India's Emerging Multinationals in Developed Region

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Abstract: Indian FDI has been rapidly growing into developed region. As a result, developed region emerged as the largest host to Indian investment during 2000–07. An increasing number of firms from a wide range of economic activities are now undertaking FDI projects into developed countries. Considering this, the present study has explored the growth of developed region bound Indian FDI since 1960s and explored various developmental impacts they have on host economies. It is argued that Indian FDI can make contribution to development by making host country markets more competitive, reducing cost of products and services and increasing the range of consumer choice. However, the negative short-run impact of brownfield form of Indian FDI on local R&D and employment is clearly acknowledged.

1. Introduction

The emergence of developing country multinationals has been the subject of a growing literature in recent years. This issue has been spurred by the recognition of a rising number of developing country firms undertaking large volumes of outward investment. Outward FDI (OFDI) flows from developing and transition region has increased from just US $3 billion in 1980 to US $11.9 billion in 1990 to US $304 billion in 2007[1]. These emerging regions’ OFDI flows accounted for 6 per cent, 5 per cent, and 18 per cent of the global OFDI flows in respective years. A growing number of researchers and policy makers are concerned with the rise of these new players in the geography of global direct investment. Yet the corporate and organizational behaviour of these emerging multinationals is not yet well understood.

There are two broad informal views that exist about the rise of emerging multinationals (EMs) in developed countries. One informal view—that continued from the past literature (ESCAP/UNCTC, 1985; Oman, 1986)—is that these developing country multinationals are generally regional players and they may not have a significant consequence for the global market at large. This thought gets empirical strength when one finds that nearly 78 per cent of FDI from developing and transition economies (excluding offshore financial centres) went to other developing countries during 2000–2004 (UNCTAD, 2006, Table-III.8, pp.118). The other view focusing on the growing news of large-sized acquisitions done by emerging multinationals in developed region presumes that these developing country players have come of age to be global corporations and more attention needs to be devoted to explore the behavior of these new actors[2]. In this characterization, the EMs are viewed as strong competitors to their domestic industrial sector and concerns were raised about their possible development impact. So, it appears that sometime the global growth of EMs are exaggerated beyond the actual picture and sometimes they are dismissed as regional players—inconsequential to developed countries.

The purpose of this study is to provide some empirical insights into the debate of emerging multinationals in developed countries from the analysis of Indian firms investing in developed region. The focus shall be on understanding the salient nature of Indian FDI flows into developed region and then identifying a set of leading emerging Indian multinationals (EIMs) to compare them with their global peers. Apart from presenting the actual picture of EIMs foraying into developed region market, the study also shares some reflections concerning their likely development impact on host developed

[1] http://www.unctad.org/Templates/Download.asp?docid=10597&lang=1&intItemID=3277

[2] Large acquisitions like Chorus (UK) by Tata Steel (India), Wind Telecomunicazioni SpA (Italy) by Weather Investments (Egypt), Cable & Wireless Optus (Australia) by SingTel (Singapore), personal computers division of IBM (US) by Lenovo (China), etc., have attracted prominent media attention in developed countries.

countries and local firms. The basic intention is to present a realistic picture about EIMs so as to appreciate what they are and what they are not. Since the current research on Indian multinationals is yet to develop into a comprehensive level and has been hampered by the unavailability of required data, some of analytic insights offered in this study are not backed by quantitative analysis.

The study has been structured as follows: Section 2 summarizes the broad trends and features of greenfield outward FDI undertaken by Indian firms in developed region. Indian firms' overseas acquisition activities are reviewed in Section 3. Next Section compares the profiles of a total of 18 EIMs with that of their global competitors in terms of asset and sales size, number of foreign affiliates and degree of foreign production. Section 5 discusses factors influencing outward investment activities of Indian firms. Possible impacts of EIMs on host developed country are discussed in Section 6. Final Section concludes the study with a summary of the main findings.

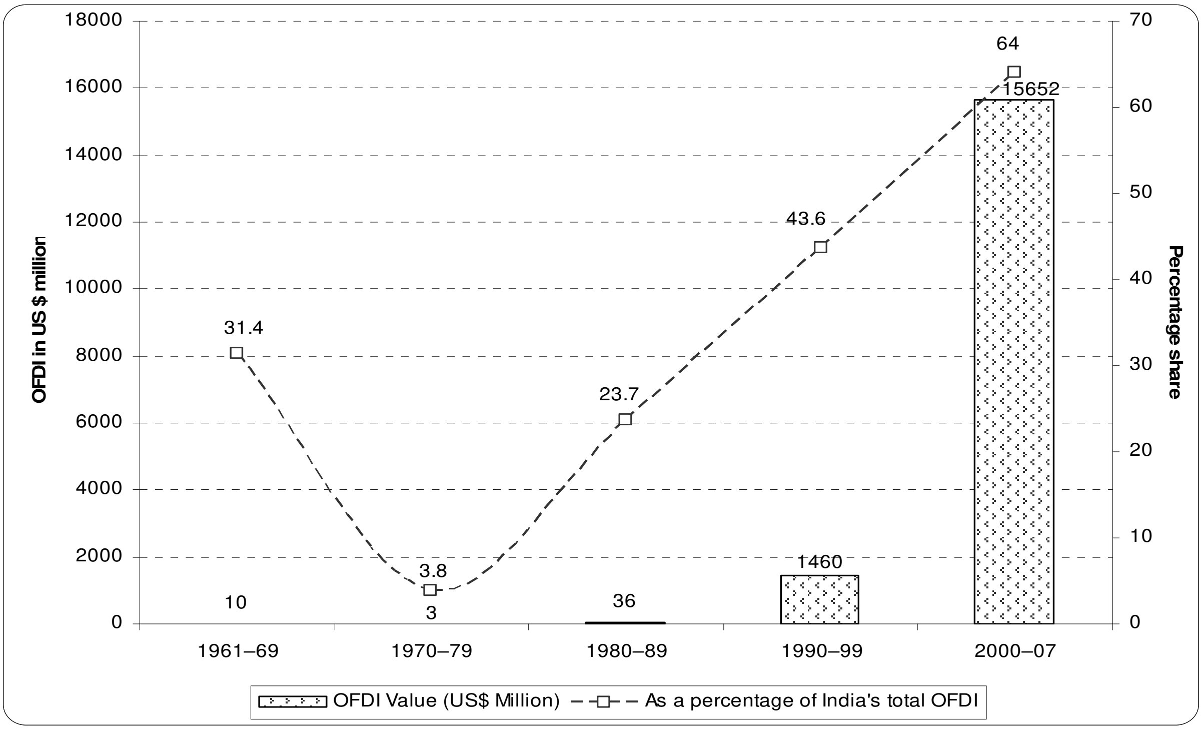
2. Size and Trends of Greenfield Investment

The origin of Indian FDI in developed region can be traced back to 1961 when the Tata group invested US $7.4 million in Switzerland for establishing a wholly-owned subsidiary (WOS), namely Tata International AG. This overseas affiliate was established to provide sales and distributional support to exported industrial and non-industrial products from India and to represent the Tata Group in the European market. The next cases of Indian FDI in developed region took place in 1965 when a total of three Indian companies undertook direct investment for transnationalizing their businesses. Dodsal Private Limited and Kirloskar Oil Engines Limited respectively set up a WOS and joint venture (JV) in Germany. The outward investment of US $1.4 million by the Dodsal Group (owned by the Kilachand family) was for providing engineering services, particularly welding contracts. The overseas subsidiary was also expected to help the Dodsal in its trading activities—importing and distributing industrial machinery, industrial products and raw materials into India. The Kirloskar Group invested about US $0.6 million in acquiring 47.5 per cent stake in FH Schule Gmbh—a company producing plants and machines for rice processing. This is primarily a trading and marketing venture that has been undertaken with a view to import machinery and assembles diesel plants produced by the acquired foreign entity. Third company that had invested abroad in 1965 was Raymonds Woolen Mills Limited, a part of JK Singhania group, which undertook an investment of US $19600 for starting a WOS in Switzerland. Another two Indian companies had invested in developed region during 1967–68. Shanudeep Limited established a wholly-owned trading subsidiary in Switzerland and MN Dastur & Company started its wholly-owned consultancy subsidiary in Germany.

Clearly, the early Indian FDI projects in developed region were largely into service activities like trading, consultancy and construction rather than manufacturing sector. Europe, led by Switzerland and Germany was the initial destination for these developed region oriented Indian FDI projects. Large business conglomerate group like the Tata, JK Singhania, Kirloskar and Dodsal actively led to the emergence of Indian FDI into developed region. Finally, investing Indian companies in majority of their OFDI projects opted for full ownership.

As compared to US $10 million FDI flows in 1960s, Indian FDI into developed region declined in 1970s to US $3 million and then recovered to US $36 million in 1980s (Table-1). This sizeable decline in Indian FDI in developed region during 1970s seems to be contributed by a variety of contributory factors. But, main three causes are decline in the competitiveness of Indian enterprises on account of low productivity and poor quality, rigorous screening of OFDI projects by home country regulatory authorities to minimize the high mortality rate of Indian OFDI projects and decline in the average size of FDI projects undertaken by investing Indian parent companies.

Figure-1 Indian FDI in Developed Region, 1961–2007 (US $ million)



Note & Source: Same as Table-1.

The growth of developed region oriented Indian FDI was relatively rapid since 1990s. Between 1980s and 1990s, Indian FDI increased roughly 41-fold in value terms to US $1.5 billion in 1990s. The rapid growth rate of Indian FDI continued in 2000–2007 and Indian companies invested US $15.7 billion in developed region. This impressive growth of Indian FDI has been led by an increasing number of Indian parent companies targeting growing number of host developed countries. The number of Indian parent companies investing in developed region has gone up from 55 in 1980s to 687 in 1990s and further to 1327 in 2000–2007. The operation of these Indian companies spread to 30 host developed countries during 1961–2007. This led to the emergence of developed region as the largest host region of Indian OFDI in 2000–2007 overtaking developing region. The share of developed region in total Indian FDI outflows has consistently gone up from 4 per cent in 1970s to 43.6 per cent in 1990s and further to the highest share of 64 per cent in 2000s (Figure-1).

