AN ANALYSIS OF FOREIGN ACQUISITIONS IN INDIA'S MANUFACTURING SECTOR

Beena Saraswathy

Working Paper 193

August 2016



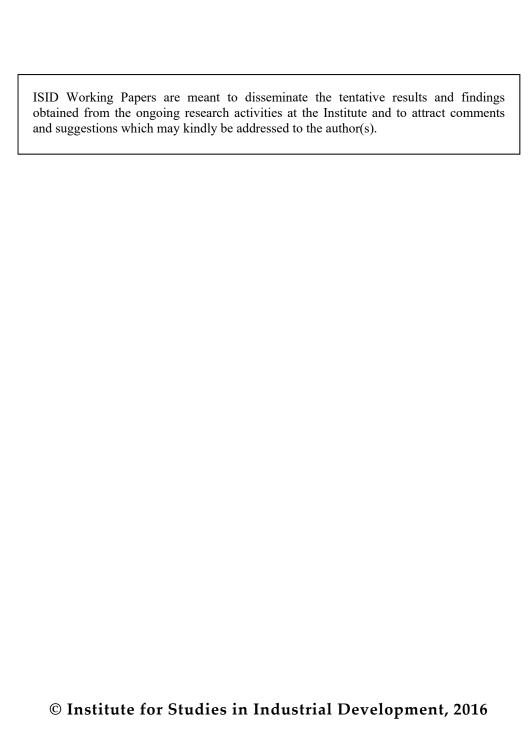
An Analysis of Foreign Acquisitions in India's Manufacturing Sector

Beena Saraswathy

ISID

Institute for Studies in Industrial Development

4, Institutional Area, Vasant Kunj Phase II, New Delhi - 110 070 *Phone:* +91 11 2676 4600 / 2689 1111; *Fax:* +91 11 2612 2448 *E-mail:* info@isid.org.in; *Website:* http://isid.org.in



CONTENTS

Abstract		1
I. Introduc	tion	1
II. Extent a	nd Structure of Foreign Acquisitions in India	2
	rent of CM&A Deals	2
2.2 Re	ationship of CM&A with Greenfield FDI and FDI	4
2.3 For	reign Acquisitions in India: More Details based on VID	(
III. Emergi	ng Concerns when Dealing with CM&A in India	22
_	s Approach towards Foreign Acquisitions	25
	sions and Policy Implications	26
Appendix	•	28
References	5	30
List of Box(es)	
Case No. 1	Acquisition of Andhra Pradesh Paper Mills (APPM) by International Paper for US\$388 Million	21
Case No. 2	Acquisition of WMI Cranes Ltd by Konecranes for approx. Rs 3600 Million	21
Case No. 3	Acquisition of Kare Elevators by ThyssenKrupp Elevator	21
Case No. 4	Acquisition of Paras Pharmaceutical by Reckitt Benckiser (RB) for approx. Rs 3260 crores	22
List of Figu	re(s)	
Figure 1	Extent of CM&A in the World: Value and Number	3
Figure 2	Extent of CM&A in India: Value and Number	3
Figure 3	CM&A in India and the World	4
Figure 4	FDI Inflows in India through CM&A and Greenfield Route	5
Figure A1	Share of CM&A in FDI Inflows (in per cent)	28
Figure A2	Inbound Deals in Manufacturing Sector: 2004-05 to 2014-15	28
Figure A3	Acquirers of JV Related Deals in India	29

List of Table(s)

Table 1	Value and Extent of CM&A in FDI Inflows	5
Table 2	Sectoral Composition of CM&A in India: 2004–05 to 2014–15	8
Table 3	Value Involvement in Cross-border Acquisitions in India	10
Table 4	Listed and Unlisted Firms across Sectors	10
Table 5	Selected Cross-border Acquisition of Firms Aged more than 40 Years	13
Table 6	Average Age of Acquired Firms at the time of Acquisition	14
Table 7	Selected Start-up Acquisitions (aged less than 5 years)	15
Table 8	Selected Acquisitions by Global Leading Firms in India	16
Table 9	Selected Acquisitions Related to the Pharmaceutical Sector	18
Table 10	Acquisitions undertaken by Schneider Electric	19
Table 11	Revised Thresholds for Combination Regulations	23

An Analysis of Foreign Acquisitions in India's Manufacturing Sector

Beena Saraswathy*

[Abstract: Globally cross-border mergers and acquisitions (CM&A) are an important component of FDI. Though CM&A is less significant in India compared to the global scenario, its contribution is gradually increasing. This study throws light on the current foreign acquisition scenario in India and the emerging concerns. The study observed that across various sectors, many leading foreign firms are trying to eliminate competition in the domestic market by taking over competent firms with high growth potential. The major aim behind the takeover of Indian firms is to expand their Indian operations through acquisition route and to exploit the capabilities built by domestic firms through years of effort. The recent trend in the CM&A scenario is the acquisition of start-ups. The study suggests a look into the Chinese experience, where, in certain areas, foreign acquisitions are scrutinised to ensure compliance with the national security concerns.]

JEL Classification: G34, K21; F21; F23, G18

Keywords: Mergers, Acquisitions and Restructuring; Antitrust Law; International Investments; Multinational Firms and International Business; Government Policy and Regulations.

I. Introduction

The foreign investment policies adopted during the liberalisation era in India were mainly intended to bring in sophisticated foreign technology, marketing and managerial capabilities, employment creation, export promotion, and so on. In this context, myriad studies have examined the pros and cons of foreign investment in India. One important dimension of FDI in recent years has been the increasing presence of brownfield investment¹ in aggregate FDI inflow. This has also been corroborated by the findings of the studies on consolidation strategies such as mergers and acquisitions in India.

The author is Assistant Professor at the Institute for Studies in Industrial Development, New Delhi. Email: vsbeena@gmail.com. This study is part of the ICSSR Research Project on 'India's Inward FDI Experience in the Post-Liberalization Period with Emphasis on the Manufacturing Sector'. Author is thankful to Prof. K.S. Chalapati Rao, Dr Satyaki Roy, Prof. P. Mohanan Pillai and the participants of the National Conference on 'India's Post-1991 Inward FDI Experience: Looking Beyond Aggregates' held at ISID for the comments and suggestions.

¹ The terms "brownfield investment" and "inbound transaction" are used interchangeably in the study. Similarly, the term "foreign acquisition" in the study refers to an acquisition involving a foreign firm in India.

However, these studies were historically handicapped due to the absence of appropriate databases; as a result, the discussion on its various implications is at a nascent stage. Meanwhile, there has also been a paradigm shift in the relevant rules and regulations governing mergers and acquisitions in India. The Monopolies and Restrictive Trade Practices Act, 1969 has been replaced with Competition Act, 2002 while the Competition Commission of India (CCI) replaced the three-decade old MRTP Commission. Since then, the pace of inbound transactions increased drastically. The increasing extent of inbound transactions under CCI raises concerns as domestic capabilities developed over the years have been taken over by foreign companies. In this context, the present study is an attempt to unravel issues relating to foreign acquisitions in India in recent years. This paper is further organised into four sections: Section II: Extent and structure of foreign acquisitions in India, Section IV: China's approach towards foreign acquisitions, and Section V: Conclusions and policy implications.

II. Extent and Structure of Foreign Acquisitions in India

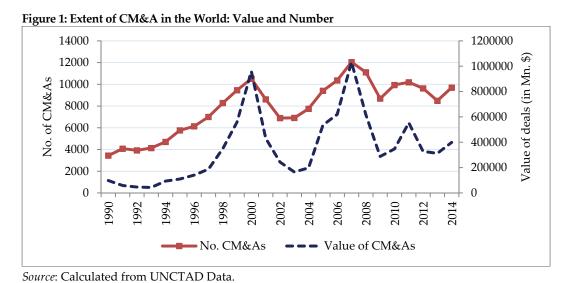
The study has used UNCTAD database at macro level and Venture Intelligence Database (VID) at firm level to bring out the extent and structure of foreign acquisitions in India. Major observations based on this are discussed here.

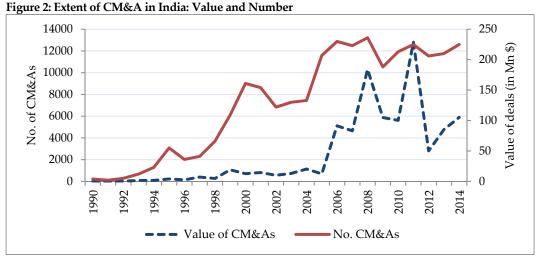
2.1 Extent of CM&A Deals

Globally, three distinct cross-border M&A (CM&A hereafter) waves are observed since 1990s in terms of both value and volume of CM&A transactions (see *Figure 1*). They are: (i) from 1990 to 2003, with the peak year 2000, (ii) 2003 to 2009, with the peak year 2007, and (iii) 2009 to 2013, with the peak year 2013. It is observed that merger waves are associated with economic prosperity and business cycles. For example, the steep decline in transactions immediately following the peak years of 2000 and 2007 are associated with the World Trade Centre attack in the year 2001 and the global economic financial crisis during 2008–09. This association is also noticed for merger waves that occurred before the 1990s (Owen, 2006; Saraswathy, B., 2013). During the initial years of liberalization, the number and values of CM&As in India were minimal.

However, over the past few years, these values have increased several times. The total number of inbound deals was only five in 1992, which increased to 225 in 2014. From 1990 to 2014, 3216 CM&As occurred in India, in aggregate. The CM&A activities began imperceptibly in the 1990s in India. Hence, for the 1990s, a CM&A wave is not completely visible in the Indian context. In terms of volume of transactions, a CM&A wave, to a limited extent, is observed for the periods (i) 1990 to 1996, with peak in 1995 and (ii) 1996 to 2002, with peak in 2000. This is similar to the first global CM&A wave after 1990s as mentioned above. However, this is not distinguishable in terms of the volume of transactions. In India, substantive CM&A waves in terms of both value and

volume have only been observed since 2005. Since then, two CM&A waves have been observed (see *Figure* 2). They are: (i) 2004 to 2009, with peak in 2008 and (ii) 2009 to 2013, with peak in 2011. Out of this, the first wave started in 2005 in terms of value. Both these waves coincide with the second and third global CM&A waves, though the first wave in India started a year later. In general, the global and Indian CM&A regimes are moving together, which can be observed from the coincidental peak years of CM&A activities in India and the world (see *Figure* 3).





