ireland for resource seeking reasons.

Table 8.16. Motives for Indian firm's investment in Ireland.

Firms	Market seeking	Resource seeking	Efficiency seeking	Strategic asset seeking
Firm A	Yes	No	No	No
Firm B	Yes	Yes	Yes	Yes
Firm C	Yes	No	Yes	No
Firm D	Yes	No	No	No

FDI theory states that the location decisions of MNEs are determined by the relative location advantages of particular countries for certain activities. Locations abundant in particular resources will attract MNEs whose activities make intensive use of these resources (Dunning 1993). Implicit in these formulations is the assumption that particular location advantages have the same value for all MNEs, that is, within an industry, firms value the abundance of particular resources similarly and firms benefit from them to the same degree (Nachum and Wymbs, 2002). This survey supported Nachum and Wymbs (2002) as different motivations for Indian OFDI in Ireland was evidenced across the firms and also across specific industries. Nachum and Wymbs (2002) argued that specific location advantages have different values for the investing firms and these characteristics vary across firms. Hence the factors affecting location choices are not identical across MNEs and depend on the characteristics of the investing firms. So a further enquiry is needed to understand the particular characteristics of these pharmaceutical firms that have led to different reasons for location choice by Indian firms.

The tax incentives were a major attraction for their investment in the Irish market. Though not very important, better financing possibility was another reason for resource seeking Indian firms to invest in Ireland (Table 8.17).

Table 8.17. Factors behind resource seeking Indian investment in Ireland.

Criteria		Pharma (<i>n</i> = 3)	IT (n = 1)
Lower taxes, duties, tax relief and other incentives offered by Ireland	1.75	2	1
Better financing possibilities in Ireland	1.25	1.33	1
Less strict laws and regulation in Ireland	1.25	1.33	1
To acquire natural resources in Ireland	1	1	1
Lower unit labor cost in Ireland	1	1	1

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

As suggested by Dunning (1993), firms seek market expansion opportunities through FDI for a variety of reasons. Among all the reasons, the need to adapt to local taste and expanding their market share in Ireland and neighbouring developed countries were quite important (Table 8.18).

Table 8.18. Factors behind market seeking Indian investment in Ireland.

Criteria	Overall $(n=4)$	Pharma (<i>n</i> = 3)	IT (n = 1)
Access to the neighbouring markets of Ireland	4,25	4.33	4
Access to the markets of developed world countries	3.75	4.33	2
Need to adapt to local tastes in Ireland	3.25	2.66	5
To enlarge existing market share in Irish market	3.25	3	4
Growing demand in Irish market	3	2.66	4
To provide a better after sales services	3	2.66	4
Presence in the critically important markets of Ireland	3	2.66	4
Follow the domestic competitors that have invested in Ireland	2	1.33	4
Lack of market in India	1.5	1.66	1
Saturated market in India	1.5	1.66	1
Follow the customers that have invested in Ireland	2	1.33	4
Diversification of market risk	2.5	2.33	3
Avoid tariff and other trade restrictions	1	1	1
Preferential agreements	. 1	1	1

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

Among the efficiency seeking FDI factors, product specialization in Ireland was seen as an important factor particularly in the pharmaceutical firms. The FDI by the pharmaceutical firms also promoted their exports from the home country. The firms also found the suitable infrastructure for their operations in Ireland and thus increasing their efficiency to serve the market demand (Table 8.19).

Table 8.19. Factors behind efficiency seeking Indian investment in Ireland.

Criteria	Overall (n = 4)	Pharma (<i>n</i> = 4)	$ \begin{array}{c c} \mathbf{IT} \\ (n=4) \end{array} $
Product specialization in Ireland	2.75	4.5	1
Export-promotion from India	2.25	3.5	1
Suitable facilities in Ireland	2.5	4	1
Economies of scale (e.g. reduced cost of production)	2	3	1
Economies of scope (e.g. more promotion on same marketing cost)	2	3	1
Restructuring of your firm to eliminate financial risk	1.25	1.5	1

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

Profit maximization has been the major factor for the strategic asset seeking Indian firms in Ireland. The notion that Indian firms are more attracted by the brand names while they invest overseas has been supported by many studies (Kumar, 1987, 2007; Pradhan, 2004). The capture of international brand names was also found to be important in the Indian pharmaceuticals firms in Ireland (Table 8.19). The access to local expertise was another equal important factor for Indian firms in the Irish markets. A sectoral difference was evidenced as the IT firm was not seeking strategic asset while they invested in Ireland (Table 8.20).

Table 8.20. Factors behind strategic asset seeking Indian investment in Ireland.

Criteria	Overall $(n=4)$	Pharma (n = 3)	IT (n = 1)
Expectation of high profit margins	2.5	3	1
Acquisition of brand names and goodwill	2.25	2.66	1
Access to local expertise	2.25	3	1
Increasing the revenue of your firm	1.75	3	1
Strengthening overall competitive position in India	1.75	3	1
Access to local knowledge and technology	1.75	3	1
Better R&D environnent	1.75	3	1

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

8.6.3. Prior involvement

The results in this study showed that two out of four respondent firms were already serving the market by exports (Table 8.21).

Table 8.21. Prior involvement of Indian firms in Ireland.

Firm's prior involvement	Exports	Licensing agreement	Others
Firm A	Yes	No	No
Firm B	No	No	No
Firm C	Yes	No	No
Firm D	No	No	No

The finding shows that Indian firms in Ireland follow the Uppsala model to a good extent and also suggest that Indian firms gradually expand internationally through a sequential process or different stages, with the firm increasing its commitment to international operations as it proceeds through each stage.

A key aspect of developing countries firms' internationalization strategies is a greater propensity to use non-traditional international expansion strategies, such as the simultaneous use of exports and FDI (Contractor *et al.*, 2007). Buckley *et al.* (2007) found strong statistical evidence that one of the key motivations of Chinese OFDI has been to promote domestic exports. The historical or textbook version of 'foreign market entry' used to entail a choice between exporting, licensing and FDI as alternative means of reaching the foreign customer. But in today's globally-integrated world, where the value chain is disintermediated with functions dispersed over different geographical regions, exporting and FDI are frequently a combined and simultaneous strategy. Where a firm with international aspirations was traditionally supposed to first export and later engage in FDI, many Indian and developing countries firms appear to be engaging simultaneously in both, early in the internationalization process.

Among the survey population only one firm indicated that export promotion has been a prime motive behind investing in Ireland. An interesting aspect was observed in the survey, among the population the older firms, such as Firm A and Firm C followed the Uppsala model as they explored the market through exports initially. It might be argued that Indian firms that entered Ireland later built upon the experience of the firms which were already present and helped them in making a decision for investment in Ireland rather than exporting or licensing as firms tend to imitate each other. Firms may imitate to avoid falling behind their rivals, or because they believe that others' actions convey information (Lieberman and Asaba, 2006).

8.6.4. Market entry mode

The general evidence from literature on Indian Investment overseas, especially in the developed country, point to a high propensity to enter the market by acquisitions than greenfield. With the relatively similar industrial structure of OFDI from India, this option was exercised by the Indian firms in Ireland. The evidence on the sectoral composition of investment by Indian firms in Ireland is worth highlighting. The preferred route to enter the Irish market was found to be through acquisition for the pharmaceutical firms. All Indian pharmaceutical firms have entered Ireland as they acquired a pre-existing firm in Ireland, but Indian IT firm made a greenfield investment.

Studies also indicate that acquisition is a more effective internationalization strategy than greenfield investment for Indian pharmaceuticals firms as it provides all the benefits that the latter gives, but also several other competitive advantages important for firms' performance in world market (Pradhan and Alaskhendra, 2006). The findings (Table 8.22) of this survey support the study conducted by Pradhan and Alaskhendra (2006).

Table 8.22. Mode of Internalization of Indian firms in Ireland.

Firm's mode of entry	Greenfield	Brownfield	Joint Venture
Firm A	No	Yes	No
Firm B	No	Yes	No
Firm C	No	Yes	No
Firm D	Yes	No	No
Percentage	25%	75%	0%

The Indian IT firm (Firm D) present in Ireland saw greenfield investment as the most appropriate route to enter the Irish market. Since the IT firm is capital rich and possess the strategic asset, it can survive without any legacy issues as expected in an acquired firm (Table 8.23).

Table 8.23. Factors responsible for greenfield investment.

Factors	IT firm $(n = 1)$
Capital availability in the firm	5
To benefit from the existing strategic asset(s) of the firm	5
Fresh approach – unencumbered with legacy issues	4
Technological specialty/ monopolistic asset of the firm	3
Knowledge of product demand in Ireland	3
Little/weak competition in Ireland	1
To bring raw materials/intermediates from Ireland	1

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

The Indian pharmaceutical firms in Ireland are expending their market, and they expect that their acquisition of Irish companies would provide a good brand name (Table 8.24). Indian pharmaceutical firms also found that brownfield investment was a good opportunity to enter the Irish market with relatively low risk. The acquired firms have strong R&D and technology and they have performed well in the past.

Table 8.24. Factors responsible for brownfield investment.

Factors	Pharmaceuticals (n = 3)
Opportunity to extend the core business of the firm	4.33
Brand name of the pre-existing firm	4
Entry to Irish market with relatively less risk	3.66
Strong technology of the pre-existing firm	3.66
Past performance of the pre-existing firm	3.66
Acquisition of firm specific created asset	3.33
Moving up the value chain	3.33

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

8.6.5. Investment and operational challenges in Ireland

Table 8.25 describes the extent of the various problems faced by Indian firms in Ireland. The factors were ranked by the participants on a scale of 1 (no problem at all), 2 (minor problem) and 3 (major problem). The managers indicated that cultural difference was among the top challenges for Indian firms in Ireland. Apart from that the limitation on setting a price on their products in Ireland, low margin, national attitude of customers and public authority were also among the challenges that the Indian firms have faced while they operate in Ireland.

Table 8.25. Challenges for Indian firms in Ireland.

Challenges	Overall (n = 4)	Pharma (n = 3)	IT (n = 1)
Cultural differences	2.25	2	3
Limitation on setting price in Ireland	2	2	2
Nationalist attitudes of customers and public authority	1.75	1.33	3
Low margins in Ireland	1.75	1.66	2
Unfavorable legislation in Ireland	1.5	1.33	2
Lack of access to financing	1.5	1.5	NA
High cost of financing	1.5	1.5	NA
Lack of familiarity to distribution channels in Ireland	1.5	1.33	2
Lack of support from Indian government	1.33	1	2
Corruption in Ireland	1.25	1	2

(Values are mean scores of 1-3 answering options of the Likert scale; 1 = 'not at all', 2 = 'minor', and 3 = 'major').

8.6.6. Success factors

The ownership advantages of Indian firms such as their product quality, technology know how and skilled management are very important factors for their success overseas

investment. Apart from those factors, managers indicated that the condition of the Irish market also played a major role in their successful investment (Table 8.26).

Table 8.26. Factors for success or otherwise for Indian firms in Ireland.

Factors	Overall $(n=4)$	Pharma (n = 3)	IT (n = 1)
Quality of products of the firm	4.25	4.33	4
Skilled management of the firm	4.25	4.33	4
Market conditions in foreign market	4.25	4.33	4
Following clients, adapting to foreign market	4	3.66	5
Technological know-how of the firm	4	4	4
Previous international experience of the firm	4	3.66	5
Knowledge of competition and foreign market	4	4.33	4
Price compared to competition	3.75	3.33	5
Government co operation in Ireland	3.75	3.33	5
Personal contacts with customers and representatives	3.75	3.66	4
Political and economic changes in Ireland	2.5	2	4
Market condition in India	2	1.33	4
Co-operation of business partners in Ireland	-	3.66	NA

(Values are mean scores of 1-5 answering options of the Likert scale; 1 = 'not important' to 5 = 'extremely important').

8.6.7. Performance of Indian Firms in Ireland

Notwithstanding the problems faced by the firms, most firms reported positive growth experiences. All the respondents reported that the performance of their firm has partially matched their expectation (Table 8.27). The respondents of Firm C and Firm D indicated that the recent global economic slowdown was fully responsible for not matching

the expectation and the rest said that their performance was hit by the economic slowdown to some extent. No significant sectoral differences were observed in this regard.

Table 8.27. Performance of Indian Firms in Ireland.

	Firm A	Firm B	Firm C	Firm D
Matched				
Partially matched	Yes	Yes	Yes	Yes
Not matched				

8.6.8. Indian investors' future plans in Ireland

In support of the reported positive performance, the analysis of the Indian investors plan shows that in the near future two firms intend to expand their affiliates, while the other two want to retain their investment (Table 8.28). Among the respondents there was no firm planning to close down their existing foreign affiliates. This suggests a clear intention of Indian firms to continue with their investment in Ireland.

Table 8.28. Future plans of Indian investors in Ireland.

Firms	Increase investment	Retain Investment	Cut down investment
Firm A	No	Yes	No
Firm B	Yes	No	No
Firm C	No	Yes	No
Firm D	Yes	No	No
Percentage	50	50	0

Table 8.29 presents the main findings of the survey in relation to the research issues identified and described earlier.

Table 8.29. A summary of the findings in relation to research issues.

Research issue	Finding of the survey	
Drivers	The mission statement and technological capability are main drivers of Indian firms investment	
Motivation and their realization	Differences among motivations were observed among the firms and across different sector.	
Location selection	Tax advantage and access to neighboring markets were important factors while deciding on location for Indian firms.	
Prior involvement	Indian firms were exporting before making investment.	
Mode of investment	Brownfield investments are more common than greenfie investments. No case of Joint venture was observed. Sectoral difference was observed in mode of entry.	
Challenges	Host country environmental factors were major challenge for Indian investors in Ireland	
Future Plans	None of the firms were reported to decrease their investment or disinvest, two participants indicated to retain and rest firms plan to invest more in Ireland.	

8.7. Conclusion

These findings provide some valuable insights into the nature of Indian MNEs in Ireland. The study has shown that Indian firms consider Ireland as an attractive destination for their investments. It provides first and unique insights into the motives, operations, experiences, and future plans of Indian firms in Ireland, as media reports are the only source of information to date.

The survey also finds that brownfield investments are the dominant mode of entry for Indian firms in Ireland. Indian MNEs in Ireland have generally performed well and intend to further strengthen their operations in Ireland.

Nonetheless, firms are also faced with several challenges, including but certainly not limited to cultural issues. As suggested by Euh and Min (1986), Indian firms also bear the cost caused by discriminatory attitudes toward them, which are born out of the host's country nationalist fervour, in other words, the cost of foreignness. Also sectoral differences must be kept in mind while devising strategies to overcome any such challenges.

Since this explorative study is based on a relatively small sample, the findings invariably carry a tentative character. On the other hand, there are strong reasons for the assumption that the findings point in the right direction, for they are in conformity with expert opinions and available reports. The findings provide a useful base for formulating hypotheses regarding FDI flows from emerging markets to developed countries to look into various aspects of international business such as the motives, location selection, and problems faced in the host county.

In summary, Ireland without being properly reflected in the official statistics has advanced to the position of a successful and profitable destination for Indian MNEs in their spirited pursuit of growth opportunities in the developed market and this trend will probably continue into the foreseeable future.

Before concluding the chapter, the limitations of this survey must be discussed. There are some background issues to be briefly discussed regarding Indian OFDI in Ireland. India is an emerging economy and with the time as Indian firms are more competent in internationalization, the characteristics and advantages are likely to evolve and thus it would be reasonable to expect that there might be differences in results. In other words, these findings may well be peculiar to India alone, and may change over time with a longer time series. Secondly, Ireland is a small, open and developed economy, so it would be reasonable to expect the difference while compared to moderate and large developed countries, thus such studies are called for. Until such time comes, the current study will have to reach conclusions based on currently available evidence, so we expect that the results of this survey will definitely add to the literature of developing countries OFDI in developed countries.

CHAPTER 9

A CASE STUDY OF INDIAN FIRMS IN IRELAND

9.1. Introduction

The debate on the internationalization of MNEs from emerging markets especially in the developed countries has assumed significant importance because of its socioeconomic relevance. At least some of the emerging market MNEs, in particular those in the pharmaceutical sector, are looking for means to improve their competitive advantages within the current World Trade Organisation (WTO) regime. The WTO is the international body dealing with the regulations of trade between nations. The WTO agreements have emerged as a backbone of the globalization process particularly for the pharmaceutical sectors in emerging markets (Kale and Wield, 2008). The pharmaceutical industry, with its rich scientific talents and research capabilities, supported by intellectual property (IP) protection regime is continuously growing in the international market. The firms across the world are reaching out to their counterparts to take mutual advantage of each other's core competencies in research and development (R&D), manufacturing, marketing and the niche opportunities offered by the changing global pharmaceutical environment. It is important to note that the growth of the pharmaceutical industry is governed not only by the domestic business environment but also shaped by the changing global scenario.

In international business today, there is a global trend towards consolidation, the merger and acquisition (M&A) of many smaller companies into much larger ones, beyond national boundaries. This trend continues in the pharmaceutical industry, as pressure on healthcare needs increase. The FDI flow in the pharmaceutical and biotechnology industries is relatively high because of easy availability of capital and the increasing global interest. Moreover, pharmaceutical companies are scouting for newer geographies to launch their products globally. Among the emerging economies, those which have a relatively well-developed domestic industry, are benefiting by assessing the various options and adopting appropriate strategies to operate in overseas countries.

Shaping the motivation behind international expansion in which MNEs adjust and accommodate their firm specific advantages are guided by a number of factors such as home country policies, the mode of entry, host country advantages and attractiveness. The motivation of a firm for going abroad requires specific policy and strategies, which are

associated with their capabilities, organizational structures and managerial skills (Nachum and Zaheer, 2005). Moreover, costs and benefits also influence the motivation driven investment in the countries involved. Therefore, it is imperative to examine firms' motivations in order to understand their behaviour, which is fundamental to the creation of ownership advantages. It is critically important to identify the FDI motivation of firms for the theory and practice, because the rationale for foreign investment largely underlies the very nature of a firm and its behaviour. An explicit understanding of the rationale for firms' foreign investments is also necessary to propose adequate policy measures.

In the expanding literature of emerging market MNEs, it is important for the international business researchers to examine the patterns of FDI, firm's competitive advantages and their motivations to internationalize (Buckley *et al.*, 2007). An *in-depth* investigation of the motivation and performance of emerging market MNEs, such as the survival chances of their foreign subsidiaries (Wells, 1998) is important. Moreover, both theoretical and empirical evidences are vital in order to determine if emerging market MNEs follow similar or substantially different pathway that are observed for developed country MNEs (Buckley and Casson, 1976; Buckley *et al.*, 2007). Previous studies indicate periodic variations in the motivations and internationalization strategies within and among emerging and developed economy firms from different countries (Luo and Tung, 2007; Mathews, 2006; Peng and Delios, 2006; Gaur and Kumar, 2010). Gaur and Kumar (2010) suggest that a thorough understanding of the motivations, paths, processes, and performances of emerging market firms require new theoretical approaches, which can take into account the unique aspects of emerging market firms.

There is a worldwide structural trend evolving in the pharmaceutical industry, and Indian companies play a key role in this framework. Indian pharmaceutical firms are driven by their superior biotechnology and drug synthesis skills, high quality and vertically integrated manufacturing assets, differentiated business models and significant cost advantages. The Indian pharmaceutical industry is experiencing a paradigm shift due to ongoing trends in globalization, developing markets, industry dynamics and increasing regulatory and competitive pressures. Over the last two decades, several Indian pharmaceutical companies have targeted the developed markets in their pursuit of growth, especially *via* acquisitions. Firms such as Ranbaxy, Wockhardt, Reliance Life Sciences,

Cadila, Matrix, and Jubilant have made one or more European acquisitions, while others such as Torrent are scouting for potential targets. They are vying for the branded generic product space to register their global presence.

This chapter presents a theoretical framework to account for the dynamic configuration of the activities and the motivation of MNEs from emerging market in a developed country, and the interplay between various motivations and the factors that influence investment decision made by the firms. This focused investigation is based on a series of case studies of Indian pharmaceutical companies in Ireland and analyzes the motivation of firms, and various aspects of their internationalization process. The following section evaluates the selection of the case firms. Section 9.3 provides the questions addressed in this case study research and section 9.4 elaborates the methodology used. Section 9.5 reviews the literature around the case topic. Sections 9.6, 9.7 and 9.8 provide the case firms' overview, their acquisition history and within-case analysis. Section 9.9 deals with the cross-case analysis. The final section 9.10 discusses the findings to achieve a meaningful conclusion.

9.2. Selected cases for the study

The Indian pharmaceutical sector today is in the front rank of India's science-based industries with wide range of capabilities in the complex business of the generic markets. It is now the 3rd largest in the world in terms of volume and 14th largest in terms of value (www.pharmaceutical-drug-manufacturers.com). According to the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, India, the total turnover of the Indian pharmaceuticals industry during 2008-2009 was US\$ 21.04 billion and growing at a rate of approximately 8-9% annually. McKinsey & Company Inc., in a recent report entitled "India Pharma 2020: propelling access and acceptance, realising true potential", forecasts India's pharmaceutical sector to reach US\$ 55-70 billion in 2020 (Bhadoria *et al.*, 2010).

Indigenous capability development in the Indian pharmaceutical industry represents one of the most successful cases of self-reliant development in knowledge-based industries from emerging and developing countries (Kale and Wield, 2008). Moreover, Indian firms in this sector represent an interesting case because of the pro-IFDI approach before the

1970s and because of the pro-OFDI intention of its firms with a strong focus on the developed world. In line with these arguments, a case study approach was used to capture the motivations for the internationalization process of Indian pharmaceutical companies in Ireland. As demonstrated and explained in chapter 8 of this thesis, we found a difference in motivations behind Indian firms' investment in Ireland. In order to explore this finding, all three Indian pharmaceutical firms in Ireland namely Ranbaxy Laboratories Limited (Ranbaxy), Wockhardt Limited (Wockhardt) and Reliance Life Sciences (Reliance) were selected for the present case study. As reported in chapter 8 and in as summarized in figure 9.1, these three firms have differing motivations. As result they were selected as the case firms.

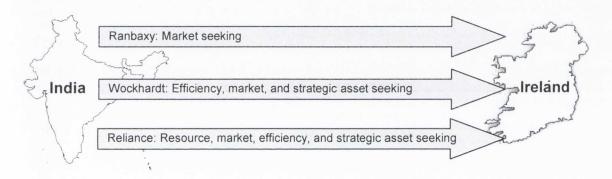


Figure 9.1. Summary of motivations of the selected case firms.

Before we embark on our case studies it is appropriate to discuss the multinational pharmaceutical industry in Ireland. Ireland is a key location for the pharmaceutical and chemical industry in Europe. Nine of the top ten companies in the world have operations in Ireland. Substantial foreign investment by top international companies over a 40-year period has created an international pharmaceutical cluster in Ireland. A total of 170 MNEs employ 24000 people and export US\$ 47 billion annually. This represents over 56% of total Irish exports and makes Ireland the largest exporters of pharmaceuticals and fine chemicals in the world in 2009 (IDA Ireland, 2010). Pharmaceutical plants in Ireland compete equally with their counterparts worldwide on quality and reliability. Many companies have recognized the positive working environment that Ireland offers the industry. As a result, Ireland has benefited from the merger and acquisition activity that has restructured the pharmaceutical sector globally.

The multinational pharmaceutical industry in Ireland is capital-intensive, highly-skilled, characterised by advanced manufacturing technology, state-of-the-art equipment and stringent quality control. The role of the Irish government has been crucial in creating the fertile ground for pharmaceutical MNEs to flourish through the provision of low corporate tax rates and ensuring the availability of sophisticated human resources and infrastructure. Thirty pharmaceutical Irish plants are FDA approved. Ireland has attracted huge investment from the pharmaceuticals sector during the past decade, with many major US and Japanese pharmaceutical firms setting up production bases in the country as a toehold to the wider European Community (EC). The pharmaceutical sector in Ireland is a diversified one. Investment in fine chemical plants producing bulk active materials was followed by new investments in finished product pharmaceuticals operations. Forty seven finished pharmaceutical plants are now in operation. The pharmaceutical industry has achieved a critical mass in Ireland and the infrastructure is in place to meet the industry's exacting demands. The pharmaceutical industry is the largest contributor to corporation tax and total tax receipts from it amount to approximately €3 billion annually.