The growing engagement of Indian firms in developed region through OFDI is driven by a number of causal factors. The heightened competition among domestic firms contributed by internal industrial policy reforms and transmission of intense international competitive pressures into domestic markets through cheap imports and entry of foreign companies have necessitated enlargement of firms' market focus from local to global markets. Many capable Indian companies have responded with OFDI to tap business opportunities thrown open by large-scale reduction in barriers to accessing overseas markets. Developed region with their large domestic markets seems to be attractive to these internationalizing Indian companies. The service sector dominated developed economies are also relatively attractive to large number of service Indian companies from a range of sectors like software, hotel, consultancy, etc., that are emerging as global players. The mounting competitive pressure generated by policy liberalization continues to force Indian companies to invest in accessing new knowledge resources and intangible assets. Innovation driven developed region is clearly the natural choice for such overseas acquiring Indian companies.

Table-1 Trends of Indian FDI Flows into Developed Region, 1961–2007

Period	FDI Value (US $ Million)	No. of Indian Investing Firms	No. of Host Countries
1961–69	10	6	2
1970–79	3	9	2
1980–89	36	55	9
1990–99	1460	687	27
2000–07**	15652	1,327	28
All Years	17162	1,866	30

Note: * Data for 2001 is only from January to March, 2002 is from October to December and 2007 data is from January to March; Developed region includes countries classified as developed by the UNCTAD in World Investment Report 2006.

Source: Calculation based on a dataset compiled from unpublished remittance-wise information from Reserve Bank of India, published reports of Indian investment centre and unpublished firm-level information from Ministry of Commerce.

2.1. Destinations

With the phenomenal growth of Indian FDI in developed region, the operation of Indian parent companies assumed a widely diversified cross-country geographical profile. The greenfield OFDI operation of Indian firms in developed region rose significantly from 2 host countries in 1970s to 28 host countries in 2000–2007. Between 1961 and 2007, a total of 30 developed countries hosted FDI projects by 1866 Indian parent companies (Table-1).

The largest flow of Indian investment within the developed region went to European Union. Since 1970s European Union remained the leading sub-regional host of Indian FDI, accounting for 76 per cent of the total developed region bound Indian investment in 1961–2007 (Table-2). In European Union, UK alone accounted for more than half of the total Indian investment estimated at US $9.2 billion. In fact India emerged as the second biggest FDI source to London accounting for 16 per cent of foreign investment in London during 2003–2007[3]. For Indian companies operating in developed region UK has been an early destination since 1975. UK with common institutional and legal system, cultural and historical links and familiarity in language turned out to be a natural choice for Indian companies going international for the first time. Majority of these early investors were from service sector and they continued to dominate Indian investment in UK during 1970s–1990s. However, Indian companies from primary and manufacturing sectors have overtaken the service Indian companies in 2000–2007.

About 47 per cent of Indian service investment in UK has gone into film, entertainment and broadcasting segment. As many as 18 Indian companies have invested in this sector but Zee Telefilms Limited is the largest investor with US $701 million. These Indian companies are clearly motivated to serve media and entertainment demand emanating from a sizeable chunk of British Asians, particularly Indian origin population in UK and across Europe. Software and IT (information technologies) segment turns out to be the second important sector for service Indian investments in UK with 21 per cent share. A total of 146 Indian software companies have invested an aggregate of US $321 million during 1993–2007. Tata Consultancy Services, Satyam Computer Services, Mphasis BFL, Subex Systems, Applabs Technologies and Melstar Information Technology are major investing Indian software companies in UK. The key drivers for Indian software investments in UK are significant growth opportunity in Europe's largest IT market and strategic behaviour of Indian software companies to decrease their heavy dependence on a single country, namely the US. Indian investment in UK's manufacturing sector is fuelled by investments in food and beverages, pharmaceuticals and computer & electronics. These three industries account for 76 per cent of the Indian manufacturing investment in UK. Indian

[3] BBC News (2007), 'Indian investment in London jumps', April 27.

investment in UK's gas and petroleum sector soared to US $6.5 billion investment in 2000–2007. This is mainly on account of restructuring implemented by the Cairn Energy Group in which its Indian subsidiary Cairn India Limited acquired 100 per cent ownership of the Jersey Channel Island-based Cairns India Holdings Limited—a wholly-owned indirect subsidiary of Cairn Energy Group by cash transfer rather than for actually undertaking any oil exploration activities[4].

Table-2 Regional Distribution of Indian FDI in Developed Region, 1961–2007

Region/Country	FDI flows in $ million							No. of Investing Firms
	1961–69	1970–79	1980–89	1990–99	2000–07	All Years Value	All Years Per cent	
Developed Region	10	3	36	1460	15652	17162	100	1866
European Union	2	3	18	1021	12061	13105	76.36	857
Austria				37	5	42	0.24	12
Belgium & Luxembourg				17	187	204	1.19	41
Cyprus				20	1359	1379	8.04	36
Czech Republic				1	35	36	0.21	5
Denmark					27	27	0.16	5
Finland				2	0.04	2	0.01	4
France			0.01	3	109	112	0.65	28
Germany	2		0.2	24	138	164	0.96	131
Greece			0.3	3	0.2	3	0.02	2
Hungary			0.2	3	2	5	0.03	9
Ireland				38	13	51	0.30	13
Italy			0.01	12	42	54	0.31	16
Latvia				1	0.3	1	0.01	2
Malta					64	64	0.38	1
The Netherlands			0.01	57	1701	1759	10.25	79
Poland				1	2	4	0.02	9
Portugal				0.1	0.01	0.1	0.00	2
Slovakia				0.03		0.03	0.00	1
Spain				1	13	13	0.08	10
Sweden				3	10	12	0.07	8
UK		3	17	798	8353	9171	53.44	531
Other developed Europe	8		0	8	175	191	1.12	49
Liechtenstein				0.5		0.5	0.00	3
Norway					0.4	0.4	0.00	2
Switzerland	8		0.4	7	175	191	1.11	44
North America		0.1	17	388	2815	3221	18.77	1,156
Canada				5	411	416	2.42	45
USA		0.1	17	384	2404	2805	16.35	1124
Other developed countries				43	601	645	3.76	104
Australia				3	596	599	3.49	74
Israel				25	1	26	0.15	5
Japan				15	5	19	0.11	24
New Zealand				0.1	1	1	0.00	7

Note & Source: Same as Table-1.

[4] Hindu Business Line (2006), 'Cairns to await valuation by market in cash cum share swap deal', November 05.

The Netherlands is the second important European Union host to Indian FDI. It has attracted a total of US $1.6 billion investment made by a group of 79 Indian parent companies. Since Indian firms started investing in 1989, Indian FDI in the Netherlands exhibited rising trend from 1993 onwards. Most of the Indian investments in the Netherlands were confined to just two economic sectors, namely services (US $893 million, 51 per cent) and manufacturing (US $845 million, 48 per cent). Financial and insurance services received the largest share of total service investment (77 per cent), followed by software segment with 22 per cent share. In total manufacturing investment, pharmaceuticals (66 per cent), electrical machinery & equipment (17 per cent) and basic metals (6 per cent) were major attractive industries for investing Indian companies. Indian FDI in the Netherlands is expected to be buoyant in coming years given the favourable incentive regime that it has with India like a double taxation avoidance agreement since 1988, an investment protection agreement since 1995 and a strong trade relationship.

North America emerged as the second largest recipient of Indian FDI in developed region after European Union. Indian FDI inflows to North America have grown significantly from US $388 million in 1990s to US $2815 million in 2000–2007, pushing up the stock of Indian investment to US $3.2 billion. This growing volume of Indian investment in this developed sub-region is being accompanied by sustained rise in the number of Indian parent companies to reach 1156. USA is the major North American host country with US $2.8 billion of Indian investment undertaken by a total of 1124 Indian parent companies during 1973–2007. The bulk of Indian investment in US is concentrated in the service sector, which alone accounted for 66 per cent share. Inflows into US manufacturing sector account for 33 per cent share of the total Indian investment. Software and IT segment is the most favoured service activity with US $1.4 billion of investment (nearly 74 per cent of the total service Indian investment in US). Health services with US $167 million and financial services with US $152 million are other attractive services sectors for Indian investment in US. Important recipient activities in US manufacturing sector are pharmaceuticals (US $355 million), transport equipment (US $84 million), metal products (US $79 million), machinery & equipment (US $71 million) and gems & jewellery (US $66 million). Apart from accessing world's largest market, direct investments in US permit Indian companies to build trade supporting infrastructure and to leverage US innovation system for improving their own global competitiveness.

The share of other two developed sub-regions, namely other developed Europe and other developed countries are minimal in developed region oriented Indian investment. Their percentage shares stood at 1 per cent and 4 per cent respectively.

2.2. Sectoral Distribution

The sectoral profile of Indian greenfield investment in developed region has also undergone some significant changes recently. The most notable trend is that manufacturing emerges as the greater attractive host sector than service sector in 2000–2007. This trend is particularly distinct since throughout 1960s–1990s the share of manufacturing sector in Indian FDI was well behind service sector's share. This trend reflect that Indian manufacturing firms undertaking OFDI have broken the past regional pattern of concentration in developing region to be relatively more active in developed region as well. This spurt of Indian investments into manufacturing sector of developed region is partly contributed by growing sophistication of firm-specific advantages of Indian firms and liberalization infused global competition pressuring them to seek new markets. The primary sector led by oil and gas segment emerged as the top sectoral destination of Indian investment in developed region with 41 per cent share during 1961–2007 (Table-3). However, this figure is misleading since about US $6.5 billion investment (96 per cent of the total oil and gas Indian investment) done by Cairn India Limited was not for actually undertaking any oil exploration activities—a point made earlier in the case of UK. Excluding this particular investment, the oil and gas investment of US $268 million hardly account for 2.5 per cent of adjusted total Indian investment in developed region.

