INTERNATIONALIZATION OF FIRMS FROM EMERGING ECONOMIES: THEORY, EVIDENCE AND POLICY

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Abstract

India and China have emerged as an important source of outward foreign direct investment (OFDI) in the global economy. The increasing presence of their enterprises in the advanced countries has posed a challenge both to theory of internationalization of firms and public policy alike to explain why this has happened. In this paper, an attempt is made to examine, in comparative framework, the trends, patterns and determinants of OFDI from India and China. The critical review of theory and empirical evidence related to internationalization of firms clearly brings out that unlike firms of advanced countries, there are multiple sources of the strength of Chinese and Indian firms that drives overseas investment. The study covers the periods from 1990 to 2010. To ascertain the probability that allows a firm to engage or not to engage in international operations have been estimated for the period 2000-2009, based on a unique panel data set of 140 Indian firms, with the help of logit models. The stock as well as flow of OFDI from India increased at a fast rate compared to China. The outward to inward ratio for India has increased dramatically during 2000-2007 but this ratio was much higher for China between 2008 and 2010. China's OFDI was more concentrated in financial services and Asian countries, whereas in case of India, it was predominantly in manufacturing sector and advanced countries. The public policy regarding OFDI has undergone substantial transformation from merely permissive to encouraging in both the countries. The pattern of investment abroad and internationalization of firms from both the emerging economies seems to have been largely determined and guided by the state policy.

Key words: Outward foreign direct investment, Internationalization of firms, Emerging economies, India, China, Public policy.

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Introduction:

The global economy is facing unprecedented crisis led by the recessionary trends that had occurred in the advanced countries since 2007. The hope for the global economy lies in the growth process of the emerging developing economies of the world. Two such economies are China and India. These two giant sized economies are ranked number two and nine in the global economy respectively in terms of their Gross Domestic Product (World Bank, 2011). Although their pace of economic growth has been slightly slowed down because of the impact of recession in the advanced countries, yet these are fast growing economies of the global economy. China and India have not only shown resilience in a recession ridden global economy but have emerged as the growth pole of the global economy and hope is being pinned on these economies to alleviate global economies especially the advanced economies from a deep rooted economic crisis. It is significant to note that these two economies have been contributing in various ways to make a turnaround in the global economy and one such contribution is the growing importance of their outward foreign direct investment (OFDI) in the global foreign direct investment. China and India are turning from purely recipients of foreign direct investment (FDI) to important contributors of OFDI.

The global economy has witnessed a dramatic change in the structure and pattern of international investment associated with the arrival of new international firms from the emerging economies. China and India have amazingly altered the discourse of outward foreign investment due to increasing presence of their firms in the fast globalization of the world economy. This has attracted the attention of a large number of scholars (Baskaran, et al 2011; Singh and Jain, 2010; Nayyar, 2008; Gammeltoft, 2008 and Morck, et al, 2008). The widely held wisdom, based on the theory of international operation of firms of the industrially advanced countries, is the unique competitive advantage that allows firms to acquire monopolistic or oligopolistic power in the market. The unique competitive advantage of the international operation of the firms was enshrined in the national innovation system of the advanced economies. However, the national innovation systems of the emerging economies and international operation of firms of these economies do not possess such unique competitive advantage primarily due to the infancy of their national innovation systems. Thus, the theoretical developments explaining motives behind internationalization of business by firms of the emerging economies, based on the experience of the industrially advanced countries' firms, remain quite inadequate to explain the recent spurt in internationalization of firms from emerging economies such as China and India. This paper attempts to fill this gap while presenting a critical review of existing theory and empirical evidence from India and China. Furthermore, the study endeavors to explore alternative explanations of international operation of firms based on a unique panel data set of 140 Indian firms. The sample was divided into two parts. One part consists of seventy firms which were engaged in foreign operations, and in the second part an equal number of firms not engaged in foreign operations were taken. The factors that allow a firm to engage or not to engage in international operations have been estimated with the help of logit models. This empirical evidence backed by alternative theoretical underpinnings not only attempts to fill the gap in economic literature but also strives to contribute in exploring additional explanation about the concerned phenomenon. The rest of the paper is organized into five sections. In section one, the theory and empirical evidence of international operation of firms from developing economies are presented. The changing structure and pattern of outward foreign direct investment of two emerging Asian economies viz. India and China is presented in section two. The discussion related to why Indian firms invest abroad based on empirical estimates derived from an econometric model is presented in section three. The changing public policy that has provided incentives to firms in an emerging economy is presented in section four. Final section presents major conclusions and policy implications that emerge from the study of the two aforementioned emerging economies.

1. Emerging Multinational Corporations from the Developing Economies: Theory and Empirics:

There is a spurt in studies focusing on the increasing internationalization of firms from emerging economies in the recent years. The established pattern of international operation of firms has been that there is a flow of investment going from relatively developed to the developing countries. The newly emerging economies have also followed a similar pattern of expansion of their business internationally for quite some time. The recent dramatic rise of outward foreign direct investment from the emerging economies to the advanced countries has generated curiosity and also posed a challenge to the well established wisdom that has provided underlining explanations for such a phenomenon. The theory of international investment that is based on the experience of the industrial advanced countries' firms suggests that competitive advantage allows firms to expand business and secure higher returns. The theoretical perspectives on the international operation of the firm of the developed countries have been evolved from the contributions made by Hymer (1976), Dunning (2000) and several others. The unique competitive advantage possessed by the firms was based on innovation and research technology that is largely concentrated in the home country. The unique competitive advantage in the form of ownership, location and internationalization allows a firm to acquire monopolistic or oligopolistic power in the market and expand business internationally through investments, mergers and acquisitions.

