Comparison of Post-Merger performance of Acquiring Firms (India) involved in Domestic and Cross-border acquisitions

Saboo, Sidharth and Gopi, Sunil

Bocconi University Milano Italy, Indian Institute of Management Kozhikode

10 December 2009

Comparison of Post-Merger Performance of Acquiring firms (India) involved in Domestic and Cross-Border Acquisitions

Sidharth Saboo
PGDM Participant, Indian Institute of Management, Kozhikode, India
Fall Semester Exchange Student, Bocconi University, Italy
E-mail: sidharth.saboo@gmail.com

Sunil Gopi
PGDM Participant, Indian Institute of Management, Kozhikode, India
Fall Semester Exchange Student, Bocconi University, Italy
E-mail: go.sunil2@gmail.com

Abstract

Mergers and acquisitions are used for improving competitiveness of companies and gaining competitive advantage over other firms through gaining greater market share, broadening the portfolio to reduce business risk, entering new markets and geographies, and capitalising on economies of scale etc. India has emerged as one of the top countries with respect to merger and acquisition deals. Indian companies have been actively involved in mergers and acquisitions in India domestically as well as internationally. The value share of deals where India has been a target or an acquirer has risen sharply over the past decade, from $2.2 billion in 1998 to $62 billion in 2007. As India increases its participation in M&A deals, it is instructive to compare the domestic and cross-border acquisitions due to their distinctiveness. The distinction between them is a function of the change in market integration which changes the costs and benefit structure and also the difference in synergies – social, cultural and organisational. This research study was aimed to study the impact of mergers on the operating performance of acquiring firms by examining some pre-merger and post-merger financial ratios of these firms and to see the differences in the pre merger and post merger ratios of the firms that go for domestic acquisitions and the firms that go for the international/cross-border acquisitions. The results suggest that there are variations in terms of impact on performance following mergers, depending on the type of firm acquired – domestic or cross-border. In particular, mergers have had a positive effect on key financial ratios of firms acquiring domestic firms while a slightly negative impact on the firms acquiring cross-border firms.

1.0 Introduction

Corporates worldwide have been aggressively building new competencies and capabilities and going in for markets based diversification leading to increase in number of mergers and acquisitions globally. In the USA, since the early 1900s, there have been six distinct waves of mergers and acquisitions, each with its distinct characteristics and outcomes, as per a BCG report released in July 2007[1] (based on a detailed analysis of more than 4,000 completed deals between 1992 and 2006 in USA). As per the report, "at the beginning of the twentieth century,

[1] Boston Consulting Groups research report. The Brave new world of M&A – How to create value from Mergers and acquisitions, July 2007

there was a drive for market share, followed three decades later by a longer and more ambitious wave as companies connected together different elements of the value chain, from raw materials and production through to distribution. The most recent wave, which started in 2004, after the internet bubble at the turn of the century and the subsequent downturn, is driven by consolidation motives.

1.1 Indian Industry

In India, the concept of mergers and acquisitions was initiated by the government bodies. Some well known financial organizations also took the necessary initiatives to restructure the corporate sector of India by adopting the mergers and acquisitions policies. The Indian economic reform since 1991 has opened up a whole lot of challenges both in the domestic and international spheres. The increased competition in the global market has prompted the Indian companies to go for mergers and acquisitions as an important strategic choice. The trends of mergers and acquisitions in India have changed over the years. The immediate effects of the mergers and acquisitions have also been diverse across the various sectors of the Indian economy.

Among the different Indian sectors that have resorted to mergers and acquisitions in recent times, telecom, finance, FMCG, construction materials, automobile industry and steel industry are worth mentioning. With the increasing number of Indian companies opting for mergers and acquisitions, India is now one of the leading nations in the world in terms of mergers and acquisitions.

1.2 Mergers and Acquisitions in India: the Latest Trends

Till recent past, the incidence of Indian entrepreneurs acquiring foreign enterprises was not so common. The situation has undergone a sea change in the last four-five years. Acquisition of foreign companies by the Indian businesses has been the latest trend in the Indian corporate sector.

There are different factors that played their parts in facilitating the mergers and acquisitions in India. Favourable government policies, buoyancy in economy, additional liquidity in the corporate sector, and dynamic attitudes of the Indian entrepreneurs are the key factors behind the changing trends of mergers and acquisitions in India.