Table-3 Sectoral Composition of Indian FDI in Developed Region, 1961–2007

Industry	FDI flows in $ million							No. of Firms	No. of Countries
	1961–69	1970–79	1980–89	1990–99	2000–07	All Years			
						Value	Per cent		
Primary				13	6966	6979	40.67	48	8
Agriculture & allied products				12	22	34	0.20	31	7
Ores & Minerals				1	217	218	1.27	4	3
Gas, Petroleum and related products				0.1	6727	6727	39.20	14	5
Manufacturing	1	1	10	501	4468	4981	29.02	864	29
Food, beverages and tobacco		1	2	19	421	443	2.58	72	17
Textiles and wearing apparel	0.02	1	0.5	77	153	231	1.35	180	18
Wood & wood products				2	0.5	3	0.02	4	3
Paper and paper products				0.3	18	18	0.10	10	6
Printing and publication			0.01	2	15	17	0.10	20	5
Gems and jewellery				30	85	116	0.67	68	11
Leather and related products			0.2	18	6	24	0.14	41	16
Rubber and plastic products			0.01	4	45	49	0.29	30	11
Non-metallic mineral products				2	45	46	0.27	27	9
Basic metals and fabricated metal product		0.1	0.4	64	364	429	2.50	62	12
Machinery and equipment	1		1	41	177	219	1.28	57	13
Electrical machinery and equipment			0.3	19	206	225	1.31	60	15
Transport equipment			1	7	238	246	1.44	54	10
Computer, electronic, medical, precision			0.02	15	319	334	1.95	66	12
Chemicals			5	50	40	94	0.55	103	16
Pharmaceuticals			0.2	135	2334	2470	14.39	102	18
Other manufacturing				15	1	16	0.09	15	6
Services	9	2	26	921	4200	5158	30.05	1030	23
Construction and engineering services	1	0.002	10	45	48	105	0.61	51	10
Trading	1	0.04	6	15	3	25	0.15	53	10
Advertising and market research				0.2	15	16	0.09	20	4
Consultancy and business advisory service		0.01	0.4	5	45	51	0.30	54	6
Event management					1	1	0.00	3	3
Film, entertainment and broadcasting				473	251	724	4.22	35	7
Hospitality and tourism		0.03	3	25	37	66	0.38	46	11
Hospital and health services					177	177	1.03	28	5
Financial and insurance Services		0.001	0.1	15	999	1014	5.91	67	10
Telecommunication services				129	45	174	1.01	15	4
Transportation services			1	12	114	127	0.74	32	9
Software development, packages			5	199	2309	2513	14.64	692	21

and ITES									
Other services	7	2	0.4	1	156	166	0.97	22	11
Others			0.1	25	19	44	0.26	36	8
Total	10	3	36	1460	15652	17162	100.00	1866	30

Note & Source: Same as Table-1.

An analysis of the structure of Indian investment in services sector shows that about half of such investment is concentrated in software and IT sector. A total of 962 Indian software parent companies have invested US $2.5 billion across 11 developed countries. US alone attracted more than 54 per cent of Indian software investment, followed by Canada with 16 per cent, UK with 13 per cent and the Netherlands with 9 per cent. Financial and insurance service with US $1014 million is the second important sector for service sector Indian investment in developed region after software services. The Netherlands is the major destination for Indian firms operating in financial services with 68 per cent of Indian financial service investment. USA with 15 per cent and Belgium & Luxembourg with 8 per cent shares are other important recipients of Indian FDI in financial services. Film, entertainment and broadcasting is the third important segment of service sector to host Indian investment. A total of 35 Indian parent companies have invested a sum of US $724 million in 7 developed countries.

Within manufacturing sector, pharmaceutical is the top industry to attract Indian investments. About 102 Indian pharmaceutical companies had invested US $2.5 billion accounting for half of the Indian investment in developed region's manufacturing sector. Cyprus, Netherlands, USA and UK are four main recipients of Indian pharmaceutical investment. Food & beverages, metal products and computer & electronics respectively accounting for 9 per cent, 8.6 per cent and 7 per cent of Indian investment in manufacturing sector are other attractive host industries.

2.3 Ownership Choice

Indian greenfield FDI flows into developed countries are characterized by a distinct ownership preference since its beginning in 1960s. The major form of ownership participation in Indian FDI projects are mainly wholly-owned subsidiaries. The share of wholly-owned subsidiaries in the total number of OFDI approvals was 83 per cent in 1960s and consistently remained higher than the share of joint ventures throughout 1970s–1990s (Table-4). In 2000–2007, WOS's share was 81 per cent and for overall period 1961–2007, it accounted for 78 per cent of the total Indian FDI approvals. This trend is in contrast to Indian FDI in developing region where joint venture accounted for larger share than WOS.

One possible cause for Indian firms' preference for full ownership in their OFDI projects in developed region is the nature of their overseas operation. Predominantly Indian FDI projects in developed region during pre-1990s period are into providing services in trading, consultancy, hotel, software and financial services, etc. Majority of these service activities require relatively less resources (relatively low capital-intensive) unlike manufacturing operation and Indian parent companies are capable of undertaking the financial commitment of their OFDI projects on their own. Most importantly, services like software and financial services involve close relationships with clients, personalized services and confidentiality of information. Given the nature of services, WOS provide firms with relatively less risky mode of overseas expansion than joint venture with local firms.

Table-4 Ownership Choice of Indian Firms Investing in Developed Region, 1961–2007

Ownership Mode	**Number of OFDI Approvals**					
	European Union	**Other developed Europe**	**North America**	**Other developed countries**	**Total Developed Region**	
					Number	Percentage share to total
1961–69						
JV	1				1	16.7
WOS	2	3			5	83.3
Total	3	3			6	100
1970–79						
JV	4		1		5	45.5
WOS	5		1		6	54.5
Total	9		2		11	100
1980–89						
JV	17	1	7		25	48.1
WOS	11	1	15		27	51.9
Total	28	2	22		52	100
1990–99						
JV	158	8	122	21	309	32.7
WOS	283	10	327	15	635	67.3
Total	441	18	449	36	944	100
2000–07						
JV	247	13	390	34	684	18.8
WOS	1099	49	1689	117	2954	81.2
Total	1346	62	2079	151	3638	100
All Years						
JV	427	22	520	55	1024	22.0
WOS	1400	63	2032	132	3627	78.0
Total	1827	85	2552	187	4651	100
Percentage share of WOS	76.6	74.1	79.6	70.6	78.0	

Note & Source: Same as Table-1; WOS-wholly-owned subsidiary; JV-joint venture.

2.4. Main Indian Greenfield Investors

Table-5 summarizes OFDI activities of 10 leading Indian multinationals operating in developed region over different periods. In identifying these leading investors, an OFDI index was constructed by giving equal weight to the amount of aggregate greenfield investments made and the number of host developed countries in which a company is operating. The Index is obtained as summation of these two series that are made scale-free by dividing respective average values (i.e., simple arithmetic mean).

The leading Indian multinationals of 1960s were mostly owned by large Indian business houses and their outward investment went into just two European countries, namely Switzerland and Germany. These early Indian multinationals undertook small-sized FDI projects related to service activities covering trading, consultancy and engineering services. These industrial houses have already established themselves in the domestic market with high market shares and further domestic expansion was costly and restricted in view of unfavourable policy regulations. Developed countries like Germany and Switzerland were attractive to them as new markets. Trade supporting type of OFDI projects in this context would help these parent companies in exporting their products from India and importing foreign products. In the case of consultancy services, investing Indian company appears to be motivated to take benefit of the availability of cheap manpower in the home country.

In 1970s–80s the basic profile of leading Indian multinationals underwent little change. The list of leading investing Indian companies continued to be dominated by large Indian business houses and in overwhelming cases their OFDI operation was limited to two developed countries, namely UK and USA. The Tata group has been the most active leading player with Tata Sons, Tata Steel, Indian Hotels and Tata Tea leading the internationalization of the group through outward FDI in developed region. Sectorally, leading Indian multinationals in this period undertook outward investment projects related to trading and marketing of manufacturing products in textiles, tea, food, pumps, machineries and services projects in hotels, construction, insurance and consultancy. The 1980s is a crucial period that witnessed a government owned company like Gujarat Narmada Valley Fertilizers to be the largest investors in developed region and rise of Indian software companies like HCL Technologies into OFDI scenario.

The composition of the 10 largest Indian multinationals operating in developed region changed significantly in 1990s. The old Indian business groups, which hitherto dominated the top 10 list were replaced by new emerging business groups like Zee, Ranbaxy, Sun Pharmaceutical, Wockhardt, Ramco and Jindal groups. These emerging groups represented increasing diversification of Indian outward FDI to include new sectors like entertainment, telecommunication services and pharmaceuticals. With three Indian software companies claiming 4th, 8th and 9th positions among leading Indian investors, Indian software sector emerged as the leading Indian service sector resorting to outward FDI in developed region. Indian pharmaceutical companies numbering three ranked 5th, 6th and 7th are aggressive OFDI players from manufacturing sector. In addition to traditional host destinations like USA, UK, Germany, and Switzerland, the geography of Indian leading players expanded in 1990s with new host developed countries like the Netherlands, Canada, Ireland and Japan.

The group and sectoral diversification of leading Indian multinationals operating in developed region continued in 2000s. Dr. Reddy's, Suzlon, Videocon and Mphasis are new entrants to the list of top Indian investing firms. New destinations for leading Indian firms include Cyprus, Spain, Australia, Denmark, France, Belgium & Luxemburg, Sweden and Italy. Hindalco Industries investment in overseas mining activities and ONGC's investment in overseas oilfields represented natural resource seeking activities of India's leading multinationals. Suzlon Energy's overseas expansion signifies Indian firms' entry into global wind power sector.

Therefore, the rise of leading Indian firms investing in developed region since 1960s showed remarkable trends of geographical spread of their foreign operations. The number of host countries, which was just 5 until 1980s has increased to a total of 16 during 1990s–2000s. Emerging Indian business groups and government owned enterprises led to sectoral diversification with spread to new areas like software, pharmaceuticals, mining, wind energy and oil & gas.