Source: Calculated from UNCTAD Data

2002

India

2004

2006

World

2010

2012

0

Figure 3: CM&A in India and the World

Source: Calculated from UNCTAD Data.

1992

1994

0

2.2 Relationship of CM&A with Greenfield FDI and FDI

1996

1998

As per recent World Investment Reports, globally, CM&A is an important component of FDI. However, a strict one-to-one comparison between the two cannot be made because of data issues concerning both FDI and CM&A. Issues relating to data on FDI are discussed in detail by Rao *et al.* (2013). Likewise, CM&A may not necessarily result in international capital flows always. UNCTAD also reports data on Greenfield FDI (GFDI) from 2003. However, GFDI figures are based on announcement, not on effectiveness. The value of inflows depends on the mode of financing of CM&A and GFDI. Hence, these figures are also not comparable with CM&A. In the absence of an appropriate alternative data source, the study has made use of data from UNCTAD to bring out the significance of CM&A in FDI.²

The value of FDI inflows in India was only US\$ 2.07 billion during the first half of the 1990s, which increased to US\$136 billion during the first half of 2000s and further to US\$150 billion during the second half of the 2000s. Similarly, the estimated inflow through CM&A accounted for only US\$0.2 billion during the first half of 1990s, which increased to US\$3.9 billion and US\$31.9 billion during the first half and the second half of the 2000s respectively. The contribution of CM&A to world FDI inflows was 34 per cent in the first half of 1990s, and 45 per cent and 28 per cent during the first half and the second half of the 2000s respectively. In India it was 10 per cent, 20 per cent and 21 per cent respectively, which clearly indicates an upward trend. Compared to the global figures, the share of CM&A in FDI inflow was low in India. For the entire period, the global share is 40 per cent and that of India is 20 per cent. However, it is growing rapidly

World Investment Report has also used this data for comparing FDI and CM&A. The data reflects only the estimated inflows.

in absolute terms. In China, the share of CM&A is only 15 per cent, which is low compared to that of India. However, in absolute terms, the value of China's CM&A deals is four times higher than that of India's (see *Table 1* and *Appendix Figure A1*).

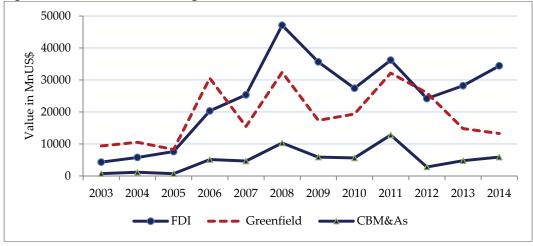
Table 1: Value and Extent of CM&A in FDI Inflows

Period	Value of F	DI (in \$B	n)	Value of 0	CM&A (i	n \$Bn)	Share of CM&A in FDI (%)			
	World	India	China	World	India	China	World	India	China	
1990-1994	997.1	2.1	80.1	341.2	0.2	1.1	34.2	9.8	1.4	
1995–1999	2980.2	13.1	210.3	1347.7	2.1	15.9	45.2	16	7.6	
2000-2004	3873.4	24.8	254.5	1999.2	3.9	64.8	51.6	15.9	25.5	
2005-2009	6868.4	136.0	432.0	3092.8	26.6	55.5	45	19.6	12.8	
2010-2014	6991.7	150.4	612.2	1940.2	31.9	106.6	27.7	21.2	17.4	
1990-2014	21710.7	326.4	1589.1	8721.1	64.7	244.0	40.2	19.8	15.4	

Source: Based on UNCTAD Data.

The Greenfield FDI (GFDI) figures in India are much ahead of CM&A figures (see *Figure 4*)³. However, these figures are just indicative of the general trends as data on GFDI is based on announcements. *Figure 4* shows that the general trends in the growth of FDI, CM&A and GFDI are almost similar. As mentioned earlier, the share of CM&A in FDI is only 20 per cent from 1990 to 2014, which indirectly indicates the presence of a higher share of GFDI. However, the growing share of CM&A in recent years shows the replacement of GFDI with CM&A.

Figure 4: FDI Inflows in India through CM&A and Greenfield Route



Source: Based on UNCTAD Data.

³ World Investment Report has also used this data for comparing FDI and CM&A. The data reflects only the estimated inflows.

2.3 Foreign Acquisitions in India: More Details based on VID

We have used Venture Intelligence database (VID) to understand more details on inbound deals in India⁴. The database contains information on 5360 transactions that took place between 2004-05 and 2014-2015. Between April and August 2015, 225 deals had occurred; however, we are not taking these deals into consideration because of incomplete data for the financial year 2015-16. Similarly, we have excluded 25 deals covered in the database from January to March 2004 to maintain uniformity. The database contains information on domestic (2601 deals: 49 per cent), outbound (1592 deals: 30 per cent) and inbound (1167 deals: 22 per cent) transactions across primary, secondary and tertiary sectors. As discussed earlier, we will confine our analysis to inbound deals in the manufacturing sector. Out of the 1167 inbound deals, 654 (56 per cent) pertain to service sector, three (0.3 per cent) to agriculture sector and 507 (43 per cent) to manufacturing sector. The study defined inbound deals as transactions that occurred in India with at least one foreign partner. Further, we have omitted partial acquisitions⁵ and repeated deals from the sample. We have also separated the acquisitions made by private equity (PE) firms. Our final sample consists of 373 (74 per cent) inbound acquisitions pertaining to the manufacturing sector as classified by VID.

Regulatory regimes pertaining to these deals are not uniform. In June 2011, India adopted a new competition regulation, which was expected to strengthen competition with a view to enhance welfare of both the producers and the consumers in India. It becomes clear from the data that within a short span of five years, the post-CCI regime accounted for 57per cent of the total transactions reported during the study period. The data covers a period of six years for pre-CCI regime and five years for post-CCI regime. While 213 transactions occurred during the post-CCI regime, the pre-CCI regime registered 160 deals (53 per cent). The peaks in transactions also registered immediately after CCI took over the regulatory role (see *Appendix Figure A2*). As per VID, up to August 2015, a total of 2266 manufacturing sector deals were recorded under post-CCI regime. However, up to August 2015, CCI handled only 284 combination cases⁷ for all sectors, which indicates the presence of deals in the manufacturing sector, which have not come under the purview of CCI8. The implications of deals which do not come to the notice of the CCI need further investigation.

⁴ We have reclassified the deals based on NIC 2008. The analysis is restricted to inbound transactions that occurred within India during the period 200–05 to 2014–15. Data extracted on August 21, 2015.

⁵ Partial acquisitions include sale of a division, certain assets, etc.

⁶ It includes 13 deals in the manufacturing sector that were undertaken between April and August 2015, which is excluded from the main analysis.

⁷ Combinations include M&As and JVs.

⁸ CCI regulates only those deals which meet the turnover/asset limit as prescribed in the Competition Act, 2002.

2.3.1 Sectoral Composition of CM&A

Kumar (2000) observed that during the 1990s, the major sectors that experienced inbound transactions are non-electrical machinery, food and beverage, industrial chemicals and pharmaceuticals. A more or less similar trend was observed by Beena (2004). The study noted that 'consumer goods industries such as food and beverages, household appliances, pharmaceuticals and personal care products, automobiles and the like have had a high concentration of MNE related deals'. Covering data up to November 2007, Saraswathy, B. (2010) observed that the dominant sectors for CM&A in India are pharmaceuticals, chemicals, metals, automobiles, electrical appliances, and food and beverages. The present study reiterates the continuing importance of certain sectors like pharmaceuticals, chemicals, food and beverages, auto-components, etc., during 2004-05 to 2014-15. The pharmaceutical sector alone accounts for around 14 per cent of the overall transactions; it has been one of the most preferred sectors since the beginning of the consolidation scenario in India. It may be due to the vastness of the Indian market and the presence of highly competitive Indian companies, which is visible in the provision of cost-effective medicines from these companies both within and outside India. Hence, it may be a strategy to counter competition from these companies in the domestic and overseas markets rather than competing directly. Chemicals (excluding pharmaceuticals) and food and beverages have been simultaneously occupying the second position with approximately 12 per cent of inbound transactions. Auto components and machinery constituted 11 per cent each, electronics and domestic appliances constituted 8 per cent, and so on.

2.3.2 Nationality of Acquirers

In 70 per cent of the inbound deals, Indian firms have been acquired by foreign partners. Another 23 per cent of the deals (84 deals) appertain to joint venture related acquisitions. Out of these, in almost all deals, the foreign partners gradually increased their stakes, thus taking control of the joint venture partners. Hence, in both situations, Indian firms are losing control to the foreign partner. Together, these constitute 93 per cent of the inbound transactions. Deals between/among foreign firms hardly constituted seven per cent of the overall deals (27 out of 373 deals). Out of these, 13 deals were related to the parent-subsidiary acquisition. Indian firms are mainly acquired by the US based firms, which constitutes around 24 per cent (86 in number). Second in importance are the Japanese firms (12 per cent: 44 deals), followed by German firms (11 per cent: 39 deals), French firms (10 per cent: 36 deals), and so on.

Kumar (2000) found that, during 1993 to 1999, around 35 per cent of the MNE related horizontal deals⁹ were undertaken by buying out the Indian joint venture counterparts. Similar observation has also been made by other scholars for the decade of the 2000s

⁹ Horizontal deal refers to a deal undertaken within the same industry.

