MERGERS AND ACQUISITIONS IN INDIA: SOME INTERESTING PATTERNS

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ABSTRACT

A sudden and sharp increase in mergers and acquisitions in India over the last two decades has attracted a great attention of scholars to understand the activity. This study brings forth some interesting recent patterns about the same. Using a much wider span period of 17 years', precisely from 1996 to 2012, it is shown that mergers are coming in waves. Further, they are not occurring randomly. Instead, the activity is concentrated in a few industries, and that too, in a few years within a given industry. These statistics imply that certain industry- specific time variant factors are significant in causing the substantial restructuring.

KEYWORDS: *Mergers and acquisitions, clustering, wave pattern*

INTRODUCTION AND OBJECTIVE

Post economic reform period in India has witnessed a sudden increase in mergers and acquisitions (M&A).[1] The factors like globalisation, privatisation, dereservation of many of the items that were earlier reserved for production by the small scale sector, adoption of policies to attract foreign investment and repealing Monopolies and Restrictive Trade Practices (MRTP) Act etc. have led to sea changes in the landscape of Indian industries. These changes have forced firms to restructure their boundaries. The number of merger and acquisition deals which stood at around 144 in the year 1993 has crossed the level of 2000 in the year 2005, registering a fourteen fold rise over 12 years (Kaur, 2012). The activity can be driven by various motives – to enhance the competitiveness to cope up with foreign competition, to increase market share against other players, to acquire new technologies, to reduce tax liabilities or to set off accumulated losses of one entity against the profits of other entity etc.

The extant literature on patterns and determinants of mergers worldwide has revealed some interesting observations (Mitchell and Mulherin, 1996; Andrade and Stafford, 2004, Fusillo,2009; Cortes, Agudelo and Mongrut, 2012; Okoeguale, 2013). It has been seen that mergers are coming in waves. The activity increases initially over a few years, reaches to a maximum level and then falls down. Secondly, it has been acknowledged well that the mergers are not occurring randomly. The activity is concentrated in a few industries and that too, over a few years within a given industry. Most of the existing literature is on developed countries, however, Agrawal and Sensarma (2007) has attempted to analyse these trends for India. But, their analysis was restricted to only two years' time period, 2002-2004. In this light, this paper has the objective to analyse if these interesting statistics/

patterns hold true for India based on a much wider time period which spans from 1996 to 2012. A non-random nature of mergers would indicate that some industry and time-specific factors are responsible in causing the spur.

The results of the study are consistent with the existing literature. Ensuing sections of the paper are organised as follows: Section 2 describes the data set that has been used in the study. Section 3 presents the patterns – the time trend, industrial clustering and time clustering. Finally, section 4 concludes the entire paper.

([1] Henceforth, the terms "mergers", "merger activity" and "mergers and acquisitions" have been used interchangeably.)

DATA

Prowess is used to extract the data on merger & acquisition deals from 1996 to 2012. The impact of New Economic Policy measures that were initiated in 1991 are expected to subside in 5 years and therefore, the data begins from 1996 to get the results not confounded by those measures.

A rigorous approach has been followed to create a data set for the mergers. Prowess captures a deal in a year in which it comes to know about a particular deal but not in the year in which the deal gets completed. For instance, if a deal was completed in the year 1999 but it came to know about it in the year 2001 then it captures that particular deal in the latter year. But a year in which the deal gets completed is more interesting. So, all the deals have been re- arranged manually according to the completion year. Prowess gives details about a deal under the column "event name". The acquisition deals are being re-arranged by the "deal completion" year or "post open-offer" year, wherever either of the detail about the deal is given. The deals, in which neither of the deal completion year or post open offer year is given,