Table-5 Period-wise Top 10 Greenfield Outward Investing Indian Firms in Developed Region, 1960s–2000s

Company Name	Business House	OFDI (US $ million)	Name of Host Countries	OFDI Index	Rank	Areas of Operation
1960s						
Tata Sons Ltd.	Tata	7.4	Switzerland	5.4	1	Trading and acting as agents of parent company
Dodsal (P) Ltd.	Dosal Group	1.4	Germany	1.8	2	Undertaking welding contracts, Construction and engineering services
Shanudeep Ltd.	Stanrose Mafatlal Group	0.6	Switzerland	1.4	3	Trading
Kirloskar Oil Engines Ltd.	Kirloskar Group	0.6	Germany	1.4	4	Machinery and equipment
MN Dastur & Company (P) Ltd.		0.1	Germany	1.0	5	Consultancy in engineering services
Raymond Ltd.	JK Singhania	0.02	Switzerland	1.0	6	Textiles and wearing apparel
1970s						
Tata Sons Ltd.	Tata	1.8	USA	5.7	1	Trading and acting as agents of parent company
Mafatlal Industries Ltd.	Arvind Mafatlal	0.8	UK	3.0	2	Trading in textiles and wearing apparel
E I D-Parry (India) Ltd.	Murugappa Chettiar	0.5	UK	2.3	3	Trading and consultancy in food & beverages
Ghai Lamba Catering Consultants Pvt. Ltd.		0.02	UK, USA	1.8	4	Restaurants and consultancy services
Tata Steel Ltd.	Tata	0.1	USA	1.3	5	Trading and acting as agents of parent company
Shaw Wallace & Co. Ltd.	Jumbo*	0.04	UK	1.0	6	Trading and investment activities
Karana Hotels Pvt. Ltd.		0.02	UK	1.0	7	Restaurant
Ramji Dayawala & Co. Ltd.		0.002	UK	0.9	8	Construction and engineering services
JB Boda & Co Pvt. Ltd.	JB Boda	0.001	UK	0.9	9	Insurance services
1980s						
Gujarat Narmada Valley Fertilsers Co. Ltd.	Govt. owned	9.3	UK	14.6	1	Phosphoric acid project
Reliance Industries Ltd.	Reliance Group [Mukesh Ambani]	5.2	UK	8.6	2	Trading activities
HCL Technologies Ltd.	HCL Group	4.7	USA	7.8	3	Computer software
Novo Resins Ltd.		3.9	USA	6.6	4	Particle board manufacturing
Indian Hotels Co. Ltd.	Tata	2.9	USA	5.2	5	Hotels
Tata Tea Ltd.	Tata	2.4	USA	4.4	6	Trading and marketing of tea

Tata Sons Ltd.	Tata	0.5	Switzerland, UK, USA	3.3	7	Trading
Mafatlal Industries Ltd.	Arvind Mafatlal	0.2	UK, Italy, Switzerland	2.9	8	Textiles and wearing apparel
Kirloskar Brothers Ltd.	Kirloskar Group	0.4	UK, USA	2.3	9	Marketing of pumps
CIMMCO Birla Ltd.	S.K. Birla	0.1	UK, USA	1.9	10	Trading in machinery and equipment
1990s						
Zee Telefilms Ltd.	Zee	471	UK	218.4	1	Broadcasting & telecasting
Videsh Sanchar Nigam Ltd.	Govt. owned**	79	Netherlands, UK	38.4	2	Telecommunication services
Iridium India Telecom Pvt.Ltd.		50	USA	24.0	3	Telecommunication Services
Silverline Industries Ltd.		48	USA	23.2	4	Software services
Ranbaxy Laboratories Ltd.	Ranbaxy	41	Canada, Netherlands	20.9	5	Drugs & pharmaceuticals
Sun Pharmaceutical Industries Ltd.	Sun Pharmaceutical Group	32	Switzerland, UK, USA	17.7	6	Drugs & pharmaceuticals
Wockhardt Ltd.	Wockhardt Group	31	Ireland	15.2	7	Drugs & pharmaceuticals
Ramco Industries Ltd.	Ramco	24	USA, Germany, Switzerland	13.7	8	Computer software services
NIIT Ltd.	HCL Group	19	Japan, Netherlands, UK, USA	12.5	9	Computer software services
Jindal Saw Ltd.	Om Prakash Jindal Group	25	USA	12.4	10	Metallurgical products
2000s						
Dr. Reddy's Laboratories Ltd.	Dr. Reddy's	987	Cyprus, Spain, USA	100.4	1	Drugs & pharmaceuticals
Suzlon Energy Ltd.	Suzlon	656	Australia, Denmark, Germany, Netherlands, USA	69.2	2	Generators, turbines and other electrical machineries
Ranbaxy Laboratories Ltd.	Ranbaxy	504	France, Netherlands	51.7	3	Drugs & pharmaceuticals
Hindalco Industries Ltd.	Aditya Birla	402	Australia, Canada	41.5	4	Non-ferrous metals, investment services
TransWorks Information Services Pvt. Ltd.	Aditya Birla	400	Canada, USA	41.3	5	Software development services
Tata Consultancy Services Ltd.	Tata	294	Australia, Belgium & Luxembourg, France, Germany, Netherlands, Sweden, UK, USA	35.8	6	Software development services
Tata Tea Ltd.	Tata	280	UK, USA	29.4	7	Tea processing and blending
Videocon Industries Ltd.	Videocon	235	Italy, Japan, UK	25.8	8	Electronics equipments
ONGC Videsh Ltd.	Govt. owned	234	Australia, Cyprus	24.8	9	Oil exploration
Mphasis BFL Ltd.	MphasiS	206	Australia, Germany, Ireland, UK, USA	24.6	10	Software development services

Note: Cairn India Ltd. has not been considered in preparing the list. *- Acquired by UB group in 2005; **-Acquired by Tata group in 2002.
Source: Same as Table-1.

3. Size and Trends of Brownfield Investment

The sharp rise in Indian FDI flows into developed region as reflected in the case of greenfield investments by Indian companies to set up new overseas affiliates can only be termed as moderate when compared to FDI flows generated by their overseas acquisition activities. Since 2000s an increasing number of Indian companies are aggressively following the businesses strategy of overseas acquisition for a number of firm-specific objectives like market entry, geographical diversification, access to strategic assets and natural resources. During the period from 2000 to March 2008, the Indian FDI flows into developed region on account of acquisition stand at US $47.4 billion as compared to Indian greenfield investment stock of US $17.2 billion as on end March 2007. Clearly, brownfield form of Indian FDI has surpassed its greenfield form in 2000s. Regionally, Indian brownfield investments in overwhelming cases are directed at developed countries that account for 79 per cent of the total overseas acquisitions made by Indian companies (Table-6). There are a total of 306 Indian firms engaged in acquisitions covering 28 developed countries. Strong sales growth, increased corporate profits and capability to raise international resources for M&As all have contributed to the rising phenomena of overseas acquisitions by Indian firms.

Similar to greenfield investments, overseas acquisitions of Indian firms have been more concentrated in European region with 50 per cent share in the total value of developed region acquisitions. It is followed by North America with 43 per cent share. UK in European Union with 37 per cent share and USA in North America with 39 per cent share are by far the two largest destinations for Indian brownfield investment in developed region—they together claimed 76 per cent share. These two economies are among the largest economies in the world and also leaders in producing innovative and competitive assets. For both the objectives of accessing large market and firm-specific intangible assets like technologies, skills, brands and management practices, USA and UK are thus natural destinations for acquiring Indian companies.

Table-6 Developed Region Acquisitions by Indian Firms, 2000–2008

Year	Developed Region Acquisition		In Number		
	Value (US $ Million)	As a Per cent of Total Indian Acquisition	Acquisition Deals	Acquiring Indian Firms	Host Developed Countries
2000	887	97.7	35	27	6
2001	172	88.6	20	19	5
2002	118	4.6	19	14	5
2003	594	96.6	34	31	8
2004	785	26.1	42	38	10
2005	2518	61.8	108	85	18
2006	5976	77.6	151	114	23
2007	33739	91.2	144	118	21
2008	2614	71.9	43	42	12
All Years	47402	79.3	596	306	28

Source: Based on dataset constructed from different reports from newspapers, magazines and financial consulting firms like Hindu Business Line, Economic Times, Financial Express, Business World, Grant Thornton India, etc.

As for sector, manufacturing has a relatively high proportion of acquisitions, which mainly reflected large-sized acquisitions done by Indian companies from steel industry and related to relatively small value acquisitions by firms from other industries such as food processing, electrical machinery, chemicals, pharmaceuticals and non-electrical machinery. The prominence of high technology Indian firms in manufacturing acquisitions suggests that brownfield Indian FDI is associated with strong firm-specific objective of accessing strategic foreign assets. Service sector accounted for 15 per cent of the value of Indian acquisitions in developed region (Table-7). Software and IT service segment has been the top attractive segment within service sector brownfield investment. About 6 per cent of Indian brownfield investment is accounted for by primary sector mainly led by oil and natural gas segment. Table-8 presents top 15 acquisition deals done by Indian firms in developed region during 2000 to March 2008.

Table-7 Regional and Sectoral Distribution of Overseas Acquisitions of Indian Firms, 2000–2008

					Acquisition Value (US $ Million)
Host Region/country	**Value**	**As a Per cent of Total**	**Sector**	**Value**	**As a Per cent of Total**
Developed Region	47414	100	**All Sectors**	**47414**	100
European Union	23536	49.6	**Primary**	**2732**	5.8
Austria	133	0.3	Mining	454	1.0
Belgium	910	1.9	Oil & natural gas	2278	4.8
Czech Republic	43	0.1	**Manufacturing**	37568	79.2
Denmark	16	0.0	Food & beverages	2857	6.0
Finland	101	0.2	Textiles & apparels	410	0.9
France	316	0.7	Plastic & products	173	0.4
Germany	3115	6.6	Metal and fabricated metal products	22318	47.1
Greece	16	0.0	Electrical machinery and equipment	2742	5.8
Hungary	44	0.1	Non-electrical machinery & equipment	2081	4.4
Ireland	169	0.4	Telecommunication equipment	339	0.7
Italy	363	0.8	Transport equipment	1356	2.9
Netherlands	486	1.0	Chemicals	2756	5.8
Poland	8	0.0	Pharmaceuticals	2374	5.0
Portugal	69	0.1	Biotechnology	36	0.1
Slovenia		0.0	Gems & jewellery	127	0.3
Spain	173	0.4	**Services**	7054	14.9
Sweden	87	0.2	Banking & financial services	4	0.0
UK	17488	36.9	Business advisory	12	0.0
Other developed Europe	1829	3.9	Hospitality and tourism	526	1.1
Monaco	25	0.1	Telecommunication services	913	1.9
Norway	1646	3.5	Media & entertainment	111	0.2
Switzerland	158	0.3	IT & ITES	5487	11.6
North America	20388	43.0	**Others**	61	0.1
Canada	1955	4.1			
USA	18433	38.9			

Other developed countries	1662	3.5			
Australia	563	1.2			
Bermuda	592	1.2			
Israel	489	1.0			
Japan	5	0.0			
New Zealand	13	0.0			

Source: Same as Table-6.