(Beena, 2004; Saraswathy, B., 2010). The present study has noticed that the breaking of joint ventures is an important mode of inbound acquisitions in India. Overall, it constitutes 23 per cent of the transactions. However, in sectors like automobiles and auto components, a major proportion of the deals are undertaken through this route (see *Table* 2). The US based firms (24 deals) are entering the Indian market mainly through the joint venture route (see *Appendix Figure A3*). Many MNEs found that entering the market through joint ventures with existing partners is an easy mode of entry. As Beena *et al.* (2004) observed, operating in a foreign market is entirely different from operating in the home market. Partnership with established Indian firms helps foreign firms in forging labour and market ties. Though these factors were considered important during the preliberalisation era because of stringent regulations, network building is important at any point of time for the successful operation of a firm. Such partnerships are welcomed by the domestic firms as it is expected to spillover managerial and technological capabilities into domestic firms. The above figures show that these ventures are being taken over by

Table 2: Sectoral Composition of CM&A in India: 2004–05 to 2014–15

Sector	Acqı	uired firm (No. 0j	is in Indi f deals)	a are	Acquired firms in India are (in per cent)			
	Indian Firms	Foreign	Indian JVs	Total	Total	Indian Firms	Foreign	Indian JVs
Pharmaceutical & Biotech	46	4	4	54	14	85	7	7
Chemicals	35	5	5	45	12	78	11	11
Food and Beverages	27	5	12	44	12	61	11	27
Auto components	17	2	22	41	11	41	5	54
Machinery	27	3	11	41	11	66	7	27
Electronics & Dom. Appl.	26	3	1	30	8	87	10	3
Electrical Equipment	21	1	3	25	7	84	4	12
Engineering	21	1	2	24	6	88	4	8
Basic Metals	9	1	4	14	4	64	7	29
Textile	10	0	4	14	4	71	0	29
Automobiles	1	1	11	13	3	8	8	85
Cement and Plastic	9	0	3	12	3	75	0	25
Non-metallic Minerals	8	0	2	10	3	80	0	20
Power & Energy	1	0	0	1	0	100	0	0
Miscellaneous	4	1	0	5	1	80	20	0
Total	262	27	84	373	100	70	7	23

Source: Based on Venture Intelligence Database.

foreign partners rather than resulting in expected spillovers. The breaking up of joint ventures also indicates the changes in stringent policies post 1990s, which allowed firms to select CM&A as a mode of network building. It is not the case of India alone. From 2002 onward, M&A is the preferred route of expansion in China compared to joint ventures. Consequently, there has been a decline in joint venture deals in China (Qian, 2010).

2.3.3 Value Involvement in Transactions

The total estimated transaction value during the study period is US\$22 billion, out of which transactions worth nearly US\$11.9 billion (55 per cent) were undertaken during the pre-CCI regime (See Table 3). The year 2008–09 marked the highest value owing to the acquisition of Ranbaxy by Daichi, followed by the year 2012–13 during which the Diageo-United Spirits deal (valued at US\$3 billion) was struck. The pharmaceutical sector has been the most important segment, accounting for 37per cent of the value involved, which is much higher compared to the number of deals shown above, i.e. 14 per cent (see Table 2). This indicates the presence of high-value acquisitions in the sector (see *Table 3*). Second in importance is the food and beverages sector, which constitutes 20 per cent of the transaction amount, and which is also high compared to the number of deals (12 per cent). However, it is interesting to note that under the CCI regime, food and beverages has been the most preferred sector in terms of value of transactions (41 per cent), followed by electrical equipment (14 per cent). The pharmaceutical sector constituted only 6 per cent of the manufacturing sector during the post CCI era, which is even less when compared to the chemicals sector. It is further observed that in majority of the sectors, acquisitions among foreign firms constituted only a meagre proportion of the inbound transactions compared to acquisitions involving Indian firms. The latter is more than 90 per cent of the value of transactions in most of the sectors.

2.3.4 Takeover of Unlisted Firms by Listed Firms

It is observed that 95 per cent of the acquired firms are unlisted (see *Table 4*). In terms of value involvement also, the given figures hold true. Out of the total transaction amount of US\$22 billion for which information is available, 78 per cent (i.e. US\$17 billion) came from the unlisted firms, whereas only 22 per cent belonged to the listed firms' category. Similar observations can be made in terms of acquisitions relating to Indian firms. Out of the total value of US\$21.5 billion, 77 per cent (i.e. USS\$16.6 billion) came from unlisted firms. It can be seen from *Table 4* that in most of the consolidation-intensive sectors, more than 90 per cent in terms of number and more than 75 per cent in terms of value of the acquisitions occurred in case of unlisted firms. The only exceptions are electrical equipment and food and beverages in terms of value. In the pharmaceutical sector, it is as high as 97 per cent.

Table 3: Value Involvement in Cross-border Acquisitions in India

Table 3: Value involv			-						,
Sector	,	ed Indian Fi	0		reign Deals			CM&A dea ndia(US\$M	
		eign (US\$N			dia(US\$Mr				
	Pre CCI	Post CCI	Total	Pre CCI	Post CCI	Total	Pre CCI	Post CCI	Total
Auto Components	147	601	749	0	9	9	147	610	758
Automobiles	389	43	432	0	202	202	389	245	634
Basic Metals	198	161	359		0	0	198	161	359
Cement and Plastic	885	494	1380			0	885	494	1380
Chemicals	373	722	1095	100	9	109	473	731	1204
Electrical Equipment	527	1445	1973		0	0	527	1445	1973
Electronics & Dom. Applian.	251	353	604	0	4	4	251	357	608
Engineering	202	203	405	0		0	202	203	405
Food and Beverages	237	4107	4343	124	20	144	361	4127	4487
Machinery	279	638	917	0	4	4	279	641	921
Non-metallic Mineral Products	316	213	529			0	316	213	529
Pharmaceutical & Biotech	7429	564	7993	219		219	7648	564	8212
Power & Energy		67	67			0	0	67	67
Textile	61	52	113			0	61	52	113
Miscellaneous	569	81	650	0		0	569	81	650
Grand Total	11864	9744	21608	443	248	690	12307	9991	22298

Source: Based on Venture Intelligence Database.

Table 4: Listed and Unlisted Firms across Sectors

Sector			Number a	ınd Value	ıd Value			Share (%)			
		No. of deals		Value	of deals (U	S\$Mn)	No. o	f deals	Value of deals		
	Listed	Unlisted	Total	Listed	Unlisted	Total	Listed	Unlisted	Listed	Unlisted	
Auto components	1	40	41	7	750	758	2.4	98	1	99	
Automobiles	0	13	13		634	634	0.0	100	0	100	
Basic Metals	0	14	14		359	359	0.0	100	0	100	
Cement and Plaster	1	11	12	43	1337	1380	8.3	92	3	97	
Chemicals	3	42	45	29	1175	1204	6.7	93	2	98	
Electrical Equipment	2	23	25	968	1004	1973	8.0	92	49	51	

Sector	Number and Value							Share	(%)	
-	No. of deals			Value	Value of deals (US\$Mn)			No. of deals		of deals
-	Listed	Unlisted	Total	Listed	Unlisted	Total	Listed	Unlisted	Listed	Unlisted
Electronics & Domestic appliances	1	29	30	4	604	608	3.3	97	0	100
Engineering	0	24	24		405	405	0.0	100	0	100
Food and Beverages	3	41	44	3088	1400	4487	6.8	93	71	29
Machinery	1	39	40	2	918	921	2.5	98	0	100
Non-metallic Mineral Products	0	9	9		377	377	0.0	100	0	100
Pharmaceutical & Biotech	2	52	54	276	7936	8212	3.7	96	3	97
Power & Energy	0	1	1		67	67	0.0	100	0	100
Textile	1	13	14	0	113	113	7.1	93	0	100
Miscellaneous	2	3	5	462	188	650	40.0	60	71	29
Total	17	354	371	4880	17266	22146	5	95	23	77

Note: Information is missing for a few cases

Source: Based on Venture Intelligence Database.

Based on the experience of the European Union (EU), Feito-Ruiz and Menéndez-Requejo (2009) mentioned that unlike listed firms, the acquisition of unlisted firms may be motivated by the fact that the negotiation process is weak compared to that of the listed firms owing to the absence of a clear-cut policy framework. Listed firms are considered to be larger and prestigious compared to the unlisted ones. So, greater managerial opportunism can be expected in the acquisition of listed firms. Further, the bidding process for listed firms is considered to be more competitive, which results in auction process and more number of bidders. On the other side, in case of the unlisted, firms mostly negotiate directly with each other. Although the unlisted firms may create auction, usually they will not do so because of the absence of adequate financial resources and contacts with investment intermediaries. However, in the Indian M&A context, it is not clear what makes the unlisted firms more fascinating to acquire in India. The overwhelming presence of unlisted firms in CM&A may be attributed to the lesser number of listed firms in the Indian manufacturing sector. In India, many unlisted firms are large-sized, and possess specialised capabilities such as critical factors of production. Here the vital question is: Are foreign firms targeting the small-sized unlisted Indian firms as part of their market expansion strategy? This issue, however, needs further exploration as it is beyond the scope of the present study.

2.3.5 Does the Age of a Firm Matter? Start-up vs. Established

Of the information available on 356 firms, 131 firms (37 per cent) were acquired on or before attaining 10 years of age10. A hundred and seventy five firms (49 per cent of the total sample) were acquired after 11 to 30 years of incorporation. Another 23 firms (6 per cent) were acquired after 31 to 40 years of experience. Further, 27 firms across various sectors with more than 40 years of experience were also taken over (see Table 5). Hence, 63 per cent of the foreign acquisitions are related to the acquisition of experienced firms-those with more than 10 years of experience. In majority of the sectors, the maximum age of the acquired firm (i.e. the oldest firm's acquisition) is more than 50 years while, on an average, most of the acquired firms have 16 years of experience or more (see Table 6). The takeover of the experienced firms by foreign acquirers is mainly intended to eliminate a competitor from within and outside the Indian market. Further, it provides access to critical resources and marketing network of the experienced domestic firm. Moreover, in many sectors, the experienced firms have grown out of public expenditure owing to the favourable policy regime. The reasons behind the sale of experienced domestic firms to foreign firms vary from case to case, including debt clearance, escape from acute competition from rival firms, focus on other areas of operation, and so on.