A note worthy feature of emerging countries is that the national innovation system of the emerging developing economies is at its stage of infancy. The internationalization of firms from these countries does not possess the unique competitive advantage as inherited by the firms of the advanced countries. Thus, the emerging multinational enterprises from the emerging economies internationalize business to acquire competitive advantage, which they do not possess (Nayyar, 2008). Therefore, the theoretical developments which strive to provide an explanation as to why a firm internationalizes business based on the experience of industrially advanced countries' firms are inadequate to explain the recent spurt of internationalization of firms from emerging developing economies, including China and India.

Mathews (2006) on the basis of the experience of the outward foreign direct investment from newly industrializing East Asian countries developed a plausible explanation that the firms of the emerging developing countries invest overseas to secure strategic resources for enhancing learning capabilities of the firm. The emerging multinational firms from developing economies seem to have been using defensive and assertive options leveraging on some of the unique assets or resources (Dawar and Frost, 1999). Khana and Palepu (2006) have argued that the emerging multinational firms of the developing countries possess distinct advantage to deal with institutional voids that can be exploited to counter foreign multinational firms both in the local economies and can be extended to international markets. Aulakh (2007) has further argued that the emerging economy multinationals use the existing ownership advantage to pursue the acquisition of complementary resources and capabilities that is required to develop potential competitive advantage for survival in the more competitive environments.

The recent empirical evidence (Fung et al, 2009) based on comparative analysis of China and other East Asian countries covering the period 1991-2006 show that market seeking motive dominates the underlining factors that drives investment abroad. However, the authors assert from the empirical analysis that Chinese investment abroad is also driven to locations with poor quality of labour. Hansen et al (2011) have examined Chinese and Indian foreign direct investment in Denmark while employing the theoretical construct of international business theory. From the empirical evidence, the authors have identified, while using the latecomer theoretical perspective, the factors such as strategic asset seeking, service market seeking, tapping into capabilities of well-known Danish clusters in renewable energy, shipping and biotech that have driven investment in the Danish economy. Baskaran et al (2011) have analyzed, while conducting case studies, the factors that determine outward foreign direct investment from the four emerging economies, that is, China, India, South Africa and Brazil. The authors on the basis of in-depth case studies argued that the main motivating factors that inspire firms from emerging economies to invest abroad are aspiration to emerge as global/regional leader, access to regional/global markets, access to R&D/technological capabilities, moving up the value chain and ensuring raw material security.

The rules and regulations governing the international firms have been dramatically altered to facilitate operations of the foreign firms more recently (UNCTAD, 2011). Opening up of the capital markets has made easier than before for the emerging multinational enterprises from the developing countries to raise equity capital and debt or list their shares on foreign stock exchanges. The firms have been encouraged by the emerging developing countries while making suitable policy changes in the home countries to enable their firms raise equity capital and debt from foreign markets (Ramamurti, 2008 and RBI, 2009). Alon (2010) has analyzed the impact of Chinese institutional environment on internationalization of its business. From the empirical results based on regression model, the author notes that the institutional discrimination generated relative advantages leading to divergence in international business strategies. This implies that policies of Chinese government played an active role in determining the participation of firms in international business. This kind of result has also been supported by studies conducted in understanding the motivating factors that drive Indian investment abroad (Singh and Jain, 2010). To conclude from the foregoing brief review of studies, there are multiple and complex factors that drive internationalization of firms from emerging economies. These factors range from market access for exports, horizontal/vertical integration, delivery of services, acquisition of international brand names, access to technology and resources, and to aspiration of global leadership.

2. A Comparative Analysis of the Changing Structure and Patterns of Outward Foreign Direct Investment from India and China:

Despite the crisis in the global economy and a one year dip in OFDI flows, there is an acceleration of internationalization of firms. The value of sales, employment and assets of foreign affiliates are expanding (UNCTAD, 2011). Table 1 reveals that over a 21 year period beginning 1990, the stock of world OFDI increased dramatically (9.7 times) from US $ 2094169 million in 1990 to US $ 20408257 million in 2010. In terms of the percentage share in world GDP, this amounted to a nearly fourfold increase during the period. The stock of OFDI of developing countries increased by 21.52 over the period of 21 years, that is, 1990-2010, from US$ 145525.1 million in 1990 to US $ 3131845 million in 2010, though its percentage share in GDP of developing countries varied marginally from those of world figures. The rapid rise in the magnitude of the stock of outward foreign investment of developing countries in the second half of the first decade of the twenty first century can be attributed to the emergence of multinational firms from these countries.