The history of the multinational pharmaceutical industry dates back to the 1950s. After independence, in the protectionist era of Ireland, the manufacturing of most pharmaceutical products was too sophisticated and required too much capital for indigenous players. Only few foreign pharmaceutical firms were present in Ireland at that time. The first substantial investments by foreign pharmaceutical companies followed rapidly on from the shift towards more outward–looking economic policies towards the end of the 1950s (Van Egeraat, 2006; Van Egeraat and Breathnach, 2007). Though small in number, pharmaceutical MNEs primarily attracted by the low corporate tax rate, were operating in Ireland (van Egeraat and Barry, 2008). Cassidy *et al.* (2010) suggest that since its arrival in the 1950s the pharmaceutical sector has been characterized by virtually continuous growth.

In 1970, the recently reconstituted and incorporated Industrial Development Authority (IDA) set out with a successful focused strategy of searching out emerging growth sectors and their star companies and targeting potential foreign investors via an aggressive direct marketing approach (White, 2000). The fine chemicals industry (including pharmaceuticals) was identified as one of the target sectors (Childs, 1996). van Egeraat

(2006) cites that the IDA attracted a substantial number of foreign (notably US) companies and employment grew notably, from just over 1,300 in 1972 to 4,750 in 1979. Most growth was accounted for the pharmaceutical sector. After a brief period of stagnation during the first half of the 1980s, pharmaceutical manufacturing employment grew continuously from about 4,500 in 1985 to nearly 19,500 in 2003.

In 2006, Irish pharmaceutical exports were worth around US\$ 17 billion. This accounted for over 6% of world pharmaceutical exports where India's share of global pharmaceutical exports was around 1% over the same period. In 2008, the sector directly employed 24,500 people with an equivalent number employed providing service to it. In the same year the pharmaceutical net exports exceeded €14 billion. In 2009, exports of pharmaceutical and medicinal products exceeded €19.5 billion making Ireland one of the largest net exporters of pharmaceuticals in the world.

Simango (2000) suggests that investors in the pharmaceutical industry have confidence in Irish production plants due to globally recognized good manufacturing practice (GMP) and consistently maintained high quality education. A study by van Egeraat and Barry (2008) suggests that Ireland as a location for the formulation of patented drugs for the highly regulated markets such as the EU and USA is more attractive than locations such as India and China. It is important to note that within the pharmaceutical industry, the role of Ireland in global productions networks has changed over time (van Egeraat and Barry, 2008).

Based on the value creation by the pharmaceutical firms van Egeraat and Barry (2008) classified three types of firms:-

- (i) High value added activities which includes discovery, clinical trials and corporate functions of the firm.
- (ii) Medium-level value added activities covers the firms' process R&D, sales and marketing activities.
- (iii) Low value added activities generally include manufacturing of active pharmaceutical ingredients and drug formulation.

The study performed by van Egeraat and Barry (2008) asserts that a clear shift from low value to high value added activities can be seen in the Irish pharmaceutical industry. If we examine the kind of products and value add of Indian pharmaceutical firms in their Irish operations, we find that the Indian pharmaceutical firms are relatively new and very few in number in the Irish market. However, the three Indian pharmaceutical firms can be categorized into three activities as suggested by van Egeraat and Barry (2008).

In Ireland, Ranbaxy Pharmaceuticals Ltd. deals in basic and auxiliary products, thus can be put in the low value added activities group. Whereas, Wockhardt Pharmaceuticals is particularly using its Irish subsidiary, Pinewood's marketing and distribution system to reach their customers for their hospital products in the Irish market. Thus the Wockhardt's Irish subsidiary is more appropriate to be categorized as a medium-level value added activities firm. Reliance Life Sciences deals in manufacturing and marketing of biosimilars, thus the firm is engaged in high value added activities within the pharmaceutical sector.

The pharmaceutical industry has been an important sector both in Ireland and India and has made a major contribution to their respective economies. It is of interest to analyse and evaluate Indian pharmaceutical MNEs in the Irish pharmaceutical industry environment.

9.3. Case research questions

As identified in the previous chapter of this thesis and also illustrated in figure 9.1, Indians firms have more than one motivating factors for their investment in a developed country such as Ireland. Given their differences in ownership advantages and stage of internationalization, this study addresses the following two important questions regarding the motivation of Indian pharmaceutical firms investing in Ireland.

- In spite of belonging to same sector (pharmaceutical) and having utilized the same mode of entry into the Irish market, how do Indian pharmaceutical firms differ in the motivation behind their investment in Ireland?
- Why do they differ in the motivations in their investment in Ireland?

9.4. Case research methodology

9.4.1. Data collection

The primary data in this study includes the questionnaire survey described in chapter 8, and interviews with key managers from the selected Indian firms in Ireland within the pharmaceutical sector. As discussed in chapter 8, a questionnaire was designed (Appendix II) for this purpose. The open ended interview questions were derived from the questionnaire and the published literature to address issues regarding the motivations and the investment decisions of the case firms. A series of telephonic interviews were conducted with the senior managers of the case firms in order to collect data based on the theoretical propositions described later in this chapter. The firms' presence in Ireland, their purpose, their prior involvement and history in Ireland, their international history and their current global footprint were addressed by expanding the open-ended questions in the telephonic interviews.

Additionally, secondary data was extracted from various sources such as companies' annual reports, business magazines, statistical data from the government and other relevant agencies. Information on the background and overall strategy of the firm were gathered. This included compiling data on the influence of the industry environment such as patents, product specialization of the firm, and government policies for the pharmaceutical sector both at the home (India) and host country (Ireland). Particular attention was given to understand the link between the overseas investment strategy of each company and their motive behind investments in Ireland.

9.4.2. Data analysis

A multiple case approach was chosen for this study as discussed in the methodology chapter 3. Relevant information were gathered from interviews with senior managers involved in the investment decision process of the firm as well as from the publicly available archival data. Following the methods developed by Eisenhardt (1989), within-case analysis and cross-case analysis were performed. A key strength of this approach was that it allowed the triangulation of data obtained from multiple sources. Tables and figures were generated and used in the data analysis phase. Tests of construct validity, internal validity, external validity and reliability were employed as suggested by Stake (1995) and

Yin (1984) to confirm the research findings. To ensure construct validity, multiple sources of evidence including the interviews and archival data were used to triangulate the data. To develop a robust and logical explanation of the case questions, internal validity was ensured by within-case as well as cross-case analysis. Each case was further reviewed individually. External validity was ensured by employing replication logic to the conduct and analyzing each of the cases. To increase the reliability, all the procedures were applied consistently across the cases, including the preparation of the questionnaire, open-ended interviews, data collection, and analysis. Following Yin's approach (Yin, 1984), a case study protocol was developed (Appendix III) and used in this study.

9.5. Theoretical considerations for FDI motivations of Indian MNEs

A motivation for FDI refers to the reason that gives an investing firm the impetus for investing abroad. It has long been recognized that firms invest overseas for various reasons (Farmer and Richman, 1966; Behrman, 1969; Dunning, 1993, 2000; Dunning and Lundan, 2008). Firms engage in FDI because they are motivated and have the capability in the form of ownership advantages (for example, resources and necessary skills) to do so (Makino *et al.*, 2002). The major investment motivations identified in the literature are 1) market-seeking, 2) resource-seeking, 3) efficiency-seeking, and 4) strategic asset-seeking.

Market-seeking FDI is said to take place when the investing firm expands horizontally into markets to secure or defend a market position established through arm's length relationships or to develop a new market previously unserved. Developed countries provide emerging economy MNEs with well-developed and mature markets as well as access to marketing and distribution channels. In this regard, acquisitions help to enhance the entry process and ownership of well-established brands, marketing skills and marketing distribution networks overseas (Pradhan and Abraham, 2005). Emerging economy MNEs, particularly the Indian pharmaceutical firms are consolidating their markets by acquiring generic companies or creating business links in advanced markets, such as the USA and European countries *e.g.*, Nicholas Piramal India Ltd.'s acquisition of Pfizer's production facility in Scotland.

Resource-seeking FDI generally involves vertical expansion and is said to occur as the investing firm acquires assets in foreign countries in order to improve its access to immobile, location-bound factor inputs. It is straightforward and describes investments directed towards improving opportunities to exploit local factor endowments, such as natural resources. Of the 168 foreign acquisitions by Indian firms during 2000-2007, 20% were resources seeking *e.g.*, Hindalco's acquisition of copper mines in Australia and the USA based Novelis to become the world's largest aluminium rolling company.

Strategic asset-seeking FDI relates to investments by firms in strategic-assets that extends and augments the stock of firm specific advantages rather than to exploit new markets directly. Such FDI is normally aimed towards the acquisition of brands, gaining advanced technologies and improved access to distribution channels and tacit assets (Dunning, 1992). Latecomers or emerging market firms with few ownership advantages often invest in developed countries to elevate their existing domestic advantages to an international level (Dunning *et al.*, 1998; Bartlett and Goshal, 2000; Makino *et al.*, 2002). For example, many software companies from India with limited ownership advantages moved abroad to acquire further knowledge, skill and technology that were not available in its home country (Pradhan, 2007).

Efficiency-seeking FDI generally is geared towards economies of scale and scope and/or to secure access to cheaper input factors, especially human resource, by dispersing design and production facilities globally. In doing so, firms take advantages of institutional convergence and factor endowment differences at various locations to improve their efficiency levels. Generally, firms from developing countries have a considerable supply of low cost labour at home. Therefore, efficiency-seeking considerations play only a limited role in the FDI motivations of MNEs from developing countries. However, efficiency-seeking FDI from emerging market MNEs may grow in importance over time (Athreye and Kapur, 2009; WIR, 2006).

Previous studies on the FDI motivations of firms from emerging economies to invest in the developed countries have shown diverse results. An empirical analysis and case studies by Sachwald (2001) indicate that Korean firms during the last two decades have invested in developed countries not only to jump over trade barriers but also to source advanced technology and marketing capabilities. Matthews (2002) in his book 'Dragon Multinationals' argues that firms from East Asia invest abroad to make 'linkages' and

'leverage' capabilities and also to 'learn' from their overseas investments. Buckley *et al.* (2008) suggest that Chinese OFDI is different from a standard model of developing country OFDI, which itself is distinctive with respect to developed country OFDI. A global survey on transnational corporations from developing countries carried out by UNCTAD (UNCTAD, 2006) revealed that market-seeking was the most significant motive for 51% of the respondents, efficiency-seeking was the most significant motive for 22% of the respondents, resource-seeking was the most significant motive for 13% of the respondents, and strategic-asset-seeking was the most significant motive for 14% of the respondents (Figure 9.2). The debate on the differences between the developed and emerging market MNEs still continues.

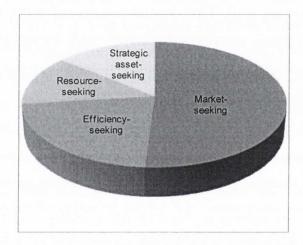


Figure 9.2. Proportional motivations of emerging market MNEs to invest abroad. (Source: Compiled from UNCTAD. 2006).

9.5.1. FDI motivation and Ownership advantages

The OLI paradigm states that a firm willing to invest abroad must possess its specific advantages (ownership or O advantages) in order to overcome the 'liability of foreignness' (discussed in detail in chapter 2). The ownership advantages can include both, internally generated capabilities and competence to seek assets with other institutions with which the firm has ongoing cooperative relationships (Dunning, 1995, 2006).

With the rise of emerging market MNEs, an asset augmenting or asset-seeking perspective has been advocated to explain how these latecomers are employing international expansion to overcome their competitive disadvantages (Makino *et al.*, 2002; Mathews, 2002, 2006; Child and Rodrigues, 2005). At the same time, emerging market firms are engaged in accelerated and aggresive internationalization (Luo and Tung, 2007; Bongalia and Goldstein, 2007). In this way, there may not be a direct relationship between firm-specific ownership advantages and the pursuit of FDI. Instead, firms engage in FDI to enhance their competitiveness rather than to exploit their existing set of advantages. However, Dunning (2006) acknowledges that the asset-augmenting perspective does not conflict with the OLI framework with the assertion that the investing firm has to possess certain unique and at least some sustainable advantages. There is now a substantial body of evidence, which suggests that the possession of ownership advantages is an important motivating determinant of FDI flows between countries (Caves, 1974; Clegg, 1987; Kumar, 1987; Love and Lage-Hidalgo, 1999). In order to better understand the motivation of Indian pharmaceutical firms in Ireland, we propose that:-

p1: The motivation of a firm's investment decision in a particular location is influenced by the ownership advantages of the firm.

9.5.2. FDI motivation and Industry sector

The OFDI behaviour of a firm is likely to be influenced by the industry sector. The extent of overseas investment depends on the industrial market structure. The greater is the oligopolistic interdependence in an industry, the higher is the likelihood of OFDI, because of the imitative behaviour of rivals in investing abroad. The inter-industry variation in OFDI activity may reflect differences among industries and between domestic and foreign firms in terms of intangible assets. Further, the incidence of OFDI may vary across industries depending on differences in government regulations and relevant policies. Therefore, it is important to control industry-specific heterogeneity in the OFDI behaviour of enterprises (Pradhan, 2004).

A recent study by Atrheye and Godley (2009) indicates that Indian firms, particularly from the pharmaceutical sector, have a clear strategy of exploiting and leveraging global location advantages. The pharmaceutical sector is highly regulated;

however, the nature of the sector varies in different countries. Regulation or deregulation for a particular product can be a motivating factor for overseas investment by pharmaceutical firms. Thus, based on the above arguments, we propose that:-

p2: The motivation for a firm's investment adjusts to sectoral regulations.

9.5.3. FDI motivation and Degree of internationalization

The measurement of the degree of internationalization and its relationship with performance are key issues in international business research (Sullivan, 1994). As discussed in chapter 2, the Uppsala model explains the characteristics of the internationalization process of the firm. It suggests that internationalization of a firm is an incremental process. It explains this through the progression of increasing experiential knowledge of foreign markets (Johanson and Vahlne, 1977; Eriksson et al., 1997). The core idea behind this process model is the interplay of two elements – 1) the development of knowledge of international operations, and 2) the increasing propensity for organizations to commit to international operations. Exposure to international operations leads to greater development of knowledge about FDI that further facilitates commitments to such operations (Johanson and Vahlne, 1977). Johanson and Vahlne (1977) emphasized the evolutionary development of the firm which is based on the gradual acquisition of knowledge of the foreign market. In a study of 794 Indian firms, Elango and Pattnaik (2007) found support for the Uppsala model, but they also emphasized that apart from knowledge benefits, Indian firms belonging to networks such as business groups can access scarce resources (e.g., financial capital, human capital, reputation).

Recent studies highlight the evolutionary nature of the FDI motivations. For example, the World Investment Report (2006) has noted that the motivations a firm to pursue in its internationalization strategies is evolutionary. Dunning and Lundan (2008) emphasize that the motive for foreign production may change with firm's degree of internationalization. However, we could not find any study linking the FDI motivation to the degree of internationalization. The observed evolutionary behaviour of FDI motivations necessitates further modifications in the Uppsala theory. Therefore, certain assumptions and notions of the Uppsala model (*i.e.*, deterministic sequential stages, commitment,

state/change variables) need to be extended to incorporate the motivations and possible linkages between them. In this study, we propose that:

p3: The motivation for a firm's investment decision depends on the firm's stage of internationalization.

9.5.4. Case construct: key decision criteria

Generally, business firms do not follow any unique pattern to internationalize their operations because they face different environmental settings. They may enter a particular target market through different entry strategies based on their specific resources and capabilities. Both internal and external factors influence the international strategy, market selection and the choice of entry mode (Agarwal and Ramaswami, 1992; Anderson and Gatignon, 1986; Dunning, 1980; Ekeledo and Sivakumar, 1998, 2004; Koch, 2001b; Kwon and Konopa, 1993; Quer et al., 2007; Root, 1994; Wernerfelt, 1984). Internal factors include firm-specific resources and strategic considerations that can be managed by the firm. External factors such as country-specific factors and industry-specific factors are usually beyond the control of the firm (Ekeledo and Sivakumar, 1998, 2004). In other words, there are a variety of reasons that motivate a firm to invest overseas, such as home country advantages/ disadvantages, host country advantages, sector-specific advantages and firm-specific advantages. Shan and Song (1997) showed that even in one industry, firms can differ in their motives and mode of operations as FDI decision is often made as a function of its internal resources and investment requirements. Thus, the following three aspects of international business have been investigated to establish an explanation to the propositions p1, p2 and p3 developed in this chapter.

- 1) Motivation for acquisition is derived from ownership advantages together with the emerging market firm's springboard perspective and/or Linkage, Leverage and Learning (LLL) framework.
- Motivation for investment is derived from sector/Industry specific advantages/ disadvantages.
- 3) Motivation is derived from stages/degree of internationalization of the firm.

In order to be able to present a broad and integrative framework of MNEs' motivations and the push/pull factors emanating from the internationalization model, we adopt an approach that includes previous findings and suggestions by various researchers *e.g.* Dunning (1993), Johanson and Vahlne (1977), Mathews (2006), and Luo and Tung (2007). These scholars' work is well-known, and has been recognized in the extant literature in their respective research areas. Figure 9.3 illustrates the conceptual framework of the above-mentioned propositions that offers an explanation for OFDI motivations along with the host country location advantages in the internationalization process of a firm.

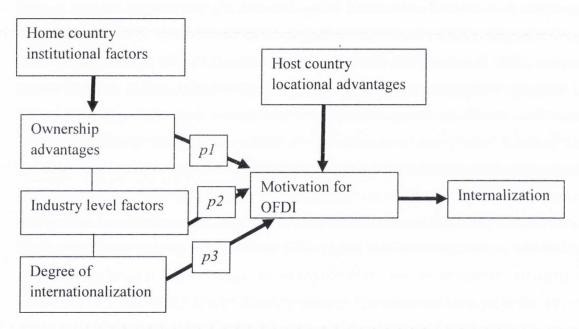


Figure 9.3. Framework indicating the hypothesized relationships.

9.6. Case 1: Ranbaxy Laboratories Limited



9.6.1. Firm overview: Ranbaxy is India's largest pharmaceutical company. Ranbaxy Laboratories Ltd. was established in 1961 and went public in 1973. Ranbaxy, with its subsidiaries, operates as an integrated international pharmaceutical organization with businesses encompassing the value chain in the marketing, production and distribution of a wide range of therapeutic products. The firm is now recognized worldwide as a leading generic company engaged in the manufacture and trade of formulations, active pharmaceuticals ingredients and intermediates, drug discovery and consumer health care products. It is also amongst the top league global firms and is ranked 9th largest generic company worldwide (Bowonder and Mastakar, 2005). The firm's products are sold in over 125 countries with presence in 23 of the top 25 pharmaceutical markets. It has ground operations in 46 countries and manufacturing units in 10 overseas countries. It employs around 14,000 multicultural workforces comprising over 50 nationalities.

Ranbaxy has always been very outward looking company. Internationalization and international growth of the company has been an essential part of its strategy. It operates in India, Europe, North America and Asia Pacific. The company has the largest market share in North America. In 2009, its sales in North America was US\$ 660 million, followed by Asia US\$ 468 million and Europe U\$ 272 million. In 2010, it recorded global sales of US\$ 1868 million. Ranbaxy has a mix of revenues from emerging markets accounting about 50%, and developed markets accounting about 44%. The company is driven by its vision to achieve significant business in proprietary prescription products by 2012 with a strong presence in the developed world. It intends to dominate the world market, and aims to be amongst the top 5 generic players with global sales of US\$ 5 billion by 2012.

9.6.2. Acquisition history: The firm traces its roots to a chemist shop in Delhi. Ranbaxy was initially started in 1937 by Mr. Ranbir Singh and Mr. Gurbax Singh as a distributor for a Japanese pharmaceutical company "Shionogi". Hence, the name Ranbaxy - coined from its first owners **Ran**bir and Gurbax. They sold the company in 1952 to their cousin Bhai Mohan Singh. Later in 1967, Bhai Mohan Singh's son Parvinder Singh significantly transformed the company's business and scale.

During the early 1970s, Ranbaxy recognized that a major part of its market lies outside India and exports alone would not be sufficient to tap the market into this market (Paul, 2008). In fact, Ranbaxy is one of the first Indian pharmaceutical companies to start a joint venture abroad. It set up its first joint venture in Lagos in Nigeria in 1977, followed by Malaysia in 1983 and Thailand in 1987. In 1992, Ranbaxy focused its interest on the pharmaceutical sector rather than diversifying into other sectors with an intention to become a global leader (Paul, 2008). In 1993, the company entered into an agreement to set up a joint venture in Guangzhou, China. It established its regional headquarters in the UK and the USA in 1994. In 1995, it acquired Ohm Laboratories, a manufacturing facility in the USA, and started a new Food and Drug Administration (FDA) approved state-of-art manufacturing wing in the USA which is world's largest pharmaceutical market and now the biggest market for Ranbaxy. In 2005, the USA market accounted for 28% of total sales of the firm.

In 1999, Ranbaxy entered an agreement with a German company Bayer AG. Bayer obtained exclusive development and worldwide marketing rights to a Ranbaxy developed product 'Ciprofloxacin'. Later in 2000, Ranbaxy acquired Basics GmbH, the generics division of the Bayer group in Germany and forayed in Brazil, the largest pharmaceutical market in South America. Ranbaxy took a significant step forward in 2001 by setting up of a new manufacturing facility in Vietnam. In 2001, it was listed as the fasted growing company in the USA with sales of over US\$ 100 million in the same year. Ranbaxy received 'The Economic Times Award for Corporate Excellence' for the 'Company of the Year', 2002-2003. Ranbaxy ventured into the French pharmaceuticals market by acquiring RPG, the generics business of Aventis, in January 2004 and joined the elite club of Billion Dollar Companies, achieving global sales of US\$ 1 billion. In 2005, Ranbaxy launched its operations in Canada and acquired generic product portfolio from EFARMES of Spain. In

2006, it acquired Terapia, the largest independent generic pharmaceutical company in Romania, for US\$ 324 million. Ranbaxy is currently the 5th largest generic company in South Africa, due to an acquisition of Be-Tabs in 2006 with a turnover of US\$ 30 million. Figure 9.4 displays the major international involvement of Ranbaxy year-wise from its inception.

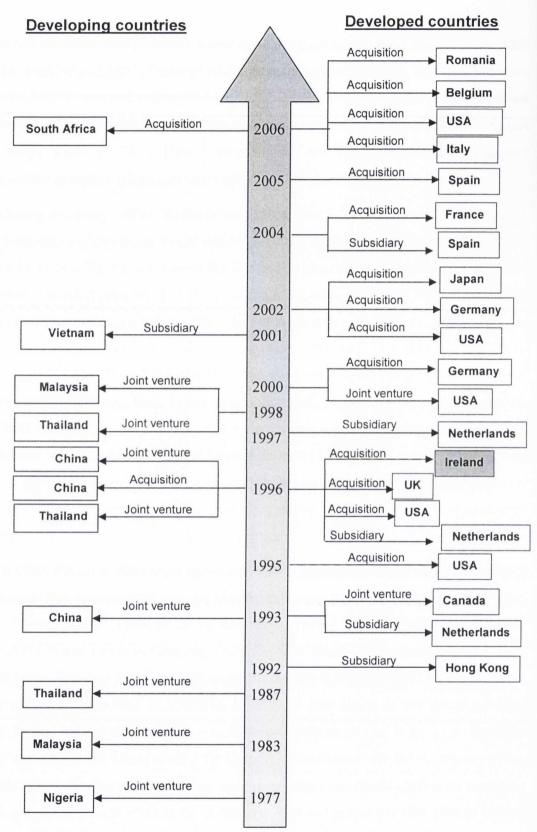


Figure 9.4. Internationalization of Ranbaxy Laboratories Ltd.

9.6.3. Within case analysis - Ranbaxy

With a tenure that reaches back to 1961 (incorporation), Ranbaxy has truly become an economic success story. The success of Ranbaxy, a pharmaceutical company with Indian origins, provides an ideal case to investigate the approaches and motives of MNEs firms from developing countries to developed countries such as Ireland. In order to understand the market seeking motivation of investment by Ranbaxy in Ireland, here we discuss its overseas investment strategies. In this section, we analyze how the accumulated ownership advantage has driven the market seeking motivation of Ranbaxy's overseas investment with special reference to Ireland.

