

**Working Paper
434**

**CROSS-BORDER MERGERS AND
ACQUISITIONS IN INDIA:
EXTENT, NATURE AND STRUCTURE**

Beena Saraswathy

July 2010

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This is part of the PhD study on Cross-border Mergers and Acquisitions in India. I acknowledge my sincere gratitude to my Guru, Prof. P Mohanan Pillai, to whom I owe this and everything; Prof. KK Subrahmanian remains like a messenger of GOD... Dr. PL Beena, Prof. K Pushpangadan, Prof. N Shanta, Prof. Sunil Mani, Prof. KJ Joseph, Dr. V Santhakumar Prof. NS Siddharthan, Dr. Vinoj Abraham and Dr. Uday Bhanu Sinha helped me at different stages of this work. Thanks also go to the library staff of IIM Calicut and CDS, especially Mr. VK Anilkumar.

ABSTRACT

The corporate sector all over the world is restructuring its operations through mergers and acquisitions in an unprecedented manner in order to successfully overcome the challenges posed by globalization. One of the striking features of the present mergers and acquisitions scenario is the presence of a large number of cross-border deals, which is an easier way of internationalization comparing Greenfield mode of entry. Further, this is leading to a gradual shift in the organic ways of foreign investment into inorganic means of brownfield investment. In this context, the present study tries to understand the nature and extent of such deals in India in the backdrop of global scenario. The present study also suggests that like the overall FDI, there has been high national difference in attracting brownfield investment. Not only the world FDI is moving in tandem with the incidence of cross-border mergers and acquisitions, but also the service sector mergers and acquisitions are the major force driving world FDI during the study period. Even though Indian merger scenario is still in a nascent stage, a substantial proportion of FDI came through this route in recent period. With the help of a firm level database on mergers and acquisitions we have observed three distinct phases of merger activity in India. The pre mid 1990s merger scenario was dominated by domestic deals, while there is an increasing presence of cross-border deals within India since the mid 1990s. Finally, we witness another stage of overseas deals during the post 2000 period, which shows that the overall macro economic scenario over the years is shaping the motives of merger. The study also tries to understand the nature, extent and structure of these deals in India. In this paper we argue that the current surge in cross-border deals should be viewed in a multi-factor dimension, which involves the push factors from home country such as market constraint, need for low priced factors of production, increasing global competition as well as the pull factors from foreign firms such as the wider market, technology and efficient operation.

Key words: Market structure, Mergers and acquisitions, Anti trust Issues, Multinational firms

JEL classification: D43, G37, L40, F23

I) Introduction

The corporate sector all over the world is restructuring its operations through different types of consolidation strategies like mergers and acquisitions in order to face challenges posed by the new pattern of globalisation, which has led to the greater integration of national and international markets. The intensity of such operations is increasing with the de-regulation of various government policies as a facilitator of the neo-liberal economic regime. Earlier also the firms were widely using consolidation strategies, but one of the striking features of the present wave of mergers and acquisitions is the presence of a large number of cross-border deals. The intensity of cross-border operations recorded an unprecedented surge since the mid-1990s and the same trend continues (World Investment Report, 2000). Earlier, foreign firms were satisfying their market expansion strategy through the setting up of wholly owned subsidiaries in overseas markets (Jones, 2005), which has now become a 'second best option' since it involves much time and effort that may not suit to the changed global scenario, where the watchword is 'plaction', that is plan and action together¹. Thus getting into cross-border mergers and acquisitions became the 'first-best option' to the leaders and others depended on the 'follow-the-leader' strategy².

The Indian corporate sector too experienced such a boom in mergers and acquisitions that led restructuring strategies especially after liberalization, this is due to the increasing presence of subsidiaries of big Multi National Corporations (MNC) here as well as due to the pressure exerted by such strategies on the domestic firms. Besides, many MNCs realised the fact that the Indian market is a consumer base to meet their

1 Otherwise the next best firm will bring out the product and reap the profit.

2 'Follow-the leader strategy' is developed by Knickerbocker (1974).

desired objectives. Thus the entry is unavoidable. They found that resorting into mergers, acquisitions and similar strategies is an easy way of entry into Indian market without much cost of time and money. In order to facilitate globalisation, Indian government also implemented various policies which marked a paradigm shift in the operation of the domestic firms as it removed the patronage enjoyed by the domestic firms under the assumptions like Infant Industry argument and opened them for the free play of market forces. More importantly, globalization reduced the product life cycles and the firms began to bring out new products quickly to the market as compared to the past. Computer aided manufacturing helped to reduce the time needed for production. Shortened product life cycles meant high R&D intensity and this has to be recouped before the technology becomes obsolete, which becomes especially important if a rival firm 'wins-the-race' to innovate a new generation product (Levin et. al, 1997 as in Narulla, 2003). These circumstances again prompted firms to engage in various kinds of agreements to reduce the high risk associated with innovation and to become successful through the sharing of tangible and intangible assets. Given this broad context, the present study is an attempt to analyse the changing nature of foreign investment in the form of mergers and acquisitions using a new database created, which prevented many scholars from making detailed studies. In the second section we will be discussing why firms are crossing borders and the global scenario of cross-border deals and its significance in world Foreign Direct Investment, the third section will be dealing with the extent and nature of mergers and acquisitions in India with special emphasis on cross-border deals. The fourth section is an attempt to explore the new pattern of internationalization of Indian firms in the form of overseas acquisitions and the fifth section is concluding observations.

II) Why Firms are Crossing Borders?

When we look at the business history, we can see at least four types of growth strategies adopted by the firms. Firms started with

domestic production and began to export to the foreign markets, establishment of subsidiaries in overseas market was the next stage and as a fourth phase, firms started to acquire firms in foreign markets instead of establishing subsidiaries³. The increasing magnitude of investment through cross-border mergers and acquisitions and its emergence as a major component of FDI even in the case of developing countries such as India, demand us to think why firms are engaging in cross-border consolidations instead of establishing subsidiaries or to engage in export-oriented growth. This necessitates us to merge the prime objectives of foreign investment with that of mergers and acquisitions. We observed that in many cases, the objectives of foreign investment are achieved through consolidation in an easier way, which is the *raison d'être* the increasing importance of cross-border consolidation strategies. In this section we shall try to bring together the above-mentioned two questions such as, why do firms invest abroad and what makes mergers and acquisitions-a preferred mode to other strategies.

Ever since the publication of Stephen Hymer's seminal thesis on FDI and MNC's the literature on this topic increased substantially and taken different dimensions and placed MNCs at the crossroads of many disciplines and debates (Calvet, AL, 1981). Jack Behrman (1972), distinguished four major types of foreign investors based on the underlying motives, which later adapted and extended by Dunning⁴. They are 1) Resource seekers, 2) Market seekers, 3) Efficiency seekers and 4) Strategic assets or Capability seekers. Presently, firms have multiple objectives and they fall under more than one of these categories. We shall discuss each of these categories and try to incorporate how mergers and acquisitions enable to achieve the desired objectives of each of these categories of investors⁵.

3 All four strategies are in operation now. But the entry of each strategy was of this order. The policy changes were also facilitated in shaping this order.

4 See Dunning (1993) for a detailed discussion.

5 Dunning also discussed about Escape Investment, Support Investment and Passive Investments.

1) *The Resource Seekers (RS)*

RS include the firms, which are investing abroad for obtaining specific resources at lower prices. They are either prompted by the non-availability of these resources in home market or lower prices prevailing in foreign locations compared to their home country. There may be three types of Resource Seekers such as, seeking physical resources⁶, seeking skilled and semi-skilled labourers at lower cost and those, which seek technological capability, management or marketing expertise, and organizational skills. Under all these categories the major motivation is to make the investing enterprise more profitable and competitive in the market it serves or intends to serve than the previous levels.

2) *The Strategic Asset Seekers (SS)*

This group includes the firms, which try to sustain or enhance their international competitiveness or weaken that of other firms through acquiring the assets of foreign corporations. The major motive of SS is to add to the existing product portfolio of the firm rather than to exploit the marketing and other type of synergies.

3) *The Market Seekers (MS)*

As the name suggest, these are firms, which seek new markets in order to expand and strengthen their operations outside the home country. They invest in a particular country or region to supply goods or services to market in these or adjacent countries. One of the major reasons for the emergence of market oriented FDI is due to the need to “follow-the-leader” as suggested by Knickerbocker (1974) and to “exchange the threats”⁷ as mentioned by Graham (1974). This becomes more important under the present global scenario, where most of the markets are characterized with oligopolistic behaviour. MNEs may consider it necessary to have physical presence in leading markets served by its competitors and construct production units and research centers there. This will enable them to adapt their products to the local needs and to

6 Which may be location bound also.

7 Where, the oligopolists imitate each other by establishing subsidiaries in each other's market.

indigenous resource and capabilities, which is essential to compete with the local firms. Hymer (1960) argued that local firms have better information about the economic environment of their country than do foreign firms, and foreign firms should possess countervailing capabilities in order to overcome this (Calvet, AL, 1981). Moreover, subsidiaries in foreign locations will help to reduce the production and transaction cost to a great extent compared to export from home market⁸.

4) *The Efficiency Seekers (ES) or Rationalized FDI*

These are firms, which try to operate more efficiently by deriving economies of scale and scope and by reducing risk. This is essentially rationalizing the structure of the established resource based and market seeking investment. They are mainly aiming to take advantage of different factor endowments, cultures, institutional arrangements, economic systems and policies and market structures by concentrating production in a limited number of locations. There are two types of Efficiency Seekers. First is to take advantage of the availability and cost of traditional factor endowments in different countries and the second is to take advantage of economies of scale and scope. Generally, Rationalized FDI and Strategic Asset Seekers are moving together to achieve their desired objectives.

When we look at the advantages of mergers and acquisitions as we discussed above, we can see that most of these categories will be able to achieve their objectives through mergers and acquisitions in a better way compared to Greenfield investment. The entry through mergers and acquisitions will enable the firms to attain these critical resources in an easy way compared to the Greenfield investment, which will take much more time and effort. The Resource Seekers which are more interested in getting the physical and labour resources at cheaper rates will be better off through mergers and acquisitions compared to Greenfield investment since they will be able to use the already established resources of the

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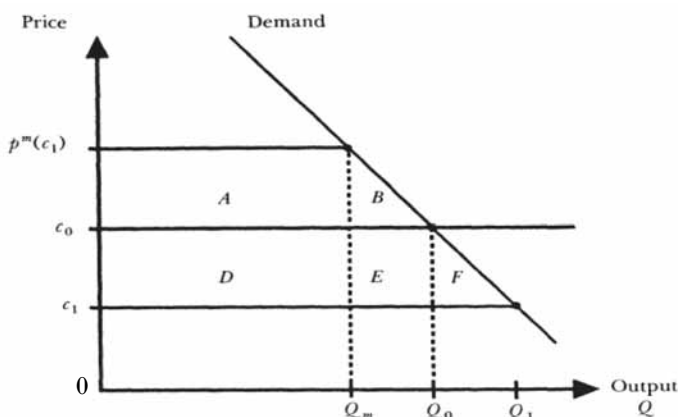
It will depend on the distance of foreign location.

partner firm. They can access the local firm's cheap labour and such other resources. The case of Strategic Asset Seekers is almost the same as the Resource Seekers. They can very well strengthen or diversify their product portfolio through acquiring the brands of their partner and make the firm more competitive. The consolidated operation will again help to reduce the competitiveness of their competitors.

Regarding the other two types of investors i.e. the Market Seekers and Efficiency Seekers, the advantages of market power and efficiency creation through mergers and acquisitions is well established. As we said earlier, both of these categories of firms are aiming at the creation of economies of scale and scope and thereby market power. If they are following Greenfield mode of entry, major advantages to them are the expansion of their market to a foreign country and the availability of factors of production at cheaper rates. Whereas if they are entering a foreign market through mergers and acquisitions, they can achieve these objectives and more, with less cost and effort compared to fresh entry. They can access and share the already established market and avail resources of an established firm in a better way and avoid the problems of culture, language etc. Not only they can achieve the benefits of large scale of operation but also the reduction of many expenses such as marketing, advertisement, distribution, R&D etc through avoidance of duplicate expenses. The effect of cutting R&D expenditure would be too high since it will save much time, effort and cost. Moreover from a firm's point of view, they can raise the market power to a large extent through the reduction of number of firms in the industry and the expansion of operation, which enable them to have a say in the determination of prices. The major advantages to the Efficiency Seekers and Market Seekers from consolidation can be discussed with the help of a simple model developed by Williamson (1968) and later extended by Shapiro and Willig (1990)⁹ (see the figure 1).

9 The article is in the context of joint ventures, which we are applying to mergers and acquisitions with some minor changes.

Figure 1: The Effect of Consolidation on Price, Output and Efficiency



Source: Shapiro, D and Robert D Willig (1990)

Here we are assuming a perfectly competitive industry prior to the consolidation move (that is merger or acquisition) and was producing 'Q₀' quantity of output at 'C₀' marginal cost and 'P₀' price, which is implicit. If consolidation is taking place at this point and suppose that both the firms are producing their previous level of output, then the cost of production will reduce from 'C₀' to 'C₁' (i.e. C₀ > C₁). Here the firm increases the efficiency by reducing production costs and the area DE shows this improved efficiency. Now the firm has three options. One is to sell their product at previous level of price (P₀) second at a reduced price (P₁) and third at a higher price (P^m) using their increased market power¹⁰. In the first case there will not be any change in prices and the firm will get the profit equal to the area D+E that is, Q (OC₀-OC₁). In the second case, the firm can capture the entire market through a small marginal reduction in prices. The net increase in welfare would be similar to the area D+E that is, Q (OC₀-OC₁), which is the sum of profits and consumer surplus.