A recent trend in M&A scenario in general and in CM&A in particular is the takeover of start-ups. This is a two-way strategy. Some start-ups enter the market with the goal of being acquired by big firms, especially those initiated by serial entrepreneurs¹¹. On the other side, for acquirers, it is a strategy to eliminate future threat of competition and also to catch hold of the emerging innovative ideas. The recent incubation programme by Aditya Birla Group to collaborate with start-ups is an example. As per media reports, 1200 start-ups applied for this programme, out of which 25 have been shortlisted. Similarly, other firms have also undertaken various initiatives to keep start-ups in their net by providing incentives in the form of financial and other technical support¹². Our study noticed that 66 firms were acquired on or before completing five years of incorporation¹³. *Table 7* provides information on such deals.

¹⁰ The age of a firm is measured from its year of incorporation, which is collected from external sources since it is not available from VID.

¹¹ Serial entrepreneurs are business owners who start a company with an intention to let it grow to a certain size and then exit the market to allow someone else to scale it up. Thereafter, they launch a new business venture and the process continues.

¹² See http://www.medianama.com/2015/08/223-aditya-birla-launches-bizlabs/; accessed on January 01, 2016.

As per VCC edge data, 224 M&A deals were struck between January and December 2015, which amounted to US\$2139.41 million. Out of this, values of transaction have been disclosed for only 40 deals. Further, out of these 224 deals, 157 are domestic and 30 are inbound deals, which are defined as stake purchases in Indian start-ups or Indian-owned foreign assets by overseas entities. The

Table 5: Selected Cross-border Acquisition of Firms Aged more than 40 Years

Target Company	Acquirer	Incorporation*	Year of	Age of firm	Deal	Country of
			deal*	on CM&A	Amount	Acquirer
					(US\$M)	
ACC	Holcim	1936	2005	69		Switzerland
Deepak Optic	Essilor	1949	2014	65		France
Shree Digvijay Cement Company	Cimpor	1945	2008	63	78.5	Portugal
Devidayal Sales	Arysta Life Science	1949	2011	62		Japan
Fulford India	Schering-Plough	1948	2007	59	1.6	USA
Quest International India	Givaudan Group	1948	2007	59	87	Switzerland
Aventis Pharma	Sanofi	1956	2010	54	90	France
Tata Refractories	Krosaki Harima Corporation	1958	2012	54	131	Japan
Mahindra Engineering & Chemical Products	3M	1955	2007	52		USA
Star wire India	Aubert & Duval	1963	2015	52		France
Mysore Cement	Heidelberg Cement	1958	2007	49	97	Germany
TKH Plastics	Aptar Group	1963	2012	49	18	USA
Andhra Pradesh Paper Mills	International Paper	1964	2011	47	380.68	USA
Ranbaxy Laboratories	Daiichi Sankyo	1962	2009	47	4600	Japan
Perfect Circle India	Federal-Mogul	1963	2009	46	4	USA
Vulcan Engineers	Terruzzi Fercalx	1964	2010	46	1.5	Italy
New Chemi Industries	Sumitomo Chemical	1966	2011	45	16.61	Japan
Consulting Engineering Services India	Jacobs Engineering Group	1970	2012	42	44.47	USA
SRP Tools	Mitsubishi Heavy Industries	1963	2005	42		Japan
Concast India	Mitsubishi- Hitachi Metals	1973	2014	41		Japan
Medreich	Meiji	1974	2015	41	290	Japan
Ellenbarrie Industrial Gases	Air Water	1974	2014	40	17.63	Japan
Purolator India	Mahle Filtersysteme	1966	2006	40		Germany
Western Refrigeration	Hoshizaki Electric	1973	2013	40	27.88	Japan

Note: Financial year is followed to determine the date of incorporation as well as the deal date. *Source*: Based on Venture Intelligence Database.

number of outbound deals is around 37. Available at: http://gadgets.ndtv.com/internet/features/the-10-most-acquisitive-indian-startups-in-2015-779271

Table 6: Average Age of Acquired Firms at the time of Acquisition

Sector	Mean	Maximum	Minimum
Auto components	15	52	1
Automobiles	15	50	2
Basic Metals	18	54	0
Cement and Plaster	25	69	3
Chemicals	21	62	0
Electrical Equipments	19	52	0
Electronics & Domestic appliances	14	40	1
Engineering	18	49	2
Food and Beverages	11	34	0
Machinery	21	52	3
Miscellaneous	17	47	1
Non-metallic Mineral Products	11	27	2
Pharmaceutical & Biotech	19	65	1
Power & Energy	7	7	7
Textile	11	20	4
Total	16	69	0

Source: Based on Venture Intelligence Database and other external sources.

Founded in 2005 by the Chief Operating Officer of Matrix Laboratories, Mr Satyanarayana Chava¹⁴, Laurus Labs was considered to be a hot start-up in the pharmaceutical sector. Laurus merged with the US-based Aptuit in 2008, i.e. within three years of its incorporation, spending nearly Rs 400 crores. Laurus was an R&D based pharmaceutical company since its inception. In the early months of establishment, Laurus had only 10 employees in manufacturing and 300 in R&D (Business Standard, 2010; Srivastava, 2015). We have noticed that in some cases, a new firm is incorporated following the divestment of unimportant business of the established firms. For example, Vetnex Animal Health was initially Ranbaxy's animal health business, which was divested to ICICI Venture Funds for approximately Rs 155 crores in 2005. Later in 2009, Pfizer Animal Health acquired Vetnex from ICICI for approximately Rs 355 crores¹⁵ (Business Line, 2009). Within four years, the value of this transaction more than doubled. Similarly, Ace Refractories was acquired by Imerys through private equity (PE) fund within three years of incorporation. Initially, Ace was the refractory division of the major cement producer, ACC Ltd, which was bought by ICICI Ventures in 2005 for

¹⁴ Matrix was a successful start-up in the pharmaceutical sector. Mr Chava started Laurus after quitting Matrix.

¹⁵ Divestment from Ranbaxy also included chemicals and diagnostics. More details available at:http://www.thehindubusinessline.com/todays-paper/pfizer-acquires-vetnex-business/article1054829.ece; accessed on January 01, 2016.

approximately Rs 257 crores and rechristened as Ace Refractory. After two years, Ace was acquired by the world's largest industrial metal company, Imerys (based in France) for nearly Rs 550 crores. Thus, through PE fund, ICICI could more than double its investment in two years. Moreover, the acquisition added the second largest player in the Indian refractory market with 50 per cent market share to the net of Imery's refractory solutions company, Calderys, which was one of the major players in the global refractory market ¹⁶.

Table 7: Selected Start-up Acquisitions (aged less than 5 years)

Target Company	Acquirer	Incorpora tion*	Year of deal*	Age of firm on merger	Amount** (US\$M)	Country of Acquirer
Riddhi Siddhi Corn Processing	Roquette Freres	2010	2013	3	197.6	France
Ace Refractories	Imerys	2005	2008	3	135	France
Laurus Labs	Aptuit	2005	2008	3	100	USA
Vetnex Animal Health	Pfizer Animal Health	2007	2010	3	75	USA
Orient Refractories	RHI	2010	2013	3	43	Austria
Nitin Cylinders	Worthington Industries	2006	2011	5	21	USA
Nuray Chemicals	Par Pharmaceutical	2013	2014	1	19	USA
Taraori Rice Mills	Ebro Foods	2013	2013	0	14.5	Spain
Ordain Health Care	Chemo Espana	2012	2013	1	11.37	Spain
Voltas Material Handling	Kion Group	2011	2013	2	10.66	Germany

Note:* Financial year is followed for incorporation and deal date. ** Here, the amount of the deal is based on data from VID. This amount is often less than the total amount reported by media reports as, in most cases, the deal materialises in more than one stage.

Source: Based on Venture Intelligence Database.

2.3.6 Expansion of Market Power

Monopoly creation is one of the major issues related to M&A in general and CM&A in particular. It becomes a global issue when leading firms across the world are involved in the transactions. It not only results in price rise and quantity constraints, but also drives out potential competitors from respective product markets, which will have long-run consequences for developing country markets (Saraswathy, B., 2016). Data shows that in

¹⁶ Details on the deal are based on Datta, K. (2007), 'Imerys is Close to Acquiring ACE,' *Business Standard News*, August 01. Available at: http://www.business-standard.com/article/companies /imerys-is-close-to-acquiring-ace-107080101091_1.html; accessed on January 14, 2016.

many cases the acquiring firms are global leaders, either in the broad sector or in the product segment in which acquisitions are made. This trend is visible across most of the sectors such as paper, chemicals, auto components, food and beverages, and pharmaceuticals. Many a time, apart from entry by way of joint venture deals as discussed before, global market leaders enter the Indian market through acquisition of small firms or their assets. Further, there are several instances wherein the acquiring firms are the global market leaders while the acquired firms are the sectoral or product market leaders in the Indian market (see *Table 8*).

Table 8: Selected Acquisitions by Global Leading Firms in India

Target	Acquirer	Target nation	Acquirer nation	Incorporation of Target	Year of deal	Comment*	New entry or Not
My Home Industries	CRH	India	Ireland	1985	2008	Ag is leader in home country	
Andhra Pradesh Paper Mills	International Paper	India	USA	1964	2011	Ag is global leader	
Luminous Power Technologies	Schneider Electric	India	France	1989	2012	Ad is also leader	
Ashirvad Pipes	Aliaxis Group	India	Belgium	1997	2013	Ag is global leader	
Zuari Cements	Ciments Français	India	France	2000	2007	Ad is global player	
WMI Cranes	Konecranes	India	Finland	1975	2011	Ag is global leader	Yes
Kalyani Brakes	Bosch Group	India	Germany	1982	2006	Ag is largest auto component supplier globally	
Ravin Cables	Prysmian	India	Italy	1983	2010	Ag is global leader in cables	
Hightemp Furnaces	Dowa Thermotech	India	Japan	1972	2012	Ad is the leader in heating technology in India	
Western Refrigeration	Hoshizaki Electric	India	Japan	1973	2013	Ad is one of the largest manufacturers of commercial refrigeration equipment in the country with an installed capacity of over 2,00,000 units per annum from its three plants.	