Table 1: Global Trends of Outward Foreign Direct Investment, 1990-2010

(Stock in US$ millions)

Year	World	Developing Economies	Developing Economies' share in World	China	India
1990	2094169 (08.70)	145525.1 (09.60)	06.95	4455 (01.30)	124.07 --------
1991	2347432	159727.3	06.80	5368	113.07
1992	2387355	185428.9	07.77	9368	293.89
1993	2776227	223148.8	08.04	13768	294.24
1994	3110092	275921.5	08.87	15768	376.24
1995	3615752	330041.7	09.13	17768	495.24
1996	4093273	384108.8	09.38	19882	735.24
1997	4715324	556986.8	11.81	22444.49	617.29
1998	5525637	520093.9	09.41	25078.30	705.78
1999	6685708	666228.6	09.96	26852.61	1707.32
2000	7962170 (19.70)	857353.7 (21.50)	10.76	27768.39 (02.60)	1733.48 (00.40)
2001	7676328	850919.1	11.08	34653.79	2531.75
2002	7756851	858920.8	11.07	37172.19	4070.58
2003	9890797	940073.5	09.50	33222.22	6073.15
2004	11670353	1105567	09.47	44777.26	7734.42
2005	12415957	1281057	10.32	57205.62	9741.30
2006	15617992	1723325	11.03	73330	27035.64
2007	19080094 (28.9)	2383114 (33.90)	12.49	95798.86 (03.00)	44080.35 (02.60)
2008	15987901	2342750	14.65	147948.90	63337.82
2009	19197164	2688106	14.00	229600	79163.93
2010	20408257 (32.38)	3131845	15.35	297600 (05.06)	92406.51 (05.34)

Note: Figures in parentheses are percentage of GDP.
Source: UNCTAD (2005, 2008 and 2011).

So far as the share of developing economies in world OFDI is concerned, this share increased more than double, from 6.95 per cent in 1990 to 15.35 in 2010. Of these developing economies, China's OFDI stock increased from US $ 4455 million in 1990 (1.3 per cent of its GDP) to US $ 297600 million (5.06 per cent of its GDP). China's OFDI share in that of developing economies registered a three-fold increase. India's OFDI stock, which stood at US $ 124.07 million in 1990 increased to US $ 92406.51 million (5.24 of its GDP in 2010). It is pertinent to note that in percentage terms, India's share in OFDI stock of developing countries also registered nearly a three-fold increase. Although India stood way behind China in terms of OFDI stock as a per cent of GDP till 2007, it was slightly ahead in 2010. Another significant observation is that during the study period 1990-2010, while the stock of OFDI from China increased nearly 67 times, OFDI from India rose a whopping 745 times.

Table 2: Comparison of Foreign Direct Investment Inflows and Outflows from Indian and China

(US$ millions).

Year	India		China		India's outward to inward ratio	China's outward to inward ratio
	Inward	Outward	Inward	Outward		
1990	236.69	6	3487.11	830	0.025	0.238
1991	75	-11	4366.34	913	-0.147	0.209
1992	252	24	11007.51	4000	0.095	0.363
1993	532	0.350641	27514.95	4400	0.0006	0.160
1994	974	82	33766.5	2000	0.084	0.059
1995	2151	119	37520.53	2000	0.055	0.053
1996	2525	240	41725.52	2114	0.095	0.051
1997	3619	113	45257.04	2562.49	0.031	0.057
1998	2633	47	45462.75	2633.807	0.018	0.058
1999	2168	80	40318.71	1774.313	0.037	0.044
2000	3587.99	514.4454	40714.81	915.777	0.143	0.022
2001	5477.638	1397.437	46877.59	6885.398	0.255	0.147
2002	5629.671	1678.039	52742.86	2518.407	0.298	0.048
2003	4321.076	1875.78	53504.7	2854.65	0.434	0.053
2004	5777.807	2175.367	60630	5497.99	0.376	0.091
2005	7621.769	2985.488	72406	12261.17	0.392	0.169
2006	20327.76	14284.99	72715	21160	0.703	0.291
2007	25349.89	17233.52	83521	22468.86	0.680	0.269
2008	42545.72	19397.45	108312	52150	0.456	0.481
2009	35648.78	15929.25	95000	56530	0.447	0.595
2010	24639.92	14626.1	105735	68000	0.594	0.643

Source: UNCTAD (2012).

This dramatic rise can perhaps be explained if the inflows and outflows of FDI from India and China are reviewed (Table 2). In case of India, both inward and outward flow of FDI increased rapidly during 1990-2010, particularly from 2000 onwards. Initially, the gap between inward and outward FDI was substantial, but it narrowed down considerably in the subsequent years. Indeed, 2001 onwards can be described as the arrival of India in the global investment scenario. This can also be observed from India's outward to inward FDI ratio.

A comparison of China's inward and outward FDI from Table 2 itself also showed a similar trend, although the figures are much higher as compared to India. Interestingly, when the ratios of outward to inward FDI of the two countries are compared, it is observed that India registered a higher ratio 2000 onwards till 2007, and thereafter China registered a slightly higher ratio. In both economies, the importance of FDI as indicated further analysis of outward to inward ratio has substantially increased. This spurt of outflows is being scrutinized from the point of view of theory as well as public policy, to understand the process of emergence of the companies of these two economies as global players.