Ranbaxy pursued internationalizing initiatives first in African and South East Asian markets, starting with Nigeria (1977), followed by Malaysia (1983), Thailand (1987), and China (1993). Ranbaxy's decision for these locational choices mirrored those of other Indian outward investors during the 1970s-1990s which limited their internationalization to countries that were geographically close and at stages of development similar to or less than those of their home market (UNCTAD, 2006). Figure 9.4 depicts that Ranbaxy made a series of investments in developing countries especially in the 1980s and the 1990s. According to Dunning (2002), the majority of FDI undertaken in developing countries by Ranbaxy was primarily to gain an access to resources and enlarge its market.

Following a policy change by the USA government in 1984 and enactment of the Waxman-Hatch Act to ensure availability of less costly generic drugs, entry opportunities for Indian pharmaceutical firms was greatly increased. Ranbaxy entered into an agreement with a US based Eli Lilly & Company in 1992 for setting up a joint venture in India to produce and market Lilly's branded pharmaceuticals for the domestic market. At the same time, Lilly agreed to begin marketing Ranbaxy's products in the USA. In this way, Ranbaxy gained wide scale access, backed by the highly respected company Lilly, into the world's single largest drugs market. This enabled Ranbaxy in 1994 to establish its regional headquarter in the USA with the basic objective of undertaking sales, marketing and distribution support for its generic and branded prescription products.

To further ensure manufacturing support at a local level, Ranbaxy acquired the USA based Ohm Laboratories in 1995. Its acquisition of Ohm Laboratories Limited facilitated

Ranbaxy with the first and new FDA approved manufacturing facility in the USA. In 1996, it started a joint venture with another US based firm Schein Pharmaceuticals for marketing 'Ranitidine' in the USA. In 1998 Ranbaxy established a 100% subsidiary in the USA and started marketing products under its brand name. Ranbaxy made another acquisition of 13 established and well recognized brands of the dermatology segment from Bristol-Myers Squibb in the USA. Within just four years of starting its US operations, Ranbaxy sales reached to US\$ 100 million in the USA.

Ranbaxy began expanding its production facilities in Europe by setting up a subsidiary in the UK in 1994 and establishing a subsidiary in the Netherlandss in 1996. Ranbaxy's interest in Europe further expanded in 1996 when it acquired an Irish company Rima Pharmaceuticals Limited (Rima). Rima was a producer of a wide range of generic drug markets in the UK and some other European countries. The quote from a senior executive in Ranbaxy captures the importance of Ireland as a route to European countries:-

"Expansion to European market is a key element of our internationalization strategy. Acquisition of Rima is an important step forward in this direction".

The manufacturing plant in Ireland provided the backbone of Ranbaxy's European business. With this acquisition, Ranbaxy got access to over 100 marketing licenses issued by the Medicines and Healthcare Products Regulatory Agency (MHRA) for sale of products in the UK and over 50 marketing licenses issued by the Irish Medicine Board for sale in Ireland. These proved instrumental in Ranbaxy's forays into other European markets; its presence in the UK and Ireland created a critical size that provided the company with a platform to expand it further in Europe. This strategy facilitated Ranbaxy to expand into Poland, Hungary, the Czech Republic and the Slovak Republic.

Ranbaxy is fast-tracking its growth plans to access other high-growth markets globally. Especially after 2000, Ranbaxy is pursuing an aggressive acquisition strategy for internationalisation of its operations. It continues to expand in Europe to further strengthen its strategic assets. For example in 2000, Ranbaxy acquired a German company Bayer's generic business. The company's international expansion also took a major step forward in 2004, when it consolidated its position in the European market by acquiring the 5th largest generics company in France RPG (Aventis). In 2006, Ranbaxy acquired two generic companies namely, Terapia in Romania and Ethimed N.V. in Belgium and followed that by

buying a large unbranded generic product portfolio of Allen S.p.A., a division of GlaxoSmithKline, in Italy. These acquisitions made Ranbaxy as one of the world's largest generics firms.

In the home country (India), Ranbaxy generated three strong and distinct competitive advantages. The first strength of the firm lies in the Indian domestic market, which is considered as one of the most competitive and aggressive marketplaces in the world. Ranbaxy carries this aggressiveness and spirit of competition to its overseas markets also. The second is its manufacturing base with a strong backward integration from the research and development (R&D) laboratory to the market. The third strength includes cost competitiveness and high quality R&D. The firm's research and innovation capabilities enable it to develop best-in-class products with a focus on reducing both cost and increasing efficiency.

By the mid 2000s Ranbaxy had expanded its operations in major markets in the developed world. In order to support its demand in the global market, Ranbaxy continued to seek appropriate resources. In 2005, the company launched a new US\$ 100 million production facility in Brazil. Brazil is the largest pharmaceuticals market in Latin America and the firm targets to expand throughout the region.

In order to protect its international investments, Ranbaxy also applied for patents all over the world for its innovative production processes. The experience gained also developed regulatory skills needed to obtain approvals for its products.

Ranbaxy's internationalization strategies include joint ventures, acquisition and greenfield routes. Ranbaxy started investing in developing countries first and then shifted its focus to the developed countries. Figure 9.4 clearly demonstrates Ranbaxy's internationalization strategy in developing and developed countries. Ranbaxy's overseas investment started with joint ventures in developing countries followed by entry into the developed countries *via* acquisition. Apart from this, Ranbaxy has targeted a number of developed countries and not just limited to the USA and the UK. This extensive internationalization of Ranbaxy has proved to be an importance source of learning for operating in international markets. At the heart of its strategy was sequential expansion; first prioritise market in the overseas country, then export via sales agents or form joint

venture to understand dynamics, then set up an infrastructure and finally start expanding. It can be argued that overseas acquisitions by Ranbaxy have not only provided an enlarged market but also have augmented its intangible asset bundle including distribution and market networks.

Ranbaxy was involved in exporting its product to Ireland well before acquiring the Irish company Rima pharmaceuticals. Thus, its internationalization behaviour can be explained by the Uppsala model which argues that firms' incremental internationalization can be described as one of overcoming psychic distance related to cultural distance (Johanson and Vahlne, 1977) as well as technological distance, economic distance, and institution distance (Tsang and Yip, 2007; Xu and Shenkar, 2002). In order to overcome the liability of foreignness in Ireland, Ranbaxy followed the sequence of entry modes from exports to mergers and acquisitions (M&A). The acquisition of Rima pharmaceuticals helped Ranbaxy to have access to the product licenses for the UK market and cut short registration services (The Economic Times, February 14, 1997). In 2005, Ranbaxy generated revenues of about US\$ 17 million from its Ireland unit. Overall, the evidence suggests that Ranbaxy is a mature international player in the pharmaceutical industry. Ranbaxy extended its operations into the developed countries especially to the USA and Europe for strategic asset- and/or market-seeking motives. Ranbaxy's venture in Ireland serves as a backbone for its market-seeking pursuit.

9.7. Case 2: Wockhardt Limited



9.7.1. Firm overview: Wockhardt Limited, with global headquarters in Mumbai, India, is a technology-driven pharmaceutical and biotechnology company. It is one of the most successful pharmaceutical firms in India. Wockhardt's key growth driver is its state-of-theart, multi-disciplinary research capability backed by a team of 500 skilled scientists. It employs over 9,000 workforces based in its international subsidiaries. Wockhardt's strong presence in healthcare market covers pharmaceutical formulations, bulk actives, biopharmaceuticals, vaccines and nutritional products. Wockhardt's commitment to international quality standards in all its business processes has propelled it to the ranks of the leading pharmaceutical and biotechnology companies operating out of India, with a market capitalisation of over US\$ 1 billion and a strong global footprint. Today, the company is distinguished by its strong and growing presence in the world's leading markets, with over 70% of Wockhardt's revenue comes from the international markets, most of it from Europe and the USA. Wockhardt has recently been adjudged as a 'Business Superbrand' by a UK-based organisation tracking reputed consumer and corporate brands in 45 countries including the USA, France, Australia and Canada. The superbrands are selected by a council of independent experts in recognition of emotional and tangible benefits to stakeholders. Wockhardt is the only pharmaceutical company from India to get this tribute.

Today, Wockhardt's presence in both the leading and emerging markets of the world is a testimony to the success of its globalisation strategy. Wockhardt has subsidiaries in the USA, the UK, Ireland and France with a total of fourteen manufacturing plants. It has various marketing offices across Africa, Russia, Central and South East Asia. The firm has

a strong track record in acquisition management, with five successful acquisitions in the European market. These acquisitions have strengthened Wockhardt's position in the high-potential markets of Europe, and have expanded the global reach of the organisation. In the recent years, Wockhardt's growth has been propelled by consistent expansion in the global generics market. Wockhardt has an aggressive programme targeting various strategic platforms for launching generic products in the 'advanced' markets. The company's brand equity has made it the preferred partner for many international pharmaceutical companies. Today, it has strong relationships with well-known companies such as Amylin and Eli Lilly of the USA, Bristol of the UK, and Eisai and Daiichi of Japan.

9.7.2. Acquisition history: Wockhardt was started by the Khorakiwala family in 1959 as a small pharmaceutical distribution and selling entity. The company set up its first formulation plant in 1977 and soon established a bulk drug plant in 1983. In many ways it was a typical business house that became diversified into a number of business activities overtime. This diversified business portfolio makes the position of Wockhardt quite different from that of the other pharmaceutical firms. The company was first listed on Mumbai stock exchange recently in the year 1992 and followed that with listings in Luxemburg in 1994 and in the USA in 2003.

Figure 9.3 provides the list of the internationalization moves of Wockhardt. As can be seen in figure 9.3, Wockhardt started targeting international markets in the early 1980s when early entrants like Ranbaxy had already made appreciable presence in the international market. Wockhardt's expansion of international production into Europe and the USA is based largely on acquisitions of plants that had FDA approval. In 2001, Wockhardt entered into a strategic alliance with Eisai Companies Ltd. to manufacture and market a neurology drug "Methycobal" in Japan. The company entered the UK market by acquiring Wallis Laboratory in 1998 and CP Pharmaceuticals (Holdings) Ltd., along with its subsidiaries in 2003. In 2004, Wockhardt streamlined its European operations by selling Wallis's manufacturing plant to Bristol Laboratories and shifting some of the manufacturing operations of Wallis to CP Pharmaceutical's plant in the UK and the rest to the company's Indian plant. Currently, Wockhardt is in the process of up-grading the CP pharmaceutical plant to in the UK make it the company's largest overseas manufacturing base.

Germany is the largest drug market in Europe. In order to enter the German market, Wockhardt acquired Esparma GmbH in 2004 for US\$11 million. Esparma has a portfolio of 135 marketing authorisations, of which 67 are in Germany. The company also has 9 international patents and 94 trademarks. This acquisition has given Wockhardt increased depth in their product portfolio and helped the firm to strengthen its presence in the European generics market. In 2004, Wockhardt launched its operations in the USA by starting Wockhardt Americas Limited, which now has its own marketing and regulatory teams based in the USA.

In Ireland, Wockhardt acquired Pinewood Laboratories Limited in 2006 by investing US\$ 150 million. Pinewood is the largest and fastest growing generic pharmaceutical company in Ireland with a strong presence in the pharmaceutical and renal business. In 2007, Wockhardt acquired Morton Grove, a leading US manufacturer and marketer of oral liquid and topical pharmaceuticals. More recently on May 03, 2007, Wockhardt announced the acquisition of Negma Laboratories, the 4th largest independent, integrated pharmaceutical group in France with sales of US\$ 150 million. The company acquired Negma Laboratories in an all-cash deal worth US\$ 265 million. Figure 9.5 displays the major international involvement of Wockhardt, year-wise from its inception.

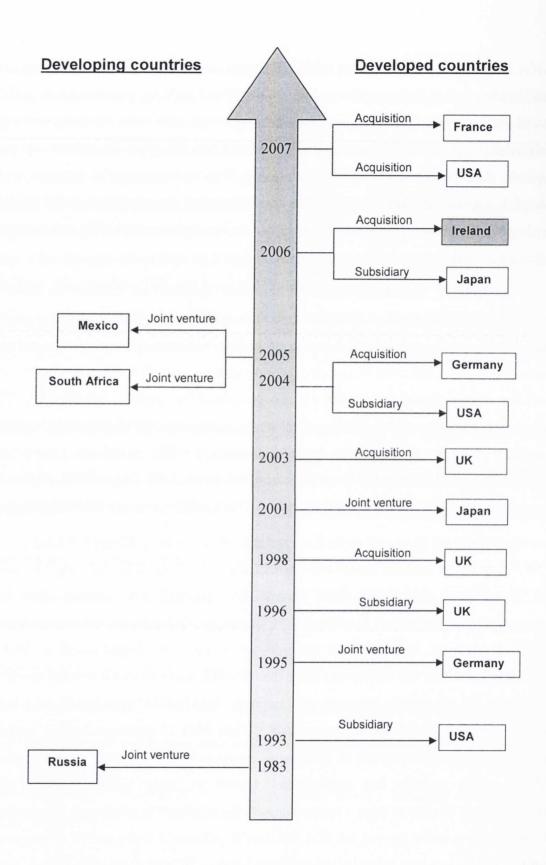


Figure 9.5. Internationalization of Wockhardt Limited.

9.7.3. Within case analysis: Wockhardt has majority investment in the developed market and has a very less investment in the developing countries, as evident from Figure 9.5. Although Wockhardt was the first Indian company to get an Abbreviated New Drug Application (ANDA) approval in the USA in 1995, it lagged behind Ranbaxy in its market expansion in the USA. Until 2004, during which it established its own sales and marketing subsidiary to capture value from end to end of the supply chain, Wockhardt primarily used a partnership model to market its products in the USA. It acquired Morton Grove of the USA, a leading manufacturer and marketer of oral liquid and topical pharmaceuticals, in 2007.

Wockhardt's initial internationalization goal is to establish a strong presence in Europe. Its first acquisition in Europe took place in 1998, when the company acquired a UK-based firm Wallis Laboratory and then CP Pharmaceuticals in 2003. This was followed by Germany (2004), Ireland (2006), and France (2007). The acquisition of Wallis Laboratory (1998) and CP Pharmaceuticals (2003) helped transform the company into a major player in the UK market and served Wockhardt as a platform to expand its footprint in Europe. The acquisition of German company Esparma GmbH in 2004 signalled Wockhardt's entry into markets in Germany and in continental Europe. Thus these acquisitions gave Wockhardt an increased market share in Europe spread over the UK, Ireland, France and Germany. Wockhardt entered into semi regulated markets of Latin America and South Africa in 2005 with the formation of majority joint ventures in Mexico and South Africa and the establishment of a wholly owned subsidiary in Brazil.

Wockhardt's 4th European acquisition in 2006, after Wallis (UK), CP Pharmaceuticals (UK) and Esparma (Germany) was Pinewood Laboratories in Ireland, one of the most open economies of the world. As quoted by a senior executive in Wockhardt:-

"This acquisition of Pinewood Laboratories with a deal worth US\$ 150 million by Wockhardt is the largest investment made by Indian firms in Ireland".

Pinewood Laboratories, established in 1976, is a highly regarded and recognised company in Ireland with over 200 prescription and over-the-counter products. Pinewood is the market leader in renal therapy products and has a strong brand name in many of its market segments.

The analysis presented in chapter 8 of this thesis based on the questionnaire survey reveals that reasons for investing in Ireland was efficiency, strategic asset and market seeking mainly for achieving economies of scale and scope, appropriate facilities and technology/product specialization of the acquired firm in Ireland. The export promotion from back home was among the important push factors for Wockhardt's investment in Ireland. These motives have also been highlighted in several industry based magazines.

The acquisition of Pinewood Laboratories provided Wockhardt an entry and leadership in the fast growing generic market of Ireland. This acquisition offered Wockhardt a highly regarded and a well-recognized brand name in the pharmaceutical industry. Currently it employs about 360 people in Ireland. As almost half of Pinewood's sales come from the UK, the acquisition has reinforced Wockhardt's position in the UK and Ireland. A respondent in Wockhardt also stated that:-

"The acquisition of Pinewood has provided us an opportunity to target the large customer base in the UK and Ireland. We are now able to market a wide range of products in this region".

Thus, Pinewood was an appropriate choice for Wockhardt for strategic asset acquisition in Ireland. With this acquisition, Wockhardt got an access to Pinewood's marketing, distribution system and customer base in Ireland for its vast range of hospital products.

A report by KPMG suggests that Wochkardt acquisitions in Europe have enabled the firm to increase its efficiency (KPMG, 2006). For example, overheads could be reduced by combining production facilities. With each takeover Wockhardt has been able to improve costs by between 10-20%. Apart from that Pinewood has a very efficient marketing distribution channel as it has more than 200 marketing authorizations. Wockhardt's long-standing expertise in their products, purpose-built warehousing and expertise in logistics are among the major ownership advantages. Through the acquisition of Pinewood Laboratories, Wockhardt is able to deliver competitively priced quality products on time, which is backed by individual customer service, thus, increasing the overall efficiency of the company.

According to a report by HFDC securities (Verma and Shah, 2007), Wockhardt's acquisition in Ireland is also a strategic fit for product specialization reasons as the firm is

achieving synergies through cross introduction of its products. For example, Pinewood's liquids and creams business complements its strengths in injectable and solid dosages (Economic Times, 2006).

Apart from efficiency and strategic asset-seeking motivation, the market has also been a big reason seen by the top managers in Wockhardt, Ireland. The market-seeking motivation of the firm is very clear from the statement made by the chairman of Wockhardt:-

"This acquisition gives us a larger footprint in Europe spread over UK, Ireland and Germany. European business accounts for almost half of Wockhardt's total sales".

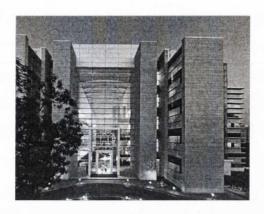
It can also be argued that from the very beginning Workhardt's internationalization goal was to make a strong presence in Europe, which had led to investment in the UK, Germany and France by the company and acquiring Pinewood's manufacturing unit in Ireland. Pinewood acquisition has given Wockhardt a strong foothold in branded generic market.

The firm does not seek resources in Ireland as sufficient resources lies with the firm in home and various overseas countries. The long history of Wockhardt in the pharmaceutical sector suggests that resource seeking may not be a motive for investments particularly in Ireland. It is important to note that Wockhardt has also followed the incremental process of the Uppsala model. The company was exporting before owing a manufacturing unit in Ireland. It established a trading subsidiary in 1993 and then followed the market by acquiring Pinewood Laboratories in 2006.

The company is continuing to acquire pharmaceuticals in Europe, indicating that Wockhardt is on the growing stage of internationalization in the European market. Wockhardt reinforced its European presence by acquiring Negma in France in 2007, company's 5th acquisition in Europe. This acquisition deal made Workhardt the largest Indian pharmaceutical company in Europe, with 1,500 employees based in the continent.

Despite having strong expertise in process engineering for active pharmaceutical ingredients and biological research, Wockhardt's late entry into international markets suggests that acquisitions were deemed necessary to leapfrog incumbents' internationalization efforts in key markets.

9.8. Case 3: Reliance Life Sciences



9.8.1. Firm overview: Reliance Life Sciences Private Limited, an initiative of the Reliance Group of Companies, is a research-driven, biotechnology-led, life sciences organization. Reliance Industries Ltd. was founded by an Indian industrialist Dhirubhai Ambani in 1966. Reliance Industries Ltd. is the largest private sector enterprise in India. It participates in multi-sector businesses with an annual turnover in excess of US\$ 45 billion and profit of US\$ 3.6 billion for the fiscal year ending in March 2010. It is also the world's second largest private sector conglomerate. Fortune Global 500 (2011) places the flagship company, Reliance Industries Limited at 2nd position in India and at 175th position in the world.

Reliance Life Sciences was incorporated in January 2001 and is based in Navi Mumbai, India. The company, together with subsidiaries, expects to attain global leadership through innovative and cost-effective solutions in the field of life sciences. Reliance Life Sciences operates in the domains of medical, plant and industrial biotechnology. The company aspires to be the most diverse and integrated biotechnology initiative developed in the world. Its business activities include research, process development, pre-clinical studies, human clinical trials, manufacture, and marketing of pharmaceuticals, biopharmaceuticals, regenerative medicine, molecular medicine, bio-fuels, plant and industrial biotechnology. The company also provides clinical research services, plant metabolic engineering, industrial biotechnology, enzymology research, cord blood stem cell repository services, and contract manufacturing of biopharmaceuticals. It is also working on the development of novel therapeutics targeted to cancer, infectious diseases, inflammatory disorders, ocular disorders and neurodegenerative disorders.

Consistent with the diversity and depth of its initiatives, Reliance Life Sciences has a professional team comprising substantially of PhDs, MDs, engineers and science postgraduates. The average age of the Reliance Life Sciences team is 32 years and one third of its employees are women. The company has filed over 281 patents at both national and international levels that cover the entire spectrum of its R&D activities. Reliance Life Sciences doesn't publish its sales figures.

9.8.2. Acquisition history: Reliance Life Sciences has a very short history of FDI. The first overseas investment by the company was the acquisition of the UK based biotech company Genemedix Plc in 2007 for about US\$ 31 million with its manufacturing facility situated in Ireland. In 2007 Reliance incorporated its subsidiary in the USA. Figure 9.6 displays the year-wise international investment by Reliance Life Sciences.

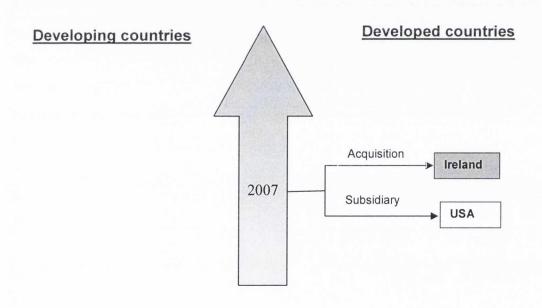


Figure 9.6. Internationalization of Reliance Life Sciences.

9.8.3. Within case analysis – Reliance

Probing deep into the motivation of Reliance Life Sciences revealed that the company plans to ramp up its business in the USA and in Europe. In order to widen its customer reach in the developed markets and conduct multi-location clinical research/trials for its clients, Reliance Life Sciences acquired a UK-based biotechnology company GeneMedix Plc. in 2007 with a manufacturing facility in Ireland. With the deal value of approximately US\$ 31 million, the company further plans to invest a total of US\$ 68 million over the next few years as a means to launch its bio-pharmaceutical products in both Europe and the USA.

Reliance Life Sciences global forecast for the prescription market indicates considerable growth in the generic market over the next five years. The acquisition of GeneMedix provides Reliance Life Sciences with significant infrastructure support and commercial scale manufacturing capabilities to meet the market demand. It also enables Reliance Life Sciences to operate from a low-cost base in the home country and to generate healthy profit margins.

The most crucial challenge Reliance Life Sciences is facing is that countries are sceptical to allow bio-similars because they contain living active ingredients and are relatively new. Regulators have less experience in testing and dealing with such products. This point was illustrated by the quote of a respondent in Reliance Life Sciences:-

"The US doesn't worry us. There is a pathway in Europe, and our acceptance of our product in the European market gives us the confidence to take others to market."

Unlike the USA, Europe has a policy to approve bio-similars products (the Economic Times, 3rd April 2010). This suggests that because of such regulations the firm was more motivated to target the European markets.

In Ireland, Reliance Life Sciences is primarily investing for location advantages of this region as it finds Ireland a gateway to many European markets. The firm relies more on its products, and based on its ownership advantages the firm seeks for overseas market (Press release: 21st Dec 2009, the Economics Times). This suggests that Reliance Life Sciences presence in Ireland is primarily motivated by market seeking in the EU nations with strong competitive advantage of the firm.

Given that Reliance Life Sciences has its own portfolio of bio-similars products and appropriate manufacturing facilities at home, the firm sees a sizable market in Europe. The respondent in Reliance Life Sciences also added that:-

"Especially for developed markets, the first region we are focusing on is EU, where we are currently conducting clinical studies for two biosimilars in our Reliance GeneMedix Plc., Ireland subsidiary".

Reliance Life Sciences has a great opportunity to introduce its products into the EU through collaboration with GeneMedix and also to leverage its own production capabilities by manufacturing the acquired firm's products (GeneMedix Plc Press release: 16 Feb 2007) and thus maximizing the profit of the firm by operating from its home country which is quite cheap compared to Ireland. Importantly, apart from the market-seeking motivations, Reliance Life Sciences managers quoted 'various reasons' behind their investment decision in Ireland.