Target	Acquirer	Target nation	Acquirer nation	Incorporation of Target	Year of deal	Comment*	New entry or Not
Waaree Instruments	Baumer Group	India	Switzerla nd	1989	2011	Ad was Indian leader	Yes
Deccanet Designs	Flextronics	India	Singapore	1994	2005	Ag is global leader	
Cheryls Cosmeceuticals	LOreal	India	France	2002	2014	Ag is global leader	
Webtech Labels	Huhtamaki	India	Finland	2013	2013	Ag is global specialists	
National Laminations Group	NLMK	India	Russia	1992	2012	Ag is global leader	
Himneel Breweries	Carlsberg	India	Denmark	1992	2007	Ag is global leader	Yes
Fun Fashion	Louis Vuitton Moet Hennessy	India	France	2006	2007	Ag is global leader	
Karnavati Rasayan	CABB GmbH	India	Germany	1992	2009	Ag is world leader; Ad provides 20% in India	Yes
Anewa Engineering	Dialog Group	India	Malaysia	2007	2012	Ag group is big player	
Hydro S&S Industries	Kingfa Sci & Tech	India	China	1984	2014	Ag is world's highest performing plastic compounding	
Induction Equipment (India)	SAET Group	India	Italy	1987	2007	Ag is global leader in induction technology	
Deepak Optic	Essilor	India	France	1949	2014	Ag is world's largest ophthalmic lens maker	
Alukbond India	Alcan	India	Canada	2000	2008	Ag is global leader	
Beetel Teletech	Brightstar Corp	India	USA	1999	2015	Ad is No.1 in land phone market	
Concast India	Mitsubishi- Hitachi Metals	India	Japan	1973	2014	Ad is global leader in steel casting	
Ghiya Extrusions	Tekni-Plex	India	USA	2007	2015	Ag is global leader	
Kartar Wire	Delfingen Industry SA	India	France	1991	2014	Ag is global leader	Yes

Target	Acquirer	Target nation	Acquirer nation	Incorporation of Target	Year of deal	Comment*	New entry or Not
Monarch Catalyst	Evonik Industries	India	Germany	1984	2015	Ag is global leader	
Wadco Packaging	MeadWestvaco	India	USA	1975	2009	Ag is global leader	
Yantra Automation	Rexel	India	France	1989	2011	Ag is global leader	

Note: *Ag denotes acquiring firm and Ad denotes acquired or target firm; Comments are based on newspaper reports at the time of transaction.

Source: Based on Venture Intelligence Database and Various Newspaper reports.

A classic example of the foreign acquisition scenario in India is the case of the pharmaceutical sector. The sector is known for its generic competitiveness across the world. The credit for this achievement is given to the Indian Patent Act, 1970, which allowed *process patenting*. It enabled the domestic firms to reverse-engineer technology, build indigenous capabilities, and disseminate them cheaply into the industry. With the adoption of *product patent* from the beginning of 2005, the prosperity derived from "me too" products also minimised (Pillai, 1984; Chaudhuri, 2005). However, generic competition from Indian firms continued. Meanwhile, foreign competitors tried to eliminate competition from Indian firms (both within and outside the Indian market) by taking control over them. This is evident from the acquisition of top ranking domestic firms since the mid-2000s. Important CM&As in the sector are listed in *Table 9*.

Table 9: Selected Acquisitions Related to the Pharmaceutical Sector

SN	Target	Acquirer	Nationality of Acquirer	Amount (US\$Mn)	Year of deal
1	Ranbaxy Laboratories	Daiichi Sankyo	Japan	4600	2009
2	Piramal Healthcare*	Abbott Laboratories	USA	3720	2010
3	Matrix Laboratories	Mylan Laboratories	USA	736	2007
4	Paras Pharmaceuticals	Reckitt Benckiser	UK	726	2011
5	Shantha Biotechnics	Sanofi	France	625	2010
6	Orchid Chemicals & Pharmaceuticals*	Hospira	USA	381	2009
7	Medreich	Meiji	Japan	290	2015
8	Dabur Pharma	Fresenius Kabi	Germany	274	2009
9	Laurus Labs	Aptuit	USA	100	2008
10	Aventis Pharma	Sanofi	France	90	2010
11	Vetnex Animal Health	Pfizer Animal Health	USA	75	2010
12	Adler Mediequip	Smith & Nephew	UK	70	2014

Note: *Partial acquisitions

Source: Based on Venture Intelligence Database.

Acquisition of Piramal's pharmaceutical solutions business by US based Abbot was considered a big loss to the domestic pharmaceutical sector since Piramal had itself acquired around 15 firms since 1988. This is the second largest acquisition in the Indian pharmaceutical sector worth nearly Rs 17500 crores (US\$3.72 bn) after Ranbaxy-Daiichi deal. Healthcare constituted around 50 per cent of Piramal group's revenue. Pharma Solutions division was one of the world's leading pharmaceutical company offering full lifecycle partnership and drug development services to small and big pharmaceutical companies (Industry Watch, 2010). As per media reports, the acquisition added around 7 per cent market share to Abbot¹⁷. Similarly, Hyderabad based Matrix Laboratories was acquired by US based Mylan for a sum of US\$736 million. Matrix was providing Active Pharmaceutical Ingredients (APIs) to leading generic pharmaceutical companies in India. The deal transformed Mylan overnight into the world's largest manufacturers of APIs and allowed to vertically integrate the production of finished dosage form medicines¹⁸. With the acquisition of competent domestic firms, the share of foreign companies in the overall pharmaceutical market in India has gone up. Not just the story of pharmaceutical sector, it is also the story of other sectors with growth potential. Firms like Schneider Electric have grown out of a series of acquisitions undertaken in India (see Table 10). Schneider Electric is a France based global specialist in energy management with operations in more than 100 countries. It can be seen from the table that since 2009, the company has undertaken several acquisitions in India. These acquisitions helped Schneider become one of the top players in the relevant Indian market.

Table 10: Acquisitions undertaken by Schneider Electric

infrastructure end-markets20.

Transaction

2014 Acquisition of Invensys (a UK based global automation player with large installed base and strong software presence; deal value US\$5.2 billion globally¹9) completed and created a unique player in Industry Automation. With this acquisition, Schneider significantly increased its global position as a provider of efficiency solutions integrating power and automation. The combined entity is expected to have a unique position in industrial and

2011 Acquisition of Luminous (the leader in the fast-growing Indian inverter and secured power market) for Rs 1400 crores (74 per cent stake). The deal expected to triple the Schneider

¹⁷ Times of India (2010), 'Abbott Buys Piramal's Pharma Arm for \$3.7 Bn,' May 22. Available at: http://timesofindia.indiatimes.com/business/india-business/Abbott-buys-Piramals-pharma-arm-for-3-7bn/articleshow/5960176.cms; accessed on February 15, 2016.

¹⁸ Available at Mylan's website: http://www.mylan.in/en/company/mylan-in-india, accessed on February 15, 2016.

¹⁹ Available at: http://www.bloomberg.com/news/articles/2013-07-31/schneider-agrees-to-buy-invensys-in-5-2-billion-takeover, accessed on February 15, 2016.

²⁰ Available at Invensys's: http://iom.invensys.com/en/Pages/IOM_NewsDetail.aspx?NewsID=639, accessed on February 15, 2016.

Year Transaction

India's sales vale to Rs 4543 crores from 2009 levels and make India, Schneider's seventh largest market in terms of group sales²¹.

Acquisition of Digilink, a leading structured cabling systems provider in India

Acquisition of promoter shares of APW President by Schneider Electric

2010 Acquisition of Uniflair, the world's number 3 manufacturers of in-room precision cooling systems and modular access floors primarily for data centers and telecommunication applications. Uniflair had strong presence in Europe and emerging economies like India and China²².

Acquisition of Areva T&D along with another French firm Alstom. The combined value of transaction is approximately Rs 16000 crores globally. Schneider will get the distribution business while transaction will go to Alstom. Areva T&D India is engaged in the manufacturing equipment for power transmission and distribution companies²³.

Acquisition of two units of Mumbai based Zicom's electronic security systems integration business for Rs 224.7 crores.

2009 Acquisition of Conzerv (leader in Metering & Energy audits) a two-decade old energy audits and energy meters firm, for Rs 70 crore.

Acquisition of Meher Capacitors (domestic leader in Power Factor Correction with the second biggest domestic market share in low-voltage capacitors; Meher generated Rs 40 crore revenue during the pre-transaction year²⁴).

2000 S & S Switchgear & CGLV acquisition

1995 Schneider Electric: 100% subsidiary

1984 IV With TMC

1963 JV between Merlin & Gerin with Tata Sons & Voltas

Source: (i) Venture Intelligence Database, (ii) information available at Schneider's website: http://www.schneider-electric.co.in/sites/india/en/company/profile/history/schneider-electric-india-history.page, Accessed on February 21, 2016, and (iii) Various newspaper reports.

The following CM&A cases uncover the motives of foreign acquirers in the Indian market.

²¹ Available at http://www.business-standard.com/article/companies/schneider-takes-over-luminous-for-rs-1-400-cr-111060100050_1.html, accessed on February 15, 2016.