Table 3a: Sectoral Distribution of Indian Foreign Direct Investment Abroad 2000-01 to 2007-08

(US $ Millions)

Year	Manufacturing	Financial Services	Non-financial Services	Trading	Others	Total
2000-01	169 (23.84)	6 (00.85)	470 (66.29)	52 (07.33)	12 (01.69)	709 (100)
2001-02	528 (53.82)	4 (00.41)	350 (35.68)	79 (08.05)	20 (02.04)	981 (100)
2002-03	1271 (70.69)	3 (00.17)	404 (22.47)	82 (04.56)	38 (02.11)	1798 (100)
2003-04	893 (59.77)	1 (00.07)	456 (30.52)	113 (07.56)	31 (02.07)	1494 (100)
2004-05	1170 (65.88)	7 (00.39)	304 (17.12)	192 (10.81)	100 (05.63)	1776 (100)
2005-06	3407 (67.46)	160 (03.17)	895 (17.72)	377 (07.46)	207 (04.10)	5050 (100)
2006-07	3545 (26.34)	28 (00.21)	7486 (55.62)	1739 (12.92)	656 (04.87)	13459 (1000
2007-08	6240 (34.84)	26 (00.14)	1635 (09.13)	8993 (50.21)	1010 (05.64)	17910 (100)
2008-09	6817.0 (42.74)	174.9 (01.97)	1068.0 (06.70)	640.1 (04.01)	7247.8 (45.44)	15947.8 (100)
2009-10	4443 (43.11)	-	2895 (28.09)	1174 (11.39)	1794 (17.41)	10306 (100)

Source: RBI Annual Reports, 2005-06 and 2007-08.
Note: Figures in parentheses are percentages.

The sectoral distribution of India's OFDI (Table 3a) reveals that during the period 2000-01 to 2009-10, the manufacturing sector accounted for most of India's OFDI, barring the two years of 2000-01 and 2006-07. The share of manufacturing sector increased from 23.84 per cent to 43.11 per cent during the period 2000-01 to 2009-10. The share of non financial services, which was as high as 66.29 per cent in 2000-01, registered a steep decline in subsequent years, but improved considerably in 2009-10 (28.09 per cent). The share of financial services was negligible throughout the period. This is in sharp contrast to sectoral distribution of China's FDI abroad (Table 3b).

Table 3b: Sectoral Distribution of China's Foreign Direct Investment Abroad 2004 to 2010

(US $ Millions)

Year	Manufacturing	Financial Services	Non-financial Services	Trading	Others	Total
2004	755.55 (13.74)	749.31 (13.63)	888.78 (16.16)	799.69 (14.54)	2304.66 (41.92)	5497.99 (100)
2005	2280.40 (18.60)	4941.59 (40.30)	845.97 (06.90)	2260.12 (18.43)	1933.19 (15.77)	12261.17 (100)
2006	906.61 (04.28)	8051.65 (38.04)	2095.33 (09.90)	1113.91 (05.26)	8996.46 (42.51)	21163.96 (100)
2007	2126.50 (08.02)	7275.14 (27.44)	5605.31 (21.15)	6604.18 (24.91)	4894.96 (18.47)	26506.09 (100)
2008	1766.03 (03.16)	35765.23 (63.97)	3513.15 (06.28)	6514.13 (11.65)	8348.63 (14.93)	55907.17 (100)
2009	2240.97 (03.96)	29207.52 (51.67)	4156.6 (07.35)	6135.75 (10.85)	14788.15 (26.16)	56528.99 (100)
2010	4664.17 (06.78)	38908.09 (56.54)	9200.19 (13.37)	6728.78 (09.78)	9310.08 (13.53)	68811.31 (100)

Source: Ministry of Commerce (2011) Statistical Bulletin of Chinese Outward Foreign Direct Investment 2010, Beijing: People's Republic of China (Accessed on 3-2-2012 http://english.mofcom.gov.cn/aarticle/statistic/foreigninvestment/201109/20110907742320.html).

Note: Figures in parentheses are percentages.

Although the available data is 2004 onwards, even then it is evident that financial services reigned supreme in OFDI of China. The share of this sector increased from 13.63 per cent in 2004 to 56.54 per cent in 2010. The share of manufacturing, on the other hand, decreased from 13.74 per cent to 06.78 per cent during the same period. Percentage share in OFDI of non-financial services was much more in case of India than China. In absolute terms of course, China's OFDI was much more than that of India, barring the manufacturing sector. This is a pointer towards the more aggressive strategy of India in mergers and acquisitions, as compared to China (Table 4). This strategy is also indicative of the possibility that since India's manufacturing sector is comparatively weak, its OFDI is directed more towards gaining advantages for this sector – technology, brand name, managerial skill and learning etc.

Table 4: Value of Cross-Border Mergers and Acquisitions of India and China during the Period 2000-2010 (Figures in US $ Millions)

Year	India			China		
	Sales	Purchases	Sales-Purchases Gap	Sales	Purchases	Sales-purchases Gap
2000	1219	910	309	2247	470	1777
2001	1037	2195	-1158	2325	452	1873
2002	1698	270	1428	2072	1047	1025
2003	949	1362	-413	3820	1647	2173
2004	1760	863	897	6768	1125	5643
2005	3754	4958	-1204	7207	3653	3554
2006	4740	6586	-1846	11298	12090	-792
2007	4405	29083	-24678	9332	-2282	11614
2008	10427	13482	-3055	5375	37941	-32566
2009	6049	291	5758	10898	21490	-10592
2010	5537	26421	-20884	5965	29201	-23236
Total	41575	86421	-44846	67307	106834	-39527

Source: UNCTAD (2004, 2007 and 2011).