In order to understand other motives of Reliance Life Sciences' investment in Ireland, unlike other two cases, we need to focus on other factors such as business group affiliation. One of the distinguishing factors of Reliance Life Sciences is that it is a part of the largest private sector enterprise in India, participating in multi-sector businesses. The resource seeking aspect of Reliance Life Sciences support Chang and Rosenzweig (2001), who suggest that firms often enter foreign markets to exploit strengths in a given line of business. Occasionally, they enter into lines of business where they are relatively weak, seeking to capture greater capabilities or competitive strengths. While the resource-seeking aspect of foreign investment may sometimes be present in incumbent lines of business (where they already compete), this motivation is observed when firms enter a market in a new line of business (where they do not yet compete at all). Since Reliance Life Sciences is an unrelated diversification of the of Reliance group, the firm seeks to increase its global competitiveness by acquiring the appropriate resources in the developed market. The acquisition by Reliance Life Sciences in Ireland has benefited the firm mainly with two types of resources. Firstly, Reliance got an access to a highly skilled and experienced human resource present in Ireland. Secondly, the manufacturing and R&D infrastructure present in Ireland with Good Manufacturing Practice (GMP) certificate and commercial manufacturing licence has ensured that the quality of product will meet the highest

standards in the industry. The acquisition of GeneMedix has also provided Reliance Life Sciences with major strategic advantages such as brand name. GeneMedix developed marketing and market generic version of branded products, using the latest technology and is the first life sciences company to be listed in Singapore Stock Exchange. It has a market valuation of £300 million and has established collaboration with many renowned universities in the world. With a well recognized brand name such as GeneMedix Reliance Life Science has been able to develop a scaling-up process that protects product quality whilst ensuring cost-efficiency for firm's world class manufacturing facility in its home country.

Since Reliance Life Sciences was established only 10 years ago, it has little internationalization experience. Thus, the company is in its early stage of internationalization and a late mover in the global market place. The firm is pursuing an accelerated process of internationalization and bypassing the stages of the Uppsala model. Moreover, discussion during the interviews and survey revealed that the Reliance Life Sciences were not exporting before their investment in Ireland. This support the study by Luo and Tung (2007) that suggests that emerging market MNEs can overcome their latemover disadvantage by using internationalization as a springboard to actively participate in global competition and acquire strategic assets from MNEs. As a late mover firm, Reliance has increasingly shifted its focus from simply accessing local markets and resources (such as skilled workforce, infrastructure) to efficiency seeking, accessing knowledge intensive assets and other types of strategic assets that may be location-specific (Deng, 2007).

9.9. Cross-case analysis of Indian pharmaceutical firms in Ireland

On a macro level, Europe is the second largest pharmaceutical market after the USA. The growth of European pharmaceutical market is witnessed by its ageing population, sedentary life style and rising healthcare costs resulting in an increasing demand for generics. To gain a critical mass in this potential market and to accelerate its pace in the generic business, Indian MNEs are targeting faster regulatory filings in the EU and encouraging generic substitution. In this section, we analyze the data across the abovementioned three cases in order to identify similarities and differences in the internationalization process and the motivations of Indian pharmaceutical firms. We use the

cross-case analysis to seek a chain of evidence for the relationships on the basis of the framework illustrated in figure 9.3.

Table 9.1 presents a relative understanding of the degree of internationalization of the three cases – Ranbaxy, Wockhardt, and Reliance Life Sciences. The degree of internationalization assigned by evaluating 1) international presence, 2) number of overseas manufacturing plants, 3) number of overseas operations, and 4) percentage revenue from overseas operations of the case firms are presented (Table 9.1).

Table 9.1. Comparison of degree of internationalization of the case firms (as on December 2010).

Firm	Year established	International presence (No. of countries)	Overseas manufacturing facilities	No. of overseas operations	Market capitalization (US\$ billion)	Revenue from overseas operations (%)
Ranbaxy	1962	125	6	46	8.5	80%
Wockhardt	1959	90	4	4	1	70%
Reliance Life Sciences	2001	2	1	2	NA	NA

Based on Table 9.1, it can be inferred that Ranbaxy is a mature international player with the highest degree of internationalization among the three case firms. Ranbaxy being the first mover in the internationalization, as illustrated in Figure 9.4, has already achieved the needed strategic assets to operate in a developed country and thus the European market exploitation is the primary motive for the firm. Wockhardt is on the growing stage of internationalization as the firm continues to engage in overseas investments for strategic assets and increasing the efficiency of firm capacity. Reliance Life Sciences is on an early stage of internationalization path and a late mover in the global pharmaceutical industry. In this case, Reliance Life Sciences follows the early internationalization patterns.

An interesting aspect was evidenced in this study that Indian pharmaceutical firms have a distinct mode of entry into developing and developed markets. Fig. 9.7 illustrates

that Joint venture has emerged to be a common mode of entry for Ranbaxy and Wockhardt for entering developing countries. Both the firms have preferred acquisition to enter a developed country. This unique distinction has not been reported so far in the studies on Indian pharmaceutical industry.

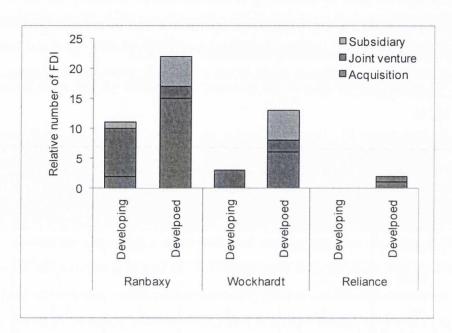


Figure 9.7. Entry modes in developing and developed countries by the case firms.

All three case firms discussed in this study have ownership advantages albeit different in nature and magnitude. Thus these case firms confirm the proposition p1 of the study. Due to the nature of the industry, the proposition p2 is applicable to all the three firms, a more accentuated effect of industry can be seen on Wockhardt and Reliance because of the kind of products that have been introduced in Europe but face a regulatory barrier in other developed countries. Ranbaxy, Wockhardt and Reliance confirm the proposition p3 that the firm's degree of internationalization has influence on its overseas FDI motivations. The motivation of the firms varied with increased degree of internationalization.

The applicability of the Uppsala model which is the genesis of the proposition p3 was also examined. In Ireland, Ranbaxy and Wockhardt follow an evolutionary expansion

path, demonstrating an increasing commitment to internationalization over time, whereas Reliance doesn't follow the incremental stage approach. Thus, the Uppsala model have limited applicability for those emerging market firms that have never exported overseas but have started overseas operations straightaway. It would be interesting to see how this firm behaves as it accumulates ownership advantage and as it goes through the path of internationalization. Table 9.2 summarizes the results of the cross case analysis under each theme.

Table 9.2. Cross case analysis based on templates used in the study

	Ranbaxy	Wockhardt	Reliance
Ownership advantages	International experience, low cost innovation, advanced product and process capabilities in the home market	Pioneer in biotechnology in home country, large number of patents, multidisciplinary R&D capability	Product specialization, large production base at home country
Industry specific reasons	Product licenses for the UK market and easy registration services	Manufacturing facilities approved by MHRA in Europe.	Approval for biosimilars in the European market.
Stage of internationalization	Mature	Growth	Early

9.10. Discussion and case conclusion

The assessment of motivation, and why firms might differ in the motivation, is one of the central issues in international business research. The differences in FDI motivations arise because firms may have strategically positioned themselves in product markets, and are thus able to exploit the benefits of niche exploitation and high market share. By their choices as to which industries to participate in, which strategic groups to belong to, and what generic strategies to adopt (Porter, 1980) firms define their strategic domains to face the barriers to entry and mobility that exist.

Here, we studied the three cases of Indian pharmaceutical companies with their ground operations in Ireland. We explored internationalization behaviour of Indian firms within the holistic perspective of overall business growth strategies in Ireland. We identified similarity and differences in the patterns, processes and pace of internationalization among Indian pharmaceutical firms in Ireland.

Based on the findings of our survey presented in the previous chapter, the aim of present case study was to extend the theory of internationalization for emerging market MNEs. On the basis of extensive literature survey, we mainly considered motivating factors and the pattern of internationalization process by the case firms to explain the theory. Any unusual concept was explained by the supporting evidence from the company archives and pioneer economic newspaper articles. The specific objective of the enquiry was to explain the different motivations pursued by the Indian firms, given that they are similar in many respects to their internationalization approach. A number of key issues were investigated in depth. These included:-

- · Firms' initial business strategies, growth objectives and international orientation
- The history of acquisitions by the firms
- The stimuli which influenced the choice of strategies and subsequent operational decisions

The most important finding of this study is that the case firms do not follow a generalized pattern of internationalization, even if they belong to same sector, home and host country. This supports previous observations by Kuada and Sorensen (2000), who argue that the internationalization process is distinct for each and every industry and even for individual firms.

We observed idiosyncratic nature of the case firms. Firms are idiosyncratic because throughout their history they accumulate different physical assets and, often more importantly, acquire different intangible organizational assets of tacit learning and dynamic routines (Dosi et al., 1990; Teece et al., 1997). Firm's history, strategy and organization combine to yield the unique bundle of resources it possesses. The decisions made in the past and their paths of asset accumulation direct a firm to plan its future strategy (Collin,

1991). While the ultimate goal of growth and profit maximization is the driving force among all cases, their motivations for FDI certainly arise from diverse backgrounds. This study has emphasised the role of differences in the motivations between firms in shaping these choices.

Since the generic market is continuously growing, a firm should have the efficiency with the right resources and strategic assets to meet the demand for a bigger market size spread across the globe. Choices about the optimal location of each of the firm's activities, and how those activities are controlled determine the firm's ability to realize the benefits of global operations while minimizing administrative costs.

Nachum and Zaheer (2005) underscore the need to understand the motivations of firms' overseas investment. The fact that firms from same industry and home country can have different motivation for their overseas investment has not been dealt in previous literature. The three strands of the explanation (ownership advantages, industry level factors, and degree of internationalization) were used in this study to understand Indian firms' behaviour may have evolved sequentially. However, in the present context they seem to be convergent to explain overseas investment behaviour of the Indian MNEs.

According to the ownership, location and internalization (OLI) theory (described in detail in chapter 2), a prerequisite for a firm to become international is the ownership of unique advantages that outweigh the disadvantages of being "foreign" in overseas markets. The OLI advantages are adjusted according to the motivation of the firm. Dunning (2000) and Dunning and Zhang (2008) emphasize an alternative explanation of OFDI. They suggest that in contrast to the objective of more effectively exploiting their existing ownership advantages, some firms may wish to engage in FDI in order to augment their ownership advantages. Thus, ownership advantages of firms accumulate over time and are evolutionary in nature. Based on this case study, it can be argued that:-

- Similar firms may pursue different motives while operating in a particular location.
- The three cases studied here support Dunning (2006) that accelerated internationalization by emerging market firms doesn't conflict with the OLI paradigm. This study also supports Dunning and Zhang (2008), who suggest that firms may invest overseas to augment their ownership advantages.

• The degree of internationalization can influence the motivation behind overseas investment by a firm.

It has been argued that the Uppsala model (described in chapter 2) applied best to the early stages of a firm's internationalization process (Hadjikhani, 1997; Johanson and Vahlne, 1990). The Uppsala process stage model identifies the different development stages of internationalization (Johanson and Vahlne, 1977) and treats firms as a learner (Contractor *et al.*, 2003), knowledge acquirer (Kogut and Zander, 1993), and market power accumulator (Kogut, 1985). This study enables us to integrate the Uppsala model with the four motivations of internationalization (described in chapter 2) suggested by Dunning (1993) and with the emergent accelerated internationalization perspective, which can enhance the understanding of the difference in the motivation among the case firms. On the basis of our case study and analysis, we propose to extend the theory that with the stage of internationalization the motivation for overseas investment in a particular location changes. Based on the cross case analysis, a pyramid of internationalization motives is presented in Figure 9.8.

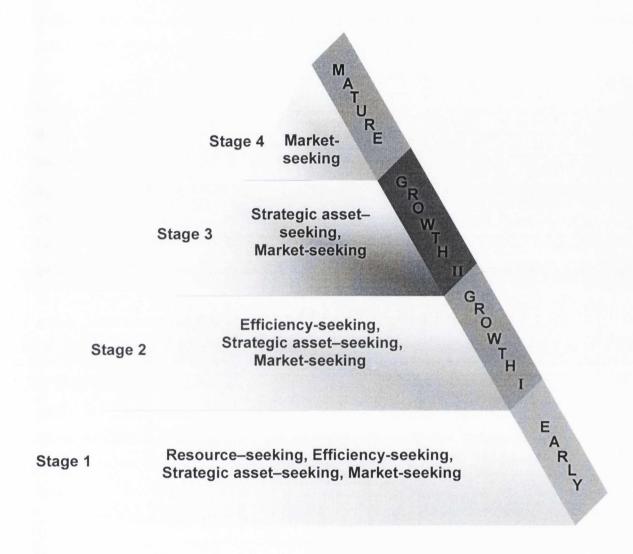


Figure 9.8. Pyramid of internationalization motives among Indian pharmaceutical firms in Ireland.

The proposed theory explains the stage process of internationalization of emerging market firms, in particular Indian firms in Ireland. With the overseas experience, the firm goes up through the stages of internationalization. As they accumulate diverse ownership advantages and gain international experience, the motivation underlying OFDI by emerging market firms in developed world change. The early entry to the international market provides the firm with the accumulated experience and this may shift the motivation of

foreign market entry. The different stages of the internationalization *via* FDI are also associated with relative importance of the four motives for FDI: resource-seeking; market-seeking; efficiency-seeking; and strategic asset seeking. The pyramid of internationalization motivation (Figure 9.5) has four stages as follows:-

Stage 1: Studies suggest the emerging market firms FDI in developed countries is not based on the possession of overwhelming domestic assets which can be exploited abroad. Rather, their FDI has been undertaken more for the search for new resources and acquisition of innovative capabilities, and as a way of building their competitive position (Deng, 2004). In the stage one of the proposed framework, the firm is new to the globalization with limited resources and capability. With this study it can be conferred that emerging market firms initially lack any unique ownership advantage which cannot be exploited for a long time. This study supports that the major motives of motivations, as suggested by Dunning (1993), dominate emerging market MNEs early internationalization patterns.

New MNEs from emerging markets will make resources seeking investment in order to augment their ownership advantage at that point such as capital availability, technological know-how etc. But very soon the resource seeking motive behind FDI erodes as firm finds labor and other resources not so cheap in the developed countries and starts investing in developing countries for resources. In other words, this is a factor driven stage in the internationalization process of emerging market firms.

Stage 2: At this stage when the emerging market firm have sufficient access to resources in the home and overseas country, they seek for the optimal efficiency, strategic asset and a market to leverage their capability. With a growing number of international ventures, the firm with appropriate resources will seek to invest in those markets where efficiency, strategic asset and a sizable market can be found for their operations and future growth. This stage is expected to be longer compared to stage 1 as achieving efficiency gain can be time consuming and a matter of learning.

Stage 3: At this stage of FDI, emerging market firms mainly seek to acquire strategic asset and market. Advanced industrial countries generally offer high standard strategic assets including technical knowledge, learning experiences, management expertise and

organizational competence (Dunning, 1998). Moreover, to maximize profit, emerging market firms' main consideration is to enlarge their market size at this stage.

Makino *et al.* (2002) suggest that emerging markets MNEs generally are strategic asset and/or market seeking while they invest in developed countries. The stage 3 generally includes firms such as Tata Motors. The acquisition of Jaguar and Land Rover helped the firm to extends its global footprint and enter the high-end premier segment of a superior brand in the global automobile market.

Stage 4: In this stage, the emerging market firms are well positioned with resources, efficiency and strategic assets. Therefore, market seeking FDI is exercised in this stage in the view of profit maximization. The emerging market firms in this mature stage resemble more with a developed country firm.

In summary, it can be concluded that:-

- Indian pharmaceutical firms have heterogeneous motivation for FDI in Ireland.
- International experience and the ownership advantages derived from the international advantages are mainly responsible factors while deciding the need of Indian firms which can be met by investing in Ireland.

9.11. Limitations

Though the study uses a multiple case approach, the main limitation of this study includes the generalizability. Further studies are required in order to test the generalizability of this study. The study of the internationalization of firms from emerging market is an attractive area of research. Therefore, examination of theoretical views in the context of emerging markets is necessary.

Further studies on this subject are encouraged. International business researchers should consider explaining FDI motivations in terms of business group influence, variation in sectors *etc*. Future studies on FDI motivation should attempt to increase the congruence between the theoretical and operational level of the firm and to clarify concepts and relationships among firms and their motivations that lead to their investment.

CHAPTER 10

GENERAL DISCUSSION AND CONCLUSION

10.1. Introduction

The recent increase in overseas investments by emerging market firms is an extremely welcomed development in international business and calls for a multi-parametric investigation. Since outward FDI (OFDI) from emerging markets has generally been relatively limited and reliable data have not been easily accessible, it has not been as widely studied in comparison to developed countries. It has been suggested in previous literature that emerging market firms follow a distinct rationale, have specific strengths and weaknesses for their investment motivations (Luo and Tung, 2007; Matthews, 2002, 2006; Child and Rodrigues, 2005). This unique phenomenon of emerging market OFDI demands special attention of international business researchers and compels them to revisit extant FDI theories.

Previous studies suggest that both the home and host country level factors influence MNEs' behaviour and their entry mode (Meyer, 2001; Yiu and Makino, 2002; Delios and Henisz, 2000, 2003). However, the internationalization process of firms from emerging economies to developed nations remains an unfilled gap in the literature of international business (Yamakawa *et al.*, 2008). As one of the major emerging economies, India is actively participating in FDI to integrate into the global market. The increased interest of Indian investors in the developed countries is clearly evident from Indian OFDI data, and is repeatedly being highlighted by the media. However, the crucial question "What drives Indian firms to the developed world?" has not been dealt adequately in the literature.

This thesis employs an integrated framework to explain Indian OFDI on the basis of three leading perspective of international business: country-based, firm-based and industry-based views of Indian OFDI. While each of the perspectives illustrates an important aspect of the internationalization of firms, their combined implication provides a better and more insightful understanding of the phenomenon of OFDI from emerging economies to the developed market. The broad aim of this thesis was to understand OFDI from emerging economies with three focused objectives. The first objective was to theoretically and empirically analyze the country level factors of Indian OFDI based on macroeconomic theories of international business. The second objective was to determine characteristics, firm level factors and location determinants of Indian firms undertaking investment in

Ireland. The third objective was to evaluate the current status of Indian investment in Ireland and to analyze FDI motivations of Indian pharmaceutical firms in Ireland using a case study methodology.

The following sections discuss the major contributions of the thesis. Research implications and limitations of this study are highlighted. Future research directions to further investigate the OFDI from emerging economies are suggested.

10.2. Key findings and contributions

This section highlights the major findings at different milestones of this research and discusses the overall contribution of the thesis to the international business literature. A summary of the findings is presented at the end of this section (Table 10.1).

10.2.1. Literature and data on OFDI

The findings presented in chapters 5 through 7 and literature reviews suggest that Indian OFDI is a unique case. We noted that the phenomenon of Indian OFDI challenges a number of the orthodoxies of the received literature on OFDI from emerging economies:-

- While OFDI from emerging economies traditionally has followed large inflows of FDI, this was not the case with India.
- While OFDI from emerging economies traditionally has taken place in other developing countries, Indian OFDI is converging on advanced economies in the last decade.
- While OFDI from emerging economies traditionally has been in manufacturing and resource extraction, Indian OFDI is driven by services and knowledge intensive sectors.
- While ownership advantages of emerging market MNEs traditionally have been in mature technologies and industries, many Indian MNEs have their advantages in technologically cutting-edge industries such as information and technology (IT), and pharmaceuticals.

10.2.2. Macroeconomic determinants of OFDI

The review of the Indian government FDI policies revealed that initially (after independence) India adopted an inward looking strategy. Indian government focussed on domestic industry in the first few decades after independence. Later during the late 1980s,

it gradually realized that globalization was an important tool for the growth of Indian economy. Since 1991, India is introducing various economic reforms and the country is now more open to the FDI. The Indian government, especially in the recent years, are playing a crucial role of facilitator, which is reflected by its substantial progress in inward as well as outward FDI and a sustainable growth.

In order to better understand the possible linkage between the economic development of India and its investment position, we analyzed the dynamic relationship between these two variables within the framework of the Investment Development Path (IDP) theory (Verma and Brennan, 2011a). The results are presented in chapter 5 of this thesis. Following a series of appropriate statistical analysis of the annual data collected from various sources including UNCTAD, we demonstrate the form of the IDP for India. The study empirically supports the IDP theory. The analysis of GDP and net outward investment position (NOIP) suggests that India has entered stage 3 of the IDP model. A more critical analysis of NOIP reveals the peculiar features of Indian IDP. For example, in the third stage of the IDP, the growth of IFDI is expected to slow down with respect to that of OFDI. However, the acceleration of Indian FDI inflows as well as outflows is converging since the last few years, which depicts an exception to the conventional IDP theory. The growth curve of India's NOIP and GDP per capita does not show a typical U shape suggested by the IDP model for this stage. The study presented in chapter 5 highlights the idiosyncrasy of the Indian IDP.

This thesis developed a framework for explaining the probability of the Indian firms investing abroad. We considered a wide range of external and internal factors that jointly affect and determine OFDI originating from emerging economies. Within the integrated framework, we investigated the interrelationship among various potential macroeconomic factors, and provided robust evidence to show that OFDI strategic motivation and propensity by Indian firms are jointly affected by these factors. We observed that there is unidirectional causal relationship from Indian exports to its OFDI. The empirical results of chapter 6 indicate that more exports from India will lead to more OFDI from the home country, but more OFDI from India may not necessarily increase exports from the home country.

The analytical framework developed in this study was applied to assess the probability of OFDI being undertaken by Indian firms with an exclusive panel of datasets covering the 1981-2006 periods. In chapter 7, we empirically tested macroeconomic variables to examine their relationship with Indian OFDI. The empirical estimations suggest that in line with our hypotheses, Indian firms acquired their ownership advantages by adapting improved technologies and openness of economy. Also, the economic growth during the period showed a positive relationship with its OFDI. However, we could not find any significant relationship between Indian OFDI and human capital, interest rate or exchange rate. In a recent study, Tolentino (2010) has suggested that changes to the home country-specific macroeconomic factors (such as exchange rate, openness of economy and interest rate) do not influence the level of Indian OFDI. Our study extends this suggestion to explain that there may not be a causal relationship between Indian OFDI and exchange rate, openness of economy or interest rate, but OFDI from India can be explained in terms of its openness of economy. The analyses presented in chapter 7 partially support the study by Tolentino (2010) with respect to the relationship between exchange rate and interest rate with Indian OFDI. We also suggest revisiting the received theory of OFDI from emerging markets on these particular aspects.

10.2.3. Firm level study

The firm level study presented in chapter 8 adds new information on the OFDI from emerging economies, specifically the motivations of Indian firms to invest abroad on the basis of a systematically collected firm-level dataset. The OLI advantages set out by the "eclectic paradigm" was investigated for Indian firms in Ireland. The findings from the firm-level study suggest that the mission statement of a firm is an important driver for its overseas ventures, while technological capability is a major driver for Indian MNEs' investment in Ireland. This finding also supports our results presented in chapter 7, which suggests technology as an important factor for Indian OFDI at a macroeconomic level. Apart from the tax advantages, Ireland provides Indian firms with an excellent base to explore European markets. Our survey also reveals that brownfield investments are the dominant mode of entry for Indian firms in Ireland. It should be noted that whereas Indian pharmaceutical firms have preferred to acquire existing firms, Indian information and

technology firms have made a fresh investment in Ireland. These differing motivations of Indian firms to invest in Ireland were further investigated using a case study methodology.

10.2.4. Industry level study

We carried out an industry-level study to examine the motivations of the Indian pharmaceutical firms for their overseas investments. We performed a series of case studies to understand and explain the differing motivations of Indian pharmaceutical firms in Ireland. The findings from case studies presented in chapter 9 highlights the importance of the accumulation of ownership advantages of the firm while investing in overseas markets. We provide a new perspective of the internationalization framework to integrate FDI motivations to the existing Uppsala model. Based on the cross case analysis, we propose a pyramid of internationalization motives (chapter 9, Figure 9.8) pursued by Indian firms.