A survey among Indian corporate managers in 2006 by Grant Thornton found that Mergers & Acquisitions are a significant form of business strategy today for Indian Corporates. The three main objectives behind any M&A transaction, for Corporates today were found to be:

- Improving Revenues and Profitability
- Faster growth in scale and quicker time to market
- Acquisition of new technology or competence
- Eliminate competition and increase market share
- Tax shield and investment savings

This study has attempted to examine the performance of Indian companies that have gone through mergers in India and abroad and see if mergers had significant impact on operating financial performance of merging companies and specifically, the study has aimed to analyse mergers of firms to see variations in the impact, for domestic and cross border acquisition.

2.0 Literature Review

2.1 Background and existing literature

Mergers and acquisitions as a subject has been a topic of interest among the circles of financial researchers. In recent history numerous literature and papers have been researched on the impact of M&A on corporate capital consolidation and several theories have been proposed to understand the empirical validation of such impacts. Some of the effects that have been widely studied are the returns to shareholders following the merger and acquisition and the post merger performance of the merged business entity. Pursuant of this several measures have been postulated to understand and measure the performance of the company following M&A. These include the long and short term impacts of announcement, the effect of hostile takeovers etc.

USA and several European markets were researched by several researchers to evaluate the corporate performance of the organisations following any mergers and acquisitions. Several such researches have showed that the main reason for the better performance of the acquiring firms have been due to several operational and technical synergies between the acquiring and the acquired firm.

Healy, Palepu, Ruback (2) examined the performance of 50 US mergers post acquisition using the criteria of cash flow performance and found that the operating performance of thwse companies were distinctly better following acquisitions. But the other claim that the operating cash flow performance did not improve following acquisitions was claimed by Ghosh in his paper.

AS to the question of the performance of conglomerate firms, Weston and Mansingka tackled them in their paper and found that the difference between the performance of the control sample group and the firms were insignificant over the long run. Marina, OOsting and Renneboog researched the corporate takeovers in Europe and their impact on the economic performance and found that both the acquiring and acquired companies were outperforming the average companies before any takeover attempt, but this profitability decreased once the takeover was successfully completed.

Mixed results were shown by Ikeda and Doi as they investigated the performance of the mergers of Japanese manufacturing firms using the measure of ROE and found that half the sample had their ROE increased post M&A and ROA increased in half the cases. However over the % year period both these profitability measures showed an increase in more than half the firms, showing that there was a adjustment period where the acquiring firms learn to manage the new organisation. Kruse park and Suzuki examined the long term operating performance of Japanese companies where the sample used was 56 manufacturing organisations during the period 1966-97. This study showed a improvement of the operating performance over a 5 year period and that pre merger and post merger performance are highly correlated.

Research literature has shown us that the operating performance of the acquiring firms have shown mixed results in terms of the difference between the post merger and pre merger performance. Thus it would be extremely difficult to conclude whether the M&A can be used as a catalyst by acquiring firms to achieve better operating performance

2.2 Research on post-merger performance in India

According to India has been a breeding ground for some groundbreaking and fantastical M&A deals over the past few years especially since the liberalisation of trade in 1991. However the research on the mergers and acquisition has been equally limited. Kaur compared the pre merger and post merger performance of acquiring companies using a set of financial ratio. The study concluded that profitability and efficiency declined post acquisition but there was no statistically different performance. However Pawaskar who undertook the same study using firms during 1992-95 and ratios of profitability, growth, leverage and liquidity concluded that acquiring firms performed better then industry average in terms of profitability. When he performed a regression analysis, he found that to the contrary of earlier finding, there was no increase in post merger profits compared to the industry average.

Pramod Mantravadi and A Vidyadhar Reddy analysed the post merger performance of acquiring firm's different industries in India. The study found that there are minor variations in terms of impact on operating performance following mergers, in different industries in India.

Empirical testing of post merger performance of Indian companies has so far been proved inconclusive in order to derive any meaningful inference. The studies were also highly skewed in favour of a particular sector especially manufacturing ones and have a time period bias as only short time intervals were chosen to measure the performance.

3.0 Research Methodology

3.1 Research Objectives

The present research has been aimed at review operating performance of firms going for expansion through mergers and acquisitions in Indian industry, after year 2000. Through this study, attempt was made to test if there are significant deviation in the results achieved by mergers done in the domestic market and mergers done in the overseas market.