Table 4, reveals that over the eleven year period from 2000-2010 in India's case, purchases for exceeded sales for a few hiccups in 2000, 2002, 2004 and 2009. The gap was quite high in the rest of the years. On the other hand, China's purchases (cross-border) exceeded sales only 2006 onwards. For the entire period, India registered a gap of US $ 44846 million, which was higher than that of China (US $ 39527 million).

Table 5: Top 15 Destinations of Outward Foreign Direct Investment from India and China in 2009

(Stock in Million US$)

India			China		
Rank	Destination	Amount	Rank	Destination	Amount
1	Singapore	14384.11	1	Honkong	164498.94
2	Netherlands	10714.03	2	British Virgin Islands	15060.69
3	USA	6616.85	3	Cayman Islands	13577.07
4	Mauratius	6165.38	4	Australia	5863.10
5	UK	5624.11	5	Singapore	4857.32
6	Channel Islands	5446.02	6	USA	3338.42
7	Cyprus	4679.12	7	South Africa	2306.86
8	Russia	3105.65	8	Luxembuorg	2484.38
9	UAE	2232.40	9	Russia	2220.37
10	British Virgin Islands	1626.68	10	Macau	1837.23
11	Sudan	1191.13	11	Canada	1670.34
12	Switzerland	1069.77	12	Kazakhstan	1516.21
13	Hong Kong	998.58	13	Pakistan	1458.09
14	China	949.42	14	Mongolia	1241.66
15	Egypt	820.71	15	South Korea	1217.80

Source: 1. Government of India (2012) Country-Wise Approvals of Indian Direct Investment in Joint Ventures and Wholly Owned Subsidiaries, New Delhi: Ministry of Finance, Government of India (Accesses on February 6, 2012 http://finmin.nic.in/the_ministry/dept_eco_affairs/icsection/Annexure_5.asp?pageid=1)
2. Ministry of Commerce (2011) Statistical Bulletin of Chinese Outward Foreign Direct Investment 2010, Beijing: People's Republic of China (Accessed on 3-2-2012 http://english.mofcom.gov.cn/aarticle/statistic/foreigninvestment/201109/20110907742320.html).

Table 5 gives the destination wise top 15 positions of OFDI from India and China in 2009. Among the top fifteen investment destinations, both China and India have shown their presence at least in five advanced countries. The analysis of the table reveals that there is equal number of common destinations, which may be construed that there is some degree of competition among them. However, the analysis of the composition of outward foreign direct investment of China and India shows that Chinese investment abroad predominantly is in financial services, where as Indian investment is predominantly in the manufacturing sector. Therefore, it is less likely that both the countries are competing with each other. It is interesting to note that India's OFDI is to China also (albeit on rank 14), but India did not figure in the top 15 destinations of OFDI from China. The trend of both India and China is towards developed economies, Asian economies find more place in China's OFDI than in India's OFDI.

3. Firm Level Determinants of OFDI from India

Extensive literature exploring determinants of OFDI is available, but much of it is with regard to firms from industrialized countries. It is suggested that investments abroad are mainly guided by competitive advantage, and this competitive advantage is attributed to ownership, location, and internationalization. However, this argument is not entirely suitable to seek explanations of OFDI from developing economies. Rather, it is being argued that developing countries undertake OFDI "not as a means of exploiting competitive advantage, but as a means of realizing and augmenting potential competitive advantage." (Nayyar, 2008).

In the particular case of India, OFDI is mainly driven by push and pull factors. The key push factors are inadequacy of home markets, rising cost of production and labour cost. The pull factors are investment in infrastructure, strong currencies, established property rights and minimal exchange rate regulation. For the present study, the main determinants of OFDI from India are identified as exports, firm size, product differentiation, research and development, cost effectiveness, and managerial skill/accumulated learning. A brief explanation of these probable determinants and their expected behaviour in influencing OFDI from India will precede the actual results obtained through econometric model. A comparative performance of 70 randomly selected Indian firms who are undertaking OFDI, and 70 firms not undertaking OFDI have been selected covering the period of 2000-2009 The data set developed for Indian companies is based on the prowess data base provided by the Centre for Monitoring Indian Economy.

Cost Effectiveness (X1): This is expected to be positively related with OFDI from India. Adoption and incremental change can affect the cost of production. It can be measured in terms of profitability and is positively associated with the probability of investing abroad (Kumar 2007). Profit divided by capital will give us cost effectiveness.

Research and Development (X2): R&D is expected to be positively related with ODFI from India. This is because firms aspire to buy technology, process management, know-how, marketing and distribution networks (Rajan, 2009) from abroad. Technology is a cost effective process, and technological effort can be measured by the process of R&D. R&D is calculated as expenditure on R&D divided by sales.

Managerial Skill/Accumulated Learning (X3): This variable is expected to have a strong positive influence on the probability of Indian OFDI. Investing abroad helps firms to learn and absorb managerial skill, market information, and know-how. These are valuable advantages of overseas investments. Accumulated learning and managerial skill depends on the age of companies, and is estimated by the inaugural year of the firm.

Firm Size (X4): A larger firm is often associated with greater market access, more R&D activities, and greater risk learning capacity. Thus, they are more likely to venture abroad. OFDI is, thus, expected to be positively related to firm size. In our model, firm size will be determined by sales.

Exports (X5): These are expected to be positively linked to India's OFDI. This expectation is based on the product cycle theory of Vernon (1966) which postulates that exports have a major positive impact on overseas investments, as it enhances the competitiveness of countries at international level.