²² Available at Schneider's website: http://www2.schneider-electric.com/corporate/en/press/press-releases/viewer-press-

 $releases.page?c_filepath=/templatedata/Content/Financial_Release/data/en/shared/2010/11/2010112\\ 3_schneider_electric_reinforces_its_position_in_precision_cooling_with_t.xml~,~accessed~on~15\\ February, 2016.$

²³ Available at: http://www.livemint.com/Companies/0pt6PMlrZyh94WsEPXUagP/Alstom-and-Schneider-Electric-in-pact-to-acquire-Areva-Tamp.html, Accessed on February 15, 2016.

²⁴ Available at: http://www.thehindubusinessline.com/todays-paper/tp-corporate/schneider-buys-meher-capacitors/article1058900.ece, accessed on February 15, 2016.

Case No. 1: Acquisition of Andhra Pradesh Paper Mills (APPM) by International Paper for US\$388 Million

US-based International Paper (IP), which is the largest paper producer in the world, acquired 75 per cent of the equity stake in Andhra Pradesh Paper Mills in March, 2011. Globally, the acquirer has presence in 24 countries and employs more than 58000 people. The acquisition enabled the global market leader to enter the Indian paper and pulp sector, which has recently registered a considerable growth rate and is expected to outweigh the Chinese and European markets. The acquired firm, i.e., APPM, has been a leading player in India with an annual sales turnover of Rs 720 crores. At the time of acquisition, APPM had a production capacity of 25000 metric tonnes per annum. APPM was also known for its green manufacturing initiatives. In the words of the CEO of IP, "APPM is an established and highly respected company in India, and is an excellent platform for International Paper to grow in the Indian paper and packaging markets" (Datla, 2014). As per the Chairman of IP India, Mr. W. Micheal Amick Jr, "... apart from integrating APPM into International Paper group, it also retains APPM which has become so widely recognised and accepted over the years in paper industry. ...This will also ensure that we direct future investments in brand building around the International Paper brand, leveraging our global presence" (Business Line, December 25, 2013).

Case No. 2: Acquisition of WMI Cranes Ltd by Konecranes for approx. Rs 3600 Million

In October 2010, Konecranes, a Finland²⁵ based manufacturer of cranes and lifting equipment entered into an agreement to acquire WMI Cranes, a leading Indian heavy duty crane manufacturer. At the time of the agreement, WMI had an installed capacity of over 4000 cranes in India and also an extensive sales network throughout India. Cranes supplied by WMI were used especially within steel, engineering, general manufacturing, cement, energy, shipyard and logistics industries. WMI's net sales value during 2009–10 was approximately EUR 30 million and employed approximately 350 people and a contracted workforce of nearly 600 people. Through this deal, Konecranes intended to strengthen its position in the Indian cranes market. According to Pekka Lundmark, President and CEO of Konecranes, "...WMI boost our presence significantly in the fast growing Indian crane market. Our aim is to further grow the business potential by extending the offering with technologies developed by Konecranes. The product offerings of the two companies complement each other very well. Furthermore, the acquisition of WMI adds India truly into our sourcing and supply network. Finally, WMI creates an excellent base for building our service business in India, in addition to our growing current service business" (as in www.konecranes.com, accessed on September 30, 2015).

Case No. 3: Acquisition of Kare Elevators by ThyssenKrupp Elevator

Aiming at the growth potential of the escalator market in India resulting from the boom in real estate, many multinational companies are resorting to acquisition of the Indian firms to enter and strengthen their position in the Indian market. Finland based Kone Elevators acquired the operations of Bharat Bijlee in 2004 and emerged as the second largest player. Similarly US based Otis Elevators, the world's largest elevator manufacturer, bought the Indian Joint Venture partner, Mahindra Group's assets and made it a wholly owned company. In 2005, ThyssenKrupp Elevator

²⁵ On August 11, 2015, Konecranes merged with Terex with the headquarters moving to the European market.

(India) (TEI), which is the wholly owned subsidiary of ThyssenKrupp Elevator, bought Kare Elevators (KE). At the time of the deal, TE was the third largest elevator manufacturer in the world. As per a TE official, "KE has a decent scale of operations, and this acquisition has expanded our installed base to around 3000 elevators in Mumbai. Given that real estate market is booming, we expect the industry witness major growth over the next five years". TE has also acquired another joint venture partner in 2004 for nearly Rs 25 crores. These two acquisitions provided TE a market share of 8–9 per cent in the escalator market. Kare helped them to strengthen the lower end market while the former deal helped to strengthen the premium end (*Economic Times*, 2005).

Case No. 4: Acquisition of Paras Pharmaceutical by Reckitt Benckiser (RB) for approx. Rs 3260 crores

In December, 2010, RB bought Paras, which is engaged in the business of Over the Counter (OTC) drugs. RB has a combination of OTC and FMCG products. The transaction is aimed at strengthening its foothold in OTC market in India through Paras. Before the deal itself, RB was trying to grow in the Indian market through the introduction of several global power brands. It is interesting to see that RB paid eight times of Paras' sales value of Rs 401.4 crore for the deal, aiming at high growth potential brands in the healthcare sector. In the words of RB's CEO Mr. Bart Becht, "...the acquisition of Paras is another step forward in our growth strategy in consumer healthcare. It creates a material healthcare business in India, one of the most promising healthcare markets in the world, with the addition of number of strong and leading brands". Further, the deal is also cautioning us from point of view of trade. As per the RB's India head CM Sethi, Paras' brands would be exported to markets abroad depending on the market and potential (as in Business Standard, 2010). This deal is one of the biggest exits for a PE controlled firm in India. Actis (PE firm) had 63 per cent stake in this firm, for which it paid approximately US\$ 145 million in 2006 and subsequent additional purchases. While exiting Paras, Actis earned more than three times of its original investment within a period of nearly four years. Another PE firm, Sequoia, which owned 7-8 per cent in Paras got around US\$50 million while exiting the deal (*Economic Times*, 2010).

From the words of chief officials of the acquiring companies, it is clear that the acquirers are motivated mainly by the entry into the vast Indian market and the opportunity to strengthen their own production and marketing network rather than filling the investment or technology gap in India. More importantly, these deals helped foreign firms to eliminate potential competitors from the Indian market. In this context, the following major challenges emerged while dealing with CM&A in India.

III. Emerging Concerns when Dealing with CM&A in India

The increasing dependence on CM&A by foreign firms is on account of the easy access to critical factors of production such as human resource and intermediary inputs with the help of the existing domestic firms. The existing domestic firm will also help smoothly overcome all regulatory hurdles compared to a fresh entry. Moreover, the existing customer base of the domestic firm will be an additional benefit to the foreign acquirer. However, the prime purpose of opening up of developing economies was to attract FDI under the assumption that it will fill the gap in domestic investment and facilitate growth

and development through technology transfer, employment generation, and so on. Foreign investment through M&A is often criticised because it does not generate fresh investment in the receiving country. Hence, not only has the possibility of filling the investment gap closed, but also domestic investments have been transferred to foreign owners. The much-claimed technology spillover and employment generation are also coming under suspicion due to the change in the mode of FDI.

Further, from the point of view of nationality, the increasing number of inbound deals coupled with the nature of merger outcomes raised several concerns owing to the absence of separate scrutiny for consolidation involving foreign and domestic transactions. As mentioned earlier, M&As are now under the purview of the Competition Act. The provisions of the Competition Act relating to anti-competitive agreements and abuse of dominance were notified on May 20, 2009²⁶, while provisions regarding combinations (M&As) were notified on June 01, 2011 onward. In the last four years of implementation of combination regulations, that is, by the end of August 2015, the CCI has handled more than 284 combination cases. Out of these, 12 cases are under investigation, as these were recently received. The highest number of cases were registered in the year 2014 (87 cases), followed by 2012 (85 cases). It is to be noted that the CCI is only concerned with deals which cross the threshold limit mentioned in the Competition Act. The revised threshold limit applicable since March 2016 and valid for a period of five years is given in *Table 11*. Thus, there is a possibility that the actual number of transactions may be much higher than the number of cases dealt with by the CCI.

Table 11: Revised Thresholds for Combination Regulations

Table 11. Revised The should for Combination Regulations								
Level	In India (in Rs crore)		In India and Outside					
	Asset Turnover		Asset		Turnover			
			Total	Minimum Indian Component	Total	Minimum Indian Component out of Total		
Enterprise	>2000	>6000	>\$1 billion	Rs 1000 crore	>\$3 billion	Rs 3000 crore		
Group	>8000	>24000	>\$4 billion	Rs 1000 crore	>\$12 billion	Rs 3000 crore		

Source: Revised Thresholds, Competition Commission of India, Government of India, 2016.

One major difference between merger regulations and other forms of anti-competitive provisions such as cartel, collusion, etc., dealt with by the competition authorities is the behaviour or performance of the agents in the future, not the present status. The *ex-ante* nature of the merger outcomes also brings additional challenges for the regulatory authorities while assessing competition. Though India's competition regime has the right to enquire into the deals entered outside India to ascertain whether it is likely to create

²⁶ For more details, see the official website of the Commission: www.cci.gov.in; accessed on August 19, 2015.

competition concern in India, the Act does not place any special emphasis on the "nationality" dimension of the deals in India. In other words, deals between domestic companies are treated the same as those involving foreign and domestic firms.

While defining the geographic market during the prima facie stage, the main consideration is the direct or indirect presence or absence of the parties to the combination in the Indian market. If it is not present in India, most often the deal is sanctioned stating that it will not affect the Indian market. However, from the previous section it is clear that in many cases foreign firms are attracted to Indian firms to take advantage of cheap factors of production, both human and physical. Cheap factors of production will enable them to compete internationally. Under this scenario, the possibility to discontinue or lessen the domestic firm's products is high. Foreign firms can simply export products/critical resources from the domestic market to high-profit foreign locations, which ultimately lead to the price rise in the domestic market in the long run, especially in the absence of close substitutes. Consequently, the domestic firm, with its years of experience in the home market, gets acquired by the foreign partner who then takes advantage of the low-cost production facilities existing in the Indian market. This is crucial in sectors like pharmaceuticals where patients' life itself may be affected due to the lack of availability of appropriate medicines at affordable prices. Foreign firms can also take the acquisition route for initial entry into the domestic market in which case there may not be any immediate impact on competition but the structure of domestic industry is likely to change, often significantly. This can have significant implications for further development of the respective industry and for indigenous capabilities. Now the acquisition of start-up firms has been made easy due to the target exemption provision in the Competition Act²⁷ as well as the hike in the threshold limit. Its implications are yet to be assessed as it is a relatively new phenomenon. Another vital question that emerges from the study is whether foreign firms are targeting small-sized unlisted Indian firms as part of their market expansion strategy.