3.2 Methodology

The data was collected for all the firms for a period of two years before the merger and two years after the merger taking the merger year as base year. In the pre-merger years, the data consisted only of the acquiring firm and after the merger the data is that of the merged entity. Using t-test (Paired two sample for means), the pre-merger and post merger performance was tested. Only mergers where equity stock of acquiring firm was issued to firm acquired (target) shareholders, as consideration for the acquisition / merger have been considered for the study. Instances where there have been only cash acquisitions are excluded from this study, to ensure comparability of results across the sample.

The company list was considered from year 2000 to 2007. The list was compiled with the help of various sources such as websites, newspapers and databases of Capitaline. The screening criterion described above was applied. 54 cases of mergers in the defined period of study were considered.

3.3 Research Hypothesis

To test the objective, the following hypotheses were formulated:

A: *Merger of domestic firm has improved the operating performance of the acquiring firm*

B: *Merger of cross-border firm has improved the operating performance of the acquiring firm*

C: *Merger effect does not depend on whether it is a cross border acquisition or domestic acquisition*

4.0 Data Collection and Analysis

4.1 Data Collection

Data on key financial ratios depicting the operating performance for upto two years after the acquisition year and two years before the acquisition year was extracted from the database of Capitaline. Data of a total of 54 firms was extracted.

4.2 Data Analysis

Pre-merger and post-merger performance ratios were estimated and the averages computed for the set of sample firms – domestic acquisition and cross-border acquisition, during the period 2001-2007. Average pre merger and post merger financial performance ratios were compared to see if there was any statistically significant change in operating performance due to mergers, using “ t-test : Paired two sample for means”.

5.0 Results

5.1 Analysis of Key financial ratios of firms acquiring domestic firm
Mean pre-merger and post merger ratios for firms in this sample:

Key Financial Ratios	Post 1 Year	Pre 1 Year	t - stat
Debt-Equity Ratio	1.163	1.333	-0.672
Long Term Debt-Equity Ratio	0.877	1.027	-0.686
Current Ratio	1.290	1.506	-3.194
Fixed Assets	1.688	1.670	0.193
Inventory	8.696	9.738	-1.287
Debtors	12.682	13.331	-0.393
Interest Cover Ratio	10.164	11.318	-0.175
PBIDTM (%)	17.479	15.529	1.505
PBITM (%)	12.683	10.567	1.569
PBDTM (%)	13.498	10.174	2.397
CPM (%)	10.892	8.841	2.174
APATM (%)	6.096	3.881	2.238
ROCE (%)	15.888	12.871	1.444
RONW (%)	17.228	9.288	2.086

Key Financial Ratios	Post 2 Year	Pre 2 Year	t - stat
Debt-Equity Ratio	1.214	1.504	-0.806
Long Term Debt-Equity Ratio	0.977	1.188	-0.678
Current Ratio	1.297	1.379	-0.884
Fixed Assets	1.740	1.765	-0.112
Inventory	8.947	9.013	-0.049
Debtors	13.811	10.589	1.784
Interest Cover Ratio	17.317	2.470	2.183
PBIDTM (%)	17.578	15.884	0.741
PBITM (%)	13.371	10.556	1.331
PBDTM (%)	14.480	9.683	1.862
CPM (%)	11.439	8.250	1.478
APATM (%)	7.231	2.922	2.080
ROCE (%)	18.408	13.194	1.955
RONW (%)	18.231	12.050	1.081

The results above show that the most of the ratios (average) have improved in both the cases - one year pre and post merger performance comparison and two years pre and post merger performance comparison. Interest coverage ratio has improved from 2.4% to 17.3% (2 year

data) and t-value suggest that the improvement is statistically significant for a significance level of 95%. Profit before depreciation and tax has improved to 14.48% from 9.683 %. Adjusted profit after tax margins have improved significantly statistically with high t-values of 2.08.
Return on capital employed showed good improvement (18.4 % from 13.2 %) and significant for a level of 90%. Return on net worth also showed considerable improvement (from 12.05 % to 18.231%) but not a very high t-value.
Based on the results of the analysis, the Hypothesis A: *Merger of domestic firm has improved the operating performance of the acquiring firm* was accepted since the mergers affected the performance of most of the ratios positively, with significant t-values (for level of significance of 90%).