Product Differentiation (X6): Enterprises having the ability to differentiate their products and establish brand names at domestic level, have greater opportunities to invest abroad. Developing countries are not likely to be strong in terms of their ability for product differentiation or establishing brand names. Product differentiation will be calculated with the expenditure on advertising divided by sales.

In this way, we have identified six explanatory variables which may determine and explain the OFDI decisions of Indian firms. The actual direction of these variables as well as their significance, was obtained by formulating a qualitative response model. The dependent variable is a dummy variable and takes the value 1 if the enterprises have undertaken OFDI, otherwise it takes the value zero. The logit model for panel dataset of 140 firms covering the period 2000 to 2009 explaining the probability of an Indian enterprise being an outward investor is given below:

$L_{it} = \beta_0 + \beta_1$Cost effectiveness $+\beta_2$R&D $+\beta_3$ Learning $+\beta_4$Size $+\beta_5$ Export $+ \beta_6$ Productdifferntiation $+\mu_{it}$

Where β_i is a vector of logit coefficients and μ_i is a normally distributed error term. L_{it} is the probability of an Indian firm undertaking investment abroad.

The results obtained from the above equation are presented in Table 6. It is important to note that Cost effectiveness (X_1) is a positively and significantly related to OFDI from India. The other variables which have the expected sign and are statistically significant determinants of OFDI are R and D (X2) and Managerial skill/accumulated learning (X3). However, variables like firm size (X4), exports (X5) and product differentiation (X5), though positively related with OFDI, are statistically insignificant determinants of OFDI from India.

Table 6: Determinants of OFDI of Indian firms

Independent Variables	Coefficients of model one	Z-statistics
Cost Effectiveness (X1)	0.002959*	2.032
Research and Development (X2)	0.002288*	2.280
Accumulated Learning/ Managerial skill (X3)	0.151743**	13.63
Firm Size (X4)	0.000099	0.075
Exports (X5)	0.000595	0.651
Product Differentiation (X6)	0.002247	1.572
Constant	3.74937**	9.42
Pseudo R2	0.37133	
LR Chi2	720.9896	
Log likelihood	-610.0613	
Number of groups	140	
Observation per group	10	

Note: * implies significance of 5 per cent level of significance; ** at 1 per cent level of significance.

To estimate the goodness of fit of logistic model, Psuedo-R^2 has been estimated. A higher value of R (closer to 1) will show a powerful explanatory power of the equation. Our estimates show that the value of Psuedo-R^2 is 0.37133, which indicates that the explanatory power of the equation is around 37 per cent. Chi square test is used to test the significance of difference between the expected and observed frequencies. The positive value of this test in our model shows significance and appropriateness of the model. The positive and statistically significant variables from the model are cost effectiveness, research and development and accumulated learning/managerial skill. This implies that Indian firms investing abroad are more efficient, technologically strong and have substantial accumulated learning/managerial skill compared with other firms operating within India. This clearly brings out the fact that Indian firms which have been investing abroad enjoy competitive edge over the firms operating domestically.

4a. Outward Foreign Direct Investment Policy: The case of India.

Indian government has shown keen interest in promoting outward foreign investment with the aim to ease foreign exchange constraint through exports of Indian capital goods, technology and consultancy services. In the year 1974, the Inter-Ministerial Committee on Joint Ventures Abroad was set up within the Ministry of Commerce by the Government of India to scrutinize the proposals made by Indian companies for overseas investment for granting approval. The Inter-Ministerial Committee formulated detailed guidelines for approving Indian companies' proposal for overseas investment. These guidelines were prepared with view to synchronize Indian participation in accordance with the host country regulations. The guidelines encouraged formation of joint ventures with the host economy enterprises and Indian enterprise equity participation should be made in terms of exporting indigenous plant and machinery and also technical know how from the existing Indian joint ventures. Keeping in view scarcity of foreign exchange, the cash remittances of capital to overseas joint ventures were discouraged but provision was made to allow it in exceptional cases. This policy has substantially increased Indian investment flows abroad in the second half of the 1970s. By 1980, India was emerged as the third largest exporter of industrial OFDI among the developing countries (Lall, 1983). The import substitution regime has been enabled Indian companies to learn to adapt technology, capital goods fabrication capability and human resources. This created assets provided requisite advantages to Indian companies to extend their business abroad, which boosted Indian outward foreign direct investment. The magnitude of Indian investment abroad declined substantially in the early eighties and turnaround in OFDI occurred again towards the mid-eighties. Indian overseas investment was largely remained concentrated in the developing countries in the seventies and the eighties. However, some change has been noticed since the mid-eighties, which had witnessed some rise of investment in the advanced industrial countries (Kumar, 1995). The first phase of

India’s outward foreign direct investment, which spanned from 1978 to 1992, can be called as quite restrictive. India’s outward foreign investment was possible only in the form of minority owned joint ventures.