10 It will also depend on the number of firms in the industry, elasticity of demand etc.

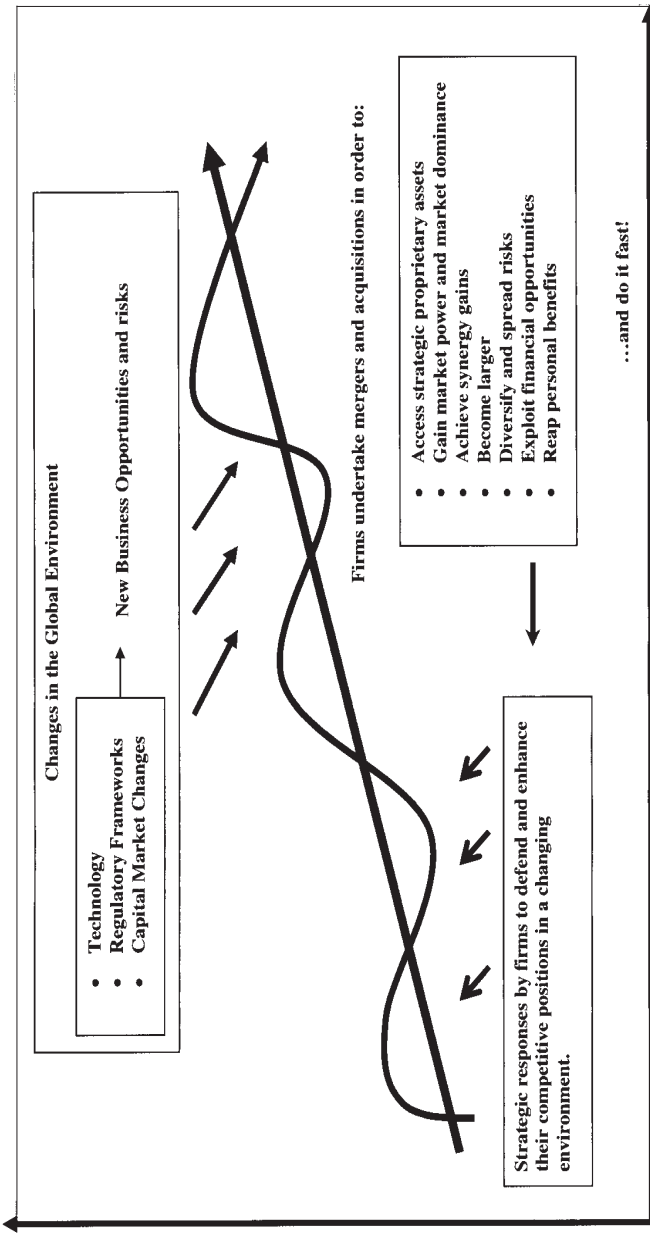
Here the consumers would appropriate the area E through the price reduction offered by the firm. Under the third case, allowing for an increase in the market power of the firm and restricted entry, firm can set the prices at the profit maximizing level of a monopolist, say P^m in our figure, which will enable them to achieve a higher level of profit given the cost of production, $C_1 < C_0$. The consumers will be harmed due to the price hike and their loss would be equal to the area A+B and the profit for the monopolist would be similar to the area A+D¹¹. The net welfare impact would be similar to the area D — B, where D represents the cost saving due to merger and B is the deadweight loss arising out of monopoly pricing. The difference between these two has been an evergreen topic of debate in merger literature. Williamson (1968) favoured the net efficiency gains and says, “even then the cost differential is too low; the net benefits will offset the losses”.

Thus from the above discussion it follows that mergers and acquisitions is a better solution for firms, which want to internationalize their operations quickly. Its importance can be briefed with the help of the following figure (see figure 2), where on the one hand various policy changes are pushing firms to engage in cross-border mergers and acquisitions whereas on the other hand consolidation strategies are acting as a pull factor for the challenges arising out of policy changes.

Broadly, there are three sets of regulations faced by the firms under the present global scenario. They are Competition Policy (Anti-trust Regulations), Intellectual Property Rights (IPRs) and Sectoral Policy Regulations. Amongst this, the Competition Policy aims at enhancing consumer welfare through maintaining competition. IPRs give temporary monopoly for the owners of a particular innovation, which is expected to enhance the innovation incentives of the innovating firms. The third set of regulation that is sectoral policies also aims at the consumer welfare, but the policy changes according to the welfare

11 Since the firms were not getting profit (normal profit only) prior to merger.

Figure 2 The Driving Forces of Cross-border Mergers and Acquisitions



implications of different sectors. Recently the competition authorities all over the world are more concerned about the creation of innovation through mergers and acquisitions and vice versa. The policy makers are facing a dilemma whether to allow big firms to merge and allow them to undertake costly innovations, or to restrict them on the ground that it can lead to concentration of market power in the hands of a few big firms. If they allow, it can be argued that mergers will enhance consumer welfare in future with the introduction of better quality products at cheaper prices through engaging in innovation facilitated by consolidation. On the other hand it can also lead to the monopolization of innovation and the consequent rise in prices, which will adversely affect the welfare of consumers. Thus the central task with the competition authorities is to ensure maximum consumer surplus without harming that of producers'. In order to overcome such a dilemma, most of the competition authorities relied on fixing a maximum ceiling limit for mergers and acquisitions, beyond this limit, the firms have to get prior permission from the respective authorities. Needless to say, the fixing of ceiling raised several questions regarding the extent of ceiling, which would be having its impact on the market structure and performance. This limit varies from country to country due to the differences in the legal, economic and social framework existing in different countries. However, there are preliminary discussions going on for evolving an *International Competition Policy* for the global economy.¹²

2.2 Cross-border Mergers and Acquisitions: An Overview of Global Scenario

Cross-border transactions can be classified into two, i.e. cross-border purchases and cross-border sales. Cross-border purchases include the purchase of a foreign firm by an Indian firm whereas those of sales are the purchase of an Indian firm by a foreign firm. Purchases will result in outflows whereas sales will create FDI inflows. As it is evident from

12 Please See Utton, M (2008) for details.

the table 1, during the initial year¹³ itself the developed countries are dominating both the sales as well as purchase of cross-border transactions (see also appendix Figure 1). However, there is a gradual decline in the share of developed countries over time due to the entry of many multinational firms from developing countries in an unprecedented manner along with the existing MNCs search for new markets. In 1987, 96 percent of the purchases and 99 percent of the sales were made by the firms operating in developed countries and the corresponding figures for 2006 is 86 and 83 percent respectively (see appendix table 1). Interestingly, out of the overall cross-border *purchases* the share of two continents such as Europe and North America constituted more than 87 percent of the deals in 1987 and their dominance has been continuing. However, their share got reduced substantially to around 79 percent in 2006. Even though both of these continents started with around equal shares in 1987, North America remained far behind that of Europe during the entire period. Notably Asia and Oceania region started with mere 8 percent, which increased to 19 percent in 1991 and now accounts 12 percent of the cross-border deal purchases in 2006. Similarly the Transition economies and Latin America region improved their position (see appendix table 2 for details).

North America was the top *seller* of firms in the world with 78 percent of the transactions in 1987 i.e. the opposite of what we have seen in the case of cross-border purchases. Here the share of Europe is only 18 percent, which meant a huge gap in their value of purchases and sales. However, this trend continued only up to 1991 that showed a substantial improvement of Europe over North America and by the year 2006, the share of Europe increased to 48 percent compared to 25 percent for North America. The share of four other regions-Asia, Latin America, Transition economies and Africa have shown a fluctuating but increasing

13 In order to bring out the global trends, we have used UNCTAD Database on Cross-border Mergers and acquisitions. This data starts from the year 1987. Thus the initial year taken for the study is also 1987.

trend during this period, which also indicates that the firms in these regions are getting more responsive to cross-border transactions as a way of further expansion (see appendix table 3 for details). One of the major reasons for this may be the pro-market policy adopted by the Governments in these regions¹⁴.

Here one of the major concerns is that except for few years, the difference in the value of purchase and sales¹⁵ of most of these regions remained negative, which is an indication that the firms in these regions are being acquired by that from the developed countries. In the case of Latin America, this difference was negative for the entire period except 1999 and that of Transition economies is all negative. However, in the case of Asia and Oceania region this difference was positive until 1996 mainly due to the regulations prevailed at that point of time. However, the late 1990s the difference witnessed negative trend owing to the drastic shift in policies to attract FDI. Even though this gap was always been favourable to the developed countries, the major chunk of purchases are made by Europe up to the year 2001 and after that they witnessed net loss but that explains the net gain of North American continent during this period. However, in 2006 the trend again reversed. Thus, it is clear that most of the European targets are the US based firms and that is the source of Europe's net gain in cross-border transactions (see appendix figures 2a-h for details).

When we take the cumulative value of all deals during 1987 to 2006, USA and UK, which makes around 41 percent of all purchases, top the purchasers in the world. The same trend continues for sales too, but here USA tops with 28 percent and that of UK's share is only 16 percent (see the table 1). One of the facilitating factors for Europe was the creation of European Union and the consequent break down of

14 From 1990 onwards many of the erstwhile closed economies opened for either free trade or less market intervention by the Governments.

15 Difference is equal to the value of purchase minus that of sales.

nationalistic barriers as the continent moved to a unified market structure with a common currency; companies began to see their market as all of Europe and more (Gaughan, 1999). Another most striking point to mention here is that the top ten purchasers in the world owns more than 80 percent of the value of purchases and the top ten sellers in the world constitute more than 75 percent of the value of sales. Thus like the case of overall FDI, some countries succeeded in attracting investment through mergers and acquisition route¹⁶. This national difference may be due to the favourable policies prevailing in these countries which help the firms to undertake deals easily.

Table 1: Top 10 Purchasers and Sellers in the World during 1987-2006

Countries	Purchase (Mn \$)	Percent	Country	Sales (Mn \$)	Percent
United States	1502326	20.72	United States	2024260	27.9
United Kingdom	1458476	20.12	United Kingdom	1167706	16.1
France	654217.9	9.02	Germany	640101	8.8
Germany	527175	7.27	Canada	372844	5.1
Netherlands	410131	5.66	France	321419	4.4
Canada	341233.2	4.71	Netherlands	268684	3.7
Switzerland	272083.6	3.75	Australia	198878	2.7
Spain	263300.6	3.63	Italy	195396	2.7
Australia	213111	2.94	Sweden	182030	2.5
Japan	161313.4	2.23	Spain	130733	1.8
Total for above	5803368	80.05	Total for above	5502051	75.7
World	7249328	100.00	World	7249328	100.00

Source: Calculated from UNCTAD, 2008

Strikingly Japan is the only one Asian country that appears in the top ten list. In the case of Asian continent too bulk of the purchases are

16 Healy and Palepu (1993) also support this point (as cited in Jones, 2005).

made by two countries namely Japan (31 percent) and Singapore (16 percent) and Japan and Korea tops the list of sales (see table 4). Nevertheless Japan and Singapore are the gainers from cross-border transactions as it is evident from their low sales value whereas Korea's case is the opposite. China is the fourth dealer both in terms of purchase (6 percent) as well as sales (9 percent). India invested \$14885 million during this period for purchasing foreign firms and got \$21516 million through sales (see table 2). Magnitude involved is only half of China. Both India and China started with a very low pace of transactions during the latter part of the 1980s and picked up during the 1990s. In the case of sales, in most of the years China remained far higher compared to India but Indian sales value exceeded that of China in many years. However, recently (2000 onwards) both of these countries are involving in cross-border transactions in an unprecedented manner. India ranks as the 6th largest purchaser and 5th seller in the Asian region; whereas China was the 3rd largest purchaser as well as seller in 2006 (see figures 3 and 4).

Figures 3

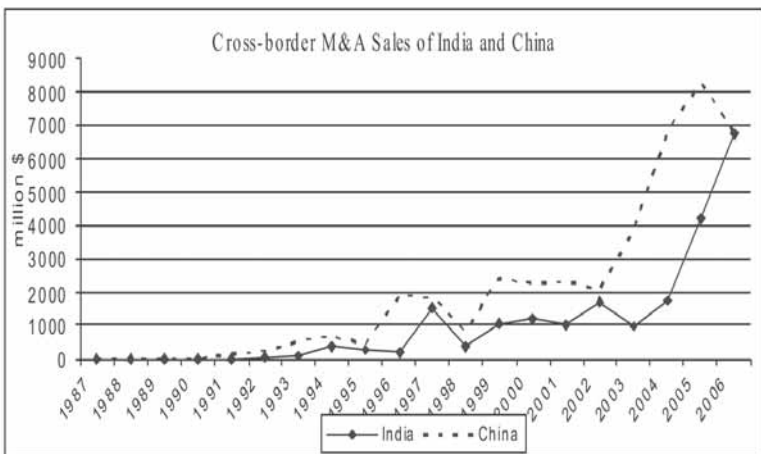
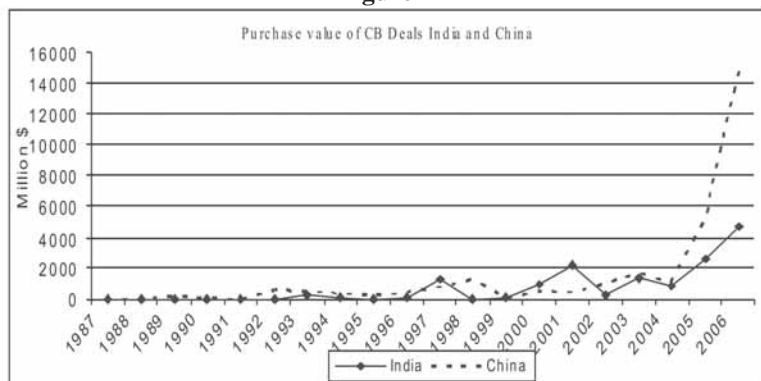


Figure 4



Source: Calculated from UNCTAD, 2008

Table 2: Cross-border M&A Sales and Purchase of Top 10 Asian Countries, 1987-2006

Country	Purchase (In Mn \$)	Share	Country	Sales (In Mn \$)	Share
Japan	161313	31	Japan	90209	19
Singapore	80440	16	Korea	50550	11
China	29447	6	China	41196	9
Malaysia	28371	5	Turkey	32019	7
United Arab Emirates	27821	5	Singapore	31340	7
Israel	22456	4	Israel	26947	6
India	14885	3	Indonesia	22309	5
Saudi Arabia	12598	2	India	21516	5
Korea	12244	2	Thailand	16743	4
Turkey	10114	2	Philippines	15355	3
Total	399689	77	Total	348184	73
Asia Total	516554	100	Asia Total	474188	100