Table-8 Top 15 Developed Region Acquisitions Done by Indian Firms

Indian Company	Target	Sector	Host Country	Acquisition in US $ Million	Year
Tata Steel Ltd.	Corus	Metal	UK	13650	2007
Hindalco Industries Ltd.	Novelis	Metal	USA	6000	2007
Suzlon Energy Ltd.	75% stake in Repower	Electrical machinery and equipment	Germany	1816	2007
Essar Steel Ltd.	Algoma Steel Inc	Metal	Canada	1630	2007
Volvo Construction Equipment	Ingersoll Rand's road development division	Non-electrical machinery & equipment	USA	1300	2007
United Spirits Ltd.	100% stake in Whyte & Mackay	Food & Beverages	UK	1178	2007
Tata Chemicals Ltd.	100% stake in General Chemical Industrial Products Inc	Chemicals	USA	1005	2008
J S W Steel Ltd.	Jindal United Steel Corporation, Saw Pipes, and Jindal Enterprises LLC.	Metal	USA	900	2007
Aban Lloyd Chiles Offshore Ltd.	Sinvest ASA	Oil & Natural Gas	Norway	800	2007
Tata Tea Ltd.	30% stake in Energy Brands Inc.	Food & Beverages	USA	677	2006
Wipro Technologies	Infocrossing Inc	IT & ITES	USA	600	2007
Dr. Reddy'S Laboratories Ltd.	Betapharm Arzneimittel GmbH	Pharmaceuticals	Germany	597	2006
Rain Commodities Ltd.	CII Carbon	Chemicals	USA	595	2007
Suzlon Energy Ltd.	Hansen Transmissions International NV	Non-electrical machinery & equipment	Belgium	558	2006
D S Constructions Ltd.	100% stake in Globeleq America's power assets	Electrical machinery and equipment	Bermuda	542	2007

Source: Same as Table-6.

4. Leading Indian Multinationals in Global Comparison

Though there is some information available on outward FDI flows, the exact extent of the foreign value adding activities undertaken by the various sectors of Indian economy is not known. This is due to the lack of a suitable statistical system that collects data on overseas subsidiaries of Indian companies and a liberal policy regime on corporate disclosure that exempts Indian companies from reporting on foreign subsidiaries. In the context of rising outflows of FDI, the issue of foreign production is emerging as an important area to be addressed.

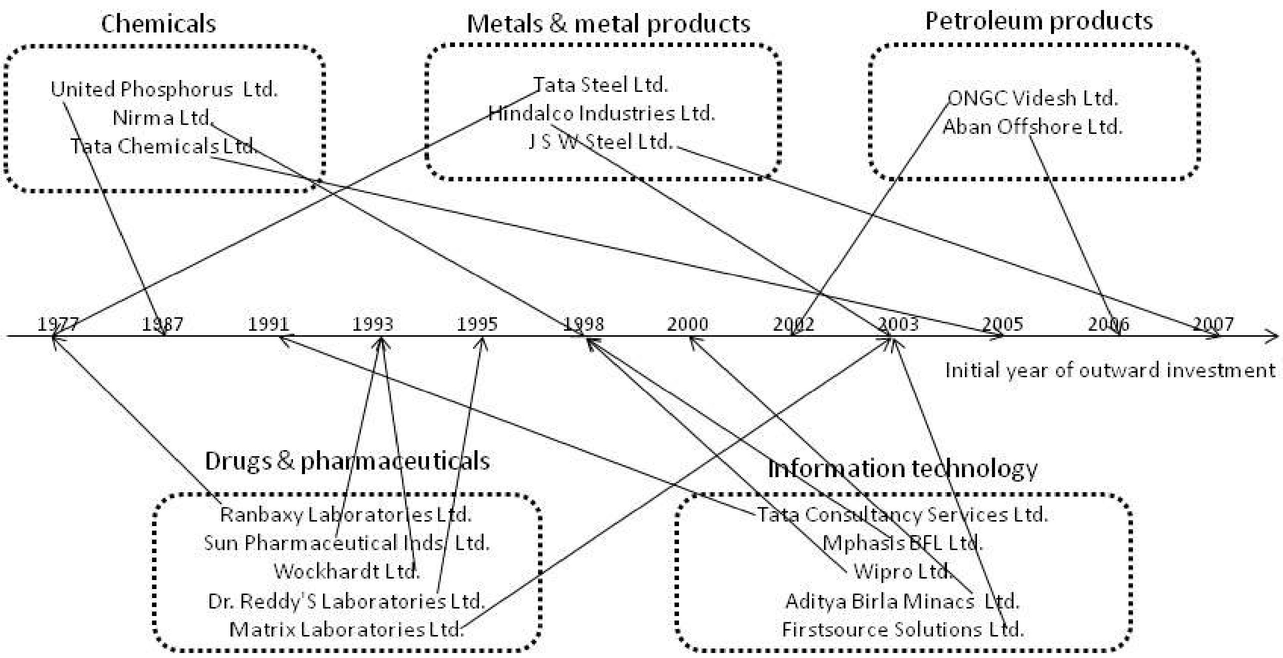
In order to present a preliminary picture of the Indian firms' foreign production activities, it is convenient to concentrate only on the important outward investing economic sectors and chose a few important players from them. Outward investing economic sectors such as metal, oil & natural gas, IT & ITES, pharmaceuticals and chemicals together claimed nearly 70 per cent of the Indian OFDI stock on account of greenfield projects and overseas acquisitions[5]. Concentrating on these individual sectors, important outward investing Indian firms were chosen given the size of their aggregate outward investment. Following this selection process, the study concentrated on a total of 18 emerging Indian multinationals (EIMs). Clearly, this selection procedure not only ensures representation from all the three categories of economic activity, namely primary, secondary and tertiary sector, but also takes care of the influence of sectoral heterogeneity in OFDI performance in deriving those inferences that are generally valid for Indian firms across different sectors.

4.1. Origin of Selected EIMs

It can be seen from Figure-2 that only three EIMs began their OFDI operations before 1991 and the rest of the EIMs ventured into overseas investment more recently. There are 7 EIMs initiating OFDI projects in 1990s and 8 EIMs in 2000s. Sectorally, Indian manufacturing firms are early movers from the Indian economy that started outward investment in 1970s, followed by service firms in 1990s and energy firms (oil & gas) in 2000s. This shows that majority of India's leading EIMs have recently emerged in the world market and have relatively less experience in foreign value adding activities as compared to their advanced country counterparts. For example, outward FDI by Alcoa Inc. began in 1920s, Thyssenkrupp AG in 1978, British Petroleum Company in 1908, International Business Machines in 1910s, and BASF AG in 1969.

[5] OFDI stock include greenfield investment undertaken during 1961–2007 (up to March) and value of acquisition done during 2000–2008 (up to March).

Figure-2 Initial Year of Outward FDI by Selected EIMs



4.2. Size of Foreign Assets and Sales

Table-9 summarizes the size of foreign production being currently undertaken by leading Indian multinationals. It is apparent that the majority of EIMs are quite small companies when one considers their global assets as compared to the assets of global firms. Only three Indian multinationals such as Tata Steel, Hindalco and ONGC are found to have comparable assets size vis-à-vis their global peers, but rest of the EIMs are small entities in global comparison. In fact the rise of these three global firms from India is strong related to the large scale foreign acquisitions that these companies undertook to expand their global size and geographical reach.

Although Indian multinationals are comparatively small in asset base, their foreign assets have begun to account for a considerable proportion of their global asset similarly to that of global multinationals. About 44 per cent of the combined assets/sales of the selected 18 EIMs is owned by their foreign subsidiaries. In terms of share of overseas subsidiaries in total assets, Aban Offshore is the most transnationalized EIM (82 per cent), followed by Aditya Birla Minacs (79 per cent), Tata Steel (79 per cent), Hindalco Industries (69 per cent), Mphasis BFL (64 per cent) and Wockhardt (50 per cent). Clearly, these EIMs possess higher foreign share in assets than those possessed by global companies such as Mittal Steel Company (27 per cent), Thyssenkrupp AG (42 per cent), Dow Chemical Company (45.3 per cent), and Johnson & Johnson (45.5 per cent).

Table-9 Foreign Assets and Sales of Selected EIMs and Global Firms

Home Country	Company Name	Assets (US $ million)			Sales (US $ million)			No. of foreign affiliates
		Foreign	Total	FPT	Foreign	Total	FPT	
Metals & metal products								
Netherlands	Mittal Steel Company NV	30438	112166	27.1	46985	58870	79.8	76
Canada	Alcan Inc.	22017	28939	76.1	20410	23641	86.3	266
India	Tata Steel Ltd.	20361	25851	78.8	27764	32794	84.7	364
USA	Alcoa	19790	37183	53.2	13229	30379	43.5	121
Germany	Thyssenkrupp AG	19677	47056	41.8	39252	59121	66.4	428
India	Hindalco Industries Ltd.	9964	14535	68.6	11629	14962	77.7	49
India	J S W Steel Ltd.	1216	5352	22.7	259	3171	8.2	12
Petroleum products								
UK	British Petroleum Company Plc	170326	217601	78.3	215879	270602	79.8	337
UK, Netherlands	Royal Dutch/Shell Group	161122	235276	68.5	182538	318845	57.2	518
USA	Exxonmobil Corp.	154993	219015	70.8	252680	365467	69.1	278
India	ONGC Ltd.	5334	31254	17.1	4176	40233	10.4	30
India	Aban Offshore Ltd.	2839	3471	81.8	348	531	65.5	24
Information technology								
USA	International Business Machines		120431			98786		
USA	Electronic Data Systems		19224			22135		
India	Tata Consultancy Services Ltd.	305	3268	9.3	837	5821	14.4	58
India	Mphasis BFL	258	400	64.4	224	604	37.1	12
India	Aditya Birla Minacs Ltd.	248	314	79.0	351	396	88.5	9
India	Wipro Ltd.	181	4037	4.5	642	5085	12.6	72
India	Firstsource Solutions Ltd.	51	498	10.3	190	333	57.2	15
Chemicals								
Germany	BASF AG	38705	59648	64.9	37194	66002	56.4	384
USA	Dow Chemical Company	20651	45581	45.3	30952	49124	63.0	133
India	Tata Chemicals Ltd.	675	2220	30.4	496	1662	29.8	7
India	Nirma Ltd.	215	972	22.2	90	681	13.2	7
India	United Phosphorus Ltd.	144	978	14.7	526	938	56.1	56
Drugs & pharmaceuticals								
France	Sonofi-Aventis	55342	102414	54.0	20266	35595	56.9	179
Switzerland	Roche Group	52178	60980	85.6	33155	33531	98.9	184
Switzerland	Novartis	42922	68008	63.1	35630	36031	98.9	294
USA	Johnson & Johnson	32130	70556	45.5	23549	53324	44.2	195
India	Wockhardt Ltd.	541	1082	50.0	357	676	52.8	39
India	Matrix Laboratories Ltd.	271	617	43.8	152	445	34.1	29
India	Dr. Reddy'S Laboratories Ltd.	271	1637	16.6	402	1295	31.0	31
India	Ranbaxy Laboratories Ltd.	233	1846	12.6	672	1884	35.6	49
India	Sun Pharmaceutical Inds. Ltd.	227	1330	17.1	56	873	6.4	16