The second phase of Indian outward investment started in the year 1992, when an automatic route for Indian investment abroad was adopted and overseas investment up to two million US dollars were permitted. The restrictions on cash remittances and minority-ownership were removed. The limit on overseas investment through automatic route was increased to US$ 4 million in the year 1995. An important change with regard to the approval of proposals of overseas investment was shifted from ministry of Finance to the Reserve Bank of India. The RBI was vested with approval amount up to US $ 15 million and the approvals beyond US$ 15 million remained under the purview of the ministry of finance. In the year 2000 and 2002, the upper limit for automatic overseas investment approval was raised to US$ 50 million and US$ 100 million respectively. It needs worth mentioning here that the second phase of India’s overseas investment coincided with worldwide liberalization of rules and regulations related to foreign direct investment. During the period 1992 to 2010, the number of countries introduced changes in regulatory mechanism increased from 43 in 1992 to 74 in 2010 (Table 7). The number of regulatory changes increased during the same period from 77 to 149 and more favorable changes towards overseas investment also increased from 77 to 101. This shows that global economy has framed rules and regulations to attract foreign investment and India has also framed regulations, which permitted Indian companies to try their metal in the international markets. These relaxed regulations in the global economy were also accompanied with much greater access to financial markets.

Table 7: Global Trends of Regulatory Changes Relating to International Investments from 1992-2010

Items	1992	1995	2000	2005	2006	2007	2008	2009	2010
Number of countries that introduced changed	43	63	70	92	91	58	54	50	74
Number of regulatory changes	77	112	150	203	177	98	106	102	149
More favorable changes	77	106	147	162	142	74	83	71	101
Less favorable changes	0	6	3	41	35	24	24	31	48

Source: UNCTAD (2011 and 2008).

The policy changes with regard to Indian overseas investment since the year 2004 have been described as liberal (Nayyar, 2008). The liberal phase of the policy changes shows that the automatic route was extended up to 100 percent of the firm's net worth and was

Table 8: Selected changes to Indian overseas Investment Policy

1.	Indian companies permitted to undertake overseas investments by market purchases of foreign exchange without prior approval of RBI up to 100.0% of their net worth; up from the previous limit of 50.0%.
2.	An Indian company with a satisfactory track record allowed investing up to 100.0% of its net worth within the overall limit of US$ 100.0 mn by way of market purchases for investment in a foreign entity engaged in any bona fide business activity from 2004. The provision restricting overseas investments in the same activity as its core activity at home of the Indian company were removed. Listed Indian companies, residents and mutual funds permitted to invest abroad in companies listed on a recognized stock exchange and in company that has the shareholding of at least 10% in an Indian company listed on a recognized stock exchange in India.
3.	Indian companies in special economic zones permitted to undertake overseas investment up to any amount without the restriction of the US$ 100.0 mn ceiling under the automatic route, provided the funding was done out of the Exchange Earners Foreign Currency Account balances.
4.	The three years profitability condition requirement was removed for Indian companies making overseas investments under the automatic route.
5.	Overseas investments were allowed to be funded up to 100.0% by ADR/GDR proceeds up from the previous ceiling of 50.0%. Further an Indian firm that had exhausted the limit of US$ 100.0 mn in a year could apply to the RBI for a block allocation of foreign exchange subject to such terms and conditions as may be necessary.
6.	Overseas investments were opened up to registered partnership firms and companies that provided professional services. The minimum net worth requirement of Rs. 150 mn for Indian companies engaged in financial sector activities in India was removed for investment abroad in the financial sector.
7.	In 2004, Indian firms were allowed to undertake agricultural activities, which were previously restricted, either directly or through an overseas branch; and are now permitted under the automatic route.
8.	In 2004, the RBI further relaxed the monetary ceiling on Indian companies' investment abroad. Indian companies can now invest up to 100.0% of their net worth without any separate ceiling even if the investment exceeds the US$ 100.0 mn limit. Furthermore, Indian companies can now invest or make acquisitions abroad even in areas unrelated to their business at home.
9.	In 2005, banks were permitted to lend money to Indian companies for acquisition of equity in overseas joint ventures, wholly owned subsidiaries or in other overseas companies as strategic investment.
10.	In 2006, the automatic route of disinvestments was further liberalized. Indian companies 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.
11.	In 2007, the ceiling of investment by Indian entities was revised from 100 per cent of the net worth to 200 per cent of the net worth of the investing company under the automatic route of overseas investment. The limit of 200 per cent of the net worth of the Indian party was enhanced to 300 per cent of the net worth in June 2007 under automatic route (200 per cent in case of revisited partnership firms). In September 2007, this was further enhanced to 400 per cent of the net worth of the Indian party.
12.	The Liberalized Remittance Scheme (LRS) for Resident individuals was further liberalized by enhancing the existing limit of US$ 100.00 per financial year to US$ 200.00 per financial year (April-March) in September 2007.
13.	The limit of portfolio investment by listed Indian companies in the equity of listed foreign companies was raised in September 2007 from 35 per cent to 50 per cent of the net worth of the investing company as on the date of its last audited balance sheet. Furthermore, the requirement of reciprocal 10 per cent shareholding in Indian companies has been dispensed with.
14.	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. This was further raised to US$ 7 billion in April 2008. The existing facility to allow a limited number of qualified Indian mutual funds to invest cumulatively up to US$ 1 billion in overseas Exchange Traded Funds, as may be permitted by the SEBI would continue. The investments would be subject to the terms and conditions and operational guidelines as issued by SEBI.
15.	Registered Trusts and Societies engaged in manufacturing/educational sector 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.
16.	Registered Trusts and Societies which have set up hospital(s) in India have been allowed in August 2008 to make investment in the same sector(s) in a JV/WOS outside India, with the prior approval of the Reserve Bank.