Source: Calculated from UNCTAD, 2008

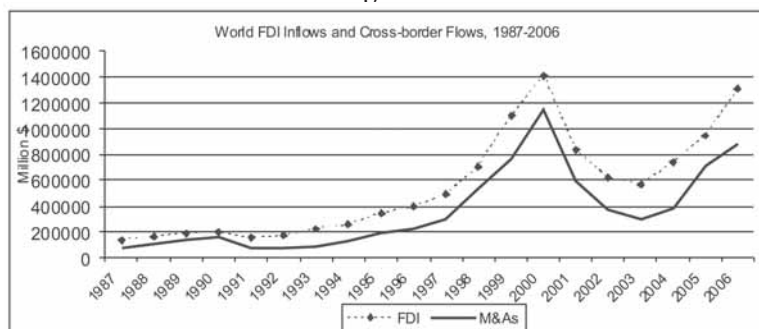
2.2 Greenfield FDI vs. Brownfield FDI

A country can invest in another country either through setting up of new firms i.e. making fresh investment or through making investment in an already established firm i.e. through mergers and acquisitions route. The first case is called Greenfield investment whereas the latter is Brownfield investment¹⁷. Except for the years 1992 and 1993, more than 50 percent of the world FDI came through mergers and acquisitions route¹⁸. In some years its share was very high, for example in 2000 it constituted 81 percent of the FDI; moreover 2000 registered a record FDI of \$1411366 Million, which is not yet been exceeded. Thus mergers and acquisitions had been a major driver of FDI throughout and as a result the FDI graph follows that of the mergers and acquisition waves (see figure 5). Despite the recent surge in cross-border deals, the Indian cross-border merger scenario is still in a nascent stage. Initially its share was only 2 percent of the FDI inflows, which is now near 40 percent. From 1990 to 2006, it constituted around 34 percent of the FDI inflows in the country. Even though the share of Greenfield investment dominates almost entire period the latter's contribution was very high in some years, for example in the year 1999 it was 48 percent and in 2005 it was 63 percent. It is to be noticed in this context that, Indian FDI is not moving in tandem with global trend (see Table 3 and Figure 6 for details). To illustrate, in several years increase in FDI is not accompanied by similar increase in cross-border deals.

17 World Investment Report (2000) says Brownfield investment actually occurs only if the acquiring firm makes new investment in the existing firm and almost completely replaces the existing firm. But such data is seldom available. So for practical purpose everybody uses this term to denote the investment through mergers and acquisitions. We are also following this.

18 World Investment Report (2000) cautions the direct comparison of FDI and foreign investment through mergers and acquisitions because the former is a balance of payment concept and measured on a net basis whereas the latter is a gross concept. However the report itself makes comparison between these two in the absence of other reliable data sources.

Figure 5



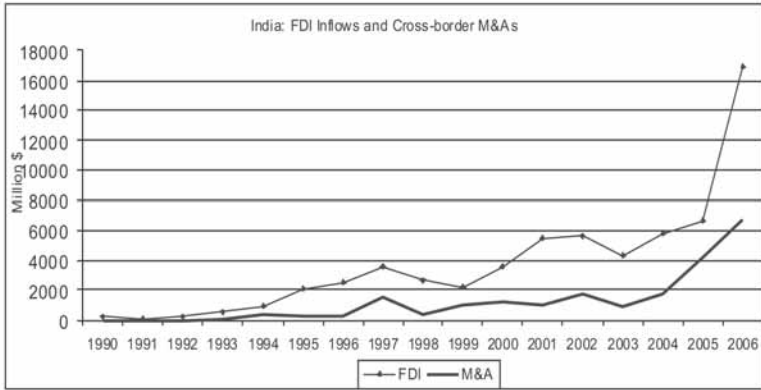
Source: Calculated from UNCTAD and FDI/TNC Database

Table 3: World FDI Inflows and Cross-border M&As (in Million \$)

Year	World (Mn.\$)			India (Mn.\$)		
	FDI inflow	Cb* sales	Share	FDI inflow	Cb sales	Share
1987	140647	74509	53			
1988	164932	115623	70			
1989	192899	140389	73			
1990	201594	150576	75	237	5	2.1
1991	154803	80713	52	75	-	-
1992	170465	79280	47	252	35	13.8
1993	224126	83064	37	532	96	18
1994	254259	127110	50	974	385	39.5
1995	342592	186593	54	2151	276	12.8
1996	392743	227023	58	2525	206	8.2
1997	489243	304848	62	3619	1 520	42
1998	709303	531648	75	2633	361	13.7
1999	1098896	766044	70	2168	1 044	48.2
2000	1411366	1143816	81	3585	1 219	34
2001	832567	593960	71	5472	1 037	19
2002	621995	369789	59	5627	1 698	30.2
2003	564078	296988	53	4323	949	21.9
2004	742143	380598	51	5771	1 760	30.5
2005	945795	716302	76	6676	4 210	63.1
2006	1305852	880457	67	16881	6 716	39.8
All	10960298	7249328	66	63501	21516	33.9

* Cb is for Cross-border.

Source: Calculated from UNCTAD and FDI/TNC Database

Figure 6

Source: Calculated from UNCTAD and FDI/TNC Database

2.3 Industry-wise Intensity of Cross-border Deals

The primary, secondary and tertiary sectors of the world economy experienced a spectacular rise in cross-border deals in terms of absolute value. It was 6 and 7 times increase in the case of primary and secondary sectors, whereas the service sector registered a 24 times increase in 2006 compared to 1987. Manufacturing sector was the largest seller of firms through mergers and acquisitions till the beginnings of nineties and later service sector began to dominate sales. It is interesting to see that the overall sales value is positively associated with the mergers and acquisition movement of the service sector, which peaked in the year 2000 as we have seen in the case of overall FDI. After completing a short merger wave, which ended in 2003, we see its revival in later years. Thus there was a steep decline in merger activity during 2001-2003 (see figure 7 and 8). Here arises the question, what explains the steep decline in mergers and acquisition activity during this period? May be the involvement of some components of the service sectors such as transport, storage and communications; finance; business activities as well as components of manufacturing sector such as chemical and chemical products declined during this period immediately after a steep rise in

2000 (more details can be seen in appendix figures 3 and 4). Thus it was the service sector merger activity that declined during this period, which may be due to the worldwide depression in service sector economic activity following the terrorist attack on World Trade Centre, USA. Except for few years, the share of primary sector remained meager whereas that of manufacturing sector declined especially since the mid 1990s. As illustrated in table 4, the share of manufacturing sector constituted 52 percent in 1987, which is 31 percent in 2006 and that of service sector, is 29 and 59 percent respectively (see appendix figures 5 and 6). Within manufacturing, chemical and its products had been the major driver of mergers during the late 1980s, but it came down during the 1990s. Now it is again picking up.

Figure 7

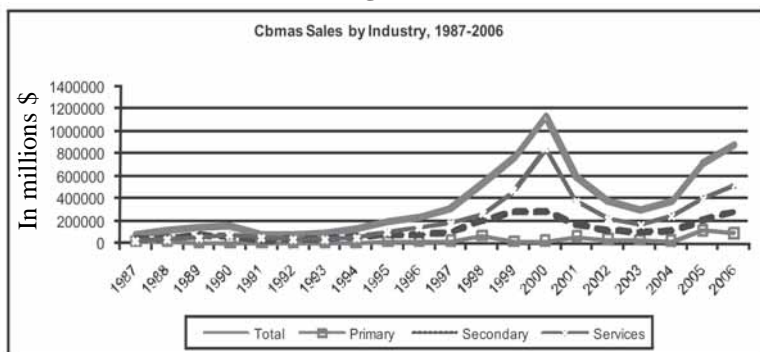


Figure 8



Like the cross-border sales, purchases were also dominated by the manufacturing sector initially, which reversed later and now service sector has become the major purchaser as well as seller. Now its share is 61 percent and that of manufacturing sector is only 32 percent compared to 31 and 51 percent respectively in 1987 (see the table 4 and for more disaggregated picture and appendix tables 4 and 5). Chemicals, metals and electrical sectors are the dominant purchasers from manufacturing sector whereas that from services it is the financial services (43%), transport, storage and communication (10%), business activities (5%). However, among all the sectors the financial services are the big giant in driving the cross border purchases as well as sales from the late 1980s itself.

Table 4: Sector-wise shares of cross-border sales and purchases

Year	Sales (in percent)			Purchase (in percent)		
	Primary	Secondary	Services	Primary	Secondary	Services
1987	19	52	29	18	51	31
1988	16	50	34	15	50	35
1989	6	59	35	8	62	30
1990	7	47	46	5	49	46
1991	7	39	54	7	50	43
1992	6	53	41	5	43	53
1993	6	51	43	3	42	54
1994	7	52	41	6	55	39
1995	7	43	50	7	47	46
1996	8	33	58	7	34	59
1997	6	37	58	6	40	54
1998	13	38	49	13	37	51
1999	2	37	61	4	35	62
2000	2	24	74	1	26	73
2001	10	28	62	4	30	65
2002	8	32	60	7	26	66
2003	10	36	55	8	31	61
2004	5	32	63	5	28	67
2005	16	28	55	15	21	64
2006	10	31	59	10	24	66
Whole	8	34	58	7	32	61

Note: Shares may not match 100 percent due to the presence of unknowns

Source: Calculated from UNCTAD, 2008

III) Nature and Significance of Indian Deals

The forgoing discussion pointed out that the post reform period has been associated with a large amount of cross-border deals all around the world and despite the dominance of developed nations in it; such deals is increasing in the developing countries such as India. India adapted its policies to facilitate globalisation since the mid 1980s. Competition became the ground reality and firms were forced to adopt different strategies to face competition in India as well. As we said earlier, firms preferred to get into mergers and acquisitions in order to face the challenges posed by globalisation. In this context, the present section tries to understand, to what extent foreign firms are entering into the Indian market through this route, the most preferred deal makers in India as well as the preferred sectors in which it is occurring. One of the major problems facing the mergers and acquisitions literature in India is the lack of a firm level database on mergers, acquisitions and the like consolidation strategies. Without having such a database we cannot get into the ground realities of this phenomenon. In the absence of a proper database normally what researchers¹⁹ do is to build their own database based on various secondary sources of information such as CMIE and newspaper reports, and to analyse the scenario using this database. In such a case omissions and repetitions are common errors. Further, data on the value of all deals are seldom available; this necessitates looking into the number of deals rather than the magnitude of value. We also built a database using different secondary sources such as Monthly Review of the Indian Economy (MRIE), M&A Database, brought out by Centre for Monitoring Indian Economy, Newspaper reports, various company reports²⁰, SEBI. We have also tried to avoid repetition. We

19 See for instance Beena, (2000, 2008), Beena S (2008) Agarwal (2002), Kumar (2000), Pradhan (2007).

20 MRIE covers data up to the period May 2001 and M&A Database starts from the month of November 2001. These two data sources are explanatory nature, however both of these suffers from the fact that they are based on announcement basis rather than effective date of deals. SEBI covers data for acquisitions from 1997 onwards.

will discuss the nature and structure of mergers and acquisition scenario in India based on this database in the subsequent sections.

Table 5: Ownership Classification of Mergers and Acquisitions (1978- November 2007)

Ownership	Acquisitions		Mergers		Total	
	No.	Percent	No.	Percent	No.	Percent
Cross-border	1,301	44	114	12	1,415	36
Domestic	1,668	56	853	88	2,521	64
Total	2,969	100	967	100	3,936	100
NA	21		78		99	
Grand total	2,990		1045		4035	

The database consists of 4035 deals of which 1045 are mergers (26%) and 2990 (74%) are acquisitions occurring *within India* during 1978 to November 2007. Out of this 1415 deals (35 percent of the overall deals) are cross-border deals (see tables 5 and 6). As we expect the incidence of acquisitions are higher than that of mergers. Of the total, 44 percent of the acquisitions and 12 percent of the mergers were cross-border deals. Our comparison of the database with Kumar (2000)²¹ proves a broader coverage of our data (see table 7). The former covers 256 deals from 1993 to January 2000 and our data cover 558 deals for the same period, which may be due to the more detailed survey of deals done by us. There are three distinct phases of mergers and acquisition behavior in India. Majority of the deals were between domestic firms during the 1990s, whereas since the mid-1990s onwards, there is a gradual increase in cross-border deals. Nevertheless, the burgeoning number and value of foreign acquisitions (overseas acquisitions) made by Indian firms is a post 2000 phenomenon²². During the pre-liberalisation era mergers and acquisition scenario in India was very small. Owing to the

21 Kumar (2000) is the existing major study on cross-border mergers and acquisitions in India, which covers data only up to January 2000.

22 As the name suggest, the first two cases are occurring within India and the latter outside India. Foreign acquisitions made by Indian firms, is included as a separate session in the paper.

pro-market policies of the government to attract FDI, the mid 1990s onwards cross-border deals began to increase. Following the global trends, Indian cross-border deals were also peaked in the years 1998, 2000 and 2005, whereas those of overall deals were at the top in 2000, 2005 and 2006.

Table 6: Trends in Cross-border Mergers and Acquisitions

Year	All Deals (No.)			Cross-border Deals (No.)			Share
	Mergers	Acquisitions	Total	Mergers	Acquisitions	Total	
1978		1	1				
1979	1		1				
1980		1	1				
1982		2	2				
1983		0	0				
1984		1	1				
1986	1	1	2				
1987							
1988	1		1				
1989	1	3	4				
1990		3	3				
1991	1	11	12		5	5	41.7
1992	4	7	11		2	2	18.2
1993	19	15	34	5	6	11	32.4
1994	65	49	114	8	17	25	21.9
1995	14	32	46	1	9	10	21.7
1996	19	36	55	1	11	12	21.8
1997	97	143	240	11	72	83	34.6
1998	49	203	252	1	152	153	60.7
1999	61	184	245	8	82	90	36.7
2000	102	324	426	23	162	185	43.4
2001	96	264	360	11	106	117	32.5
2002	82	214	296	5	116	121	40.9
2003	57	271	328	8	132	140	42.7
2004	21	224	245	4	106	110	44.9
2005	125	354	479	9	142	151	31.5
2006	191	405	596	15	110	125	21.0
2007	38	193	231	4	67	71	30.7
2008*		49	49		4	4	8.2
Total	1045	2990	4035	114	1301	1415	35.1

Note: Share denotes the share of cross-border deals compared to all deals

* 2007 April to November (financial year).