Notes: 1. Except for Tata Steel, ONGC, Mphasis BFL, foreign assets of Indian companies is obtained by subtracting assets (sales) of Indian parent company and its Indian subsidiaries from the consolidated assets (sales). The consolidated account is the consolidated performance of Indian parent company and its subsidiaries (foreign and Indian). Foreign assets (sales) of Tata Steel and ONGC have been derived from their geographical segment wise results of consolidated account where they allocate assets (sales) by India and outside India. Foreign assets (sales) of Mphasis BFL is the sum of sales of its all foreign subsidiaries. 2. Data for all Indian companies, except Ranbaxy and Wockhardt, related to the financial year ending March, 2008. For Ranbaxy and Wockhardt, data is for year ending December 2008. Information related to non-Indian companies is for year 2006, except International Business Machines and Electronic Data Systems whose data is for 2007. 3. FPT is the percentage share of foreign to total.

Source: (i) Data for non-Indian companies is from UNCTAD (2008), except International Business Machines and Electronic Data Systems whose data is from Fortune 500 available at http://money.cnn.com/magazines/fortune/fortune500/2008/ (ii) Data on Indian companies are from individual company annual reports.

4.3. Are Indian Multinationals Global Firms?

In the past developing country firms including Indian companies were more active in intra-regional outward investment activities. In the case of India, as much as 96 per cent of her OFDI stock as at 31st July 1986 went to host developing region (Pradhan, 2008a). Indian firms were observed to locate their OFDI projects in developing countries in South-East and East Asia, Africa, West Asia and Central Asia (Pradhan, 2008b). In this sense, early Indian multinationals were basically regional players focusing on business opportunities in fellow developing countries. However, the regional direction of Indian OFDI flows is increasingly shifted towards developed region since 1990s and the number of host countries to Indian FDI has gone up to 128 in 2000s. The share of developed region in Indian OFDI has grown steadily from 44 per cent in 1990s to 64 per cent in 2000–07 (Pradhan, 2008c).

Table-10 summarizes the locational profile of selected EIMs. It can be seen that EIMs in all sectors except Nirma Limited are operating in both developed and developing regions. Barring the petroleum products, other EIMs have either given equal importance to developing and developed region or relatively located more number of subsidiaries in developed region. It seems that Indian multinationals have been making efforts to have geographical presence in both developed and developing countries unlike the past when they concentrated more on developing region. However, there is considerable inter-firm variation in the number of foreign countries that EIMs are operating through OFDI. While Tata Steel with foreign subsidiaries in 44 countries emerged as the top global firm from India, Nirma Ltd. with operation in just one country (USA) is clearly not a global player. Following the old Harvard Business School Criteria that classifies a firm as a multinational firm if it has subsidiaries in at least six countries (Vaupel and Curhan, 1969), as many as 14 EIMs qualify to be called as MNEs. Four Indian firms with very large OFDI stock such as Aban Offshore, Firstsource Solutions, Tata Chemicals and Nirma failed to be global firms. This suggests that a number of Indian firms have emerged as global firms in recent period though in terms of the size of assets they are smaller as compared to multinationals from developed region.

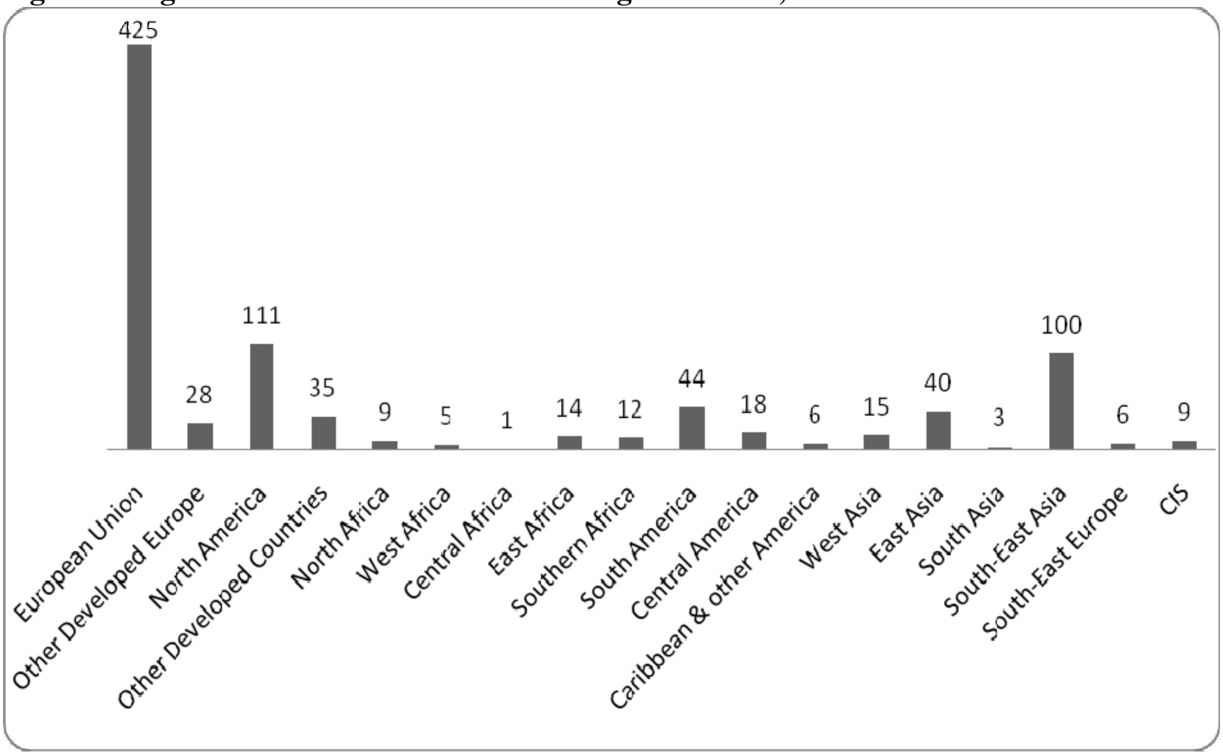
Table-10 Location of Foreign Affiliates of Selected EIMs

Sector/Company Name	No. of foreign affiliates			No. of host countries		
	Developed	Developing	Total	Developed	Developing	Total
Metals & metal products						
Tata Steel Ltd.	297 (82)	67 (18)	364 (100)	25 (57)	19 (43)	44 (100)
Hindalco Industries Ltd.	41 (84)	8 (16)	49 (100)	13 (76)	4 (24)	17 (100)
J S W Steel Ltd.	6 (50)	6 (50)	12 (100)	3 (43)	4 (57)	7 (100)
Petroleum products						
ONGC Ltd.	5 (17)	25 (83)	30 (100)	3 (19)	13 (81)	16 (100)
Aban Offshore Ltd.	6 (25)	18 (75)	24 (100)	2 (67)	1 (33)	3 (100)
Information technology						
Tata Consultancy Services Ltd.	28 (48)	30 (52)	58 (100)	15 (52)	14 (48)	29 (100)
Mphasis BFL	8 (67)	4 (33)	12 (100)	6 (67)	3 (33)	9 (100)
Aditya Birla Minacs Ltd.	7 (78)	2 (22)	9 (100)	5 (71)	2 (29)	7 (100)
Wipro Ltd.	33 (46)	39 (54)	72 (100)	13 (43)	17 (57)	30 (100)
Firstsource Solutions Ltd.	14 (93)	1 (7)	15 (100)	2 (67)	1 (33)	3 (100)
Chemicals						
Tata Chemicals Ltd.	4 (57)	3 (43)	7 (100)	2 (67)	1 (33)	3 (100)
Nirma Ltd.	7 (100)		7 (100)	1 (100)		1 (100)
United Phosphorus Ltd.	28 (50)	28 (50)	56 (100)	15 (48)	16 (52)	31 (100)
Drugs & pharmaceuticals						
Wockhardt Ltd.	36 (92)	3 (8)	39 (100)	8 (73)	3 (27)	11 (100)
Matrix Laboratories Ltd.	21 (72)	8 (28)	29 (100)	7 (70)	3 (30)	10 (100)
Dr. Reddy'S Laboratories Ltd.	22 (71)	9 (29)	31 (100)	11 (61)	7 (39)	18 (100)
Ranbaxy Laboratories Ltd.	28 (57)	21 (43)	49 (100)	16 (53)	14 (47)	30 (100)
Sun Pharmaceutical Inds. Ltd.	8 (50)	8 (50)	16 (100)	6 (50)	6 (50)	12 (100)

Note: Percentage share in parenthesis.

Figure-3 depicts the geographical spread of the foreign subsidiaries of 18 leading EIMs. It can be seen that regionally, Indian foreign affiliates are concentrated in developed region that hosted about 425 Indian overseas subsidiaries (68 per cent). Developing region accounted for just 32 per cent (282 in number) of the total number of Indian foreign affiliates. This makes it clear that India's leading multinationals are more focused on developed markets than developing region. European Union and North America are important host sub-regions within developed region and South-East is major host within developing region. At individual country level, UK with 172 Indian foreign affiliates is the largest host country for Indian multinationals. Second important host country is the US with 96 Indian foreign affiliates. Netherlands (70), Singapore (49), France (39), and Germany (35) are other important hosts to the number of Indian subsidiaries (see Appendix Table-A1).