Source: 1. RBI (2009); and 2. Singh and Jain (2010).

increased to 200 per cent of the net worth in the year 2005. The prior approval from RBI was dispensed with and firms were also allowed to obtain the remittances through any authorized foreign exchange dealer. In 2005, banks were permitted to lend money to Indian companies for acquisitions of equity in overseas joint ventures, wholly owned subsidiaries or other overseas companies as strategic investment. In the year 2007, the limit of overseas investment of Indian companies was increased to 300 per cent of net worth in the month of June 2007 and further raised to 400 per cent of the net worth of a company in the month of September 2007. The analysis of the changes related to overseas investment clearly brings out the fact that Indian government has eased any difficulty arises on the way of outward foreign investment by the Indian companies. The big boost of Indian outbound investment since the year 2000 can essentially be attributed to the policy changes affected by the government of India to encourage Indian companies during the period 2000 to 2009 (Table 8).

4b. Outward Foreign Direct Investment Policy: The Case of China:

Chinese public policy has played an important role in promoting outward foreign direct investment. It has undergone dramatic shift from merely permissive to encouraging (Davies, 2010). Chinese outward investment experience can be divided into four distinct phases. The first phase ranges between the period 1979 and 1985 characterized as early stage of opening up with the world economy. The distinctive feature of Chinese investment abroad during this phase was that the only state owned companies were allowed to invest abroad. During this period, there were 189 number of approvals granted with total investment of US $ 197 millions. During the period of second phase (1986-91), there were 891 approvals with US $ 1.2 billion investment abroad. This phase was quite different from the first phase in terms of participation of companies other than the state owned enterprises (Salidjanova, 2011). The liberalization reforms progressed further more vigorously during the third phase of Chinese investment abroad (1992 to 1998). During this phase, there occurred a substantial amount of diversification in activities of firms investing abroad such as real estate and financial markets. The Asian financial crisis had incurred losses to Chinese companies that led to the Chinese government to impose restrictions in the process of granting approvals.

The fourth or the current phase began in 1999 which is popularly called as ‘going global’ strategy. This strategy is based on the principle of promoting firms with a view to make improvements in the excessive low return foreign exchange reserves, international competitiveness and efficiency of resources use by the firms. During this phase, the declared government policy was to prod firms to invest abroad in those areas where there are deficiencies. The firms were encouraged to investment abroad in resource exploration projects; promotion of domestic technologies, products, equipment and labour; overseas research and development; and market seeking. The promotion of outward investment during the fourth phase was also aimed at to ensure future supplies of energy and raw material needs of China. Several amendments have been made since 2006 to ease barriers especially related to fixing of quoting for the purchase of foreign exchange. In 2008, the Chinese Banking Regulatory Commission has permitted commercial banks to grant loans for cross-border mergers and acquisitions. Further relaxations were granted in the year 2009 with regards to reduction of approval time and delegation of authority to grant approvals at the local branches of ministry of commerce. The state led policy of China has exerted substantial influence in pushing state owned and to some extent private companies to make investment abroad with aim to reduce deficiency of resources, technologies, managerial skills and competitiveness.

5. **Conclusions**:

Indian and Chinese firms have long experience to operate and invest in other countries of the world. The overseas investment experience of both Indian and Chinese firms show that largely they operated in the developing countries possess technological and other capabilities equal or lower than at home. But some investment has also been made in the industrially advanced countries though in minority equity participation. The recent spurt in expansion of OFDI from India and China was in sharp contrast of its own earlier OFDI experience as well as from other developing countries. In sharp contrast to China, the larger proportion of OFDI from India was in the manufacturing activities. The Chinese investment abroad is mainly taking place in the financial sector related activities. Chinese OFDI concentration is largely in Asian countries. The more than 70 per cent of OFDI from India flowed to industrially advanced countries. The significant proportion (80 per cent) of acquisitions was in the developed countries. The changing pattern of OFDI from India during the recent past can essentially be attributed to numerous underlying factors. Indian economy has shown high degree of dynamism in the process of structural transformation that has provided dividends in terms OFDI. This achievement is due to the seven decades long concerted efforts made by the Indian government to develop strategic capabilities in the economic agents of production. The innovations system put in place by the Indian development strategy, which itself has undergone unprecedented changes from import substitution to nearly open system, has developed and nurtured some strategic and unique cost reduction capabilities in the economic agents of production (Nagraj, 2006). Indian policy regime, keeping in view the national development priorities, allowed Indian enterprises to invest abroad to achieve economies of scale and remain competitive with companies of other countries. In the early stage of Indian economic development, the Indian enterprises were enabled to learn adaptive capabilities and faced restrictive policy regime to invest abroad mainly due to the reason to boost domestic investment. During the second phase of Indian economic development Indian companies were increasingly encouraged to invest abroad to reduce the deficiency of strategic asset requirements for sustaining domestic development process. The liberalization phase has boosted OFDI due to increasing domestic competition and suitable policy changes related to encouraging and enabling Indian firms to expand overseas investment. One fundamental commonality which emerges from the public policy experience of internationalization of business is that it is state led. The panel data based firm level econometric analysis shows that the liberalization policy environment succeeds more recently because of the capabilities, in terms of technology and management, to compete in the international markets has been developed systematically over the years. The national innovation system developed during the last five and a half decades paid high dividends. This is the foremost lesson that can be learned from the experience of the rapid expansion of OFDI to developed countries.

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