The global integration of Indian economy and the successful internationalization of Indian firms depend on outward investments in developed countries over and above their investment in neighbouring countries. Our findings support the argument by Luo and Tung (2007) and Aulakh (2007) in a way that despite severe constraints, some emerging economy firms such as India may adopt strategies which are neither path dependent nor evolutionary. Our findings are in line with the emerging view that the interactions between the home country legacies and the firms' dynamic capabilities are crucial for understanding their internationalization strategies that the MNEs pursue. To summarize, few macroeconomic factors such as GDP, IFDI, exports, technology and openness of economy provides a baseline setting for Indian firms which form crucial ownership advantages such as capital, technology know-how and set-off to pursue internationalization. As the firms expand their overseas operations to various countries (particularly to developed countries), firms gain other ownership advantages, such as marketing networks, brand and goodwill. The accumulation of intangible assets such as knowledge and experience, make the firm a unique entity with some nonreplicable assets and advantages.

10.2.5. A new perspective of Indian OFDI

The findings from this thesis have led to the identification of important theoretical aspects of FDI. The study has advanced the understanding of FDI from emerging

economies in a number of ways and contributed empirically and theoretically to the literature of international business.

- This study is amongst the first to test the IDP theory for India (Verma and Brennan, 2011a). Though our empirical analysis generally supports the IDP theory, we discuss the unique features of Indian IDP.
- We are the first to examine Indian OFDI-exports relationship presented in this thesis
 (Verma and Brennan, 2011b). In this study, the causal relationship between Indian
 OFDI and exports was tested using econometric methods and the importance of exports
 in Indian OFDI was explained theoretically.
- We believe that this study is among the first to theoretically and empirically examine OFDI from an emerging market in a developed economy based on firm-level as well as industry-level data.
- This study enables us to explain the differing motivations of Indian firms in Ireland and introduces a new theory to explain the peculiarity of Indian firms using core concepts of the Uppsala model with the four motivations of FDI as suggested by Dunning (1993).

Table 10.1: Summary of the findings of the thesis

Chapter	Hypothesis/Proposition/ Research issue	Supports /Rejects	Findings/Remarks
5	IDP hypothesis	Supports	India net outward investment position follows IDP theory, few peculiarities were highlighted
6	Exports-OFDI relationship	Supports	A unidirectional causal relationship from exports to OFDI was found
7	GDP-OFDI relationship	Supports	GDP plays an important role in determining the OFDI from India
7	Trade weighted exchange rate-OFDI relationship	Rejects	Trade weighted exchange rate does not determine Indian OFDI
7	Technology-OFDI relationship	Supports	Technology was a crucial factor on a macro economic as well as on a firm level
7	Openness of economy- OFDI relationship	Supports	The openness of Indian economy is a significant factor for Indian OFDI
7	Interest rate-OFDI relationship	Rejects	It shows that financial markets are not the major source of capital for Indian MNEs
7	Human capital-OFDI relationship	Rejects	Though human capital did not show an important factor for OFDI, but the importance of human capital

			in the economy was highlighted
8	Drivers	Supports	The mission statement and technological capability are main drivers of Indian firms investment
8	Motivations	Supports	Market seeking was a common motivation among the Indian firms in Ireland
8	Location selection	Supports	Tax advantage and access to neighbouring markets were important factors while deciding on location for Indian firms
8	Mode of investment	Supports	IT firms made a fresh investment whereas pharmaceuticals firms entered Ireland through acquisition
8	Future plans	Supports	Indian firms were positive about their continued investment in Ireland
9	Differing motivations of Indian firms in Ireland	Supports	The motivations of FDI for Indian firms in Ireland have evolved with their degree of internationalization

10.4. Policy implications

The surge in OFDI from emerging economies has given a new dimension to the arguments on policy regulations. The growth of OFDI from emerging economies has been facilitated by the liberalization of regulatory policies and government supports. To optimize economic synergies, emerging market countries are actively helping firms and regimes in which either production or sales take place. Emerging economies are promoting OFDI to seek new opportunities and expand profits for their firm, however, there are concerns about its potential impact on domestic jobs, supply of capital and balance of payments. The Indian government has been playing a key role to promote FDI into and from India. The Indian government at all levels are encouraging its local enterprises to invest abroad in order to bring back capital, technology and market information which will in turn greatly boom the local economic construction. India is one of the largest host countries for FDI among the developing countries and supports OFDI. In this regards FDI related macroeconomic factors with significant influence of Indian OFDI presented in this thesis will provide a guideline for policy makers in emerging market countries. This may help a country refine its framework and formulate policies on trade and investment issues in order to improve its FDI flows and speed up economic development.

Without a doubt, OFDI has proved to be the driving force for economic growth of emerging markets including India. It has improved the liquidity of the Indian economy, and thus facilitated IFDI. The main sustainable benefit of FDI lies in its ability to bring in technical know-how for an emerging market. FDI also serves to exploit the natural resources, marketing channels and institutional advantages of another country. The thesis identified the strategic drivers of Indian OFDI, which can assist the government to construct more effective policies and coordinate existing operations of their national firms abroad.

Emerging economies are continuing to make steady gains in their proportion of world FDI flows. However, some countries are more successful than others in terms of OFDI as well as IFDI. India continues to be one of the most dominant recipients as well as source of FDI amongst the emerging market economies. It is possible that different standards in macroeconomic governance across countries play a role in this process and provide some explanation behind these trends.

Given the growing significance of OFDI from the emerging economies, we suggest that both the home and the host countries should establish a common and specific collaboration platform to raise information flow as well as coordinate the negotiations and execution of investment projects. In our opinion, emerging markets must keep in mind the crucial importance of FDI and the degree of openness for the sustained and healthy growth of the global economy. It will certainly help home government to formulate strategies and assist their domestic firms in various ways. Thus, an enabling policy framework and macroeconomic environment, such as those that are developing with the progressive liberalization of policy, seem to foster an increased external orientation of Indian enterprises. With the continued policy reforms in relation to international trade and investments, India will certainly become the prominent economic powers it aspires to be. We consider that it is an appropriate time for Indian MNEs to aggressively participate into global business activities in order to maximize their profit and ultimately promote economic growth.

10.5. Managerial implications

The improved management techniques, advanced technologies and the relatively easy access to international markets are among the commonly cited advantages associated with FDI. Importantly, serving foreign markets through exports, particularly advanced markets where most of the demand is, has strong limitations. In a wide range of products and services, competitiveness requires local presence in the market in the form of FDI. This has been the crucial explanatory factor for the globalization of firms. The development and sustenance of exclusive ownership advantages by the emerging market firms may present a unique challenge.

On the basis of our case studies presented in chapter 9, we suggest emerging market firms to follow the example of long-term players, such as Ranbaxy, Wockardt, and Reliance Life Sciences. Emerging market firms should organize their presence in the developed countries and seek majority control of their investments. We observed that pharmaceutical and information and technology sectors are promising areas to invest in the developed countries. The key lesson emerging from our analysis is the importance of firms' own technological efforts and the focus on absorption and adaptation of knowledge that gives them the confidence to move beyond the confines of the domestic market.

10.6. Limitations

Despite the useful findings presented in this thesis, there are some limitations to the results which must be dealt with to improve future research in this area. This has been a common problem with several studies, especially on emerging and developing markets, and highlights the need for more extensive better quality data. This also has implications for how applicable the findings are in a wider context as some of the explanatory power associated with variables may depend on the existence of other variables. Therefore, like all other research, our findings need to be interpreted cautiously given the relatively small number of samples, nature and size of firms that we used.

Here we highlight a few limitations of the thesis. Some of these limitations may open new horizons for the future research.

1. The fact that emerging market MNEs are not a homogeneous group, suggests that the evidence presented in this thesis about Indian OFDI may not be suitable for all

MNEs from other developing countries. The country from which a firm belongs, or the sector/industry in which it operates, the competitive advantages it exploits, the markets it targets, and the internationalization paths it follows, vary quite widely. Thus, this study may not be generalized in every aspect to all the emerging market MNEs.

- 2. Some of the variables that are potentially related to Indian OFDI have been omitted because of the difficulty in obtaining data. The omitted variables due to insufficient data might have had implications for the specification of the model and possibly had provided relevant explanation to the research questions asked in this study.
- 3. We did encounter statistical problems such as multicolinearity and omitted variables. Such data was not used in our quantitative analysis. Additionally, some of the qualitative determinants of FDI could not be analyzed in this study.
- 4. The small population for the questionnaire survey in the firm level study limits generalization of the research in a wider context.
- 5. The case study is also limited by its focus on a single sector (pharmaceutical). We suggest that the hypotheses proposed in thesis may be tested for multi-sector data with an increased sample size to add more reliability and insights to our findings.
- 6. The research was undertaken at the time when developed countries (especially the USA and most of the European countries) were suffering from economic downfall.

10.7. Future research directions

A wider area of research would include further in depth analysis of OFDI from emerging markets in small and large developed markets. Considering the fact that market size, structure and competition are not the same in all the countries, it would be imperative to study how emerging market firms behave under different settings and what are the similarities or differences in their qualities they possess for successful operation abroad. For example, a study comparing various factors influencing Indian firms investing in the UK and Ireland would be interesting, as both countries posses similar business environments, such as economic development, culture *etc.* except few factors such as market size, tax regimes *etc.*

In the spirit of aiming to understand the full set of micro- and macro-economic determinants that influence FDI decisions and patterns, it will be valuable to pursue analysis of both home- as well as host-country factors that contribute to the choice among target countries. A separation of service and manufacturing firms is likely to yield distinct patterns, not only of ownership preferences but market-entry motives and expectations. Sectoral analysis is also expected to enhance the understanding of industry specific FDI flows and its associated determinants. Therefore, this study can be further extended by considering industry specific FDI determinants as well as opportunities for increased competition. Such delineation is also likely to be evident between small and large firms and indeed between countries of origin.

Depending on data availability, it would also be interesting to model the firm-specific factors along with the country-specific factors. Since FDI takes place for multiple strategic reasons and the basis that explain market-seeking FDI are not identical to efficiency-seeking FDI, the analysis may require complex modelling. Knowledge of various issues concerning special economic zones, their effectiveness in the scope of FDI attraction, and their influence on FDI location decision might contribute to a better understanding of the FDI determinants.

The future studies should also focus on the variables relating to the regional as well as home country competency of the foreign investors. With recent improvement in the quality of data on emerging markets, future studies should include more relevant variables in order to better explain the dynamic phenomenon of OFDI. Such variables may include relative market share, relative growth of the economy, relative corporate rate, risk factors and corporate governance *etc*.

Overall, our study calls for more integration between different perspectives at firm, industry, and government levels to improve the understanding of the influence of these internal and external forces, and the mechanisms by which the influence is exerted. The findings presented in this thesis advances the understanding of OFDI from emerging market economies and open a new horizon in this fascinating area of international business research.

REFERENCES

- Accenture report (2008) Mergers & acquisitions: a new wave for a new century. Available at www.accenture.com, accessed on 10th October, 2009.
- Agarwal S. and Ramaswami S.N. (1992) Choice of foreign market entry mode: impact of ownership, location and internalization factors. *Journal of International Business Studies*, 23:1-28.
- Agarwal, J.P. (1985) *In*: Pros and Cons of Third World Multinationals: A Case Study of India. Tubingen, Kieler Studien, pp.195.
- Aggarwal, R. and Agmon, A. (1990) The internationalization of developing country firms: role of government-directed comparative advantage. *Management International Review*, 30:163-180.
- Ahluwalia, M.S. (2002) Economic reforms in India since 1991: has gradualism worked? Journal of Economic Perspectives, 16:67-88.
- Aliber, R.Z. (1970) A theory of direct foreign investment. *In*: The International Corporation. Kindleberger, C.P. (Ed.). Cambridge, MA, MIT Press.
- Almeida, P. (1996) Knowledge sourcing by foreign multinationals: Patent citation analysis in the US semiconductor industry. *Strategic Management Journal*, 17:155–165.
- Altenburg, T. (2000) Linkages and spillovers between transnational corporations and small and medium-sized enterprises in developing countries: opportunities and best policies. *In*: TNC-SME Linkages for Development: Issues-Experiences-Best Practices. UNCTAD (Ed.) New York and Geneva, United Nations.
- Altheide, D.L. and Johnson, J.M. (1994) Criteria for assessing interpretive validity in qualitative research. *In*: Handbook of Qualitative Research. Denzin, N.K. and Lincoln, Y.S. (Eds.). Thousand Oaks, CA: Sage, pp.485-499.
- Amoateng, K. and Ben, A.A. (1996) Economic growth, export and external debt causality: the case of African countries. *Applied Economics*, 28:21-27.
- Andersen, O. (1992) On the internationalization process of firms: a critical analysis. *Journal of International Business Studies*, 24:209-231.

- Andersen, O. (1997) Internationalisation and market entry mode: a review of theories and conceptual frameworks. *Management International Review*, 37:27-42.
- Anderson, E. and Gatignon, H. (1986) Modes of entry: a transactions cost analysis and propositions. *Journal of International Business Studies*, 17:1-26.
- Anderson, P.F. (1983) Marketing, scientific progress and scientific method. *Journal of Marketing*, 47:18-31.
- Andrade, A.D. (2009) Interpretive research aiming at theory building: adopting and adapting the case study design. *The Qualitative Report*, 14:42-60.
- Arnold, D.J. and Quelch, J.A. (1998) New strategies in emerging markets. *Sloan Management Review*, 40:7-21.
- Athreye, S. and Kapur S. (2009) Introduction: the internationalization of Chinese and Indian firms trends, motivations and strategy. *Industrial and Corporate Change*, 18:209-221.
- Athreye, S. and Godley, A. (2009) Internationalization and technological leapfrogging in the pharmaceutical industry. *Industrial and Corporate Change*, 18:295–323.
- Athukorala, P.C. (2009) Outward foreign direct investment from India. *Asian Development Review*, 26:125-153.
- Aulakh, P.S. (2007) Emerging multinationals from developing economies: Motivations, paths and performance. *Journal of International Management*, 13:235-240.
- Babbie, E. (1986) *In*: The Practice of Social Research. Belmont, CA: Wadsworth Publication Co.
- Baek, H.Y. and Kwok C.C.Y. (2002) Foreign exchange rates and the corporate choice of foreign entry mode. *International Review of Economics and Finance*, 11:207-227.
- Baharumshah, A.Z., Evan, L. and Stilianos, F. (2003) On the sustainability of current account deficits: evidence from four ASEAN countries. *Journal of Asian Economics*, 14:465-487.
- Bajo, O. and Maria, M. (2001) Foreign direct investment and trade: a causality analysis. *Open Economies Review*, 12:305-323.

- Bajo-Rubio, O. and Sosvilla-Rivero, S. (1994) An econometric analysis of foreign direct investment in Spain, 1964-89. *Southern Economic Journal*, 61:104-120.
- Bajpai, N. and Sachs, J.D. (1998) Strengthening India's strategy for economic growth. Development. Discussion paper No. 641. Harvard Institute for International Development, Harvard University.
- Banga, R. (2007). Explaining Asian autward FDI. *ARTNeT* Consultative Meeting on Trade and Investment Policy Coordination 16-17 July, Bangkok.
- Barkema, H.G., Bell J.H.J. and Pennings J.M. (1996) Foreign entry, cultural barriers and learning. *Strategic Management Journal*, 17:151-166.
- Barnard, H. (2008) Capability development and the geographic destination of outbound FDI by developing country firms. *International Journal of Technology and Globalisation*, 4:39-55.
- Barrell, R. and Pain, N. (1996) An econometric analysis of US foreign direct investment. *Review of Economics and Statistics*, 78:200-207.
- Barry, F., Gorg, H. and McDowell, A. (2003) Outward FDI and the investment development path of a late-industrializing economy: evidence from Ireland. *Regional Studies*, 37:341-349.
- Barry, F. and Bradley, J. (1997) FDI and trade: the Irish host-country experience. *Economic Journal*, 107:1798-1811.
- Barry, F. (2008) Third-level education, foreign direct investment and economic growth. International Journal of Technology Management, 38:198-218.
- Bart, C., Bontis, N. and Taggar, S. (2001) A model of the impact of mission statements on firm performance. *Management Decision*, 39:19-35.
- Bartlett, C.A. and Ghoshal, S. (2000) Going global: lessons for late movers. *Harvard Business Review*, 78:132–142.
- Beckmann, M.J. and Thisse, J.F. (1986) The location of production activities. *In*: Handbook of Regional and Urban Economics. Nijkamp, P. (Ed.), North-Holland, Amsterdam.

- Behrman J.N. (1969) *In*: Some Patterns in the Rise of the Multinational Enterprise. University of North Carolina: Chapel-Hill, NC.
- Beiske, B. (2007) *In*: Research Methods: Uses and Limitations of Questionnaires, Interviews, and Case Studies, GRIN Verlag, Germany.
- Belkak, C. (2001) The Austrian investment development path. *Transnational Corporations*, 10:107-137.
- Benbasat, I., Goldstein, D.K. and Mead, M. (1987) The case research strategy in studies of information systems. *MIS Quarterly*, 11:369-386.
- Bende-Nabende, A. (1999) *In*: FDI, Regionalism, Government Policy and Endogenous Growth, Ashgate, UK.
- Berdie, D.R., Anderson, J.F. and Niebuhr, M.A. (1986) *In*: Questionnaire Design and Use, 2nd Edition. The Scarecrow Press, Inc. Metuchen, NJ.
- Berger, P. and Luckmann, T. (1966) *In*: The Social Construction of Reality. Garden City NY: Doubleday.
- Bertoni, F., Elia, S. and Rabbiosi, L. (2008) The firm-specific drivers of acquisitions from emerging to advanced countries. Paper presented to UNU-MERIT, September 26, 2008.
- Bhadoria V., Chakraborty, B. and Mitra, P. (2010) *In*: India Pharma 2020: Propelling Access and Acceptance Realising True Potential, McKinsey and Company, New Delhi.
- Bhagwati, J. and Desai, P. (1970) *In*: India: Planning for Industrialization. London: Oxford University Press.
- Billington, N. (1999) The location of foreign direct investment: an empirical analysis. *Applied Economics*, 31:65-76.
- Blonigen, B.A. (1997) Firm-specific assets and the link between exchange rates and foreign direct investment. *American Economic Review*, 87:447-465.
- Blonigen, B.A. (2005) A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, 33:383-403.

- Bonaglia, F. and Goldstein, A. (2006) Egypt and the investment development path: insights from two case studies. *International Journal of Emerging Markets*, 1:107-127.
- Bonaglia, F., Goldstein, A. and Mathews, J. (2007) Accelerated Internationalization by Emerging Multinationals: the Case of White Goods Sector. MPRA Paper No. 1485, Munich, 2007.
- Borensztein, E., De Gregorio, J. and Lee, J.W. (1998) How does foreign direct investment affect economic growth? *Journal of International Economics*, 45:115-135.
- Bowonder, B. and Mastakar, N. (2005) Strategic business leadership through innovation and globalisation: a case study of Ranbaxy Limited. *International Journal of Technology Management*, 32:176-198.
- Bradford, D.J. (2001) Preliminary thoughts on India's economic growth. Available at: http://www.j-bradford-delong.net (accessed 2 December 2008).
- Brahmbhatt, M., Srinivasan, T.G. and Murrell, K. (1996) India in the global economy. Working paper no. 1681, World Bank Policy Research, Washington.
- Brennan, L. and Verma, R. (2010) Inward FDI in Ireland and its policy context. *Columbia FDI Profiles*, available at: http://www.vcc.columbia.edu.
- Brennan, L. and Verma, R. (2011) *In*: Inward and Outward FDI Profiles. Sauvant, K.P., Jost, T., Davies, K. and Garcés, A.M.P. (Eds.), New York: Vale Columbia Center on Sustainable International Investment.
- Brenton, P., Di Mauro, F. and Lucke, M. (1999) Economic integration and FDI: an empirical analysis of foreign investment in the EU and in central and eastern Europe. *Empirica*, 26:95-121.
- Brouthers, K.D. and Brouthers, L.E. (2001) Explaining the national cultural distance paradox. *Journal of International Business Studies*, 32:177–189
- Bryman, A. (1998) Quantitative and qualitative research strategies in knowing the social world. *In*: Knowing the Social World, May, T. and Williams, M. (Eds.), Open University Press, Buckingham. pp.138-157.

- Bryman, A. and Bell, E. (2007) *In*: Business Research Methods. Oxford University Press, Oxford.
- Buckley P.J. and Hashai N, (2009) Formalizing internationalization in the eclectic paradigm. *Journal of International Business Studies*, 40:58–70.
- Buckley, P.J. and Casson, M. (1976) *In*: The Future of the Multinational Enterprise. London: Macmillan.
- Buckley, P.J. and Castro, F.B. (1998) The investment development path: the case of Portugal. *Transnational Corporations*, 7:1-15.
- Buckley, P.J., Clegg, L.J., Cross, A.R., Liu, X. Voss, H. and Zhen, P. (2007) The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38:499-518.
- Buckley, P.J., Cross, A.R., Tan, H., Xin, L. and Voss, H.(2008) Historic and emergent trends in Chinese outward direct investment. *Management International Review*, 48:715:748.
- Buckley, P.J. and Ruane, F. (2006) Foreign direct investment in Ireland: policy implications for emerging economies. *The World Economy*, 29:1611-1628.
- Cacioppo, J.T., Semin, G.R. and Berntson, G.G. (2004) Realism, instrumentalism, and scientific symbiosis: psychological theory as a search for truth and the discovery of solutions. *American Psychologist*, 59:214-223.
- Cai, K.G. (1999) Outward foreign direct investment: a novel dimension of China's integration into the regional and global economy. *China Quarterly*, 160:856–880.
- Calhoun, M.A. (2002) Unpacking liability of foreignness: identifying culturally driven external and internal sources of liability for the foreign subsidiary. *Journal of International Management*, 8:301-321.
- Calvet, A.L. (1981) A synthesis of foreign direct investment theories and theories of the multi-national firm. *Journal of International Business Studies*, 12:141-165.

- Cantwell, J. and Tolentino, P.E. (1990) Technological accumulation and third world multinationals. Discussion Papers in International Investment and Managements, No. 139 (Reading: University of Reading).
- Casey, W.L. and College, B. (2011) The success of Ireland's foreign investment promotion strategy: a reconsideration. *Journal of International Business Research*, 10:91-107.
- Cassidy, J., Barry, F. and van Egeraat, C. (2010) Porter's diamond and small nations in the global economy: Ireland as a case study. *In:* Handboolk on Small Nations in the Global Economy. Edward Elgar Publications, UK.
- Capron. L., Dussauge, P. and Mitchell, W. (1998) Resource redeployment following horizontal acquisitions in Europe and North America, 1988–1992. Strategic Management Journal, 19:631-661.
- Carlson, S. (1966) International business research. *Acta Universitatis Uppsalensis*, Uppsala University, Sweden.
- Cavana, R.Y., Delahaye, B.L. and Sekaran, U. (2001) *In*: Applied Business Research: Qualitative and Quantitative Methods. Brisbane: John Wiley & Sons.
- Caves, R. (1974) Multinational firms, competition and productivity in host-country markets. *Economics*, 41:176-193.
- Caves, R.E. (1971) International corporations: the industrial economics of foreign investment. *Economics*, 38:1-27.
- Chadee, D.D. and Rose, E.L. (2003) Research on foreign direct investment: introduction to the special issue. *Journal of Business Research*. 56:777-778.
- Chakrabarti, A. (2001) The determinants of foreign direct investment: sensitivity analysis of cross-country regressions. *Kyklos*, 54:89-113.
- Chakraborty, C. and Basu, P. (2002) Foreign direct investment and growth in India: a cointegration approach. *Applied Economics*, 34:1061-1073.
- Chang, S.J. (1995) International expansion strategy of Japanese firms: capability building through sequential entry. *Academy of Management Journal*, 38:383-407.