Table 7: Database: A Comparison

Year	Mergers		Acquisitions		Total	
	RIS	Our data	RIS	Our data	RIS	Our data
1993-94	4	8	9	17	13	25
1994-95	-	1	7	9	7	10
1995-96	-	1	12	11	12	12
1996-97	2	11	46	72	48	83
1997-98	4	1	61	152	65	153
1998-99	2	8	30	82	32	90
1999- Jan. 2000	5	23	74	162	79	185
Total	17	53	239	505	256	558

Source:Kumar (2000) based on RIS (Research and Information System for Developing Countries) Data and Our Database.

3.1 Purchases, Sales and Nationality of Deals within India

MRIE (1998) assess that many of the foreign firms were entering into the Indian market due to the depreciating value of Indian Rupee and low valuations in the Indian stock market as well as the growing number of sick firms during the 1990s²³. Higher managerial power in the existing ventures and reducing regulations has been an added advantage for them and are more confident about the Indian market than the Indian promoters. Funding for restructuring is also done through fresh infusion of capital in companies (CMIE, 1998). India had dealings with more than fifty countries through cross-border transactions²⁴. Repeating the world trends, USA, UK, Germany were the major partners with India. Out of the merger purchases 24 percent accounted for by USA and 11 percent by UK. Indian firms purchased 43 foreign firms within India through merger. Even though these countries were the major acquirers, the participation of a large number of nations can be

23 However, this situation is undergoing a change recently.

24 By cross-border transactions we refer only to mergers and acquisitions here.

seen owing to the minimal legal formalities prevailing in the case of acquisitions compared to mergers and the resultant lesser time to furnish the deal. It was USA (336 deals; 26%), UK (160; 13%), Germany (98; 8%); Mauritius (81; 6%). dominated the purchase through acquisitions. From here it may be very interesting to see the presence of Mauritius, which in many cases is actually playing the role of an intermediary between their big headquarters in USA and UK and are reaping the advantages in the form of tax concession offered by India to Mauritius. A crosscheck of these firms with the sales also underlines this fact since the Mauritius based sellers are only 5 firms through acquisition. Mauritius had the major share in FDI inflows to India during August 1991-September 2005 (DIPP, 2008). Majority of the purchases made by the developed countries such as USA, UK, and Japan were pertaining mainly to the emerging sectors like drugs and pharmaceutical, chemicals, telecom, IT, banking and finance, aiming at the vast Indian market and synergy creation through consolidation.

Obviously, Indian firms are the ones, which lose their control to foreigners in majority of the cases. India sold 64 firms (56%) to foreigners through mergers and 732 firms to foreigners (56.3%) through acquisitions. Others, which are losing control, are USA (14 and 117 deals), UK (7 and 69 deals), and Germany (1; 44) through mergers and acquisitions respectively (see the tables 10 and 11). However, when we take the difference between sales and purchases, foreign firms always dominated purchases. In many cases firms started with a joint venture and subsequently it resulted in merger, which may be due to the successful integration. For example, acquisition of Berger Paints by Rajdoot Paints, SAE India from ABB by KEC International, RPG Group, Stiles India by Spartek Ceramics are examples.

Moreover, our data shows that the joint venture firms form a significant share of cross-border deals. The acquisition of Tata Haneywell by Honeywell Inc.; Kirloskar Mahle Filter Systems Pvt by Mahle

Filtersystems and Max-GB by Gist Brocades Intl BV among others are examples for such deals. However, their Indian partners have been acquiring majority of them. 181 such cases were reported and within them, Indo US (61) and Indo UK (26) joint venture firms constitute a significant proportion. Besides this, the joint venture with France, Australia, Netherlands were involved in large numbers in this process. The telecom sector has an interesting story. Here most of the firms made tie-up with the foreign firms and snagged license for operating cellular and other telecom services. One of the major conditions while making the agreement was that their Indian partner must have a majority holding in the venture. In order to satisfy this, they formed shell companies for funding their controlling stake and now they are liquidating their stakes in these firms mostly to their foreign partners and reaping a bonanza in the bargain. For example, the acquisition of 40 percent shares in Hutchison Max Telecom Ltd by Telecom Investments India Pvt. Ltd from Max India spending Rs. 549.51 crore (CMIE, 1998).

3.2 Industry-wise Intensity of Deals

Like the global mergers and acquisition scenario, Indian firms too preferred to consolidate within the same industry. 66 percent of the mergers and 62 percent (69 percent in terms of value) of the acquisitions were horizontal²⁵ i.e., it occurred within the same industry. It is also notable that this tendency increases in the case of cross-border deals since the risk of consolidation²⁶ is higher in this case. Within the cross-border deals, 70 percent of mergers and 69 percent (69.1% in terms of value) of acquisitions were horizontal integration (see the table 8). It further raises the issue of the creation of foreign monopoly and the

25 Horizontal merger is defined as the merger between firms in the similar line of business activity whereas those of Vertical mergers occur between firms in buyer seller relationship. Conglomerate merger occur between firms, which are totally unrelated.

26 Success of a cross-border deal depend on the successful integration of the firms belonging to two different nations, which involves different risks other than domestic consolidation such as language, culture.

consequent rise in price level. A clearer picture can be arrived at when we disaggregate²⁷ the incidence of the entire deals into different industries. Let us start with the primary sector. Like the global trends, it has only a meager share during the entire period and that too contributed by the plantation, mining and quarrying sector. This is applicable to the sales and purchases of cross-border deals too.

It is seen that manufacturing sector was the largest seller but majority of the purchases were committed by the service sector in terms of number of deals. Within the manufacturing, drugs and pharmaceutical sector registered the highest number of *purchases*²⁸ (266, 7.3%) followed by other chemicals (264, 7.2%), domestic appliances (143, 3.9%), automobiles (131, 3.6%), metals and metal products (126, 3.4%), cement and glass (101, 2.8%). In the case of *sales* too drugs and pharmaceutical sector is in the top list (307, 8.5%). Other major sellers are other chemicals (289, 8%), metals and metal products (171, 4.7%), automobiles (166, 4.6%), domestic appliances (130, 3.6%), cement and glass (129, 3.6%), machinery (119, 3.3%). Even though the extent and significance of consolidation depends upon the intra industry shares of mergers and acquisition rather than inter-industry shares, it clearly brings out a pattern in favour of chemicals including pharmaceuticals. In the case of *cross-border deals* too a more or less same trend can be seen. Here the highest number of purchases is made by the other chemicals sector (110, 8.3%), drugs and pharmaceutical (88, 6.6%), domestic appliances (73, 5.5%), automobiles and shipyard (72, 5.4%) and that of sales are also done by the same sectors.

Service sector is the major purchaser of deals but not the highest seller as we mentioned earlier, which may be due to the recent surge in

27 The industry classification we are following is National Industrial Classification, 2004. We have followed a four digit industrial classification at the base level. However, in the case of many industries such a classification is irrelevant due to the relatively less number of deals. Such cases, we again aggregated into sectors to a broader category.

28 Include mergers and acquisitions.

Table 8 : Type of Consolidation of Deals in India, 1978-November 2007

Type		Horizontal	Vertical	Conglomerate	Available	NA	Grand Total
Merger	No.	678	261	91	1030	15	1045
	Percent	65.8	25.3	8.8	100		
Acquisition	No.	1801	951	175	2943	47	2990
	Percent	61.2	32.3	5.9	100		
Total	No.	2479	1212	266	3973	62	4035
	Percent	62.4	30.5	6.7	100		
Acquisition	Value (Rs. Crores)	167104	67898.8	7426.88	242429.7	3301.7	
	Percent	68.9	28	3.1	100		
Cross border Deals							
Merger	No.	78	19	15	112	2	114
	Percent	69.6	17	13.4	100		
Acquisition	No.	885	331	63	1279	22	1301
	Percent	69.2	25.9	4.9	100		
Total	No.	963	350	78	1391	24	1415
	Percent	69.2	25.2	5.6	100		
Acquisition	Value (Rs. Crores)	89186.78	36102.38	3845.92	129135.1	1182.8	
	Percent	69.1	28	3	100		

the service sector growth. The sector has made 2008 (55%) purchases and 1713 sales (47.5%). Within the services it was the banking and finance sector firms²⁹ which dominated purchases as well as sales (1113, 30.4%; 603, 5.8% respectively). Information technology (291; 7.9%), post and telecom (124; 3.4%), follows the next purchasers. In the case of sales, the next in importance was information technology (435; 12%), post and telecom (158; 4.4%), trading (106; 2.9%). The same pattern is observed in the case of cross-border purchases as well as sales.

If we are considering value of deals as the criteria³⁰, 57 percent of the overall purchases and 63 percent of the cross-border purchases were done by the service sector and that of manufacturing was 43 and 37 percent respectively (see the table 9). Within services, it was banking and finance³¹, which contributed most part of the overall as well as cross-border deals (27 and 32 % respectively). Post and telecom sector, irrespective of its less importance in terms of number of purchases, constituted 11 percent of all deals and 11 percent of cross-border deals. Even though the importance of IT sector in acquisition is a recent phenomenon, it has occupied a very large portion of the overall deals (9%) and that of cross-border (12%) too. Within manufacturing, petroleum and natural gas (9 and 56%) was the top sub-sector for overall deals, whereas cement and glass dominated the cross-border deals with a share of 7 percent (9 percent for all acquisitions). Next in importance were power generation, drugs and pharmaceutical industry. In the case of sales of deals, the share of manufacturing as well as services was more or less equal (50.1 and 49.8%). Here, sub-sector wise post and telecom was the major seller with 18 percent of overall sales and 19 percent of

29. Finance sector is defined broadly in the study since our major focus is on industry.

30. Here we are restricting the analysis to the acquisitions alone due to the non-availability of data for all cases.

31. Defined broadly. The sales and purchases made by individuals also included in this category.

cross-border sales. The rest of the pattern is same as the purchases as we mentioned above. Thus when we take the value of deals, the dominant sectors in terms of number seldom comes to the top, which clearly shows the incidence of mega deals in the emerging sectors such as telecom, IT.

As table 10 reveals, cross-border intensity appears high among some of the non-dominant sectors defined in terms of number of the overall acquisitions. Though the number of cross-border *purchases* was relatively low in the machinery sector, in terms of value it accounts for the highest (95%). The next in importance were Domestic appliances (86% in terms of value; 51% in terms of number), Drugs and Pharmaceutical (68% value; 33% number), Chemicals (68% value, 42% number), Electrical Appliances and allied (64% value; 51% number). The same for service sector were, Information technology (72; 41), Banking and Finance (63% value; 41% number), Post and Telecom (54% value; 43% number). Almost all the sub-sectors had been showing high cross-border intensity in terms of value of purchases more than that in terms of number. The only exception was small-scale dominated sectors such as textiles, footwear & leather products; metals & metal products and automobiles. This clearly shows that even though the cross-border deals in these sectors were less in number, they were high valued deals.

In the case of cross-border *sales* within the sectors, it was electrical appliances and allied dominated in terms of value (96% in terms of value, 47% in terms of number), whereas machinery sector dominated in terms of the number of cross-border sales (85% value, 58% numbers.). The next in importance in the secondary sector were construction (90% value; 39% number) and chemicals (79% value; 40% sales). Information technology (65% value, 37% number) banking and finance (62% value, 28% number) and post and telecom (58% value, 51% number) had the higher cross-border intensity within the services (see the table 15 for

Table 9: Sector-wise Occurrence of Deals in terms of Value (in Rs. crores)

Sector	Acquisition			Cross-border Acquisition				
	Purchase	%Share	Sales	Purchase	%Share	Sales	%Share	%Share
Primary Sector	179.7	0.1	235.7	178.5	0.1	188.5	0.2	0.2
Plantation	179.1	0.1	235.1	178.5	0.1	188.5	0.2	0.2
Mining and Quarrying	0.6	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Secondary	98612.4	42.7	114725.6	45238.5	36.6	57965.5	47.3	47.3
Food, beverages and tobacco	4888.5	2.1	4904.6	3056.2	2.5	3039.7	2.5	2.5
Textiles, footwear and leather products	1244.4	0.5	1370.3	29.3	0.0	135.4	0.1	0.1
Metals and Metal Products	5135.8	2.2	6771.1	970.4	0.8	1294.0	1.1	1.1
Machinery	2803.4	1.2	3745.6	2655.5	2.1	3199.1	2.6	2.6
Electrical Appliances & Allied	1316.5	0.6	1449.1	848.7	0.7	1386.2	1.1	1.1
Pesticides and Agro-chemicals	1322.0	0.6	1504.1	805.9	0.7	687.0	0.6	0.6
Drugs and Pharmaceutical	10251.8	4.4	12620.1	6947.8	5.5	9696.5	7.9	7.9
Other Chemicals	6485.7	2.8	7685.0	4435.6	3.6	6069.5	4.9	4.9

cont'd....