are being arranged in the year in which the last event name has been recorded for them. To assure the completion of such deals, the information on equity holders of the target companies is looked at. It has been checked under this command whether the acquirer is being captured as an equity holder of the target company or not in the year in which the last detail of the deal has been captured. But the detail of equity holders is being given by the prowess from 2001 onwards and that too not for all companies. So, for rest of the deals it is assumed that they got completed. For mergers, the deals are being re-arranged by "merger effective" year which is defined as the year when all the assets & liabilities of the target company are vested in the acquirer company. The deals, where effective year of merger is not given, are being put in the year immediately preceding the high court approval year. This is because in most of the cases an effective year of merger is the year immediately preceding the year in which high court approves the deal. The deals, in which neither the effective year nor the high court approval year has been mentioned, are being arranged in the year in which the last event has been recorded for them. To be assured of the completion of such merger deals it is confirmed that the last financial year in which the merged company has submitted its financials should precedes the effective year of merger as merged company ceases to exist after the merger, and thus, the last year in which the merged company submitted its financials cannot be after the merger. Further, the deals where either of these event names appeared: "buy-backs", "promoter", "rights issue", "inter-se-transfer", "joint venture break up" and "preferential allotment" are excluded, as these events do not imply change in control over the company. Further, if same acquirer & target companies are involved in M&A for two consecutive years then they have been captured only once in the year when the deal got finally completed. A total of 5974 merger & acquisition deals are identified over the entire sample period of 17 years, 1996 - 2012.

Further, NIC 2008 industry classification at two digit level is being followed to identify the industries the companies belong to. For almost half of the deals, NIC code of either acquiring or target company is missing in Prowess. Ace equity, Thomson Reuters, Bloomberg are also considered to fill in the missing codes. Variation in codes across different data sources and across time within same data source is also found. Out of 5974 deals, 1662 deals remained with missing observations. 194 deals are identified where either of the merging company is involved in diversified activities & therefore, no code could be allocated to them.

RESULTS

Three features of mergers have been consistently proved in the literature (Fusillo, 2009; Cortes, Agudelo and Mongrut, 2012; Okoeguale, 2013). First, mergers occur in waves. Second, mergers are concentrated in industries. Third, mergers are concentrated in time in a given industry. This paper tried to analyse these three facts about mergers for India. The results are consistent with the existing literature.

Wave Pattern: Fig 1 shows that mergers have occurred in waves in India. First period of moderate intensity wave extends from 1996 to 2004 and other relatively high intensive wave extends from 2005-09.

Concentration across industries: To identify the second feature that mergers are concentrated in few industries, the percentage of total merger activity that is accounted by

top10 and top 5 merger intensive industries, consistent with the work of Andrade and Stafford (2004) and Okoeguale (2013) is calculated. The higher the proportion of merger activity accounted by top 5 & top 10 industries the higher is the industrial clustering of mergers. This feature of clustering is analysed by acquirer companies. Out of 5947 deals in total, 4852 deals are identified with data on acquirer's company industrial code. Table 1 shows the percentage of merger activity accounted by top 5 and top 10 merger intensive industries for the whole period and also separately for two sub periods : 1996-04 & 05-09. It clearly indicates the clustering of mergers by industry in India. Top 10 industries account for 57% – 60% of total merger activity, that is, they account for more than half of total merger activity and top 5 account for 40 – 42% of total merger activity for all time periods considered.

Concentration over years: Further to analyse the clustering of mergers in time, following Mitchell & Mulherin (1996) methodology - for each industry the study finds the maximum proportion of merger deals occurring in any adjacent three year period over the entire sample period. The higher proportion of merger activity occurring within three year period indicates a higher concentration of mergers in time for the selected industry. A total of 66 industries at two digit level are identified where merger deals have been undertaken over 17 years; and22 industries out of 66 have undertaken atleast half of their merger activity within three year period that is, atleast half of the merger activity in being done in only one-fifth of the sample period by 22 industries. Most of the industries have undertaken the major proportion of their merger activity during the sub period 2005 – 2009, which is the period seen with high intensive merger wave above. Table 2 shows the selected three year period and the percentage of merger activity occurring in that period for those 22 industries.However, as mentioned by Powell and Yawson (2005) this method of analysing time clustering of mergers will bias the results. For example, say, if in an industry only three mergers have occurred consecutively over the entire sample period then the selected period of adjacent three years would account for 100% of merger activity for that particular industry. On the other hand, if in an industry 139 mergers have occurred over 17 years but the maximum number of mergers is only 50 when we consider adjacent three year period then the selected period would account for only 35.9%. Therefore, a more formal chi square test to examine the variation in timings of merger activity across industries as done by Powell and Yawson (2005) is also performed. It tests the equality of pooled sample variance with the weighted average of the variance of all industries. The null hypothesis is that there is no variation in timings of merger activity across all sub samples. The table 3 shows the p-values of chi-square test for the entire sample and two sub periods. The p-value is 0.00 for all the time periods considered which indicates significant time clustering of mergers across industries in India.