Figure-3 Regional Distribution of EIMs' Foreign Affiliates, In Number



4.4. What are the Motivations of EIMs?

The overseas investment activities of EIMs are motivated by a number of objectives. The most important motive has been getting access to new markets through greenfield and outward investments in the case of all EIMs except those from energy sector (Table-11). In the case of software sector, direct onshore presence is critical for successful service delivery from offshore centre in India and to attract more customers in foreign countries. Much of outward greenfield projects from Indian software industry are motivated to achieve these two objectives. Similarly, greenfield projects by Indian pharmaceutical firms are for building trade supporting infrastructure abroad and enhancing their market presence. EIMs from energy sector are obviously motivated to secure access to natural resources like oil and gas reserve.

Acquisitions across different EIMs seem to be motivated by composite firm-specific objectives of accessing new markets, new products, technologies, skills, and benefiting from operational synergies. Many of these objectives are quite common to acquisitions done by developed country firms. However, there is a difference in technological aspects of acquisitions done by Indian manufacturing firms and those done by developed country manufacturing companies. As Indian manufacturing enterprises are significantly lagging in technological capabilities, their acquisition is more likely for getting new technologies to upgrade their overall technological strength. The acquiring developed country firms have a well established bundle of technological assets and they look to diversify their knowledge base by acquiring complementary assets. EIMs from Indian software industry are global leaders in terms of knowledge asset and their overseas acquisitions are more for technological diversification.

Table-11 Strategic Motives of EIMs

Indian company	Managerial comments on overseas investment/acquisitions
Tata Steel Ltd.	"The acquisition of the steel business of NatSteel is an important step in Tata Steel's plans to build a global business. NatSteel's business provides Tata Steel access to key Asian steel markets including China. I believe that the acquisition will prove to be a good strategic fit and create value for Tata Steel shareholders." Mr. B. Muthuraman, Managing Director, Tata Steel. "This proposed acquisition represents a defining moment for Tata Steel and is entirely consistent with our strategy of growth through international expansion. Corus and Tata Steel are companies with long, proud histories. We have compatible cultures of commitment to stakeholders and complementary strengths in technology, efficiency, product mix and geographical spread." Mr. Ratan Tata, Chairman, Tata Steel.
Hindalco Industries Ltd.	"The acquisition of Novelis is a landmark transaction for Hindalco and our Group. It is in line with our long-term strategies of expanding our global presence across our various businesses and is consistent with our vision of taking India to the world. The combination of Hindalco and Novelis will establish a global integrated aluminium producer with low-cost alumina and aluminium production facilities combined with high-end aluminium rolled product capabilities. The complementary expertise of both these companies will create and provide a strong platform for sustainable growth and ongoing success." Mr. Kumar Mangalam Birla, Chairman, Aditya Birla Group.
J S W Steel Ltd.	"The acquisition (of Jindal United Steel Corporation, Saw Pipes of the US, and Jindal Enterprises LLC) would get an entry point into growing and booming oil and gas sector in North America, which was driving up the plate and pipe demand. The company also gets an opportunity to capture value addition from slabs (produced at JSW Vijayanagar plant here) to high-end product namely pipes." Mr Sajjan Jindal, Vice-Chairman and Managing Director, J S W Steel.
ONGC Ltd.	"We have budgeted more than Rs 6,000 crore annually for acquisitions of oil and gas fields abroad. This figure may go up depending upon the investment requirement for developing a particular field." Mr Subir Raha, Chairman and Managing Director, ONGC.
Aban Offshore Ltd.	"The proposed acquisition of a large stake in Sinvest will enable Aban Loyd to further its mission of becoming a significant global player in the oil field services industry. Sinvest's asset portfolio consists of premium new-builds, which are expected to meet the growing needs of oil exploration and production companies in their new reserve acquisitions." Mr. Reji Abraham, Managing Director, Aban Loyd.
Tata Consultancy Services Ltd.	"Our growth strategy has been a combination of organic and inorganic growth. This acquisition (of Phoenix Global Solutions) is in line with a focus to consolidate on the strengths developed by TCS over a period of time in the financial industry segments. This acquisition will give us an impetus to attract new customers and help grow our existing customers." S Ramadorai, CEO and MD, TCS. "This acquisition (of TKS) is very important on two fronts. It gives TCS a direct presence in the key markets of Switzerland and France with an ability to serve customers with a single face, from sales to delivery. The TKS acquisition also helps TCS expand its product portfolio in the banking and financial services space, not only by acquiring marketing and distribution rights to

	QUARTZ® but also by adding new products in the private banking and wealth management space." S. Ramadorai, CEO and MD, TCS.
Aditya Birla Minacs Ltd.	"The acquisition (of Minacas Worldwide) demonstrates our commitment to emerge as a leading global BPO services provider and expand our global footprint. The integrated expertise of both companies will create and provide more powerful and compelling BPO solutions to clients. The result will be a firm with distinctive industry knowledge and execution capability delivered through a unique 'same-shore, near-shore, offshore' global delivery platform. The objective will be to reliably deliver outstanding BPO services to global clients from anywhere in the world." Mr. Kumar Mangalam Birla, Chairman, Aditya Birla Group.
Wipro Ltd.	"This acquisition (of Hydrauto Group AB) gives WIN a unique Asia-Europe footprint, a customer base built over the past few decades and deep complementary engineering skills. Being together will have a multiplier effect on competitiveness.." Anurag Behar, Managing Director- Wipro Infrastructure Engineering
Tata Chemicals Ltd.	"The acquisition of GCIP will lead to sizeable increase in TCL's global soda ash capacity, making it one of the largest soda ash producers worldwide. The merger will provide TCL access to markets in North America, Latin America and the Far East which complement its existing markets." Homi Khusrokhan, MD, TCL.
United Phosphorus Ltd.	"The acquisition of Advanta allows UPL to jump start our entry in the high end of the seeds business where the future of agriculture growth lies. This transaction not only makes us the largest player in some segments but also gives us leadership position in many important products. At the same time, it allows us further our relationship with distributors and farmers in these markets. Mr. Jai Shroff, Executive Director, UPL. "After considerable growth both organically and through acquisitions in the USA, Argentina, Europe, and in India, UPL had been actively pursuing opportunities for growth in Latin America. Evofarms represents UPL's first acquisition in the Andean Region which is an interesting & fast growing Agchem market." Mr. Jai Shroff, Executive Director, UPL.
Wockhardt Ltd.	"It (acquisition of Negma Laboratories) will provide the right entry vehicle to enter the French generics market valued at $2 billion, leveraging Wockhardt's robust EU portfolio and impressive pipeline. With this acquisition, Wockhardt will enjoy a pan-European presence, covering all the key markets of Europe, namely, Germany, the U.K., Ireland and now France," Habil Khorakiwala, Chairman, Wockhardt. "Morton Grove is strategic to Wockhardt. It provides entry into the US generic market with a portfolio of 31 products, 13 of which occupy the number one market position. All others are in the top three. This represents a clear demonstrable strength in sales and marketing." Habil Khorakiwala, Chairman, Wockhardt.
Matrix Laboratories Ltd.	"The acquisition of Docpharma accelerates our evolution as a growing force within the global generic pharmaceutical industry. This transaction allows us to gain direct access into the under-represented, high growth generic pharmaceutical markets of Belgium and Southern Europe," Mr N. Prasad, Chairman and CEO, Matrix Laboratories.
Dr. Reddy'S Laboratories Ltd.	"We see our investment in betapharm as a key strategic initiative towards becoming a mid-sized global pharmaceutical company with strong presence in all key pharmaceutical markets. betapharm has created a strong growth platform and is well positioned for the future and we are looking forward to partner with them in building a strategic presence in Europe." Dr Anji Reddy, Chairman, Dr. Reddy's Laboratories.
Ranbaxy Laboratories Ltd.	"Terapia represents exceptional value for our stakeholders. Within the Ranbaxy fold, it unleashes multiple synergies of product development, product flow, low cost manufacturing, proximity and access to high growth markets, in country presence and sound fundamentals while being EPS accretive to the group immediately. The transaction is compelling and furthers us on our path to becoming a top five global generic company." Mr. Malvinder Mohan Singh, CEO & Managing Director, Ranbaxy Laboratories.
Sun Pharmaceutical Inds. Ltd.	"We are keen on a strategic acquisition in the US that will strengthen the company's presence in manufacturing as well as marketing of complex molecules in the US market." Dilip S Shanghvi, Chairman & MD, Sun Pharma.

	“The purchase of this site (Valeant Pharma's manufacturing operations in Hungary) offers us an early opportunity to enter the European generic space, building on our strengths in bulk actives and product development. This will complement our European entry strategy with our UKMHRA approved plant in India, and will allow for a quick product roll out.” Dilip S Shanghvi, Chairman & MD, Sun Pharma.

Source: Collected from various company press releases and interviews of managers reported in various newspapers and business reports.

5. Drivers

The growth and expansion of Indian multinationals into developed region have taken place in different phases with changing set of casual factors. The drivers that contributed to the investment activities of early Indian multinationals in 1960s–80s appear to differ from the new class of Indian multinationals that emerged since 1990s.

5.1 Drivers of Early Growth

The entry of early Indian firms into developed region through OFDI was contributed by a number of factors. The role of industrial and technological policies followed by the home country was critical for explaining the first phase of Indian firms’ international expansion. With the pursuance of planned industrial strategy with emphasis on technological self-reliance throughout 1950s–80s, Indian firms prominently led by public sector companies actively undertook in-house R&D activities for adopting and upgrading of imported foreign technologies. In capital goods sector, domestic production started substituting imports of heavy machinery, electrical equipments and machine tools. The domestic growth of Indian owned firms was critically supported by strategic public sector investment that created a number of higher, technical and research institutions. The adoption of Indian Patent Act 1970 permitted Indian companies to reverse engineer foreign technologies and to come up with new processes.

These led to the emergence of a number of Indian firms with indigenous capabilities to locally produce a number of industrial products. However, these firm-specific advantages based on reverse engineering and incremental innovation could not provide Indian firms much scope for exploitation through direct investment in developed region. The existence of strong patent laws in developed region was obviously a barrier, but also early transnationalizing Indian firms hesitated in entering such fiercely competitive markets for higher risks, costs and scale. Moreover, modified foreign technologies possessed by Indian companies suited the Indian factor and demand conditions, which were clearly not available in developed region. Given this backdrop, the choice for Indian firms to enter into developed region was through trading of different products in textile, food, chemicals and target services segment like consultancy, restaurants and construction activities. Due to availability of trained and cheap manpower, Indian firms had competitive advantages in diversifying into these service activities.