Sector	Acquisition			Cross-border Acquisition				
	Purchase	%Share	Sales	%Share	Purchase	%Share	Sales	%Share
Cement and glass	19878.2	8.6	21796.6	9.5	8366.5	6.8	8871.5	7.2
Petroleum and Natural Gas	20983.8	9.1	22335.2	9.7	7299.3	5.9	10747.7	8.8
Domestic Appliances	3246.4	1.4	2774.5	1.2	2791.5	2.3	1388.0	1.1
Power Generation	11800.1	5.1	15628.1	6.8	2475.2	2.0	4773.0	3.9
Automobiles and Shipyard	7126.2	3.1	8185.3	3.6	3652.7	3.0	4026.8	3.3
Construction	1796.3	0.8	1754.2	0.8	888.0	0.7	1584.5	1.3
Manufacturing others	333.3	0.1	2201.9	1.0	16.0	0.0	1066.7	0.9
Services	131965.9	57.2	114157.2	49.8	78276.2	63.3	64514.1	52.6
Banking and Finance	62123.0	26.9	34950.3	15.3	39209.3	31.7	21773.1	17.7
Hotels and Motels	844.7	0.4	1199.3	0.5	314.2	0.3	463.1	0.4
Post and Telecom	26022.9	11.3	40413.6	17.6	14000.6	11.3	23631.8	19.3
Trading	3311.9	1.4	1877.4	0.8	493.7	0.4	162.9	0.1
Information Technology	19916.5	8.6	21349.9	9.3	14311.3	11.6	13872.6	11.3
Media, Entertainment, Advt. and Consultancy	11213.6	4.9	7267.1	3.2	6045.0	4.9	2454.2	2.0
Miscellaneous	8533.2	3.7	7099.6	3.1	3902.1	3.2	2156.5	1.8
Total Available	230668.1	100.0	229000.7	100.0	123603.9	100.0	122573.8	100.0
NA	14973.4		16612.9		6624.7		7649.9	

Table 10: Cross-border Intensity in India within Sectors (1978-Nov. 2007)*

Sector	Value of Deals				Number of Deals			
	Purchase (%)		Sales (%)		Purchase (%)		Sales (%)	
	Cbma	Domestic	Cbma	Domestic	Cbma	Domestic	Cbma	Domestic
Primary Sector								
Plantation	99	1	80	20	45.5	54.5	36.4	63.6
Mining and Quarrying	100	0	80	20	44.4	55.6	35.5	64.5
Secondary								
Food, beverages and tobacco	46	54	51	49	38.7	61.3	38.4	61.6
Textiles, footwear & leather products	63	37	62	38	35.6	64.4	35.6	64.4
Metals and Metal Products	2	98	10	90	17	83	14.5	85.5
Machinery	19	81	19	81	23	77	22.2	77.8
Electrical Appliances & Allied	95	5	85	15	57.6	42.4	58	42
Pesticides and Agro-chemicals	64	36	96	4	50.6	49.4	47.4	52.6
Drugs and Pharmaceutical	61	39	46	54	25.5	74.5	26.1	73.9
Other Chemicals	68	32	77	23	33.1	66.9	37.5	62.5
Cement and glass	68	32	79	21	41.7	58.3	40.1	59.9
Petroleum and Natural Gas	42	58	41	59	32.7	67.3	32.6	67.4
Domestic Appliances	35	65	48	52	34.1	65.9	42.7	57.3
Power Generation	86	14	50	50	51	49	40.8	59.2
	21	79	31	69	38.5	61.5	39.7	60.3

cont'd....

Sector	Value of Deals				Number of Deals			
	Purchase (%)		Sales (%)		Purchase (%)		Sales (%)	
	Cbma	Domestic	Cbma	Domestic	Cbma	Domestic	Cbma	Domestic
Automobiles and Shipyard	51	49	49	51	55	45	50.6	49.4
Construction	49	51	90	10	25.8	74.2	39.4	60.6
Manufacturing others	5	95	48	52	24.1	75.9	35.7	64.3
Services	59	41	57	43	34.1	65.9	34	66
Banking and Finance	63	37	62	38	31.4	68.6	28.2	71.8
Hotels and Motels	37	63	39	61	20.8	79.2	20.7	79.3
Post and Telecom	54	46	58	42	42.7	57.3	51.3	48.7
Trading	15	85	9	91	14.7	85.3	16	84
Information Technology	72	28	65	35	40.5	59.5	37.2	62.8
Media, Entertainment, Advt and Consultancy	54	46	34	66	39.4	60.6	43.3	56.7
Miscellaneous	46	54	30	70	47.2	52.8	34.5	65.5
Total Available	54	46	54	46	36.2	63.8	36.3	63.7
NA	44	56	46	54	24.1	75.9	24.9	75.1

Note: Consists of mergers and acquisitions

* Cross-border intensity in a particular industry is defined as percentage of cross-border deals to the total number (or value) of deals in a particular industry.

details). These are also the top FDI recipient sectors in India³². Another interesting observation is that some industries are having very high intensity of horizontal deals. More than 75 percent of deals in drugs and pharmaceutical industry, petroleum and natural gas, cement, post and telecom, machinery were horizontal type, which raises different issues about the future performance of these sectors.³³

3.3 Value Involvement in the Deals

It is very difficult to capture the value involved in the transactions particularly in the case of mergers since most of them are announced in terms of swap ratios³⁴. From the available data, we have information on 68 percent of all acquisitions³⁵. It is very much evident from the data that almost 77 percent of the acquisitions occurred after 2000, which amounts to around 92 percent of the overall value involved in acquisitions. Among the cross-border deals, 73 percent of the deals occurred after 2000, which constituted around 93 percent of the value involved in cross-border acquisitions. Out of the 2020 deals for which data are available, 420 (21 percent) are mega deals³⁶ and 1600 (79 percent) are small deals. Interestingly, this 79 percent of the small deals make only 13 percent of the overall value involved in the transaction and the rest 87 percent are accounted for by 420 mega deals. Within the mega deals majority are in range of Rs.100-500 crores (see table 11). Most of the mega deals had been occurring in the banking and finance sector, post and telecom, information technology, petroleum and natural gas, cement and glass, advertisement and consultancy, automobiles, chemicals and pharmaceutical sectors (see appendix table 6).

32 During August 1991 to September 2005, the top FDI recipient sectors were Electrical Equipments, Transportation, Service Sector, Telecommunication, Fuel, Chemicals, Food Processing, Drugs and Pharmaceuticals (DIPP, 2008).

33 We will be discussing it in the last section in detail.

34 Swap ratio is the ratio in which one firms' shares are transferred to the other firm.

35 Here we are excluding merger due to the above-mentioned reason.

36 Mega deals are defined as the deals for which value is more than Rs.100 crores.

Table 11: Value Involvement in Transaction: Small and Mega Deals

Value (Rs. Crores)	Acquisitions			Cross-border Acquisitions		
	No.	Amount	Share	No.	Amount	Share
<100	1600	31386	12.8	583	16030	12.3
100-500	310	64700	26.3	169	34359	26.4
500-1000	58	40204	16.4	35	24371	18.7
1000-2000	26	35990	14.6	14	20123	15.4
2000-3000	18	41409	16.9	5	11457	8.8
3000-4000	4	13425	5.5	3	9754	7.5
>4000	4	18635	7.6	3	14229	10.9
Total	2020	245749	100	812	130323	100.0
Representation	68 % of all			62% of Cb deals		

Note: cb denotes cross-border deals

Strikingly, 55 percent of the 420-mega deals are cross-border acquisitions. Within the cross-border cases, 229 (28 percent) are mega deals and 583 (72 percent) are small deals. The five largest deals accounted for Rs. 20962, which is 16 percent of the total amount involved in cross-border deals and the same for top ten and twenty deals is around 26 and 38 percent respectively. Here also a large number of small deals make only 12 percent of the overall value and the rest is accounted for by the mega deals. The cross-border mega acquisitions occurring sectors are the same as the overall acquisitions discussed above (see appendix table 6). USA, UK and German firms are mostly involving in cross-border mega deals in India.

3.4 Route of Acquisitions

It is also important to understand whether consolidation occurred due to the prior inter-firm relationship. Our database shows that most of the acquisitions (2360 deals, 79 percent) are unrelated and in the case of cross-border acquisitions it was 942 deals (73 percent). In the case of

mergers too the unrelated mergers dominated, which constitutes 51 percent (534 deals) of all the mergers and that of cross-border mergers are 68 percent (77 deals). However, the incidences of unrelated deals are less in mergers compared to acquisitions. This may be due to the more stringent regulations in the case of mergers than acquisitions as we have discussed earlier. In terms of overall value of deals, unrelated cases make around 85 percent of the acquisitions and 87 percent of the cross-border acquisitions.

IV) Foreign Acquisition of Indian Firms Abroad (Overseas Acquisitions)

Apart from the sales and purchases of the firms within India, another salient feature of the current wave of mergers and acquisitions is the active participation of Indian firms in the international market as a purchaser of firms from many countries. The number and value of such deals is increasing over the years, which is surely an indication of the new type of consolidation strategy of the Indian firms. In many cases this has helped the Indian firms to become world leaders in the respective field of operation. In this section we shall bring out the extent and structure of such deals. There were 563 overseas acquisitions made by Indian firms during the year 1994 to November 2007. Out of this, most of the deals occurred after 2000 and the year 2007 marked the highest number of deals (121) and probably the same trend will continue³⁷ in future. Another interesting observation is that in recent years, the number of outward acquisitions is even higher than that of the overall inbound acquisitions. This clearly points to the fact that Indian firms now prefer to expand their market outside India alongside the domestic market. Out of the 563 cases, many of the acquisitions were partial in the form of plant and other assets aiming at expanding the capacity abroad. There were 35 such acquisitions and within this 15 (43%) were for getting brand names. Brand acquisitions are mainly occurring in drugs and

37 In 2008, 79 deals registered up to November 2007 (financial year basis).

pharmaceutical industry, where consumers (indirectly the prescribing doctors) are so much sensitive about the brand names rather than chemical names. Besides, this is also occurring in information technology and chemical industry. This may be due to the fact that acquisition of brand names is an easy way to enter a foreign market and thereby to get the consumer base.

Out of the 528 acquisitions³⁸, we have information on the amount of consideration for 55 percent of the deals. The cumulative value of acquisitions abroad from 1994 to November 2007 amounts to Rs. 200257 crores and around 97 percent of it is accounted for by the 115 (40% of the total number) mega deals, whereas the small deals which makes 61 percent of the total attributed to only 3 percent of the value of transactions (see Table 12). The largest ten purchases constituted around 68 percent (Rs. 136652 crores) of the total. Interestingly, the conventional top purchaser industries that were seen in the case of inbound deals were not the top valued purchasers here. The industries, which were top purchasers, include steel, aluminum, petrochemicals, and electricity. Some of the top valued purchases were, the acquisition of Corus Group Plc (UK based) by Tata Steel Ltd. for \$7.6 billion, the acquisition of Novels, a US based firm by Hindalco Industries, Basel (US based firm) by Purnendu Chatterjee, a petrochemical firm and Algoma Steel Inc, a Canadian steel producer by Essar Steel Ltd. The first three deals accounted for more than Rs. 20000 crores per deal. The largest purchase in the IT sector was undertaken by Computer Sciences Corporation India Pvt Ltd by purchasing Covansys (India) Pvt spending Rs. 5350 crores followed by Wipro Ltd's Rs. 2430 crores acquisition of Infocrossing Inc, a US based IT enabled service provider. The drugs and pharmaceutical industry's top purchase was Rs. 2760 crore acquisition of Eurocore GmbH, a German medical equipment producer by Opto Circuits (India) Ltd preceded by Sun Pharma acquisition of Taro Pharma, Israel for Rs. 1837 crores.

38 Here we are excluding 35 partial acquisitions as we mentioned above.

Table 12 Size-wise Classification of Overseas Acquisitions

Deals	No.	Percent	Amount (Rs. crores)	Percent
Small	176	60.5	5647	2.8
Mega	115	39.5	194609	97.2
Total	291	100.0	200257	100

Indian firms have made purchases in more than 85 countries, of which industrialized countries such as USA and UK remained as the major sources similar to the inbound deals³⁹. Two earlier studies on Indian overseas deals done by Pradhan (2007) and Nayyar (2007) also underlined this fact. Around 215 US based firms (40 percent), were purchased by the Indian firms, whereas that of UK firms are 59 (11 percent). Besides, Indian firms have also purchased a good number of German (20, 4%), Singapore (20, 4%) and Australian (16, 3%) based firms. Like the cross-border sales and purchases inside the country, overseas acquisitions showed a more or less similar picture of service sector (52%) domination over the manufacturing sector (47%) and that of the primary sector was again very meagre. An emerging trend in the overseas acquisition scenario is the purchase of a large number of IT sector firms and these firms are not only pure IT sector *per se*, but also IT enabled services, IT consulting, BPO along with a wide range of computer software firms. They are mainly headquartered in USA. This amounts to around 37 percent (191 deals) of the overall overseas purchases made by the Indian firms. This was followed by the Drugs and Pharmaceutical industry with the acquisition of 61 (12%) foreign firms abroad, despite the active involvement in other forms of consolidation such as brand acquisition and inbound deals. One major difference between IT and Pharmaceutical sector acquisition abroad is that the majority of IT sector deals were concentrated on USA, while that of pharmaceuticals were from several countries ranging from USA (24 percent) to South African countries such as Botswana, Uganda. Further,

39 For the rest of the analysis, we will be dealing with 528 deals, excluding the 35 partial acquisitions as we mentioned above.

majority of the deals in these two sectors were horizontal type of consolidation. More than 90 percent of deals in the drugs and pharmaceutical industry and 65 percentage in the information technology were such deals. Chemicals, metals and metal products, automobiles are the other sectors, which could make substantial number of acquisitions in the overseas market (see appendix table 7). Thus, it is clear from the above discussion that the IT sector along with Drugs and Pharmaceutical industry has been the leading industries in the overseas acquisitions. The banking sector, which constituted a substantial portion of the inbound deals, constitutes only a very small proportion of the overseas deals.

As we have seen earlier, one of the major characteristics of the cross-border deals has been the higher incidence of horizontal integration owing to a comparatively higher rate of risk involved in the post deal integration period. In the case of the overseas acquisition scenario too, horizontal integration constitutes around 73 percent of the acquisitions. Vertical type constitutes 26 percent and that of conglomerate cases were only very few (see appendix table 8). It is equally important that many of the foreign acquisitions are made by the same firms repeatedly, especially firms from Drugs and Pharmaceutical industry, IT sector, Steel, Aluminium sectors. For example, Ranbaxy Laboratories⁴⁰ has made 11 overseas acquisitions despite large number of inbound acquisitions, for Reliance it is seven deals, Wipro's is nine deals, whereas Tata, with its diverse product portfolio ranging from tea to software, acquired 22 foreign firms abroad. It appears HCL, Jubilant Organosis, IBS also like to follow their international expansion through mergers and acquisitions route rather than limiting to the domestic market and export oriented growth.

40 In June 2008, Ranbaxy entered into an alliance with Daiichi Sankyo Company Ltd., one of the largest Japanese innovator companies to create an innovator and generic pharmaceutical powerhouse.