The significance of CM&A cannot be linked to the value of transaction alone as each sector has its own peculiarities. At the disaggregate level, even small-sized firms may be catering to buyers' requirements, which may have been affected due to transactions. One of the major concerns relating to pharmaceutical sector acquisitions in the post CCI era is the approval of acquisition based on the horizontal/vertical overlap, which can ultimately undermine the importance of non-overlapping products produced by the acquired firm. Often the value and volume of overlapping products are less than that of the total number of products produced by the acquired firm, which means the major portion of production is not even analysed while approving the deal. This gives a chance to the foreign acquirer to stop production of less profitable products in the domestic market, which ultimately affects domestic consumers. Further, in case of horizontal deals, both

²⁷ Targets with either less than Rs 350 crores assets or a turnover of less than Rs 1000 crores in India are exempted from notifying the deal as per combination regulation (Government of India, 2016).

the target and the survivor produce overlapping products. Before transaction begins, very often the overlapping products of these companies compete each other under different brands at different prices. In this context, it is possible to discontinue the production of cheap brands of the domestic firm, which will certainly affect the consumer. The price competitiveness of Indian firms is well-known in industries like pharmaceutical sector. Lack of adequate mechanism to check the outcome of the deal at the micro level will adversely affect the consumers. Hence, there is urgent need to consider the probability of disappearing products and the price level after consummating the deal.

VI. China's Approach towards Foreign Acquisitions

In China, the Ministry of Commerce (MOFCOM) is in-charge of foreign and domestic trade, international economic co-operation and foreign investment including antitrust regulations (Nussbaum, 2012). From the mid-1990s onward, the acquisition of Chinese companies by foreign companies has been a cause of concern for China's Central Government. The Temporary Regulations on Foreign Investor's Takeover of Local Companies was released in March 2003; it was later revised. In order to prevent the takeover of well-known trademarks or traditional local brands, the M&A Regulations made effective in 2006 made it clear that all such M&As must be approved by MOFCOM (SERIBO, 2006). The Anti-monopoly Law (AML) enacted by the National People's Conference of China went into effect on August 01, 2008. The enforcement of the AML is undertaken by three agencies, that is, National Development and Reform Commission (NDRC), the State Administration for Industry and Commerce (SAIC) and the Anti-Monopoly Bureau of the Chinese Ministry of Commerce (MOFCOM) as per the direction of the State Council. The third agency deals with merger control provisions while the first and second deal with the price related and non-price related infringements respectively (DLA Piper, 2011).

Article 31 of AML states, "where a foreign investor merges and acquires a domestic enterprise or participate in concentration by other means, if state security is involved, besides the examination on the concentration in accordance with this Law, the examination of national security shall also be conducted in accordance with the relevant State provisions" (Government of China, 2007). Thus, it provides a separate National Security Review (NSR) mechanism and necessitates a separate timetable if the transaction involves the acquisition of a domestic company by a foreign investor in certain sectors. Apart from military/defence related enterprises, it has provisions to screen enterprises that have a bearing on national security in areas including important agricultural products, energy and resources, infrastructure facilities, transportation services, key technologies and manufacturing of major equipment. NSR falls within MOFCOM's jurisdiction. Local commerce departments are responsible for the screening of deals during foreign investment approval to ensure whether or not NSR is required. In addition, government agencies and enterprises in the upstream and downstream markets

as well as industry organisations can trigger this by proposing MOFCOM to conduct NSR²⁸ (Yeung, 2015).

According to Samsung Economic Research Institute Beijing, in general, local governments in China support foreign takeovers as it is a source of revenue mobilisation and state governments are evaluated based on the amount of FDI drawn. Further, CM&A is also seen as a source of support for the struggling State Owned Enterprises (SOEs). However, as mentioned earlier, the central government is seriously concerned about CM&As (SERIBO, 2006). Like the Indian Competition Act, the Chinese Anti-monopoly Law is broadly based on EU Competition Law. Hence, both the Acts share common characteristics. However, a major difference can be noticed when dealing with foreign firms, that is, when selling domestic firms, China ensures that the deals result in better outcomes for the country. For example, local governments support foreign acquisition of state-owned enterprises to pull themselves out of difficulties and to bring more efficiency [egs. (i) Schaeffler's purchase of Luoyang Bearing Corporation due to snowballing debt, and (ii) ThyssenKrupp's takeover of Tianrun Crankshaft to improve manufacturing efficiency of local company]. Further, China's approach is clear from the overseas acquisition strategy of its firms. Instead of buying global brands, sales networks or goodwill, they mainly focus on the acquisition of concrete assets such as mineral deposits or state-of-the-art technologies and R&D facilities. Moreover, Chinese acquisitions are not aimed at achieving short-term gains in market shares in overseas market; rather, they are to strengthen their position in the Chinese market (Williamson and Raman, 2011). Certainly, India has to learn from the Chinese regulatory authorities on how to generate FDI without harming the valuable domestic firms and their brands.

V. Conclusions and Policy Implications

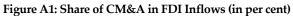
The increasing extent of inbound deals coupled with the nature of merger outcomes raised several concerns owing to the absence of separate scrutiny for consolidation involving foreign and domestic transactions in India. The study found the continuing importance of certain sectors such as pharmaceuticals, food and beverages, automobiles, and chemicals in CM&A activities in recent times. Moreover, the significance of CM&A in FDI has increased over time. Targets include both experienced firms and start-ups. The study observed that across various sectors, many leading foreign firms are trying to eliminate competition in the domestic market by taking over firms with high growth potential. The major aim behind the takeover of Indian firms is to expand their Indian operations through acquisition route and to exploit the capabilities built by domestic firms through years of effort. The study draws attention to the Chinese experience where foreign acquisitions in certain areas are scrutinised to comply with the national security requirements. Moreover, Chinese firms are cautious both as targets and as acquirers. As

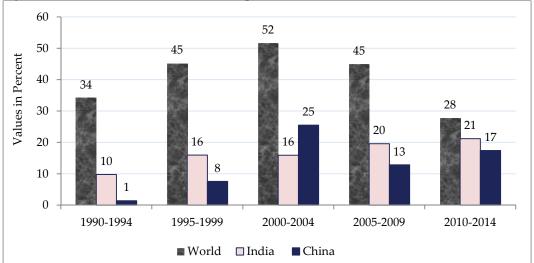
_

²⁸ Alternatively, parties can also make voluntary filing to MOFCOM for NSR.

targets, Chinese firms are trying to gain the maximum out of the deal by selling financially distressed firms and those that need technological support. And try to protect the well-known domestic brands and trademarks. On the other side, as acquirers, the main purpose is to gain control over critical resources of other countries rather than gaining short-run market shares. Control over critical resources will help them gain market power in future. This two-fold strategy is helping them increase FDI without harming domestic firms. Thus, this study suggests modification of the CM&A strategy of Indian firms, to gain technology and critical resources both from within and outside the Indian market, which was one of the prime objectives for opening up the economy. Moreover, the regulators should also undertake a separate review of the CM&A deals from the point of view of national security, before and after approval of the deal, without which the country will become perpetually dependent on outsiders for its requirement of critical factors of production.

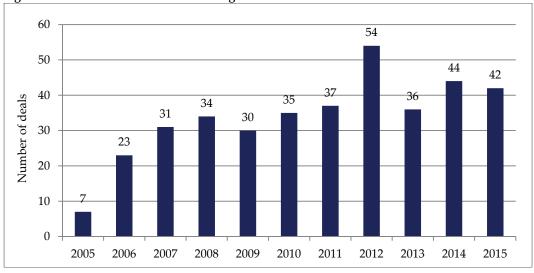
Appendix





Source: Calculated from UNCTAD Data

Figure A2: Inbound Deals in Manufacturing Sector: 2004-05 to 2014-15



Source: Based on Venture Intelligence Data.