CONCLUSION

To conclude, it is observed that mergers are occurring in waves in India and they are concentrated in few industries & in time in a given industry. These statistics strongly indicate that certain industry-specific time variant indicators, like foreign competition etc. are responsible to encourage mergers among firms.

FIGURES & TABLES
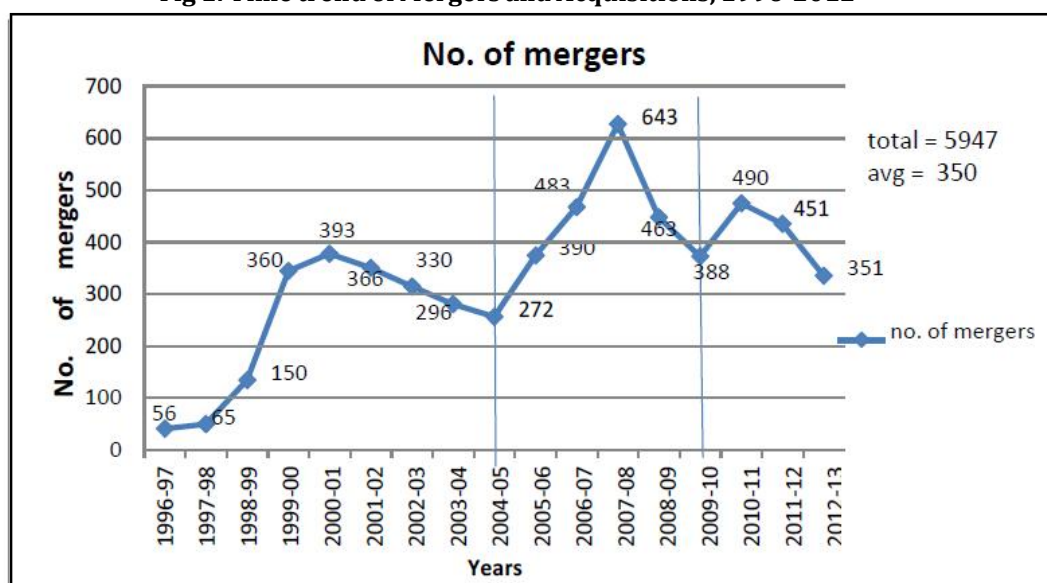## Fig 1: Time trend of Mergers and Acquisitions, 1996-2012

Table1. Percentage of merger activity accounted by top 5 & top 10 industries

Time period	Top 5 (number)	Top 10 (number)
1996 - 2012	40.23 (1952)	57.56 (2793)
1996 - 2004	42.48 (779)	60.69 (1113)
2005 - 2009	40.69 (816)	58 (1164)

Table 2: Industrial clustering of mergers and acquisitions

Industries	Proportion of mergers in selected	Three year selected period
Forestry and logging	100	2001 – 2003
Water collection, treatment & supply	100	2010 – 2012
Food & beverage service activities	100	2006 – 2008
Other professional, scientific and technical activities	100	2010-2012
Air transport	75.0	2005 – 2007
Public administration& defence; compulsory social security	75.0	2009 – 2011
Activities of membership org.	75.0	2010-2012
Education	66.7	2009-2011
Scientific research & development	66.6	2007-2009
Real estate activities	63.1	2006-2008
Travel agency, tour operator	62.5	1999 – 2001
Wood & wood products	60.0	2005 – 2007
Undifferentiated goods & service producing activities of pvt. hh for own use	57.1	2006-2008
Other mining & quarrying	55.5	2007-2009
Leather & related products	54.5	2009 – 2011
Rental & leasing activities	53.8	1998 – 2000
Insurance, reinsurance & pension funding	52.6	1999 – 2001
Specialised construction activities	50.0	1996 – 1998
Postal & courier activities	50.0	2003 – 2005
Advertising & market research	50.0	2002-2004
Employment activities	50.0	2007 – 2009
Office admin. ,office support & other business service activities	50.0	2006 – 2008

Table 3: Time clustering of mergers and acquisitions

Time period	p-value (degrees of freedom)
1996- 2012	0.0 (65)
1996-2004	0.00 (58)
2005 – 2009	0.00 (57)

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