There are enough evidences to suggest that the international acquisition strategy followed by the Indian firms helped them to become top players in the international market. For example, Tata Steel was the 56th largest producer of steel in the world in 2005, but the world saw the emergence of Tata as the fifth largest steel producer group in the world in October 2006 with the acquisition of Corus, which resulted in a production capacity of 24 million tones per annum. Likewise, the acquisition of Novelis has turned Hindalco into the world's largest aluminum rolling company and one among the biggest producers of primary aluminum in Asia. It is also India's leading copper producer. The acquisition of Whyte & Mackay, a Scottish fourth largest scotch whiskey producer by United Spirits, a Vijay Mallya owned UB group firm resulted in making the second largest liquor producer in the world, which outweighed Pernod-Ricard SA of France. Similar type of evidences is common in many industries, which is changing the ranks and market power of the firms substantially.

V) Concluding Observations

From the above discussion, it is clear that the number and value of cross-border deals is increasing year after year with a major share of it owned by the developed nations. USA was the major seller country whereas the major purchaser was UK. Likewise, the difference between purchases and sales were mostly favourable to Europe. Like the case of overall FDI, there has been high national difference in attracting Brownfield FDI. This is very much evident from the fact that the top ten purchasers and sellers in the world contributed more than 75 percent of the cross-border transactions. However, there has been a gradual increase in the share of developing nations over the years. If the world transactions were concentrated on UK and USA, the Asian giants in cross-border deals were Japan, Singapore and Korea. India was the 6th purchaser and 5th seller among the Asian countries.

It is evident that the world FDI flows are moving in tandem with the movement of cross-border mergers and acquisitions. We have further observed that mergers and acquisitions are again moving in line with the movement of the service sector mergers and acquisitions. Thus it can be said that the service sector mergers and acquisitions are the major force of the world FDI during the study period. However, this trend is not fully applicable to India as the country is still in a nascent stage in cross-frontier mergers and acquisitions. Albeit, recently a substantial portion of the country's FDI (40%) is contributed by mergers and acquisitions.

In order to understand the intensity of mergers and acquisitions scenario in India, we prepared a firm level database and found that 35 percent of the mergers and acquisitions deals occurred in India during 1978 to November 2007 were cross-border. It significantly increased only after mid 1990s. Even though India had dealings with more than fifty countries, USA, UK and Germany were prominent among them. In many cases, firms started with less regulated form of consolidation such as joint ventures and at the later stage they resulted into mergers, which marked the successful integration during the post alliance period. Moreover, many Indian firms used the joint venture partnership relationship to acquire their foreign counterpart after a period of time. This has been the story of BPO sector acquisitions especially. Surprisingly, the Mauritius based firms acquired a good number of Indian firms but in many cases these firms are the subsidiaries of the US and UK based parent firms, which may be deriving the tax advantages offered by India to Mauritius.

Sector-wise, manufacturing had been the largest seller, whereas majority of the purchases were made by the service sector. The share of primary sector remained too small throughout. Within manufacturing, Drugs and Pharmaceutical industry, other chemicals, domestic appliances, automobiles were the dominant sectors and within services it was banking and finance. Recently, there has been a rush among the

information technology firms to get into consolidation through mergers and acquisitions. Compared to other sectors, automobiles, electrical appliances, machinery, domestic appliances had high cross-border merger intensity, which means the overall deals consist of more foreign partners compared to domestic partners. In terms of the value of deals, majority of the deals were small, nevertheless, there were a good number of mega deals, which had been responsible for more than 87 percent of the total value involved. Mega mergers belong to banking and finance, post and telecom, information technology; cement and their foreign partners were mainly from USA and UK.

Another interesting dimension of mergers and acquisitions scenario is the recent surge in the number and value of the acquisitions made by the Indian firms abroad as part of the market expansion strategy. Most strikingly, these deals constitute far higher than that of the inbound deals in recent years, which clearly brings out the overseas acquisition spree of the Indian firms. There were 563 such cases occurred during 1994 to November 2007, out of this majority of them did occur after 2000.

We observe that prior to mid 1990s merger scenario was dominated by domestic deals, later we observe increasing cross-border deals within India. However, we witness another wave of overseas deals during the post 2000 period. Many of the overseas deals were partial deals for getting brand names, assets. Brand names acquisition was mainly in Drugs and Pharmaceutical sector, whereas that of the plant and other assets acquisitions was resorted to capacity expansion abroad. Here also the service sector firms have dominated the entire deals, however, the push factor of overseas deals were the Information technology and Drugs and Pharmaceutical sector. The top valued purchases are made by more capital-intensive industries such as steel, aluminum, petrochemicals, electricity. Mega deals constituted 40 percent of all overseas deals. India had dealings with more than 85 countries through overseas deals,

which is much higher than the countries involved in the inbound acquisitions. Needless to say, in many instances, foreign acquisitions helped the Indian firms to become world leaders through altering the capacity and thereby market power.

In short, from the forgoing discussion, we have observed that there is a gradual shift in organic ways of foreign investment to inorganic means of brownfield investment. Ideally it should lead to more technology spillovers, and thereby higher productivity and efficiency. The occurrence of these deals in more technology intensive sectors by firms from more industrialised countries adds more flavour to this. The occurrence of large number of horizontal deals especially the cross-border deals raises another issue namely the foreign control. Moreover, as it is evident from the data, a good proportion of the deals are mega deals and many of them are repeatedly engaging in consolidation strategies in order to grow faster than that of organic means. Thus the current surge in cross-border deals should be viewed in a multi-factor dimension, which involves the push factors from home country such as market constraint, need for low priced factors of production, increasing global competition as well as the pull factors from foreign countries such as the wider market, technology, efficient operation. This can be rightly considered as the response of the firms to the aftermath of globalization in the form of less time and more action.

Beena Saraswathy is Doctoral Scholar at the Centre for Development Studies, Thiruvananthapuram. Her main research interests include Industrial Economics and Micro Economics; Contemporary Development Issues.

Email: sbeena@cds.ac.in/vsbeena@gmail.com

APPENDIX

Table 1: Share of countries in the cross-border M&A transactions (in terms of value)

Year	Cross-border Purchases (%)			Cross-border Sales (%)		
	Develo- ped	Deve- loping	Others*	Develo- ped	Deve- loping	Others*
1987	96.05	3.92	0.03	99.14	0.86	0.00
1988	98.07	1.91	0.03	97.51	2.49	0.00
1989	96.74	2.83	0.43	96.55	3.45	0.00
1990	95.34	4.45	0.22	90.16	9.80	0.04
1991	96.10	3.89	0.01	92.23	7.11	0.67
1992	92.24	7.74	0.03	88.47	10.34	1.19
1993	87.10	12.85	0.05	82.24	17.10	0.66
1994	88.62	11.15	0.23	87.85	11.78	0.37
1995	92.83	6.92	0.25	90.94	8.46	0.59
1996	87.09	12.73	0.17	84.67	13.76	1.58
1997	89.38	10.54	0.08	78.65	19.37	1.97
1998	96.25	3.68	0.06	86.23	13.33	0.44
1999	96.17	3.68	0.15	89.77	9.53	0.70
2000	96.21	3.23	0.56	93.94	5.85	0.21
2001	93.74	5.88	0.39	85.13	14.32	0.55
2002	92.84	6.98	0.19	87.28	11.94	0.78
2003	86.66	10.31	3.03	82.78	13.05	4.17
2004	89.78	9.96	0.26	83.40	13.96	2.64
2005	87.54	11.51	0.95	84.45	13.14	2.42
2006	85.46	13.96	0.57	82.68	14.47	2.85

* Others Include Southeast Europe and CIS (Transition economies) and unspecified.

Source: Calculated from UNCTAD, 2008

**Table 2 : Share of Different Regions in cross-border M&A purchases
(in terms of values)**

Year	Europe	North America	Australia	Africa	Latin America and Caribbean	Asia and Oceania	Transition economies
1987	44.38	43.13	3.37	0.56	0.19	8.34	0.01
1988	42.98	33.36	8.09	0.02	0.09	15.44	0.00
1989	52.90	34.09	3.96	0.00	0.71	7.90	0.00
1990	61.48	20.43	2.53	0.10	1.06	14.19	0.00
1991	52.64	25.65	1.82	0.53	0.48	18.87	0.00
1992	62.76	21.68	0.85	2.20	2.39	10.09	0.03
1993	51.89	30.74	2.23	0.49	3.02	11.58	0.03
1994	59.79	26.44	1.26	3.32	2.87	6.08	0.21
1995	49.63	37.43	3.29	0.35	2.12	6.94	0.24
1996	48.86	30.61	4.09	0.95	3.68	11.64	0.11
1997	51.18	32.71	3.85	0.92	3.52	7.74	0.05
1998	61.19	32.55	1.53	0.50	2.38	1.78	0.06
1999	70.49	18.13	1.32	0.75	5.84	3.31	0.11
2000	74.67	17.39	0.95	0.58	1.63	4.23	0.03
2001	59.02	22.73	5.47	0.51	4.61	7.27	0.07
2002	62.55	24.72	2.38	0.54	3.16	6.46	0.19
2003	43.56	33.14	4.9	0.36	3.86	11.15	3.03
2004	46.27	37.85	2.76	0.71	4.33	7.82	0.26
2005	57.71	23.74	4.5	2.16	1.96	8.97	0.95
2006	54.93	23.66	3.56	1.27	4.06	11.94	0.57

Note: The results may not add up to 100 since the ‘unspecified’ are excluded from the calculation.

Source: Calculated from UNCTAD, 2008

Table 3: Share of Different Regions in Cross-border M&A Sales (in terms of value)

Year	Europe	North America	Australia	Africa	Latin America and Caribbean	Asia	Transition economies
1987	17.7	77.7	2.1	0.2	1.8	0.50	0.0
1988	29.6	62.8	3.8	0.0	1.1	2.62	0.0
1989	34.9	56.4	3.4	0.7	1.4	3.21	0.0
1990	44.9	40.1	1.7	0.3	7.6	5.29	0.0
1991	48.1	39.5	3.2	0.1	4.4	4.04	0.7
1992	60.1	23.2	3.1	0.5	5.3	6.68	1.2
1993	49.6	26.8	3.8	2.2	6.2	10.69	0.7
1994	45.8	38.6	2.3	0.3	7.8	4.75	0.3
1995	45.3	34.7	9.3	0.5	4.6	4.95	0.5
1996	40.5	34.8	5.8	0.8	9.0	7.62	1.6
1997	40.6	29.6	4.9	1.4	13.5	8.11	2.0
1998	37.2	42.5	2.8	0.5	12.0	4.53	0.3
1999	49.3	36.0	1.6	0.4	5.5	6.50	0.4
2000	54.7	35.1	1.9	0.3	4.0	3.88	0.2
2001	40.0	38.2	2.8	2.6	6.0	9.74	0.6
2002	58.3	24.2	2.9	1.3	6.1	6.53	0.8
2003	47.9	25.2	3.3	2.2	4.1	13.26	4.2
2004	48.8	26.7	4.0	1.2	6.6	10.03	2.6
2005	62.1	18.5	1.7	1.5	4.3	9.50	2.4
2006	51.3	27.6	1.9	2.0	4.4	10.10	2.9

Source: Calculated from UNCTAD, 2008

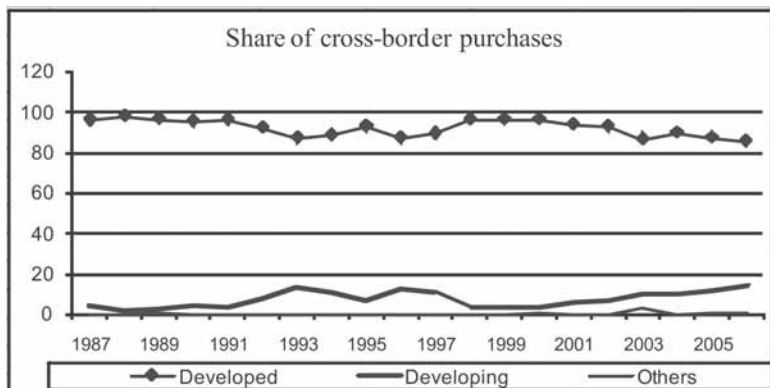
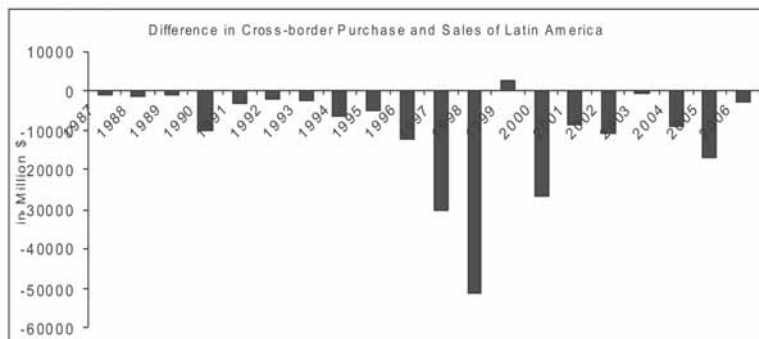
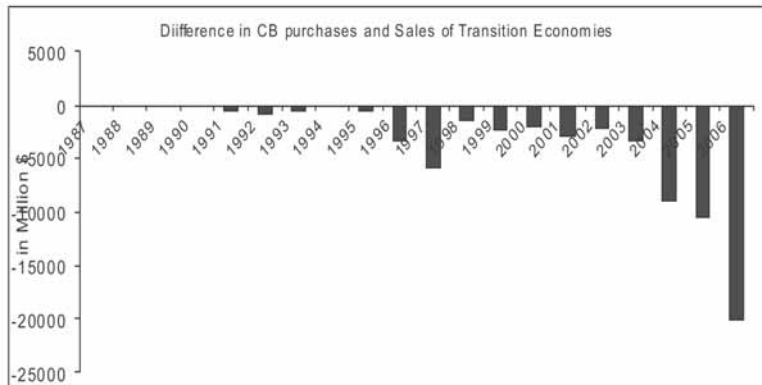