In pre-1990s period, there are mainly two push factors that led to Indian firms’ entry into foreign markets. They are stagnant domestic market and policy restrictions on large firms’ growth. Large private owned Indian firms that were desperate to grow found themselves in disadvantageous situation created by Indian policy regime like Monopolies and Restrictive Trade Practices (MRTP) Act, Foreign Exchange Regulation Act (FERA), licensing regulation and reservation policies for public-owned and small scale sector. Slow growing domestic market further added to the drive of these Indian firms to seek new markets in developing and developed countries. While Indian firms preferred to enter into developing region through manufacturing FDI projects, they had gone for trading FDI projects and services projects in developed countries. The propensity as well as the size of OFDI undertaken by Indian firms in developed region continued to be smaller than those related to developing region.

5.2. Drivers of Recent Growth

Since 1990s, Indian firms began a new wave of OFDI expansion into developed region. The economic liberalization process, which occurred since early 1990s provided strong impetus to Indian firms' increasing move towards developed countries. Historically, large chunk of Indian companies had been operating only in domestic markets protected from global competitive pressure by strong trade and investment barriers. With the dismantling of tariff and non-tariff barriers to imports and provision of easier entry norms for foreign firms into Indian markets in 1990s, all have contributed to intense competition in domestic markets. This factor has driven Indian firms to seek new markets and developed region with large markets are natural choice for them.

The rising firm-specific advantages of Indian firms in a number of industrial and service sectors like pharmaceuticals, chemicals, auto components, software, consultancy, etc., have permitted Indian companies to go for large-scale OFDI operations in developed region. For Indian firms that want to further enhance their technological assets, overseas acquisitions feature more strongly as a technology acquisition strategy. Developed region attracted most of these brownfield investments as global innovative assets are geographically concentrated there. The emergence of regional trading blocks in developed as well as developing region further required Indian firms to adopt OFDI to gain insider status. The role of OFDI policy in dramatic growth of Indian FDI has been critical in recent years. Lifting of ceiling on permissible quantum of OFDI projects, removal of restriction on ownership choice, relaxation in accessing international finance through ADR/GDR route, etc., created conducive atmosphere for Indian OFDI.

6. Implications for Host Developed Countries

The rise of Indian firms can have a number of developmental implications for host developed countries. The fact that Indian multinational firms are still small when compared to developed country local firms in terms of scale of operation, financial strength and extent of intangible asset bundle, the scope of Indian greenfield FDI leading to crowding out of domestic investment appears to be limited. While not denying the traditional drawbacks of brownfield investments by Indian firms to acquire knowledge assets in developed region, in general Indian FDI can contribute considerably to development process of host developed countries.

The capacity of Indian companies to offer cheap and quality products and services tends to promote consumer welfare in developed countries. It increases availability of product and service substitutes allowing greater consumer choice and putting downward pressure on prices. For example, consider the case of Indian pharmaceutical FDI. The entry of Indian generic players into developed region is resulting in lower cost of life-saving medicines and improving accessibility to health services. Local producers in developed countries are now required to meet competitive challenges of outward investing Indian firms, which impart strength to enterprise level productivity growth and technological activities. Apart from directly augmenting capital formation in developed countries, greenfield Indian FDI projects involve transfer of unique Indian technologies and skills diversifying the knowledge base of host developed countries.

A major development impact of Indian service sector FDI can be seen in the tremendous cost-saving achieved by host developed country manufacturing and non-manufacturing companies. The emergence of Indian software and information technology companies enable developed country firms to achieve significant cost reduction, productivity growth and increased flexibility to remain competitive in global markets and to save existing jobs. The outsourcing of work facilitated by Indian FDI in service sector definitely results in greater job loss in the short term. However, host developed countries resorting to re-training for skill improvements are likely to witness a positive outcome in the long term. Indian FDI is also likely to introduce structural change in the local labour market by forcing more workers into specialized and skilled functions.

The impact of acquisitions by Indian companies on local economy can be predicted to be negative in the short term. As Indian companies, which are smaller in size than their acquired entities in a large number, are spending huge resources in the acquisition, it is unlikely that they will be able to allocate more resources for local R&D. In the short term, the R&D activities of acquired developed country firms are likely to witness a declining trend. However, in the long term Indian parent companies are likely to get positively influenced by the advance research infrastructure in host developed countries and may step up affiliates' R&D activities. In the case where acquisition is motivated purely to access customer base and marketing network of the target developed country entities, Indian brownfield investment can increase exports from India with a negative impact on local firms. It may also be possible that Indian parent company may go for restructuring of business after acquisition effecting reduction in the size of workforce in developed countries.

7. Conclusions

The magnitude of developed region bound Indian FDI has been growing over the years with the emergence of developed countries as largest hosts to Indian investment in 2000–07. This rising importance of developed region is actually a reflection of the growing confidence, maturity and capability of Indian firms to emerge as global players by undertaking large-scale foreign production activities.

The dramatic growth of Indian FDI in developed region has been accompanied by a number of changes in the nature of such FDI. In terms of scale, the number of Indian parent firms and the amount of their investment represent a distinct break from the past. A total of 1866 Indian companies are operating in 30 developed countries with greenfield investment stock of US $17 billion at end March 2007. Although, initially Indian parent companies from services led FDI into developed region, manufacturing firms overtook them in early 2000s. Within service and manufacturing sectors, the range of economic activities covered by Indian investing firms significantly expanded over time.

European Union continues to be the largest host sub-region within developed region, but the attractiveness of North America has been growing for Indian FDI. UK followed by USA are the two major hosts for Indian FDI destined to developed region. Since the beginning, Indian investing firms operating in developed region are observed to exert full control over their overseas subsidiaries. The changing profile of leading Indian players in developed region suggests that new business groups are joining Indian FDI in current period with interest in diverse economic sectors.

In addition to greenfield investment, Indian FDI into developed region is increasingly assuming the form of acquisition in recent period. A total of 306 Indian firms undertook 596 acquisition deals amounting to US $47 billion targeted at 28 developed countries. The Indian acquisition in developed region is concentrated in two developed countries, namely UK and USA and mostly related to manufacturing activities followed by service sector.

The analysis of a group of leading EIMs shows that these firms embarked on overseas investment path very recently and are predominantly small firms as compared to their established global peers. However, EIMs have comparable degree of foreign production at global level and tends to share all those motives of outward FDI which are traditionally being associated with global firms. They are motivated to access new markets and build trade-supporting networks and service centre aboard. It appears that EIMs from manufacturing sector are using overseas acquisition as a means of technological upgrading whereas EIMs from software sector are using them for technological diversification.

Indian FDI projects are likely to affect host developed economies in a number of ways. The greenfield projects are inferred to infuse new competitive pressures into developed country markets with benefits of higher productivity, lower cost and increase in consumer welfare. Given that majority of EIMs are very small firms in global standard, they are likely to have negligible negative impact in the form of crowding out of domestic investment. However, Indian FDI in acquisition forms are predicted to have a negative effect on local R&D activities in the short run and may lead to increase in imports with possible unfavourable influence on local producers and employment.

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Appendix

Table-A1 Regional Distribution of the Number of Foreign Affiliates' of 18 leading EIMs

Region/country	No. Of Foreign Affiliates	Per cent	Region/country	No. Of Foreign Affiliates	Per cent	Region/country	No. Of Foreign Affiliates	Per cent
Developed Region	599	68.0	**Developing Region**	282	32.0	**East Asia**	40	4.5
European Union	425	48.2	**North Africa**	9	1.0	China	25	2.8
Austria	3	0.3	Egypt	3	0.3	Hong Kong	12	1.4
Belgium	24	2.7	Libya	1	0.1	South Korea	2	0.2
Cyprus	7	0.8	Morocco	1	0.1	Taiwan	1	0.1
Czech Republic	1	0.1	Sudan	4	0.5	**South Asia**	3	0.3
Denmark	3	0.3	**West Africa**	5	0.6	Bangladesh	2	0.2
Finland	3	0.3	Nigeria	5	0.6	Sri Lanka	1	0.1
France	39	4.4	**Central Africa**	1	0.1	**South-East Asia**	100	11.4
Germany	35	4.0	Congo	1	0.1	Indonesia	6	0.7
Greece	2	0.2	**East Africa**	14	1.6	Malaysia	20	2.3
Hungary	5	0.6	Mauritius	9	1.0	Myanmar	2	0.2
Ireland	13	1.5	Mozambique	1	0.1	Philippines	3	0.3
Italy	11	1.2	Zambia	4	0.5	Singapore	49	5.6
Latvia	1	0.1	**Southern Africa**	12	1.4	Thailand	15	1.7
Luxembourg	4	0.5	South Africa	12	1.4	Vietnam	5	0.6
Netherlands	70	7.9	**South America**	44	5.0	**South-East Europe**	6	0.7
Poland	4	0.5	Argentina	6	0.7	Romania	6	0.7
Portugal	4	0.5	Brazil	16	1.8	**CIS**	9	1.0
Spain	14	1.6	Chile	10	1.1	Russia	9	1.0
Sweden	10	1.1	Colombia	7	0.8	**Grand Total**	881	100
UK	172	19.5	Ecuador	1	0.1			
Other Developed Europe	28	3.2	Peru	2	0.2			
Gilbraltar	1	0.1	Uruguay	2	0.2			
Isle of Man	1	0.1	**Central America**	18	2.0			
Norway	10	1.1	Costa Rica	1	0.1			
Switzerland	16	1.8	Mexico	12	1.4			
North America	111	12.6	Panama	5	0.6			
Canada	15	1.7	**Caribbean & other America**	6	0.7			
USA	96	10.9	British Virgin Islands	5	0.6			
Other Developed Countries	**35**	4.0	Cuba	1	0.1			
Australia	21	2.4	**West Asia**	15	1.7			
Bermuda	1	0.1	Iran	2	0.2			
Israel	2	0.2	Oman	1	0.1			
Japan	6	0.7	Syria	2	0.2			

NewZealand	5	0.6	Turkey	4	0.5			
			UAE	6	0.7			