Others, 34, 40%

USA, 24, 29%

USA

Japan

Germany

Japan, 17, 20%

Figure A3: Acquirers of JV Related Deals in India

Source: Based on Venture Intelligence Database

References

- Beena, P.L. (2004), 'Towards understanding the Merger Wave in the Indian Corporate Sector: A Comparative Perspective,' Working Paper No. 355, Centre for Development Studies, Thiruvananthapuram.
- ... (2014), Mergers and Acquisitions: India under Globalisation, India: Routledge.
- Beena, P.L., et.al. (2004), 'Foreign Direct Investment in India,' Saul Estrin and E. Meyer (Ed), Investment Strategies in Emerging Markets, Edward Elgar, Pp. 126–146.
- Business Line (2009), 'Pfizer Acquires Vetnex Business,' The Hindu, June 09.
- Business Standard (2010), 'Aptuit to Acquire Majority Stake in Laurus Labs,' June 20. Available at: http://www.business-standard.com/article/companies/aptuit-to-acquire-majority-stake-in-laurus-labs-107062001027_1.html; accessed on January 01, 2016.
- Chaudhuri, S (2005), The WTO and India's Pharmaceuticals Industry: Patent Protection, TRIPS, and Developing Countries, New Delhi: Oxford University Press.
- Dhall, V. (Ed.) (2007), Competition Law Today: Concepts, Issues and the Law in Practice, New Delhi: Oxford University Press.
- DLA Piper (2011), 'Practical Guide to Merger Control in China.' Available at: http://files.dlapiper.com/files/Uploads/Documents/Practical_Guide_to_Merger_Control_in _China_Nov_2011.pdf; accessed on March 01, 2016.
- Economic Times (2010), 'Reckitt Benckiser to Buy Paras Pharmaceutical for Rs 3260 crore,' December 14.
- Feito-Ruiz, I. and S. Menéndez-Requejo (2009), 'Acquisition of Listed vs Unlisted Firms: Determinants in Different Legal and Institutional Environments,' *Applied Economics*, Vol. 46, Iss. 23.
- Government of India (2011), 'Procedures in Regard to the Transaction of Business Relating to Combinations,' New Delhi: Competition Commission of India.
- ... (2006), 'Competition (Amendment) Bill 2006,' 44th Standing Committee Report, Lok Sabha Secretariat, New Delhi.
- ... (2009), 'The Competition (Amendment) Act,' Chapter 11, Competition Commission of India, New Delhi.
- ... (2016), 'Revised Thresholds,' Competition Commission of India, New Delhi.
- Government of China (2007), 'Anti-Monopoly Law of the People's Republic of China.' Available at: http://www.china.org.cn/government/laws/2009-02/10/content_17254169.htm; accessed on January 20, 2016.
- Industry Watch (2010), 'Abbott Acquires India's Piramal Health for \$3.72 Bn,' Vol. 14, No. 5 & 6, Pp. 45–46. Available at: http://www.asiabiotech.com/14/1405n06/0045_0046.pdf; accessed on February 15, 2016.
- Kumar, N. (2008), 'Internationalisation of Indian Enterprises: Patterns, Strategies Ownership Advantages and Implications,' RIS Discussion Paper No. 140, Research and Information System for Developing Countries, New Delhi.

- ... (2000), 'Multinational Enterprises and M&As in India: Patterns and Implications,' RIS Discussion Paper No. 5, Research and Information System for Developing Countries, New Delhi.
- ... (2000), 'Mergers and Acquisitions by MNEs: Patterns and Implications,' *Economic and Political Weekly*, Vol. 35, No. 32, Pp. 2851–2858.
- Mantravadi, P. and A.V. Reddy (2008), 'Post Merger Performance of Acquiring Firms from Different Industries in India,' *International Research Journal of Finance and Economics*, ISSN 1450-2887, No. 22, Pp. 192-204.
- Datla, A. (2014), 'International Paper's Takeover Andhra Pradesh Paper Mills May not be a Trendsetter,' April 04. Available at: http://www.moneylife.in/article/international-paperstakeover-andhra-pradesh-paper-mills-may-not-be-a-trend-setter/15269.html
- Nayyar, D. (2007), 'The Internationalisation of Firms from India: Investment, Mergers and Acquisitions,' SLPTMD Working Paper Series No. 004, Department of International Development, University of Oxford.
- Nussbaum, A.J. *et al.* (2012), 'Mergers and Acquisitions: Jurisdictional Comparisons,' United Kingdom: Sweet & Maxwell.
- Owen, S. (2006), 'The History and Mystery of Merger Waves: A UK and US Perspective', Working Paper No. 2006-02, The University of New South Wales, Australia.
- Pillai, P.M. (1984), 'Multinationals and Indian Pharmaceutical industry,' Kerala Sastra Sahitya Parishat, Thiruvananthapuram.
- Qian, H. (2010), 'China's Merger Control Regime in the Face of Global Integration: Features and Implications,' *Prismas: Direito, Politicas Publicas E Mundializacao*, Vol. 7, No. 2, Pp. 137–160. Available at SSRN: http://ssrn.com/abstract=2122112
- Rao, K.S.C, B.Dhar and K.V.K. Ranganathan (2013), 'Indefinite Definition of FDI,' a Discussion Note prepared under the ICSSR Research Project titled *India's Inward FDI Experience in the Post Liberalisation Period*, DN2013/08, ISID, New Delhi, September.
- Rao, K.S.C. *et al.* (2014), 'FDI into India's Manufacturing Sector via M&As: Trends and Composition,' Working Paper No. 161, ISID, New Delhi, February.
- Saraswathy, B. (2010), 'Cross-border Mergers and Acquisitions in India: Extent, Nature and Structure,' Working Paper No. 434, Centre for Development Studies, Thiruvananthapuram, India.
- ... (2013), 'Global Trends in Cross-border Mergers and Acquisitions,' in K.R. Chittedi (Ed.) *The Economic and Social Issues of Financial Liberalisation: Evidence from Emerging Countries*, New Delhi: Bookwell Publishing, Pp. 26–40.
- ... (2016), 'Impact of Mergers on Competition in the Indian Manufacturing: An Assessment', Working Paper No. 188, Institute for Studies in Industrial Development, New Delhi, March.
- Srivastava, S. (2015), 'Laurus Labs: A Hot Start-up in the Pharma Sector,' Forbs India Magazine, September 14. Available at: http://forbesindia.com/printcontent/41063; accessed on January 20, 2016.

Various Newspaper articles and company websites

Venture Intelligence Database

- Williamson, P.J. and A. Raman (2011), 'The Globe: How China Reset Its Global Acquisition Agenda,' *Harvard Business Review*, April. Available at: https://hbr.org/2011/04/the-globe-how-china-reset-its-global-acquisition-agenda; accessed on January 25, 2016.
- Yeung, N. (2015), 'Competition Law in China,' Slaughter and May. Available at: https://www.slaughterandmay.com/media/879862/competition-law-in-china.pdf; accessed on January 01, 2016.

List of ISID Working Papers

- 192 Impact of Trade Liberalisation on the Indian Electronics Industry: Some Aspects of the Industrial Policy Dynamics of Global Value Chain Engagement, *Smitha Francis*, July 2016
- 191 Pharmaceuticals, Product Patent and TRIPS Implementation, *Dinesh Abrol, Nidhi Singh, et. al.*, March 2016
- 190 FDI, Technology Transfer and Payments for Know-How: A Case Study of Automobile Sector, Swati Verma & K.V.K. Ranganathan, March 2016
- 189 Pharmaceutical Innovation and Contribution of In-house R&D of Domestic Firms after TRIPS in India, *Dinesh Abrol & Nidhi Singh*, March 2016
- 188 Impact of Mergers on Competition in the Indian Manufacturing: An Assessment, *Beena Saraswathy*, March 2016
- 187 Trends in Foreign Investment in Healthcare Sector of India, *Reji K. Joseph & K.V.K. Ranganathan*, February 2016
- 186 Industrial Finance in the Era of Financial Liberalization in India: Exploring Some Structural Issues, *Santosh Kumar Das*, December 2015
- 185 Private Sector in Healthcare Delivery Market in India: Structure, Growth and Implications, *Shailender Kumar*, December 2015
- 184 Growth and Distribution: Understanding Developmental Regimes in Indian States, *Kalaiyarasan A.*, October 2015
- 183 Foreign Exchange Use Pattern of Manufacturing Foreign Affiliates in the Post-Reform India: Issues and Concerns, *Swati Verma*, August 2015
- 182 India's Manufacturing Sector Export Performance: A Focus on Missing Domestic Intersectoral Linkages, *Smitha Francis*, May 2015
- 181 Foreign Investment in Hospital Sector in India: Trends, Pattern and Issues, *Shailender Kumar Hooda*, April 2015
- 180 India: Trade in Healthcare Services, T.P. Bhat, March 2015
- 179 Clinical trials industry in India: A Systematic Review, *Swadhin Mondal & Dinesh Abrol*, March 2015
- 178 Seaports, Dry ports, Development Corridors: Implications for Regional Development in Globalizing India, *Atiya Habeeb Kidwai & Gloria Kuzur*, February 2015
- 177 Determinants of Public Expenditure on Health in India: The Panel Data Estimates, Shailender Kumar Hooda, January 2015
- 176 Manufacturing Strategy in a Changing Context, Nilmadhab Mohanty, December 2014
- 175 Freight logistics & Intermodal Transport: Implications for Competitiveness, *Arvind Kumar*, December 2014
- 174 Industrial Policy: Its Relevance and Currency, Biswajit Dhar, December 2014

^{*} Most of the working papers are downloadable from the institute's website: http://isidev.nic.in/ or http://isid.org.in/

About the Institute

The Institute for Studies in Industrial Development (ISID), successor to the Corporate Studies Group (CSG), is a national-level policy research organization in the public domain and is affiliated to the Indian Council of Social Science Research (ICSSR). Developing on the initial strength of studying India's industrial regulations, ISID has gained varied expertise in the analysis of the issues thrown up by the changing policy environment. The Institute's research and academic activities are organized under the following broad thematic areas:

- Industrialization: Land acquisition, special economic zones, encroachment of agricultural land, manufacturing sector, changing organized-unorganised sector relationship, rise of service economy in India, training and skill formation etc.;
- Corporate Sector: With special emphasis on liberalization-induced changes in the structures of the sector, corporate governance, individual firms/groups, emerging patterns of internationalization, and of business-state interaction;
- Trade, Investment and Technology: Trends and patterns of cross-border capital flows of goods and services, mergers & acquisitions, inward and outward FDI etc. and their implications for India's position in the international division of labour;
- Regulatory Mechanism: Study of regulatory authorities in the light of India's own and international experience, competition issues;
- Employment: Trends and patterns in employment growth, non-farm employment, distributional issues, problems of migrant labour and the changes in workforce induced by economic and technological changes;
- Public Health: Issues relating to healthcare financing, structure of health expenditure across states, corporatisation of health services, pharmaceutical industry, occupational health, environment, health communication:
- Media Studies: Use of modern multimedia techniques for effective, wider and focused dissemination of social science research to promote public debates;

Other Issues: Educational policy and planning, role of civil societies in development processes etc.

ISID has developed databases on various aspects of the Indian economy, particularly concerning industry and the corporate sector. It has created On-line Indexes of 230 Indian Social Science Journals (OLI) and 18 daily English Newspapers. More than one million scanned images of Press Clippings on diverse social science subjects are available online to scholars and researchers. These databases have been widely acclaimed as valuable sources of information for researchers studying India's socio-economic development.