Figure 2 a-h

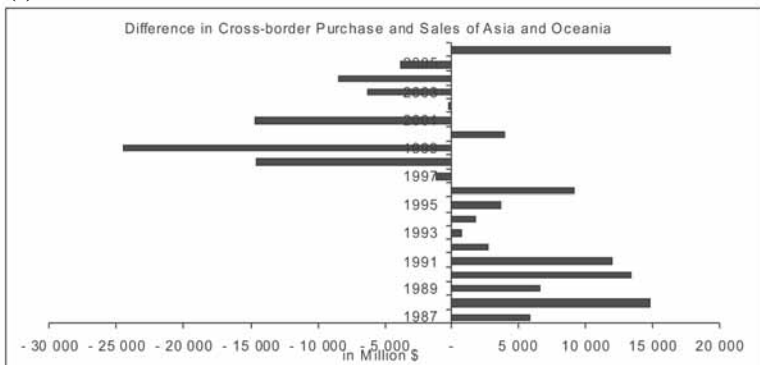
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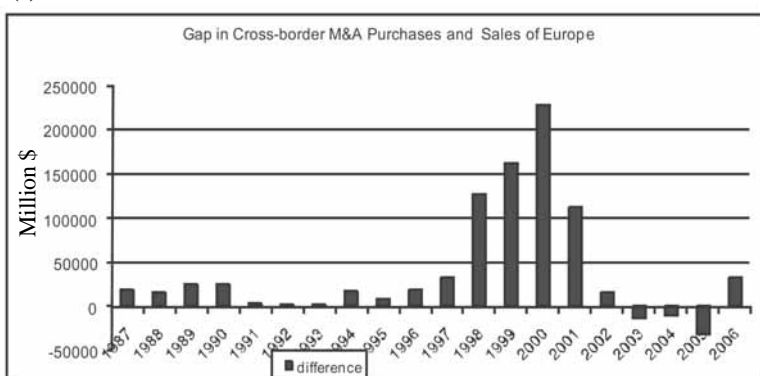
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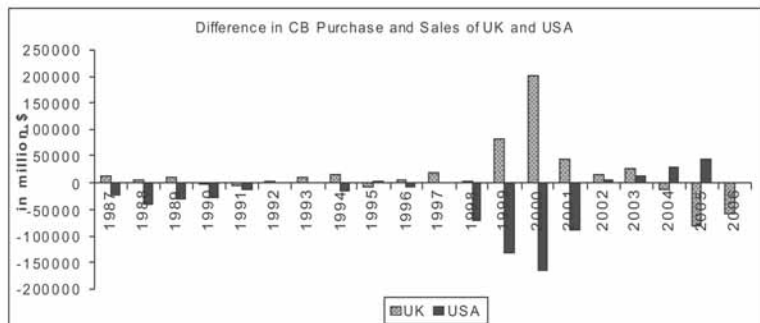
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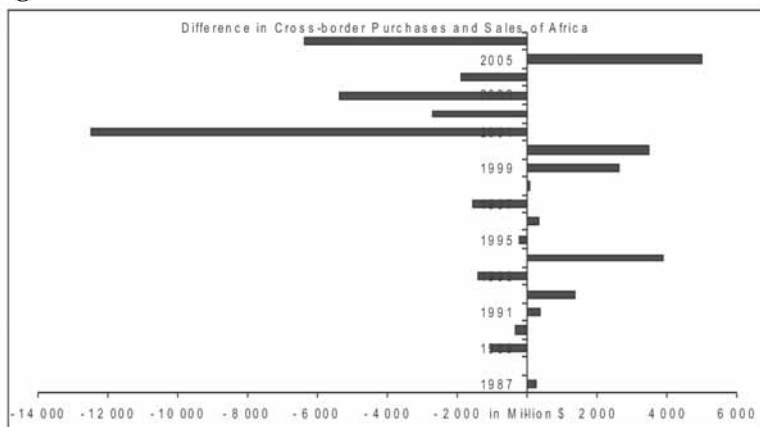
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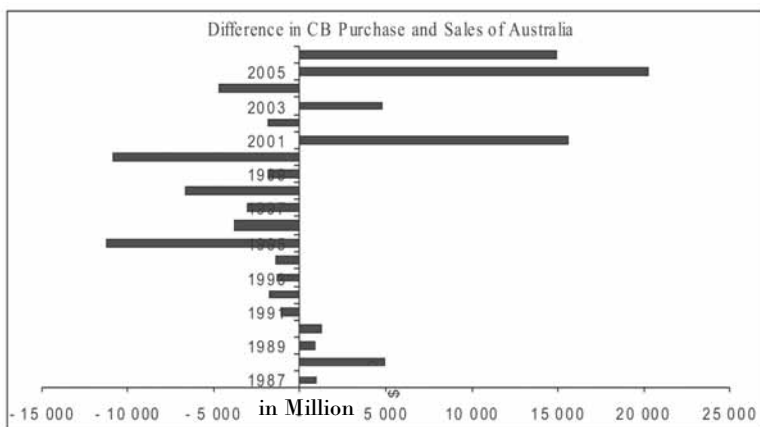


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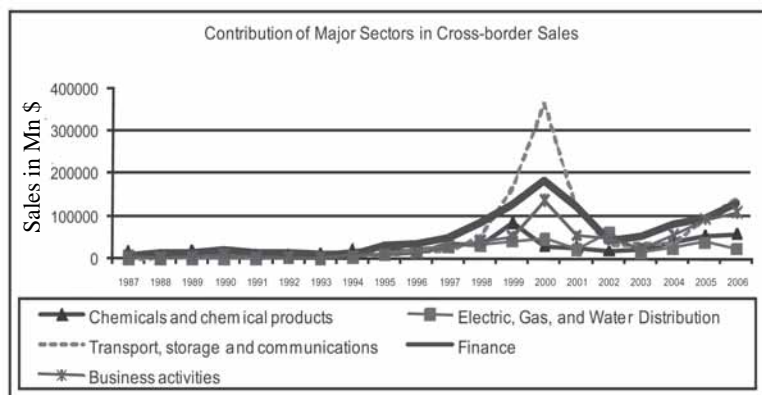


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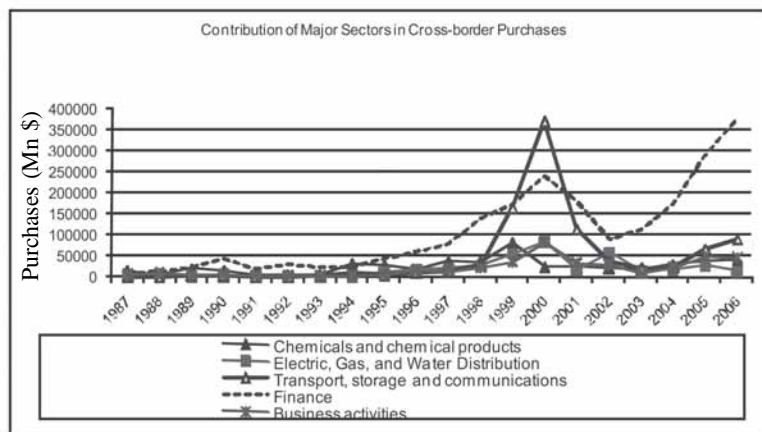


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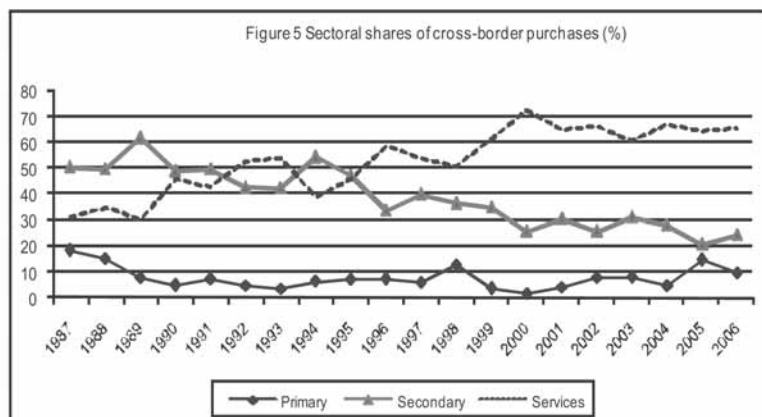


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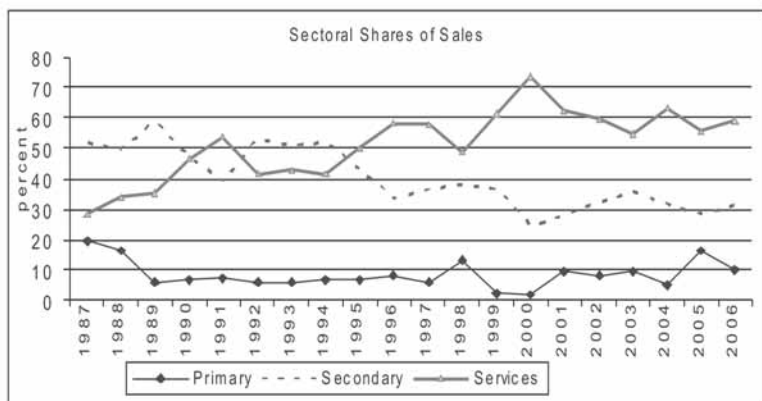


Table 4: Sectorwise share in World Purchases

Sector (Share, Purchases)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Primary	18.5	15.1	7.6	4.8	7.2	4.6	3.5	6.2	6.8	7.4	5.9	12.6	3.5	1.5	4.1	7.5	7.9	4.6	14.7	9.6
Agriculture, Forestry, and Fishing	6.1	11.9	13.7	0.6	8.1	5.5	2.3	2.0	1.4	5.7	8.6	2.2	0.9	8.6	3.2	0.1	1.0	3.7	0.2	3.4
Mining, quarrying and petroleum	17.4	13.3	6.6	4.8	6.6	4.4	3.4	6.1	6.8	6.9	5.4	12.3	3.5	1.4	3.9	7.5	7.9	4.4	14.7	9.3
Secondary	50.6	49.7	62.0	49.0	49.7	42.8	42.3	54.5	47.3	33.7	40.0	36.5	34.8	25.7	30.5	25.9	31.4	28.1	20.8	24.4
Food, beverages and tobacco	6.0	17.1	11.0	9.0	6.5	8.1	9.2	6.2	12.1	4.3	7.0	3.2	4.3	5.3	3.9	5.7	7.8	6.0	3.5	2.0
Textile, clothing and leather	0.35	0.53	1.17	2.23	1.74	0.51	4.53	0.26	0.84	0.34	0.41	0.58	0.28	0.33	0.19	0.15	0.23	0.07	0.65	0.15
Wood and wood products	1.8	2.7	4.0	4.5	2.8	2.2	3.5	2.0	3.5	1.4	2.0	2.5	0.9	1.6	2.1	1.4	0.9	1.0	0.5	0.5
Printing, Publishing, and Allied.	1.9	7.7	4.6	1.6	0.9	6.3	2.4	3.8	1.2	3.4	2.2	2.3	1.7	0.8	3.1	1.5	3.8	1.2	1.0	1.1
Oil and Gas; Petroleum Refining	0.1	0.9	1.0	0.6	1.6	0.4	0.6	0.2	0.7	0.3	0.2	0.9	2.2	2.8	2.0	2.3	0.3	0.4	0.1	0.4
Chemicals and chemical products	20.7	3.7	13.8	10.1	5.0	6.5	5.5	24.8	15.1	8.2	12.7	6.5	10.6	2.1	3.9	5.7	5.7	7.9	5.3	4.5
Rubber and Miscellaneous Plastic.	1.6	3.1	1.9	1.3	0.5	0.9	0.5	0.1	2.6	0.3	0.8	0.5	0.1	0.1	0.3	0.2	0.3	0.2	0.2	0.7
Stone, Clay, Glass, and Concrete.	2.9	1.6	2.1	4.1	1.1	5.0	2.9	4.1	1.5	2.0	2.3	1.7	1.6	1.1	1.4	0.6	0.6	1.6	1.8	1.0
Metal and Metal Products	2.2	2.4	4.3	2.0	2.3	2.9	2.5	1.9	0.8	5.9	2.8	1.5	1.4	1.1	3.4	2.4	3.8	1.2	2.6	5.3
Machinery	3.3	2.0	1.8	1.3	1.5	0.8	1.5	1.9	2.0	1.1	1.6	0.9	3.4	1.1	3.4	0.9	0.7	1.2	0.7	2.5
Electrical and electronic equipment	7.7	5.6	12.2	4.8	24.0	6.0	5.5	3.8	4.1	2.9	3.0	5.5	5.3	6.0	4.9	2.3	2.6	4.8	2.0	4.0
Measuring, Medical, Photo; Clock.	1.2	1.1	1.1	1.9	0.6	0.8	1.7	0.9	1.5	1.3	1.6	1.4	0.6	0.5	1.0	0.7	2.4	1.3	0.9	1.2
Motor vehicles, transport equip.	0.67	1.27	3.10	5.56	1.15	2.06	1.73	4.15	1.22	1.94	1.66	9.20	2.22	2.70	0.86	1.76	2.13	1.05	1.32	1.04
Miscellaneous Manufacturing	0.3	0.0	0.1	0.1	0.1	0.3	0.1	0.4	0.3	0.3	1.8	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1
Services	30.9	35.0	30.3	46.1	42.9	52.5	54.2	39.3	45.8	58.9	54.2	50.8	61.6	72.8	65.4	66.2	60.7	67.3	64.5	66.0
Electric, Gas, Water Distribution	0.09	0.89	0.55	0.22	1.33	1.27	1.50	0.65	5.61	7.32	6.16	5.18	7.19	7.38	3.02	15.65	4.53	4.62	3.61	1.36
Construction Firms	1.2	2.4	0.8	0.2	0.9	0.4	0.2	1.1	0.6	3.1	0.8	0.3	0.2	0.3	0.2	0.3	0.4	0.2	0.4	0.8
Trade	4.2	3.6	3.0	3.7	4.6	3.5	7.3	3.7	3.7	6.3	5.1	3.2	3.2	1.7	2.9	6.2	3.6	3.4	2.1	1.6
Hotels and restaurants	0.5	3.1	1.2	2.5	0.5	0.6	0.9	1.5	2.9	1.1	1.2	1.0	1.1	0.2	1.0	0.4	1.9	0.3	0.3	1.5
Transport, storage, communication.	0.8	0.9	3.6	3.2	1.7	2.4	4.9	8.2	3.3	5.0	4.8	5.7	21.4	32.3	19.0	10.0	7.3	6.5	9.2	10.1
Finance	15.0	11.4	16.7	29.0	27.7	38.4	29.6	19.1	24.3	27.0	27.1	26.7	22.7	21.1	30.5	24.6	38.4	45.7	40.5	42.9
Business activities	7.5	8.6	3.5	4.2	3.8	4.2	3.1	2.6	7.5	4.8	4.3	4.7	7.2	5.6	8.1	3.1	5.9	6.8	5.2	5.2
Public Administration	0.14	1.69	0.01	0.44	0.00	0.00	0.10	0.00	0.02	0.00	0.03	0.00	0.04	0.00	0.00	0.09	0.20	0.00	0.22	0.87
Educational Services	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health and social services	0.0	0.0	0.1	0.4	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.1	0.2	0.1
Community, social, personal serv.	1.2	1.4	0.5	1.6	1.5	1.1	1.1	1.0	1.8	0.8	3.6	3.7	0.9	2.6	2.8	0.5	1.1	0.5	0.9	1.2
Miscellaneous Services	0.3	1.0	0.2	0.7	0.8	0.6	3.7	0.7	0.8	0.6	0.4	0.5	0.1	0.0	0.1	0.3	0.1	0.0	0.0	0.1