- Chang, S.J. (1995) International expansion strategy of Japanese firms: capability building through sequential entry. *Academy of Management Journal*, 38:383–407.
- Chen, H. and Chen, T.J. (1998) Network linkages and location choice in foreign direct investment. *Journal of International Business Studies*, 29:445-468.
- Cheung, Y.W. and Lai, K.S. (1993) Finite-sample sizes of Johansen's Likelihood Ratio tests for cointegration. *Oxford Bulletin of Economics and Statistics*, 55:313-325.
- Child, J. and Rodrigues, S.B. (2005) The internationalization of Chinese firms: a case for theoretical extension? *Management and Organization Review*, 1:381-410.
- Chowdhury, A. and Wheeler, M. (2008) Does real exchange rate volatility affect foreign direct investment? Evidence from four developed economies. *The International Trade Journal*, 22:218-245.
- Chung, W. (2001) Identifying technology transfer in foreign direct investment: influence of industry conditions and investing firm motives. *Journal of International Business Studies*, 32:211–229.
- Clegg, J. (1987) Multinational enterprises and World competition: A comparative study of the USA, Japan, the UK, Sweden and West Germany. St Martin's Press: New York.
- Coase, R. (1937) The nature of the firm. *Economics*, 4:386-405.
- Cohen, WM. and Levinthal D.A. (1987) Participation in cooperative research ventures and the cost of learning. Technical Report, Dept. of Social and Decision Sciences, Carnegie Mellon University.
- Contractor, F.J., Kumar, V. and Kundu, S.K. (2007) Nature of the relationship between international expansion and performance: the case of emerging market firms. *Journal of World Business*, 42:401-417.
- Cuadros, A., Orts, V. and Alguacil, M. (2004) Openness and growth: re-examining foreign direct investment, trade and output linkages in Latin America. *The Journal of Development Studies*, 40:167-192.
- Cyert, R.M. and March, J.G. (1963) *In*: A Behavioral Theory of the Firm. Englewood Cliffs, NJ, Prentice Hall.

- Dasgupta, A. and Siddharthan, N. (1985) Industrial distribution of Indian exports and joint ventures abroad. *Development and Change*, 16:159-174.
- Dasgupta, N. (2008) Examining the long run effects of export, import and FDI inflows on the FDI outflows from India: A causality analysis. *Working Paper*, University of Maryland, Baltimore County, USA. Retrieved from http://gdex.dk/ofdi/64%20Dasgupta%20Nandita.pdf.
- Delios, A. and Henisz, W.J. (2000) Japanese firms' investment strategies in emerging economies. *Academy of Management Journal* 43:305-323.
- Delios, A. and Henisz, W.J. (2003) Political hazards, and the sequence of entry by Japanese firms, 1980–1998. *Journal of International Business Studies*, 34:227-241.
- Deng, P. (2004) Outward investment by Chinese MNCs: motivations and implications. *Business Horizons*, 47:8-16.
- Denzin, N.K. (1978) *In*: The Research Act: A Theoretical Introduction to Sociological Methods. New York: Praeger.
- Denzin, N.K. (2009) *In*: Qualitative Inquiry Under Fire: Toward a New Paradigm Dialogue. Walnut Creek, CA: Left Coast Press.
- Denzin, N.K. and Lincoln, Y.S. (1998) *In*: Collecting and Interpreting Qualitative Materials. Thousand Oaks, CA: Sage Publication.
- Denzin, N.K. and Lincoln, Y.S. (2000) *In*: Handbook of Qualitative Research. 2nd Edition. Thousand Oaks, CA: Sage Publication.
- Desai, M.A., Foley, F. and Hines Jr., J.R. (2005) Foreign direct investment and domestic capital stock. American Economic Review Papers and Proceedings 95:33–38.
- Dosi, G., Pavitt, K. and Soete, L. (1990) *In*: The Economics of Technical Change and International Trade, Harvester Wheatsheaf: Brighton.
- Dunning, J.H. (1977) Trade, location of economic activity and the MNE: a search for an eclectic approach. *In*: International Allocation of Economic Activity. London: Holmes and Meier, pp.395-418.

- Dunning, J.H. (1981) *In*: International Production and the Multinational Enterprise. London: George Allen & Unwin.
- Dunning, J.H. (1986) The investment development cycle revisited. *Review of World Economics*, 122:667-676.
- Dunning, J.H. (1988) The eclectic paradigm of international production: a restatement and some possible extensions. *Journal of International Business Studies*, 19:1-31.
- Dunning, J.H. (1993) *In*: Multinational Enterprises and the Global Economy. Addison-Wesley, Workingham.
- Dunning, J.H. (1995) What's wrong and right with trade theory. *International Trade Journal*, 9:153-202.
- Dunning, J.H. (1997) *In*: Alliance Capitalism and Global Business, London and New York: Routledge.
- Dunning, J.H. (1998) The changing geography of foreign direct investment. *In*: Internationalization, Foreign Direct Investment and Technology Transfer: Impact and Prospects for Developing Countries. Kumar, N. (Ed.), London and New York: Routledge.
- Dunning, J.H. (2000) The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, 9:163-190.
- Dunning, J.H. (2001) The eclectic paradigm of international production: past, present and future. *International Journal of the Economics of Business*, 8:173-190.
- Dunning, J.H. (2002) *In*: Global Capitalism, FDI and Competitiveness, Edward Elgar: Cheltenham.
- Dunning, J.H. and Zhang, F. (2008) Foreign direct investment and the locational competitiveness of countries. *Transnational Corporations*, 17:1-30.
- Dunning, J.H. and Lundan, S.M. (2008) *In*: Multinational Enterprises and the Global Economy, 2nd Edition. Cheltenham: Edward Elgar.

- Dunning, J.H., and Narula, R. (1996) The investment development path revisited: some emerging issues. *In*: Foreign Direct Investment and Governments: Catalysts for Economic Restructuring, London and New York: Routledge. pp.1-41.
- Dunning, J.H., Kim, C.S. and Lin, J.D. (2001) Incorporating trade into the industrial development path. *Oxford Development Studies*, 29:145-154.
- Dunning, J.H. and Narula, R. (1994) Transpacific foreign direct investment and the investment development path: the record assessed. *Essays in International Business*, No. 10, Columbia, SC: University of South Carolina.
- Durán, J.J. and Úbeda, F. (2001) The investment development path: a new empirical approach and some theoretical issues. *Transnational Corporation*, 10:1-34.
- Durán, J.J. and Ubeda, F. (2005) The investment development path of newly developed countries. *International Journal of the Economics of Business*, 12:123-137.
- Easterby-Smith, M., Thorpe, R. and Lowe A. (1991) *In*: Management Research. An Introduction, Sage: London.
- Eisenhardt, K.M. (1989) Building theories from case study research. *The Academy of Management Review*, 14:532-550.
- Egger, P. (2001) European exports and outward foreign direct investment: A dynamic panel data approach. *Review of World Economics*, 137:427-449.
- Ekholm, K., Forslid, R. and Markusen, J. (2007) Export Platform Foreign Direct Investment. *Journal of the European Economic Association*, 5:776-795.
- Ekeledo, I. and Sivakumar, K. (1998) Foreign market entry mode choice of service firms: a contingency perspective. *Journal of Academy of Marketing Science*, 26:274-292.
- Ekeledo, I. and Sivakumar, K. (2004) International market entry mode strategies of manufacturing firms and service firms: a resource-based perspective. *International Marketing Review*, 21:68-101.
- Elango, B. and Pattnaik, C. (2007) Building capabilities for international operations through networks: a study of Indian firms, *Journal of International Business Studies*, 38:541-555.

- Eriksson, K., Johanson, J., Majkgård, A. and Sharma, D.D. (1997) Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies*, 28, 337-360.
- Eriksson, P. and Kovalainen, A. (2008) *In*: Qualitative Methods in Business Research, Thousand Oaks, CA: Sage Publication.
- Erramilli, M.K., Agarwal, S. and Kim, S.S. (1997) Are firm specific advantages location-specific too? *Journal of International Business Studies*, 28:735-757.
- Ethiraj, S. and Levinthal, D.A. (2004) Modularity and innovation in complex systems. *Management Science*, 50:159-173.
- Ethridge, D.E. (2004) *In*: Research Method in Applied Economics. Blackwell Publishing, USA.
- Euh, Y.D. and Min, S.H. (1986) Foreign direct investment from developing countries: the case of Korean firms. *Developing Economy*, 26:149-168.
- Farmer, R.N. and Richman, B.M. (1966) *In*: International Business. An Operational Theory. Richard D. Irwin, Homewood, IL
- Feldstein, M., Hines, J. and Hubbard, R.G. (1995) *In*: The Effects of Taxation on Multinational Corporations. Chicago: University of Chicago Press.
- Feurer, R. and Chaharbaghi, K. (1995) Researching strategy formulation and implementation in dynamic environments. *Benchmarking for Quality Management & Technology*, 2:15-26.
- FICCI (2006) India Ines Acquisitions Abroad. Federation of Indian Chamber of Commerce and Industry (FICCI), New Delhi.
- Filstead, W.J. (1979) Qualitative methods: a needed perspective in evaluation research. *In*: Qualitative and Quantitative Methods in Evaluation Research. Cook, T.D. and Reichardt, C.S. (Eds.), Beverly Hills, Calif.: Sage.
- Fonseca, M., Mendonça, A. and Passos, J. (2007) The investment development path hypothesis: evidence from the Portuguese case a panel data analysis. Working paper No. 21, Technical University of Lisbon.

- Fosfuri, A. and Mottari, M. (1999) Multinationals without Advantages. *Scandinavian Journal of Economics*, 101:617-630.
- Fowler, F.J.Jr. (2002) *In*: Survey Research Methods. 3rd Edition, Thousand Oaks, CA: Sage. Gersick.
- Froot, K.A. and Stein, J.C. (1991) Exchange rates and foreign direct investment: an imperfect capital markets approach. *Quarterly Journal of Economics*, 106:1191-1217.
- Frost T. S. (2001) The geographic sources of foreign subsidiaries' innovations. *Strategic Management Journal*, 22:101-123.
- Gammeltoft P. (2008) Emerging multinationals: outward FDI from the BRICS countries, International Journal of Technology and Globalisation, 4:5-22.
- Gammeltoft, P., Barnard, H. and Madhok, A. (2010) Emerging multinationals, emerging theory: macro- and micro-level perspectives. *Journal of International Management*, 16:95-101.
- Gaur, A.S. and Kumar, V. (2010) Internationalization of emerging market firms: a case for theoretical extension. *Advances in International Management*, 23: 603-627.
- Ghauri, P.N. and Gronhaug, K. (2005) In: Research Methods for Business Studies, 3rd Edition, London: FT Prentice Hall.
- Ghauri, P.N. and Firth R. (2009) The formalization of case study research in international business. *der markt*, 48:29-40.
- Ghosh, S. (2006). Did financial liberalization ease financing constraint? evidence from Indian firm-level data. *Emerging Markets Review*, 7:176-190.
- Giavazzi, F. and Stonehill, A. (1989) Limiting exchange rate flexibility: the European Monetary System. Cambridge, MA: MIT Press.
- Gill, J. and Johnson, P. (1997) *In*: Research Methods for Managers. 2nd Edition. London: Paul Chapman Publishing.
- Glaser, B.G. and Strauss, A.L. (1967) *In*: The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine Publishing Company.

- Glass, A. and Saggi, K. (2002) Intellectual property rights and foreign direct investment. *Journal of International Economic*, 57:323-350.
- Globerman, S. and Shapiro, D. (1999) The impact of government policies on foreign direct investment: the Canadian experience. *Journal of International Business Studies*, 30:513-532.
- Gopinath, S. (2007) Overseas Investments by Indian Companies: Evolution of Policy and Trends. Mimeo. Reserve Bank of India, Mumbai.
- Gopinath, S. (2007) Overseas Investments by Indian Companies Evolution of Policy and Trends. International Conference on Indian Cross-Border Presence/ Acquisitions, Mumbai (www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=320, Accessed on 3rd October, 2009).
- Granger, C.W.J. (1969) Investigating causal relations by econometric models and cross-spectral methods. *Econometrics*, 37:424-438.
- Gray, H. (1995) The modern structure of international economic policies. *Transnational Corporations*, 4:49–66.
- Grosse, R. (1985) An imperfect competition theory of the MNE. *Journal of International Business Studies*, 16:57-80.
- Grossman, G., Helpman, E. and Szeidl, A.(2006) Optimal integration strategies for the multinational firm. *Journal of International Economics*, 70:216-238.
- Grubaugh, S. (1987) Determinants of direct foreign investment. *Review of Economics and Statistics*, 69:149-151.
- Guba, E.G. and Lincoln, Y.S. (1994) Competing paradigms in qualitative research. *In: Handbook of qualitative research*, Denzin, N.K. and Lincoln, Y.S. (Eds.) Thousand Oaks, CA: Sage. pp.105-117.
- Gubbi, S. R., Aulakh, P.S., Ray, S., Sarkar, M.B. and Chittoor, R. (2009) Do international acquisitions by emerging-economy firms create shareholder value? the case of Indian firms. *Journal of International Business Studies*, 41:397-418.

- Guillen, M.F. (2003) Experience, imitation, and the sequence of foreign entry: wholly owned and joint-venture manufacturing by South Korean firms and business groups in China, 1987–1995. *Journal of International Business Studies* 34:185–198.
- Gunnigle, P. and McGuire, D. (2001) Why Ireland? A Qualitative Review of the Factors Influencing the Location of US Multinationals in Ireland with Particular Reference to the Impact of Labour Issues. *The Economic and Social Review*, 32: 43-67.
- Harris, S.C. and Sutton, R.I. (1986) Functions of parting ceremonies in dying organizations. Academy of Management Journal, 29:5-30.
- Hawawini, G., Subramanian, V. and Verdin, P. (2004) The home country in the age of globalization: how much does it matter for firm Performance? *Journal of World Business*, 39:121-135.
- Hay, F. (2006) FDI and globalization in India. Presented at the Indian economy in the era of financial globalization, 28-29 September, Paris, available at: http://economix.uparis10.fr/pdf/colloques/2006 India/Hay.pdf_(accessed 15 June 2008).
- Helpman, E. 1984) A simple theory of international trade with multinational corporations. *Journal of Political Economy*, 92:451-471.
- Helpman, E. and Krugman, P.R. (1985) *In*: Market Structure and Foreign Trade, MIT Press, Cambridge.
- Henisz, W.J. (2000) The institutional environment for multinational investment. *Journal of Law, Economics and Organization*, 16:334-64.
- Hennart, J.F. and Park, Y.R. (1993) Greenfield vs. acquisition: the strategy of Japanese investors in the United States. *Management Science*, 39:1054-1070.
- Hennart, J.F. (1986) The causes of counter trade. Working paper, Center for International Management Studies, The Wharton School.
- Herzer D. (2008) The long-run relationship between outward FDI and domestic output: Evidence from panel data. *Economics Letters*, 100:146-149.
- Hladik, K.J. (1985) International Joint Ventures, Lexington Books, Lexington, MA.

- Hoepfl, M.C. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9: 47-63.
- Hong, S. and Kim, S. (2003) Locational determinants of Korean manufacturing investments in the European Union, Hitotsubashi. *Journal of Economics*, 44:91-103.
- Hood, N. and Young, S. (1979) The economics of multinational enterprise. Longman: London and New York.
- Hoskisson, R., Eden, L., Lau, C. and Wright, M. (2000) Strategy in emerging economies The Academy of Management Journal, 43:249-267.
- Huang, Y. and Khanna, T. (2003) Can India overtake China?" Foreign Policy, 74-81.
- Hughes, J. (1990) The Philosophy of Social Research, Longman, London.
- Hussey, J. and Hussey, R. (1997) *In*: Business Research. Macmillan Business Press, Basingstoke, UK.
- Hutzschenreuter, T., Pedersen, T. and Volberda, H. (2007) The role of path dependency and managerial intentionality: a perspective on international business research. *Journal of International Business Studies*, 38:1055-1068.
- Hymer, S. (1976) *In*: The International Operations of National Firms. Cambridge, MA: MIT Press.
- Hymer, S. (1960) The international operations of national firms: A study of direct foreign investment. Ph.D. thesis, Department of Economics, Massachusetts Institute of Technology.
- IDA Ireland, 2010, available at: www.idaireland.com
- Indian School of Business ValeColumbia Center survey of Indian multinationals (2009)

 The Growth Story of Indian Multinationals, Hyderabad and New York, April 9,
 2009 Available at: http://www.vcc.columbia.edu.
- Benbasat, I., Goldstein, D.K. and Mead, M. (1987) The Case Research Strategy in Studies of Information Systems, Case Research Strategies, MIS Quaterly.

- Jaklic, A. and M. Svetlicic (2003) Enhanced transition through outward internationalization: Outward FDI by Slovenian Firms. *In*: Transition and Development. Aldershot: Ashgate.
- Jeon, B.N. and Rhee, S.S. (2008) The determinants of korea's foreign direct investment from the United States, 1980-2001: an empirical investigation of firm-level data. Contemporary Economic Policy, Western Economic Association International, 26:118-131.
- Jha, R. (2003) Recent trends in FDI flows and prospects for India. Working paper, Australian National University, Australia, 18 August.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24, 602-611.
- Johansen, S. and Juselius, K. (1990) Maximum likelihood estimation and inference on cointegration with applications to the demand for money. *Oxford Bulletin of Economics and statistics*, 52:169-210.
- Johanson, S. and Vahlne, J.E. (1977) The internationalization process of the firm: a model of knowledge development and increasing foreign market commitment. *Journal of International Business*, 8:23-32.
- Johanson, J. and Vahlne, J.E. (1990) The mechanism of internationalization. *International Marketing Review*, 7:11-24
- Johanson, J. and Wiedersheim-Paul, F. (1975) The internationalization of the firm: four Swedish cases. *Journal of Management Studies*, 12:305-322.
- Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A. (2007) Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1:112-133.
- Joshi, V. and Little, I.M.D. (1994) *In*: India: Macroeconomics and Political Economy 1964–1991. Washington, DC: World Bank.
- Kapila, R. and Kapila, U. (2002) *In*: Indian Agriculture in the Changing Environment, Vols. 1 and 2, Delhi: Academic Foundation.

- Katherin, M. and McCarthy, C. (2007) Is China on the investment development path? Journal of Asian Business Studies, 1:1-9.
- Katz, J. and B. Kosacoff (1983) Multinationals from Argentina. *In*: The New Multinationals: The Spread of Third World Enterprises, Lall (ed.) John Wiley & Sons, New York. pp.137-219.
- Kayam, S.S. (2009) Home market determinants of FDI outflows from developing and transition economies. Paper presented at Anadolu International Conference in Economics, 17-19 June, Eskisehir, Turkey.
- Kelkar, V.L. (2001) India's Reform Agenda: Micro, Meso and Macro Economic Reforms. Fourth Annual Fellows Lecture 2001, Centre for the Advanced Study of India, University of Pennsylvania.
- Kelley, K., Clark, B., Brown V. and Sitzia J.(2003) Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15:261-266.
- Khanna, T. and Palepu, K. (2000) The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43:268-285.
- Kidder, T. (1982), 'The Soul of a New Machine', New York, Avon.
- Kim, J.M. and Rhe, D. K. (2009) Trends and determinants of South Korean outward foreign direct investment. *The Copenhagen Journal of Asian Studies*, 27:126-154.
- Kim, W.S. and Lynn, E.O. (1987) Foreign direct investment theories, entry barriers, and reverse investments in U.S. manufacturing industries. *Journal of International Business Studies*, 19:53-66.
- Kim, Y.H. (2007) Impacts of regional economic integration on industrial relocation through FDI in East Asia. *Journal of Policy Modeling*, 29:165–180
- Kincheloe, J.L. and McLaren, P.L. (1994) Rethinking critical theory and qualitative research. In: *Handbook of Qualitative Research*. Denzin, N.K. and Lincoln, Y.S. (Eds.). Thousand Oaks, CA: Sage. pp.138-157

- Kindleberger, C. (1969) *In:* American Business Abroad. Princeton University Press, Princeton, NJ.
- King, R., Plosser, C., Stock, J. and Waston, M. (1991) Stochastic trends and economic fluctuation. *American Economic Review*, 81:819–840.
- Koch, A.J. (2001) Selecting overseas markets and entry modes: two decision processes or one? *Marketing Intelligence & Planning*, 19:65 75.
- Kogut, B. (2003) In: The Global Internet Economy, MIT Press.
- Kogut, B, and Zander U. (1993) Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24:625-646.
- Kogut, B. (1985) Designing global strategies: profiting from operating flexibility. *Sloan Managenent Review*, 27:27-38.
- Kogut, B. and Singh, H. (1988) The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19:411-432.
- Kogut, B. and Chang, S.J. (1991) Technological capabilities and Japanese Foreign Direct Investment in the United States. The Review of Economics and Statistics, 73:401-413.
- Kogut, B. (1983) Foreign direct investment as a sequential process. *In*: The Multinational Corporation in the 1980s. Kindleberger, C. and Audretsch, D. (Eds.) MIT Press, Cambridge.
- Kohlhagen, S.W. (1977) The effects of exchange-rate adjustments on international investment: comment. *In*: The Effects of Exchange Rate Adjustments, Clark, P.B. Logue, D.E. and Sweeney, R. (Eds.) US Government Printing Office: Washington, DC, pp.194–197.
- Kojima, K. (1982) Macroeconomic versus International Business approach to direct Foreign Investment. *Hitotsubashi Journal of Economics*, 23:2-19.
- Kojima, K. (1978) *In*: Direct Foreign Investment: A Japanese Model of Multinational Business Operations. London: Groom Helm.

- Krykillis, D. and Pantelidis (2003) Macroeconomic determinants of outward foreign direct Investment. *International Journal of Social Economics*, 30:827-836.
- Kudaisya, M.M. (2003) In: The Life and Times of G. D. Birla. New Dehli: Oxford University Press.
- Kueh, S.H., Puah, C.H. and Mansor, S.A. (2009) Empirical analysis on emerging issues of Malaysia outward FDI from macroeconomic perspective. *International Review of Business Research Papers*, 5:124-134.
- Kumar, N. (2008) Internationalization of Indian enterprises: patterns, strategies, ownership advantages, and implications. *Asian Economic Policy Review*, 3:242–261.
- Kumar, N. (1995) Industrialization, liberalization and two way flows of foreign direct investments: the case of India. Discussion paper series 9504, The United Nations University.
- Kumar, K. and McLeod, M.G. (1981) *In*: Multinationals from Developing Countries. Lexington, MA: D.C. Heath.
- Kumar, N. (1995) International linkages, technology and exports of developing countries: trends and policy implications. Discussion Papers 07, United Nations University, Institute for New Technologies.
- Kumar, N. (1996) Intellectual property protection, market orientation and location of overseas R&D activities by multinational enterprises. World Development, 24:673-688.
- Kumar, N. (1998) Emerging outward foreign direct investment from Asian developing countries: prospects and implications. *In*: Globalization, Foreign Direct Investment and Technology Transfers, Kumar, N. (Ed.) London and New York: Routledge, pp.177-194.
- Kumar, N. (2006) Emerging multinationals: trends, patterns and determinants of outward investment by Indian enterprises. Research and Information System for Developing Countries, New Delhi.

- Kumar, N. (1987) Technology imports and local research and development in Indian manufacturing. *The Developing Economies*, 25:220-233.;
- Kumar, N. (2007) Emerging TNCs: trends, patterns and determinants of outward FDI by Indian enterprises. *Transnational Corporations*, 16:1-26.
- Kumar, N. (2001) WTO regime, host country policies and global patterns of MNE activity: implication of recent quantitative studies for India. *Economic and Political Weekly*, 36:39-50.
- Kuzel, A.J. and Like, R.C. 1991. Standards of trustworthiness for qualitative studies in primary care. Primary Care Research: Traditional and Innovative Approaches. *In*: Norton, P.G., Stewart, M., Tudiver, F., Bass, M.J. and Dunn, E.V. (Eds.) Newbury Park, Calif.: Sage. pp.138-158.
- Kwon, Y.C. and Konopa, L.J. (1993) Impact of host country market characteristics on the choice of foreign market entry mode. *International Marketing Review*, 10:60-76.
- Kyrkilis, D. and Pantelidis, P. (2003) Macroeconomic determinants of outward foreign direct investment. *International Journal of Social Economics*, 30:827-836.
- Lal, D. (1998) *In*: Unfinished Business: India in The World Economy. Oxford University Press, New York, NY.
- Lal, K. (2004) E-Business and export behavior: evidence from Indian firms. *World Development*, 32:505-517.
- Lall S. (1996) The investment development path: some conclusions. *In*: Foreign Direct Investment and Governments, Catalysts for Economic Restructuring. Dunning, J.H. and Narula, R. (Eds.) London: Routledge, pp. 422-441.
- Lall S. and Siddarthan, N.S. (1982) The monopolistic advantages of multinationals: lessons from foreign investment in the U.S. *The Economic Journal*, 92:668-683.
- Lall, R.B. (1986) *In*: Multinationals from the Third World: Indian Firms Investing Abroad, Delhi: Oxford University Press.
- Lall, S. (1980) Monopolistic advantages and foreign involvement by US manufacturing industry. *Oxford Economic Papers*, 32:102-122.