Source: Calculated from UNCTAD

Table 5: Sectorwise share in World Sales

Sector (sales share)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Primary	19.3	16.2	6.02	6.63	7.45	5.82	5.8	6.83	6.98	8.19	5.68	13	2.08	1.73	9.62	8.3	9.54	5.1	16.1	9.78
Agriculture, Forestry, and Fishing	0.46	1.56	0.16	0.15	0.68	0.38	0.49	0.75	0.55	0.22	0.69	1.26	0.09	0.1	0.05	0.07	0.45	0.33	0.25	0.25
Mining, quarrying and petroleum	18.9	14.7	5.86	6.48	6.77	5.44	3.31	6.08	6.44	7.97	4.99	11.7	2	1.63	9.57	8.23	9.08	4.77	15.9	9.53
Secondary	52.1	49.8	58.7	46.9	38.8	52.7	51.1	51.8	42.7	33.3	36.6	38	36.5	24.5	28	32.2	35.9	31.7	28.4	31.2
Food, beverages and tobacco	5.1	12.5	6.21	8.42	6.35	11.9	9.33	10.6	9.7	2.89	7.23	3.2	3.69	4.39	5.83	8.67	9.97	6.27	6.26	2.83
Textile, clothing and leather	0.83	0.7	1.23	0.85	0.91	0.96	1.41	1.13	1.09	0.37	0.57	0.31	0.69	0.22	0.59	0.25	0.23	0.42	0.3	0.4
Wood and wood products	2.7	1.55	6.54	5.16	3.36	2	2.45	3.35	2.6	2.52	2.25	1.36	1.23	2.06	2.34	1.98	0.93	0.99	0.74	0.65
Printing, Publishing, and Allied.	1.61	10.2	4.66	1.53	0.44	6.55	1.42	2.16	0.72	4.78	0.86	2.41	1.34	0.43	2.82	0.81	4	2.36	1.39	2.89
Oil and Gas; Petroleum Refining	0.4	1.53	1.37	1.09	1.01	0.17	0.86	0.59	0.5	0.45	0.54	1.19	1.88	2.92	0.03	3.92	0.42	0.23	0.26	0.49
Chemicals and chemical products	22.6	4.33	13.1	8.15	7.15	7.04	13.7	15.8	14.5	6.8	11.6	5.98	11.3	2.66	4.46	5.51	7.72	11	7.6	6.74
Rubber and Miscellaneous Plastic.	2.28	3.13	0.99	1.82	0.71	0.29	0.32	0.78	2.31	1.74	0.76	0.43	0.49	0.41	0.41	0.61	0.53	0.15	0.34	0.85
Stone, Clay, Glass, and Concrete.	1.68	2.12	2.77	3.74	1.38	6.82	2.65	4.09	1.46	1.25	2.02	1.52	1.58	1.02	1.41	0.86	0.9	1.36	0.97	1.11
Metal and Metal Products	1.96	1.39	4.56	2.94	2.78	3.2	2.71	2.16	1.35	3.84	3.23	1.58	1.41	1.47	2.17	2.71	2.72	1.2	4.11	5.55
Machinery	1.12	2.49	1.48	1.16	1.41	1.37	2	2.61	2.73	1.89	2.48	1.68	2.72	0.79	0.69	0.69	1.46	1.76	0.74	2.18
Electrical and electronic equipment	9.58	6.05	9.1	4.06	10.4	7.82	4.69	2.7	2.99	3.34	2.59	6.74	6.76	4.71	4.33	2.31	1.82	3.42	2.1	4.46
Measuring, Medical, Photo, Clock.	1.55	3.11	1.87	2.65	1.38	1.36	5.41	1.48	1.08	1.45	1.09	1.74	0.95	1.18	1.75	1.37	2.71	1.54	1.88	1.01
Motor vehicles, transport equip.	0.42	0.77	3.71	4.91	1.23	2.79	3.3	3.92	1.42	1.83	1.37	9.55	2.42	2.21	0.95	2.32	1.94	0.96	1.54	1.82
Miscellaneous Manufacturing	0.28	0	1.11	0.44	0.32	0.45	0.82	0.41	0.31	0.14	0.05	0.37	0.09	0.02	0.21	0.13	0.57	0.1	0.21	0.2
Services	28.6	33.9	35.3	46.4	53.7	41.5	43.1	41.4	50.3	58.4	57.7	49	61.4	73.8	62.4	59.5	54.5	63.2	55.4	59.1
Electric, Gas, Water Distribution	0.08	0.1	0.73	0.4	1.33	2.33	2.15	1.97	6.56	9.37	9.72	6.07	5.33	4.08	3.54	16.7	5.36	6.52	5.34	2.64
Construction Firms	0.56	0.26	0.58	0.35	0.35	0.82	0.4	0.66	0.93	1.94	0.2	0.27	0.42	0.45	0.36	0.4	0.37	0.87	0.87	1.3
Trade	5.63	8.63	4.6	5.07	9.67	6.99	8.35	6.37	3.78	11.8	6.51	4.99	6.43	2.41	3.92	4.52	4.44	6.95	4.08	2.62
Hotels and restaurants	3.13	5.94	6.58	5.8	1.73	1.98	2.43	2.35	3.41	1.59	2.06	2.1	1.44	0.89	1.77	1.04	1.39	1.21	1.06	3.63
Transport, storage, communication.	0.41	1.89	2.56	9.6	4.66	3.83	7.9	10.7	4.42	7.72	5.82	9.99	21.9	32	20.6	8.34	11.8	9.6	13.6	16
Finance	9.88	12.5	10.4	14.4	17.6	16.6	14.6	8.31	16.6	16.2	16.7	15.7	16.5	16.1	20.5	11.3	18.4	21.5	13.1	14.9
Business activities	8.37	2.6	3.75	7.86	6.32	4.8	4.41	6.61	5.21	5.79	8.69	7.99	6.89	12	9.15	12.8	7.93	14.5	13	12.4
Public Administration	0	0	0	0	0	0	0	0	0.32	0	0.04	0.07	0.23	0	0.06	0.02	0	0.01	0.01	0.01
Educational Services	0	0	0	0	0.04	0	0.51	0.01	0	0	0.06	0.01	0.01	0.02	0.07	0	0.03	0.02	0.21	0.05
Health and social services	0	0.07	0.33	0.31	0.1	0.3	0.31	1.94	0.51	1.11	0.12	0.09	0.07	0.32	0.21	0.38	0.72	0.87	0.27	1.54
Community, social, personal serv.	0.42	0.85	5.24	2.56	11.8	3.12	1.69	1.82	6.49	2.86	6.45	1.5	1.79	5.67	1.83	4.1	3.67	0.88	3.27	3.41
Miscellaneous Services	0.09	1.06	0.53	0.06	0.05	0.66	0.3	0.65	2	1.01	0.37	0.18	0.3	0.15	0.26	0.15	0.67	0.39	0.03	0.49

Source: Calculated from UNCTAD

Table 6: Industry-wise Distribution of Cross-border Mega Deals

Acquisitions		Cross-border Acquisitions			
Industrial Sector	No.	Percent	Industrial Sector	No.	Percent
Banking and finance	127	33	Banking and finance	80	37
Post and telecom	28	7	Information Technology	16	7
Information Technology	27	7	Post and telecom	14	6
Petroleum and Natural Gas	22	6	Advertisement, consultancy, Media and Entertainment	14	6
Cement and glass	22	6	Drugs and Pharmaceutical	12	6
Advertisement, consultancy, Media and Entertainment	20	5	Automobiles	11	5
Automobiles	18	5	Other Chemicals	10	5
Other Chemicals	17	4	Others	59	27
Drugs and Pharmaceutical	16	4	Total Available	216	100
Others	91	23			
Total Available	388	100			

Table 7: Industry Classification of the Overseas Acquisitions made by Indian Companies

Industry classification	Purchaser		Seller	
	No.	Percent	No.	Percent
Primary	6	1.1	8	1.5
Plantation			2	0.4
Mining and Quarrying	6	1.1	6	1.2
Industry	254	48	244	47
Food, beverages and tobacco	15	2.8	10	1.9
Textiles, footwear and leather products	20	3.8	24	4.6
Metals and Metal Products	30	5.7	29	5.6
Machinery	5	0.9	6	1.2
Electrical Appliances and Allied	20	3.8	14	2.7
Domestic Appliances	11	2.1	14	2.7
Pesticides and Agro-chemicals	15	2.8	16	3.1
Drugs and Pharmaceutical	58	11.0	61	11.7
Other Chemicals	31	5.9	26	5.0
Cement and glass	6	1.1	5	1.0
Petroleum and Natural Gas	9.0	1.7	13	2.5
Power Generation	3	0.6	1	0.2
Automobiles and Shipyard	25	4.7	20	3.8
Construction	1	0.2	1	0.2
Manufacturing others	5	0.9	4	0.8
Services	268	51	269	52
Banking and Finance	8	1.5	10	1.9
Media, Entertainment, Advertisement and Consultancy	13	2.5	23	4.4
Information Technology	209	39.6	191	36.7
Post and Telecom	13	2.5	7	1.3
Trading	8	1.5	20	3.8
Hotels and Motels	3	0.6	3	0.6
Miscellaneous	14.0	2.7	15	2.9
Total Available	528	100	521	100.0

Table 8: Type of Overseas Acquisitions by Indian Firms

Type	No.	Percent
Horizontal	378	72.6
Vertical	134	25.7
Conglomerate	9	1.7
Total Available	521	100.0

References

- Agarwal, Manish (2002) "Analysis of Mergers in India", M Phil Dissertation submitted to the Delhi School of Economics.
- Beena, PL (2004), "Towards Understanding the Merger-wave in the Indian Corporate Sector: A Comparative Perspective", Working Paper No: 355, CDS.
- Beena, PL (2008), "Trends and Perspectives on Corporate Mergers in Contemporary India", *Economic and Political Weekly*, September 28.
- Beena, S (2008), "Mergers and Acquisitions in the Indian Pharmaceutical Industry: Nature, Structure and Performance", MPRA Working Paper No. 8144.
- Bresman, Birkinshaw and Nobel (1999), "Knowledge Transfer in International Acquisitions", *Journal of International Business Studies*, Vol. 30, No. 3, Third Quarter.
- Calvet, AL (1981), "A Synthesis of Foreign Direct Investment Theories and Theories of the Multinational Firm", *Journal of International Business Studies*, Vol. 12, No.1, Tenth Anniversary Special Issue (Spring-Summer), pp. 43-59.
- Dunning, John H (1993), *Multinational Enterprises and the Global Economy*, Addison-Wesley Publishing Company.
- Centre for Monitoring Indian Economy, Various Publications.
- DIPP (2008), Ministry of Commerce and Industry, Government of India.
- Dunning, John H (1993), *Multinational Enterprises and the Global Economy*, Addison-Wesley Publishing Company.
- Gaughan, Patrick A (1999), *Mergers and Acquisitions and Corporate Restructuring*, John Wiley & Sons, New York.

- Healy, P and Palepu, K.G (1993), "International Corporate Equity Acquisitions: Who, Where and Why", in K. Froot (ed), *Foreign Direct Investment*, Chicago: University of Chicago Press.
- Jones (2005), *Multinationals and Global Capitalism*, Oxford University Press.
- Knickerbocker, F.T (1974), "Oligopolistic Reaction and Multinational Enterprise", Cambridge, MA: Harvard Business School Division of Research.
- Kumar, Nagesh. (2000), "Mergers and Acquisitions by MNEs: Patterns and Implications", *Economic and Political Weekly*, Vol. XXXV, No. 32.
- Narulla, Rajaneesh (2003), "Globalisation and Technology: Interdependence, Innovation Systems and industrial Policy", Blackwell Publishing Inc.
- Nayyar, Deepak (2007), "The Internationalisation of Firms from India: Investment, Mergers and Acquisitions", SLPTMD Working Paper Series No. 004, Department of International Development, University of Oxford.
- Pradhan, Jaya Prakash (2007), "Trends and Patterns of Overseas Acquisitions by Indian Multinationals", Working Paper No. 10, ISID, October.
- Shapiro, Carl and Robert D Willig (1990), "On the Antitrust Treatment of Production Joint Ventures", *The Journal of Economic Perspectives*, Vol.4, No.3. (Summer), pp. 113-130.
- Utton, Micheal (2008), *International Competition Policy: Maintaining Open Markets in the Global Economy*, Edward Elgar.
- Williamson (1968), "Economies as an Antitrust Defense: The Welfare Tradeoffs", *American Economic Review*, Vol.58, No.1. pp. 18-36.
- World Investment Report, (2000), *Cross-border Mergers and Acquisitions and Development*, UNCTAD.

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