- Lall, S. (1998) Exports of manufactures by developing countries: emerging patterns of trade and location. *Oxford Review of Economic Policy*, 11:54-73.
- Lall, S. (1983a) *In*: The New Multinationals: The Spread of Third World Enterprises London: Wiley/IRM.
- Lall, S. (1983b) The emergence of third world multinationals: Indian joint ventures overseas. *World Development*, 10:127-146.
- Lecraw, D.J. (1977) Direct investment by firms from less developed countries. *Oxford Economic Papers*, 29:442-457.
- Lecraw, D.J. (1993). Outward direct investment by Indonesian firms: motivation and effects. *Journal of International Business Studies*, 24:589-600.
- Lessard, D. and Lucea, R. (2008) Mexican multinationals: insights from CEMEX. *In*: Emerging Multinationals from Emerging Markets, Ramamurti, S. (Ed.), Cambridge University Press.
- Levinsohn, J. (1996). CARWARS: Trying to make sense of U.S-Japan trade frictions in the automobile and automobile parts markets, discussion paper No. 389. National Bureau of Economic Research.
- Li, J. (1995) Foreign entry and survival: effects of strategic choices on performance in international markets. *Strategic Management Journal*, 16:333-351
- Lieberman, M. and Asaba, S. (2006) Why do firms imitate each other? *Academy of Management Review*, 31:366-385.
- Lien, Y.-C., Piesse, J., Strange, R. and Filatotchev, I. (2005) The role of corporate governance in FDI decisions: evidence from Taiwan. *International Business Review*, 14:739-773.
- Liew, V.K.S. (2004) Which lag length selection criteria should we employ? *Economics Bulletin*, 3:1-9.
- Lim, S. and Moon, H. (2001) Effects of outward foreign direct investment on home country exports: the case of Korean firms. *International Business Review*, 9:42-49.

- Lin, A.L. (1995) Trade effects of foreign direct investment: evidence for Taiwan with four ASEAN countries. *Review of World Economics*, 131:737-747.
- Lincoln, Y.S. and Guba, E.G. (2000) Paradigmatic controversies, contradictions, and emerging confluences. *In*: Handbook of Qualitative Research. Denzin, N.K. and Lincoln, Y.S. (Eds.) Thousand Oaks, CA: Sage. pp.163-188.
- Lincoln, Y.S. and Guba, E.G. (1985). *In*: Naturalistic inquiry. Newbury Park, CA: Sage. London.
- Liu, X., Buck, T. and Shu, C. (2005) Chinese economic development, the next stage: outward FDI? *International Business Review*, 14:97–115.
- Liu, X., Wang, C. and Wei, Y. (2001) Casual links between foreign direct investment and trade in China. *China Economic Review*, 12:190-202.
- Longman (1995) *In*: Dictionary of Contemporary English. Longman. London, Longman Group Limited: 1666.
- Love, J.H. and Lage-Hidalgo, F. (1999) The ownership advantage in Latin American FDI: a sectoral study of US direct investment in Mexico. *Journal of Development Studies*, 35:76-95.
- Love, J.H. (2003) Technology sourcing versus technology exploitation: an analysis of US foreign direct investment flows. *Applied Economics*, 35:1667-1678.
- Love, J.H. and Lage-Hidalgo, F. (2000) Analysing the determinants of US direct investment in Mexico. *Applied Economics*, 32:1259-1267.
- Luo, Y. and Tung, R. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38:481-498.
- MacDonald, R. and Colm, K. (1987) On the specification of Granger-causality tests using the cointegration methodology. *Economics Letters*, 25:149-153.
- Magee, S.P. (1977) Information and the multinational corporation: an appropriability theory of direct foreign in-vestment. *In*: The new international economic order. Bhagwati, J.N. (Ed.) Cambridge, MA: MIT Press. pp.317-340.

- Makino, S., Lau, C. M. and Yeh, R. S. (2002) Asset-exploitation versus asset-seeking: Implications for location choice of foreign direct investment from newly industrialized economies. *Journal of International Business Studies*, 33:403–422.
- Makino, S., Isobe, T. and. Chan C.M (2004). Does country matter? *Strategic Management Journal*, 25:1027-1043.
- Makino, S., Lau, C.M. and Yeh, R.S. (2002) Asset-exploitation versus asset seeking: implication for location choice of foreign direct investment from newly industrialized economies. *Journal of International Business Studies*, 33:403-421.
- Markusen, J. R. (1998) Multinational firms, location and trade. *World Economy*, 21:733-756.
- Markusen, J.R., Venables, A.J., Konan, D.E. and Zhang, K.H. (1996) A unified treatment of horizontal direct investment, vertical direct investment and the pattern of trade in goods and services. *NBER working paper no. W5696*.
- Markusen, J.R. (1984) Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics*, 16:205-226.
- Markusen, J.R. and Maskus, K.E (2002) Discriminating among Alternative Theories of the Multinational Enterprise. *Review of International Economics*, 10:694-707.
- Martinussen, J. (1988) *In*: Transnational Corporations in a developing Country; The Indian Experience, New Delhi: Sage.
- Mathews, J. (2006) Dragon multinationals: new players in 21st century globalization. *Asia Pacific Journal of Management*, 23: 5-27.
- Mathews, J.A. (2002) *In*: Dragon Multinationals: A New Model of Global Growth, Oxford University Press: New York.
- McGrath, J. E. and Johnson, B. A. (2003) Methodology makes meaning: How both qualitative and quantitative paradigms shape evidence and its interpretation. *In*: Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design. Camic, P.M., Rhodes, J.E. and Yardley, L. (Eds.) Washington, DC: American Psychological Association. pp.31-48.

- Meyer, K. E. and Sinani E. (2009) When and where does foreign direct investment generate positive spillovers? a meta-analysis. *Journal of International Business Studies*, 40:1075-1094.
- Meyer, K.E. (2001) Transition economies. *In*: Oxford Handbook of International Business. Rugman, A. and Brewer, T. (Eds.) Oxford University Press: Oxford.
- Meyer, K.E. and Estrin, S. (2001) Brownfield entry in emerging markets. *Journal of International Business Studies*, 32:575-584.
- Milelli, C., Hay, F. and Shi, Y. (2010) Chinese and Indian firms in Europe: characteristics, impacts and policy implications. *International Journal of Emerging Markets*, 5:377-397
- Milleli, C. (2006) International expansion by Indian firms: what of European market entry? presented at the Indian economy in the era of financial globalization, 28-29 September 2006, Paris, available at: http://economix.u-paris10.fr/docs/21/Indian-firms-in-Europe Milell.pdf (accessed 30 November 2008).
- Montek, S.A. (2002) Economic reforms in India since 1991: has gradualism worked? Journal of Economic Perspectives, 16:67–88.
- Moosa, I.A. (2002) *In*: Foreign Direct Investment: Theory, Evidence and Practice. New York: Palgrave.
- Morris, S. (1987) Trends in foreign direct investment from India (1950-1982). *Economic and Political Weekly*, Vol. XXII, No.45, 1909-1918.
- Motta, M. and Norman, G. (1996) Does economic integration cause foreign direct investment? *International Economic Review*, 37:757-783.
- Müller, T. (2007) Analyzing modes of foreign entry: greenfield investment versus acquisition. *Review of International Economics*, 15:93-111.
- Mullor-Sebastian, A. (1983) The product life cycle theory: empirical evidence. *Journal of International Business Studies*, 14:95-105.
- Mundell, R.A. (1957) International trade and factor mobility. *American Economic Review*, 47:321-335.

- Nachum, L. and Wymbs, C. (2005) Product differentiation, external economies and MNE location choices: M&As in global cities. *Journal of International Business Studies*, 36:415-434.
- Nachum, L. and Zaheer, S.(2005) The persistence of distance? The impact of technology on mne motivations for foreign investment. Strategic Management Journal, 26:747-768.
- Nagaraj, R. (2006) Indian investment abroad: what explains the boom? *Economic and Political Weekly* XLI:4716–8.
- Narula, R. (1996) *In*: Multinational Investment and Economic Structure: Globalisation and Competitiveness, Routledge, London.
- Nayyar, D. (2008) The internationalization of firms from india: investment, mergers, and acquisitions. *Oxford Developments Studies*, 36:11-31.
- Neumayer, E. (2007) Do double taxation treaties increase foreign direct investment to developing countries? *Journal of Development Studies*, 43:1501-1519.
- Nicholas, S.J. (1982) British Multinational Investment before 1939. *Journal of European Economic History*, 11:605-630.
- Niosi, J. (1999) The internationalisation of industrial R&D: from technology transfer to the learning organisation. *Research Policy*, 28:107–117.
- North, D.C. (1990) *In*: Institutions, Institutional Change and Economic Performance, Cambridge: Cambridge University Press.
- Nunnenkamp, P. (2002) Determinants of FDI in developing countries: has globalisation changed the rules of the game? *Kiel Working Paper No. 1122*, July. Kiel Institute for World Economics, Germany.
- OECD (1998) *In*: Foreign Direct Investment and Economic Development: Lessons from Six Emerging Economies. Paris.
- OECD (2009) OECD Investment Policy Reviews: India 2009, Paris: OECD.
- Oliver, C. (1997) sustainable competitive advantage: combining institutional and resource-based views. *Strategic Management Journal*, 18:697-713.

- Oppenheim, A.N. (1992) *In*: Questionnaire Design, Interviewing and Attitude Measurement. London: Continuum.
- Organization for Economic Co-operation and Development. (1997) Globalisation and small and medium enterprises. Paris: OECD.
- Oxley, J.E. (1999) Institutional environment and the mechanisms of governance: the impact of intellectual property protection on the structure of inter-firm alliances. *Journal of Economic Behavior and Organization*, 24:283-310.
- Ozawa, T. (1990). Multinational corporations and the "flying-geese" paradigm of economic development in the Asian Pacific region, paper presented at the 20th Anniversary World Conference on Multinational Enterprises and 21st Century Scenarios, Tokyo (July).
- Ozawa, T. (1996) Japan: the macro-IDP, meso-IDPs and the technology and the technology development path (TDP). *In*: Foreign Direct Investment and Governments Dunning, J.H. and Narula, R. (Eds.) London and New York: Routledge, pp.142-173.
- Ozawa, T., (1992) Foreign direct investment and economic development. *Transnational Corporations*, 1:27-54.
- Pacek, N. and Thorniley, D. (2007) Emerging markets: Lessons for business success and the outlook for different markets. Bloomberg Press.
- Pain, N. (1997) Continental drift: European integration and the location of UK foreign direct investment. *Manchester School Supplement*, 65:94-117.
- Pain, N. and Wakelin, K. (1998) Export Performance and the Role of Foreign Direct Investment. The Manchester School of Economic and Social Studies Supplement, 66:62-88.
- Palich, L. and Gomez-Mejia, L.R. (1999) A theory of global strategy and firm efficiencies: considering the effects of cultural diversity. *Journal of Management*, 25:587-606.
- Palit, A. (2009) India's Foreign Investment Policy: Achievements & Inadequacies, Centre Asie Ifri, Asie Visions 18.

- Paloni, N.F. and Youssef, A. (2001) Human capital and FDI inflows to developing countries: new empirical evidence. *World Development*, 29:1593-1610.
- Paul, J. (2008) In: International Business, 4th edition, PHI Learning Pvt. Ltd., New Delhi.
- Pearce, R. (1999) The evolution of technology in multinational enterprise: the role of creative affiliates. *International Business Review*, 8:125-148.
- Peng, M.W. (2004) Identifying the big question in international business research. *Journal of International Business Studies*, 35:99-108.
- Peng, M. W. (2006) In: Global Strategy. Thomson South-Western: Cincinnati.
- Peng, M.W. (2000) In: Business Strategies in Transition Economies, SAGE, California.
- Peng, M.W. and Delios, A. (2006) What determines the scope of the firm over time and around the world? An Asia pacific perspective. *Asia Pacific Journal of Management*, 23:385-405.
- Penrose, E. (1995) *In*: The Theory of the Growth of the Firm, 3rd Edition, Oxford: Oxford University Press.
- Perrow, C. (1986) In: Complex organizations, 3rd Edition. NewYork: Random House.
- Petri, P.A. (1994) The regional clustering of foreign direct investment and trade. *Transnational Corporations*, 3:1-24.
- Pfaffermayr, M. (1996) Foreign outward direct investment and exports in Austrian manufacturing: substitutes or complements? *Weltwirtschaftliches Archiv*, 132:501-552.
- Pfaffermayr, M. (1994) Foreign direct investment and exports: a time series approach. Applied Economics, 26:337-351.
- Pfeffer, J. (1982) In: Organizations and organization theory Marshfield, MA: Piiman.
- Pinfleld, L. (1986) A fleld evaluation of perspectives on organizational decision making. Administrative Science Quarterly, 31:365-388.

- Pitelis, C. (2010) Determinants of foreign direct investment in developed economies: a comparison between European and non-European countries. *Contributions to Political Economy*, 29:111-128.
- Pitelis, C. (2006) Stephen Herbert Hymer and/on the (theory of the) MNE and international business. *International Business Review*, 15:103-110.
- Polit, D.F., Beck, C.T. and Hungler, B.P. (2001) *In*: Essentials of Nursing Research: Methods, Appraisal and Utilization. 5th Edition, Philadelphia: Lippincott Williams & Wilkins.
- Ponterotto, J.G. (2005) Qualitative research training in counseling psychology: a survey of directors of training. *Teaching of Psychology*, 32: 60–62.
- Porter, M. (1980) In: Competitive Strategy, New York: Free Press.
- Porter, M. (1990) In: The competitive advantage of nations. New York: Free Press.
- Pradhan, J.P. (2003a) Foreign direct investment and economic growth in developing countries: further evidence from panel data. *Asian Economic Review*, 45:197–217.
- Pradhan, J.P. (2003b) Rise of service sector outward foreign direct investment from Indian economy: trends, patterns, and determinants. MPRA Paper 17078, University Library of Munich, Germany.
- Pradhan, J.P. (2004) The determinants of outward foreign direct investment: a firm level analysis of Indian manufacturing. *Oxford Development Studies*, 32:619-639.
- Pradhan, J.P. (2005) Outward foreign direct investment from India: recent trends and patterns. *GIDR Working Paper*, No. 153, Gujarat Institute of Development Research, Ahmedabad, India.
- Pradhan, J. P. (2006a) Global competitiveness of Indian pharmaceutical industry: trends and strategies. ISID Working Paper No. 2006/05. Available at SSRN: http://ssrn.com/abstract=1413728.
- Pradhan J.P. (2006b) Quality of foreign direct investment, knowledge spillovers and host country productivity: a framework of analysis, MPRA Paper No. 12336.

- Pradhan, J.P. (2006c) How do Indian multinationals affect exports from home country. Working paper No. 07, Institute for Studies in Industrial Development, New Delhi.
- Pradhan, J.P. (2010) Indian FDI falls in global economic crisis: Indian multinationals tread, cautiously. *Columbia FDI Perspectives, No. 11.*
- Pradhan, J.P. (2007) Growth of Indian multinationals in the world economy: implications for development. Working paper No. 04, Institute for Studies in Industrial Development, New Delhi.
- Pradhan, J.P. (2008) *In*: Indian Multinationals in the World Economy: Implications for Development, Bookwell Publisher, New Delhi.
- Pradhan, J.P. and Abraham V (2005) Overseas mergers and acquisitions by Indian enterprises: patterns and motivations. *Indian Journal of Economics*, LXXXV:365-386.
- Pradhan, J.P. and Alakshendra A. (2006) Overseas acquisition versus greenfield foreign investment: which internationalization strategy is better for Indian pharmaceutical enterprises? ISID Working paper, No. WP2006/07.
- Pradhan, J.P. and Sahoo, M.K. (2005) Outward foreign direct investment by Indian small and medium-sized enterprises. A consultancy report prepared for the UNCTAD's global network of global players project, 31 October 2005, available at: http://www.unctad.org/en/docs/c3em26d2a2_en.pdf, (accessed 14 September 2008).
- Pradhan, J.P. and Singh, N. (2008) Outward FDI and knowledge flows: a study of the Indian automotive sector. Working paper No. 10, Institute for Studies in Industrial Development, New Delhi, India.
- Pradhan, J.P. and Abraham, V. (2005) Overseas mergers and acquisitions by Indian enterprises: patterns and motivations. *Indian Journal of Economics*, No. 338.
- Prugel, T. A. (1981) The determinants of foreign direct investments: an analysis of US manufacturing industries. *Managerial and Decisions Economics*, 2:220-228.

- Quer D, Claver E. and Rienda L. (2007) Business and management in China: a review of empirical research in leading international journals. Asia Pacific Journal of Management 24: 359-384.
- Raff, H. (2002) Preferential trade agreements and tax competition for foreign direct investment. CESIFO Working paper No. 763.
- Ramamurti, R. (2009). Why study emerging-market multinationals? *In*: Emerging Multinationals in Emerging Markets. Ramamurti, R. and Singh, J. (Eds.) Cambridge: Cambridge University Press. pp.3-22.
- Ramamurti, R. and Singh, J.V. (2009) Indian multinationals: generic internationalization strategies. *In*: Emerging Multinationals in Emerging Markets. Ramamurti, R. and Singh, J. (Eds.) Cambridge University Press: Cambridge.
- Ricart, J. E., Enright, M.J, Ghemawat, P., Hart, S.L. and Khanna, T. (2004) New frontiers in international strategy. *Journal of International Business Studies*, 35:175-200.
- Rios-Morales, R. and Brennan, L. (2008) Ireland's innovative governmental policies promoting internationalisation. *Research in International Business and Finance*, 23:157-168.
- Root, F.R. (1994) *In*: Entry strategies for International Markets, Lexington Books, Washington, DC.
- Rugman, A.M. (2009) *In*: Rugman reviews International Business. Palgrave publications, UK.
- Rugman, A.M. (1981) *In*: Inside the Multinationals: The Economics of Internal Markets, New York: Columbia University Press.
- Russ, K.N. (2007) The endogeneity of the exchange rate as a determinant of FDI. *Journal of International Economics*, 71:344-372.
- Sachwald, F. (2001) Going multinational: the Korean experience of direct investment. *In*: Studies in Global Competition. London: Routledge.
- Sanyal, R.N. (2001) *In*: International Management: A Strategic Perspective, Prentice Hall, NewJersey.

- Satyanand P.N. and Pramila, R. (2010) Outward FDI from India and its policy context. *Columbia FDI Profiles*.
- Sauvant, K.P. (2005) New sources of FDI: the BRICs outward FDI from Brazil, Russia, India and China. *Journal of World Investment and Trade*, 6:639-709,
- Schmitz, A. and Helmberger, P. (1970) Factor mobility and international trade: the case of complementarity. *American Economic Review*, 60:761-767.
- Schmukler, S. and Vesperoni, E. (2001) Globalization and firms' financing choices: evidence from emerging markets. William Davidson Working Paper No. 388.
- Schuller, G. (2004) A proposal for a new FDI definition. *IMF Committee on Balance of Payments Statistics and OECD Workshop on International Investment Statistics*. May 2004, Luxembourg.
- Schwandt, T.A. (1994) Constructivist, interpretivist approaches to human inquiry. *In*: Handbook of qualitative research Denzin, N.K. and Lincoln, Y.S. (Eds.) Thousand Oaks, CA: Sage. pp.118-137.
- Schwandt, T.A. (2000) Three epistemological stances for qualitative inquiry: interpretivism, hermeneutics, and social constructionism. *In*: Handbook of qualitative research Denzin, N.K. and Lincoln, Y.S. (Eds.) Thousand Oaks, CA: Sage. Thousand Oaks, CA: Sage. pp.189-213.
- Schwartz, S.H. (1999) A theory of cultural values and some implications for work. *Applied Psychology: An International Review*, 48: 23-47.
- Sciarra, D. (1999) The role of the qualitative researcher. *In*: Using qualitative methods in psychology. Kopala, M. and Suzuki, L.A. (Eds.) Thousand Oaks, CA: Sage. pp.37-48).
- Shan, W. and Song, J. (1997) foreign direct investment and the sourcing of technological advantage: evidence from biotechnology industry. *Journal of International Business Studies*, 28:267-284.
- Shapiro, A. (1989) In: Multinational financial management. 3rd Edition. Boston: Allyn and Bacon.Bools, D.C. Heath & Co.

- Sharma, K. (2000) Export growth in India: has FDI played a role? *Working paper No.* 86, Economic Growth Center Yale University.
- Sharma, V.M. and Erramilli, M.K. (2004) Resource-based explanation of entry mode choice. *Journal of Marketing Theory and Practice*, 12:1-18.
- Sim, A.B., and Pandian, J. R. (2003) Emerging Asian MNEs and their internationalization strategies-case study evidence on Taiwanese and Singapore firms. *Asia Pacific Journal of Management*, 20: 27–50.
- Simango, C.B. (2000) Corporate strategy R&D and technology transfer in the European pharmaceutical industry: research findings. *European Business Review*, 12:28-33.
- Singh, K. (2005) Foreign direct investment in India: a critical analysis of FDI from 1991-2005. Research Internship Programme, Centre for Civil Society, New Delhi.
- Slater, G. and Spencer, D. (2000) The uncertain foundations of transaction costs economics. *Journal of Economic Issues*, 34:61-87.
- Smith, J.K. (1983) Quantitative versus qualitative research: An attempt to clarify the issue, *Educational Researcher*, 12:6–13.
- Srivastava, S. and Sen, R. (2004) Competing for global FDI: opportunities and challenges for the Indian economy. *South Asia Economic Journal*, 5:233-260.
- Stake, R. (1995) In: The art of case research. Thousand Oaks, CA: Sage Publications
- Stevens, G.V.G. (1993) Exchange rates and foreign direct investment: a note. *International Finance Discussion Papers*, April, No. 444, Washington DC: Board of Governors of the Federal Reserve System.
- Stopford, J. and Wells L. (1972) *In*: Managing the multinational enterprise: organization of the firm and ownership of the subsidiaries. New York.
- Subramanyam, V.N. and Mahambare V. (2003) FDI in India. *Transnational Corporations* 12:45-72.
- Sullivan, D. (1994) Measuring the degree of internationalization of a firm. *Journal of International Business Studies*, 25:325-342.

- Svetlicic, M. (2003) Theoretical context of outward foreign direct investment from transition economies. *In*: Facilitating Transition by Internationalization: Outward Direct Investment from European Economies in Transition. Svetlicic, M. and Rojec, M. (Eds.) Aldershot: Ashgate. pp.3-28.
- Tallman, S. (1992) A strategic management perspective on host country structure of multinational enterprises. *Journal of Management*, 18:455-471.
- Tan, W. (2002) *In*: Practical Research Methods. Pearson Education Asia Pte Ltd., Singapore.
- Teece, D.J., Pisano, G. and Shuen, A. (1997) Dynamic capabilities and strategic management. *Strategic Management Journal*, 18:509-533.
- Tiwari R. and Herstatt C. (2010) Excellent Target: Indian Investment in Germany Recent Developments and Success Factors, Germany Contact India, Vol. 2, pp. 18-19. Available at SSRN: http://ssrn.com/abstract=1694578.
- Tolentino P E (2010) Home country macroeconomic factors and outward FDI of China and India. *Journal of international management*, 16:102–120
- Tolentino, P.E. (1993) *In*: The Global Shift in International Production: The Growth of Multinational Enterprises from Developing Countries. London and New York: Routledge.
- Tolman, D. L. and Brydon-Miller, M. (2001) *In*: From Subjects to Subjectivities: A Handbook of Interpretive and Participatory Methods. New York: New York University Press.
- UNCTAD (2004) India's outward FDI: a giant awakening? Available at http://www.unctad.org/sections/dite_iiab/docs/diteiiab20041_en.pdf.
- UNCTAD (2007) Global Players from Emerging Markets: Strengthening Enterprise Competitiveness through Outward Investment, United Nations, New York and Geneva.
- UNCTAD Hand Book of Statistics, (2009), UNCTAD, New York and Geneva.

- UNCTAD Investment Brief (2004) India's outward FDI: a giant awakening? Available on www.unctad.org/sections/dite_iiab/docs/diteiiab20041_en.pdf (accessed on 26 October 2009).
- UNCTAD Investment Brief (2006) Developing countries are beginning to promote outward FDI. Available on http://www.unctad.org/en/docs/webiteiia20065_en.pdf (accessed on 30 September 2009).
- UNCTAD's global network of global players project, 31 October 2005, available at: http://www.unctad.org/en/docs/c3em26d2a2_en.pdf, (accessed 14 September 2008).
- UNCTAD Hand Book of Statistics, (2007), UNCTAD, New York and Geneva.
- van Egeraat, C. and Breathnach, P. (2008) The drivers of transnational subsidiary evolution: the upgrading of process R&D in the Irish pharmaceutical industry. *NIRSA Working Paper 38*, Maynooth: National University of Ireland, Maynooth, Ireland.
- van Egeraat C. and Barry, F. (2008) The Irish pharmaceutical industry over the boom period and beyond. Available at http://www.tcd.ie/business/staff/fbarry/papers/The%20Irish%20Pharmaceutical%20I ndustry%20over%20the%20Boom%20Period%20and%20Beyond.pdf.
- van Egeraat, C. (2006) Spatial concentration in the Irish pharmaceutical industry: the role of government intervention and agglomeration economies. *NIRSA Working Paper 28*. National University of Ireland, Maynooth, Ireland.
- Van Hoesel R. (1999) *In*: New Multinational Enterprises from Korea and Taiwan: Beyond Export-led Growth. Routledge: London and New York.
- Varma, S. (2009) International venturing by Indian it firms: a motive analysis. *Journal of Emerging Knowledge on Emerging Markets* 1:93-112.
- Veal, A.J. (2006) *In*: Research Methods for Leisure and Tourism: A Practical Guide THIRD EDITION, Financial Times Prentice Hall /Pearson Education, Harlow, England
- Verbeke, A. (2010) International acquisition success: scial community and dominant logic dimensions. *Journal of International Business Studies*, 41:38-46.

- Verma, R. and Brennan, L. (2011a) The investment development path theory: evidence from India, *International Journal of Emerging Markets*, 6:74 89.
- Verma, R. and Brennan, L. (2011b) The influence of exports on outward foreign direct investment: the case of India, *In:* Huston, E., Sinkovics, R.R. and Berrill J. (Eds.), Firm-Level Internationalization Regionalism and Globalization (pp. 113-125). Palgrave Macmillan: UK.
- Verma, S. and Shah, A. (2007) In: Wockhardt: Wock"ing the talk... HDFC securities Ltd.
- Vernon, R. (1966) International investment and international trade in the product life cycle. *Quarterly Journal of Economics*, 80:190-207.
- Veugelers, R. (1991) Locational determinants and ranking of host countries: an empirical assessment. *Kyklos*, 44:363-382.
- Virmani, A. (2001) India's 1990-91 crisis: reforms, myths and paradoxes. Working paper No. 4, Planning Commission, Government of India, December.
- Virmani, A. (2004) India's economic growth: from socialist rate of growth to bharatiya rate of growth. Working paper No. 122, Indian Council for Research on International Economic Relations, New Delhi, January.
- Wagner, J. (1991) Die bundesrepublikanische Industrie auf dem Weltmarkt, Berlin.
- Walker, D.H.T. (1997) Choosing an appropriate research methodology. *Construction Management*. 15:149-159.
- Wall, S. and Rees, B. (2004) *In*: International Business, 2nd Edition, New York, Prentice Hall/Financial Times.
- Walsham, G. (1995) Interpretive case studies in IS research: nature and method. *European Journal on Information Systems*, 4:74-81
- Webb, C. (1989) Action research: philosophy, methods and personal experiences. *Journal of Advanced Nursing* 14:403-410.
- Webb, E.J., Campbell, D.T., Schwartz, R.D. and Sechrest, L. (1966) *In*: Unobtrusive measures. Chicago: Rand McNally.

- Wei, S.Z.C. and Zhu, Z. (2007) A revisit to the outward FDI determinants: further evidence from count panel data models with fixed effects. *Applied Economics Letters*, 4:809-812.
- Well, L.T.Jr. (1983) In: Third World Multinationals, Cambridge, MA:MIT Press.
- Wells, L.T.Jr.(1977) The internationalisation of firms from developing countries. In: Multinationals from Small Countries. Agmon, T. and Kindleberger, C.P. (Eds.) Cambridge: MIT Press. pp.133-156.
- Wernerfelt, B. (1984) A resource based view of the firm. *Strategic Management Journal*, 5:171-180.
- Wesson, T. (1994) Toward a fuller understanding of foreign direct investment: the example of hyundai's investment in the U.S. personal-computer industry. *Business and the Contemporary World*, 6:123–136.
- Williams, M. and May, T. (1996) *In*: Introduction to the philosophy of social research. Routledge.
- Williamson, O.E.(1981) The economics of organization: the transaction cost approach.

 American Journal of Sociology. 87:548-577.
- Winter, G. (2000) A comparative discussion of the notion of validity in qualitative and quantitative research. *The Qualitative Report*, 4:3-4.
- Wolf, M. (2009) What India must do if it is to be an affluent country. Financial times, 7 July, available at: http://www.ft.com/martinwolf (accessed 18 August 2009).
- World Investment Report (2006) FDI from Developing and Transition Economies: Implications for Development. UNCTAD. New York and Geneva.
- World Investment Report (2010) Investing in a low-carbon economy, UNCTAD, New York and Geneva.
- World investment Report, (1994) Translational Corporations, Employment and the Workplace, UNCTAD, Geneva.

- 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*, 42:1-33.
- Yamakawa, Y., Peng, M.W. and Deeds, D.L. (2008) What drives new ventures to internationalize from emerging to developed economies? *Entrepreneurship Theory and Practice*, 32:59–82.
- Yang, X., Jiang, Y., Kang, R. and Ke, Y. (2009) A comparative analysis of the Internationalization of Chinese and Japanese multinationals. *Asia Pacific Journal of Management*, 26:141-162.
- Yeaple, S., 2003. The complex integration strategies of multinationals and cross country dependencies in the structure of foreign direct investment. *Journal of International Economics*, 60:293-314.
- Yin, R.K. (2003) *In*: Case Study Research: Design and Methods. Beverly Hills, CA: Sage Publishing.
- Yin, R. (1984) In: Case Study Research. Thousand Oaks, CA: Sage Publications.
- Yiu, D. and Makino, S. (2002) The choice between joint venture and wholly owned subsidiary: An institutional perspective. *Organization Science*, 13:667-683.
- Yiu, D.W., Lau, C. and Bruton, G.D. (2007) International venturing by emerging economy firms: the effects of firm capabilities, home country networks, and corporate entrepreneurship. *Journal of International Business Studies*, 38:519-540.
- Young, S. and Lan, P. (1997) Technology Transfer to China through foreign direct investment. *Regional Studies*, 31:669-679.
- Young, S., Huang C.H. and McDermott M. (1996) internationalization and competitive catch-up processes: case study evidence on Chinese multinational enterprises.

 Management International Review, 36:295-314.
- Zaheer, S. (1995) Overcoming the liability of foreignness, *The Academy of Management Journal*, 38:341-363.

- Zhang, K.H. (2001) Does Foreign Direct Investment Promote Economic Growth?

 Evidence from East Asia and Latin America. *Contemporary Economic Policy*, 19:175-85.
- Zhang, K. and Markusen, J. (1999) Vertical multinationals and host country characteristics. *Journal of Development Economics*, 59:233-252.
- Zhang, H.Y. and Van den Bulcke, D. (1996) International management strategies of Chinese multinational firms. *In*: Management Issues in China in the 1990s: International Enterprises. Child, J. and Lu, Y. (Eds.) London, UK: Routledge. pp.141-164.

APPENDICES

Appendix I

COVER LETTER

Dage						
Dear				٠		9

I am a PhD candidate in School of Business, Trinity College Dublin. I am carrying out a survey to find the determinants of Indian overseas investment in Ireland as part of my research.

I am circulating a quick 15-questions based survey to the concerned managers to get their views on various aspects of Indian investment in Ireland. Accordingly, I am seeking your kind co-operation in completing the questionnaire. Enclosed herewith please find a paper based questionnaire and a prepaid addressed return envelope.

All responses will be treated in total confidence. A summary of the result may be provided to you after the completion of the survey and analysis. The report will provide you with useful insights on future Indian investment and its growth in these two countries.

If you have any queries regarding the survey, please do not hesitate to contact me at vermara@tcd.ie.

Many Thanks

Sincerely,

Rakhi Verma, PhD candidate School of Business Trinity College Dublin Ireland

Appendix II

A SURVEY OF INVESTMENTS IN IRELAND BY INDIAN FIRMS

This survey is designed to identify and explore the drivers, motivations, mode of investment, challenges and future plans of Indian firms in Ireland.

This survey is divided into four sections:	
Section A: Factors driving overseas inves	stment in Ireland.
Section B: Motivations behind overseas i	nvestment in Ireland.
Section C: Mode of entry into overseas m	narket in Ireland.
Section D: Success factors, challenges an	d future plans of the firm.
Results will be used for research purpose the reasons for Indian investment.	e only. The outcome of this research will help me to understand
	treated with absolute confidentiality. The name of companies, Il not be released. Completion of the questionnaire should take
Many thanks for your cooperation!!	
Please tick, if you would like to receive the	ne summary of the survey
	National Annual Contract
Please provide the following information	on:
Name of the firm:	
Industry that best describes the activities	of your firm:
Total no. of employees in Ireland	Location:
No. of years of your firm has been based	in Ireland:
Your Name:	
Your Name: Your email address:	Your phone number:

Section A

A1. For each of the following criteria, please rate their importance for your firm in its overseas investment in Ireland.

	Not important		Extre	emely imp	portant
Sufficient capital availability in the firm	1	2	3	4	5
Expertise in international expansion	1	2	3	4	5
International presence as a part of firm's mission	1	2	3	4	5
Level of specialization of the firm	1	2	3	4	5
Technology know how of the firm	1	2	3	4	5
Patent rights of the firm	1	2	3	4	5
Huge exports to the Irish market	1	2	3	4	5
Speed of response to customer demand	1	2	3	4	5
Managerial capability of the firm	1	2	3	4	5
Deploying acquired technologies in the Irish market	1	2	3	4	5
If others, please insert here:					
Section B					
B1. Which of the following is/are the relevant mot decision in Ireland?	ivations for you	ır firm	behind o	verseas i	nvestment
Resource seeking: (e.g. raw material, infrastructure, o	cheap labor)				
Market seeking: (e.g. access to EU market)					
Efficiency seeking: (e.g. export promotion)					
Strategic asset seeking: (e.g. trademark/brand names, technology, management skills)					

B2. (Only respond if you identified the relevant motivation of your firm as "resource seeking")

For each of the following criteria, please rate their importance for your firm in its "resource seeking" motivated overseas investment in Ireland.

important	Not	importa	Extremely		
Less strict laws and regulation in Ireland	1	2	3	4	5
Lower taxes, duties, tax relief and other incentives	1	2	3	4	5
offered by Ireland To acquire natural resources in Ireland	1	2	3	4	5
Lower cost of raw materials in Ireland	1	2	3	4	5
Lower unit labor cost in Ireland	1	2	3	4	5
Better financing possibilities in Ireland	1	2	3	4	5
If others, please insert here:					
if others, piease filsert fiere.					

B3. (Only respond if you identified the relevant motivation of your firm as "market seeking")

For each of the following criteria, please rate their importance your firm in its "market seeking" motivated overseas investment in Ireland.

N	lot importan	t	Extre	emely im	portant
Access to the markets of developed world countries	1	2	3	4	5
To enlarge existing market share in the Irish market	1	2	3	4	5
Growing demand in the Irish market	1	2	3	4	5
Need to adapt to local tastes in Ireland	1	2	3	4	5
To provide a better after sales services	1	2	3	4	5
Presence in the critically important markets of Ireland	1	2	3	4	5
Access to the neighboring markets of Ireland	1	2	3	4	5
Follow the domestic competitors that have invested in Ir	eland 1	2	3	4	5
Lack of market in India	1	2	3	4	5
Saturated market in India	1	2	3	4	5
Follow the customers that have invested in Ireland	1	2	3	4	5
Diversification of market risk	1	2	3	4	5
Avoid tariff and other trade restrictions	1	2	3	4	5
Preferential agreements	1	2	3	4	5
If others, please insert here:					

B4. (Only respond if you identified the relevant motivation of your firm as "efficiency seeking")

For each of the following criteria, please rate their importance for your firm in its "efficiency seeking" motivated overseas investment in Ireland.

	Not important	Extremely important			
Economies of scale (e.g. reduced cost of production)	1	2	3	4	5
Economies of scope (e.g. more promotion on same marketing cost)	1	2	3	4	5
Suitable facilities in Ireland	1	2	3	4	5
Better technology in Ireland	1	2	3	4	5
Product specialization in Ireland	1	2	3	4	5
Restructuring of your firm to eliminate financial risk	1	2	3	4	5
Export-promotion from India	1	2	3	4	5
If others, please insert here:					

B5. (Only respond if you identified the relevant motivation of your firm as "strategic asset seeking")

For each of the following criteria, please rate their importance for your firm in its "strategic asset seeking" motivated overseas investment in Ireland.

Not important	Extre	Extremely important			
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
1	2	3	4	5	
	Not important 1 1 1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 1 2	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	

t prior to	o your in	vestmen	t in Irela	nd?
irm?				
firm's ir	nvestmen	as "gree	nfield")	
d" inves	tment by	your fir	m in Irel	and.
ortant		Extreme	ely impor	tant
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
	firm's ind" investortant 1 1 1 1	firm's investment by cortant 1 2 1 2 1 2 1 2 1 2 1 2 1 2	firm's investment as "greet d" investment by your firm or tank to be a second of the s	firm's investment as "greenfield") d" investment by your firm in Irelevant Extremely import 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

C4. (Only respond if you identified the relevant mode of your firm's investment as "brownfield")

Rate the importance of the following factors for "brownfield" investment by your firm in Ireland.

	Not important		Extremely importan		
Entry to the Irish market with relatively less risk	1	2	3	4	5
Brand name of the pre-existing firm	1	2	3	4	5
Strong technology of the pre-existing firm	1	2	3	4	5
Acquisition of firm specific created asset	1	2	3	4	5
Past performance of the pre-existing firm	1	2	3	4	5
Opportunity to extend the core business of the firm	1	2	3	4	5
Moving up the value chain	1	2	3	4	5
If others, please insert here:					

C5. (Only respond if you identified the relevant mode of your firm's investment as "joint venture")

Rate the importance of the following factors for "joint venture" investment by your firm in Ireland.

	Not important		Ext	remely i	mportan	
International distribution network of foreign partner	1	2	3	4	5	
Satisfactory control with less commitment	1	2	3	4	5	
Risk sharing	1	2	3	4	5	
The only legal possibility	1	2	3	4	5	
Technological and marketing capacities of the foreign partner	1	2	3	4	5	
Foreign partner has better access to capital	1	2	3	4	5	
Distribution channels of foreign partner	1	2	3	4	5	
Foreign partner has better connection with local administration/business	1	2	3	4	5	
Foreign partner knows the local market conditions	1	2	3	4	5	
Your firm knows the foreign partner very well	1	2	3	4	5	
If others, please insert here:						

Section D

D1. Please rate the challenges encountered by your firm in investing overseas in Ireland.

		Not at all	Minor	Major
Cultural differences		1	2	3
Nationalist attitudes of customers and	d public authority	1	2	3
Corruption in Ireland		1	2	3
Low margins in Ireland		1	2	3
Limitation on setting price in Ireland		1	2	3
Lack of support from Indian governm	nent	1	2	3
Unfavorable legislation in reland		1	2	3
Lack of access to financing		1	2	3
High cost of financing		1	2	3
Lack of familiarity to distribution cha	nnels in Ireland	1	2	3
If others, please insert here:				
D2. What has been your firm's per	formance?			
Matched expectations				
Partially matched expectations				
Did not match expectations				
D3: If your firm's performance hat economic slowdown?	s not matched expe	ctations, to what	extent is due	to the globa
Completely				
To some extent				
Not at all				

D4. Rate the importance of the following factors in so far as they have influenced the success or otherwise of the overseas investment made by your firm?

	Not important	Ext	mportant		
Quality of products of the firm	1	2	3	4	5
Knowledge of competition and foreign market	1	2	3	4	5
Personal contacts with customers and representatives	1	2	3	4	5
Previous international experience of the firm	1	2	3	4	5
Following clients, adapting to foreign market	1	2	3	4	5
Skilled management of the firm	1	2	3	4	5
Market conditions in foreign market	1	2	3	4	5
Political and economic changes in Ireland	1	2	3	4	5
Technological knowhow of the firm	1	2	3	4	5
Strategic planning of the firm	1	2	3	4	5
Market condition in India	1	2	3	4	5
Price compared to competition	1	2	3	4	5
Government co operation in Ireland	1	2	3	4	5
Co-operation of business partners in Ireland	1	2	3	4	5
If others, please insert here:					
D5. What is your firm's future plan?					
To increase the investment					
To retain the investment					
To reduce the investment					
Exit from the market					

Appendix III

CASE STUDIES PROTOCOL

(I) Case study overview

The case studies present a theoretical framework to account for the motivation of MNEs from Indian pharmaceutical firms in Ireland, and the interplay between such motivations and the factors that lead to difference in the motivations pursued by the firms. The study attempts to explain the difference in FDI motivations that has been observed between the case firms. It combines three theoretical perspectives derived from 1) the OLI theory in the light of new studies on emerging market MNEs such as the linkage, leverage and learning (LLL) framework and springboard perspective of these firms. 2) industry-centered theories of FDI, and 3) theories on degree of internationalization.

(II) Background

In the context of India's increasing level of OFDI, the strategic importance of ownership (O), locational (L) and internalization (I) factors of Indian firms that have invested in Ireland, a questionnaire survey was carried out. The objective of this survey was to gain insight on the OLI factors that have influenced the internationalization of these firms. There is no existing study on India firms investing in a small economy such as Ireland. Studies have made by comparing FDI (and MNEs) from developing countries with that from developed countries, focusing on specific cases of certain countries, business operations of certain types of firms, or specific functional issues of some firms. The understanding of emerging market MNEs in a developed country is still limited.

(III) Study propositions

- With the same home country, host country and industry sector, Indian firms can differ in their motivation for FDI in a developed country (How).
- Indians firms have differing motivations for their investment in a developed country (Why).

(IV) Case selection

The results of the questionnaire survey formed the genesis of the case studies. It was found that though the Indian firms belong to the same industry, they can have different motivations for their acquisitions in Ireland. The case was selected from the population of Indian firms and an overview of the case firms is given in Table I:

Table I. Selection of case studies.

Firm	Home country	Host country	Industry	Mode of entry	Motivation
Ranbaxy	India	Ireland	Pharmaceuticals	Acquisition	Market seeking
Wockhardt	India	Ireland	Pharmaceuticals	Acquisition	Efficiency seeking, Market and strategic asset seeking
Reliance Life Sciences	India	Ireland	Pharmaceuticals	Acquisition	Resource, market, Efficiency and strategic asset seeking

(V) Field procedures

- A questionnaire survey was distributed among Indian firms in Ireland. The results of the survey provided the focus of the case studies.
- An extensive literature review was carried out on two aspects:-
 - (i) Theories that explain the basic understanding of the raised theoretical propositions.
 - (ii) Theories that have the potential to explain the phenomena in question but have not been highlighted by the extant literature around the case study proposition.
- Telephonic interviews with senior managers in the home country of the case firms.
- Press releases
- Companies annual reports
- Articles by top business magazines and newspapers.

(VI) Case study questions

- What is reason that the case firms have different motivations, though they belong to the same industry have chosen Ireland as their location and entered through the same mode of entry?
- Is there any link missing that might be able to explain the above phenomenon? If yes what is that link?

(VII) Data collection methods

The following data collection methods were used in the case studies performed in the research.

Survey: A paper based questionnaire survey was carried out within the population of Indian firms in Ireland.

Interviews: A series of telephonic interviews were conducted with the senior managers of the case firms.

Archives: A wide range of official company documents, annual reports, press releases, internal bulletins and FDI magazines were analyzed.

Media sources: Interview published in the top magazines and newspaper were compiled for the purpose.

(VIII) Case analysis

Yin (1981) suggests the technique where case studies attempt to explain a phenomenon. An explanatory case study consists of (a) an accurate rendition of the facts of the case (b) some consideration of alternative explanations of these facts, and (c) a conclusion based on the single explanation that appears most congruent with the facts (Yin 1981). The nature of the case studies was found to be explanatory rather than exploratory. Yin (1994) describes two general analytic strategies:-

1. Relying on **theoretical propositions**: The theoretical orientation guide the analysis which follows theoretical propositions that have formed the design of the case study. It helps to focus attention on certain data and to ignore other data.

2. Developing a **case description**: a descriptive framework for organizing the case study; analysis organized on the basis of description of the general characteristics and relations of the phenomenon in question.

The analytical approach used in this study is based on theoretical propositions. The theoretical propositions raised are guiding the case studies research. Now the analytical techniques of the case studies are discussed

- 1. *Pattern matching* (explanatory/descriptive): It mainly involves comparing empirically based patterns with predicted one(s).
 - a) Expected outcomes as a pattern: comparing if the initially predicted results have been found and alternative patterns are absent.
 - b) Rival explanations as patterns: searching if some of the theoretically salient explaining conditions might be articulated in empirical findings; then the presence of certain explanation should exclude the presence of others.
 - c) Simpler patterns: pattern matching is possible also with only few variables, if the derived patterns are predicted to have enough clear differences.
- 2. *Explanation-building* (mainly explanatory): this strategy includes analyzing case study data by building an explanation about the case & identifying a set of causal links. Explanation is a result of a series of iterations.

This case study generally followed explanation-building strategy and the stages involved in explanation building are:-

- Initial theoretical statement
- Comparing findings of an initial case
- Revising statement
- Comparing details of the case
- Revising
- Comparing to other additional cases

Yin (1994) alerts that there is a danger of drifting away from the original topic of interest using this analytical strategy.

3. *Time-series analysis:* This technique answers "How"- and "Why"- questions about relationships & changes of events over time. It involves identifying theoretically

proposed sequences of an event that are expected to lead to a certain outcome; identification of events must be done before the onset of the investigation, then comparing this trend with the trend of empirical data points and then comparing with some rival trend to rule alternatives out.

Based on the characteristics of the above three strategies and the nature of the case studies in this research, an explanation building strategy was found to be more appropriate for the case analysis. While analysing the case studies and prior reaching to any conclusion, the following points were carefully noted:

- That it relied on all the relevant evidence.
- All major rival interpretations are dealt.
- Most significant issue of the study is addressed.

The objective of the case study was not just to observe the differences in motivations between the Indian firms from a specific industry in their investment in Ireland but also to examine and explain how are they different and why they pursue different motivations when they are similar on many internationalization features such as mode of entry, drivers, home country, host country etc.

Based on the analytical approach outlined above the structure of the three case studies report is as follows:

- 1. Company overview and history of acquisition
- 2. Within case analysis
- 3. Cross case analysis
- 4. Case conclusion

(IX) Case study schedule

The following is the outline schedule developed for the three case studies. As made very clear by many scholars that theory building from case studies is highly iterative process. The central idea is that researchers constantly compare theory and data, iterating toward a theory which closely fits the data. A close fit is important to building good theory because it takes advantage of the new insights possible from the data and yields an empirically valid theory. The data collection and analysis was completed in parallel time frame (Table II).

Table II. Case study time frame.

ID .	Task name	Start	Finish	
1	Questionnaire survey	January 2010	October 2010	
2	Literature review	January 2010	Feb 2011	
3	Secondary data collection	September 2010	December 2010	
1	Telephonic interviews	January 2011	March 2011	
MO	Case analysis	February 2011	March 2011	
5	Cross case analysis	February 2011	March 2011	

Appendix IV

VARIABLES USED TO TEST THE IDP HYPOTHESIS

IFDI: Inward FDI stock in US\$ (UNCTAD, 2007).

OFDI: Outward FDI stock in US\$ (UNCTAD, 2007).

GDP per capita: Gross domestic product per capita, based on purchasing power parity (PPP). Gross domestic development is Gross domestic product converted to international dollars using purchasing power parity (UNCTAD, 2007).