5.2 Analysis of Key financial ratios of firms acquiring cross-border firm
Mean pre-merger and post merger ratios for firms in this sample:

Key Financial Ratios	Post 1 Year	Pre 1 Year	t - stat
Debt-Equity Ratio	0.521	0.696	-0.896
Long Term Debt-Equity Ratio	0.417	0.433	-0.176
Current Ratio	2.259	2.144	0.545
Fixed Assets	3.531	2.953	1.495
Inventory	44.309	9.122	0.968
Debtors	11.901	10.943	1.704
Interest Cover Ratio	144.964	153.895	-0.166
PBIDTM (%)	23.726	20.389	1.850
PBITM (%)	20.444	16.786	1.963
PBDTM (%)	22.095	18.779	1.849
CPM (%)	18.843	16.384	1.640
APATM (%)	15.560	12.783	1.760
ROCE (%)	24.466	23.916	0.146
RONW (%)	25.494	25.812	-0.082

Key Financial Ratios	Post 2 Year	Pre 2 Year	t - stat
Debt-Equity Ratio	0.514	0.514	0.000
Long Term Debt-Equity Ratio	0.402	0.415	-0.121
Current Ratio	2.143	1.901	0.950
Fixed Assets	3.571	2.771	1.758
Inventory	39.615	8.250	0.991
Debtors	12.047	10.632	1.431
Interest Cover Ratio	186.459	101.064	1.159
PBIDTM (%)	21.204	28.790	-1.030
PBITM (%)	17.823	22.694	-0.889
PBDTM (%)	19.320	19.255	0.031

CPM (%)	17.051	16.641	0.257
APATM (%)	13.672	10.547	1.176
ROCE (%)	21.636	24.006	-0.619
RONW (%)	21.527	23.417	-0.519

The results above for firms acquiring foreign firms show that the ratios have been impacted negatively after the merger. The performance is seen decreasing over the years when we look at performance ratios of pre and post 1-year of merger and pre and post 2-years of merger.
Debt to equity ratio has almost been unchanged which implies that firms financed the mergers not only through debt but also with the help of equity. Profit Margins have shown mixed trend in the 2-years performance table, however the change for any of these hasn't been statistically significant.
Return on capital employed showed decrement (from 24% to 21.6%) but not significantly indicated by low value of t-stat (-0.619). Return on net worth also showed decrement (from 23.41% to 21.52%) but again not significantly.
Based on the results of the analysis, the Hypothesis B: *Merger of cross-border firm has improved the operating performance of the acquiring firm* was rejected since the mergers has affected the performance of most of the ratios negatively but not with statistically significant values.
Using the above analysis for both the domestic acquisition and cross-border acquisition, we can say merger has different effect when a domestic firm is acquired or when a cross-border firm is acquired. Hence, the third hypothesis, C: *Merger effect does not depend on whether it is a cross border acquisition or domestic acquisition* is rejected as the effects on the performance ratios have been different.

6 Conclusions

The study was undertaken to test whether the type of acquisition, i.e. domestic or cross-border has different effect on the performance of the acquiring firm. The result and analysis of the key financial ratios of the acquiring firms shows that the impact of merger was different for domestic acquisition and cross-border acquisition. The type of acquisition does seem to play an important role in the performance of the companies and it does make a difference.
Limitations of the study
The possible limitations in the study are the firms in the different sample, i.e. domestic and cross-border may not be of similar characteristics – industry, size, etc. Also, large sized firms are generally involved in cross-border acquisition which may affect the analysis. The other limitation may be the sample size and the period of study i.e 2000-2007. This period has seen two bubble bursts, the dot com bubble and the real-estate bubble. This may also affect the analysis in the study.

References

[1] Boston Consulting Group research report, 'The Brave new world of M&A – How to create value from Mergers and Acquisitions', July 2007

[2] Pramod Mantravadi and A Vidyadhar Reddy, (2008): 'Post-Merger Performance of Acquiring Firms from Different Industries in India', International Research Journal of Finance and Economics ISSN 1450-2887 Issue 22 (2008)

[3] Ghosh, A., (2001): 'Does operating performance really improve following corporate acquisitions?' Journal of Corporate Finance 7 pp 151-178

[4] Weston, J.F., and S.K. Mansinghka, (1971): 'Tests of the Efficiency Performance of Conglomerate Firms', Journal of Finance, September, pp 919-936

[5] Marina Martynova, Sjoerd Oosting and Luc Renneboog, (2007): 'The long-term operating performance of European Acquisitions, International Mergers and Acquisitions Activity since 1990: Quantitative Analysis and Recent Research', G. Gregoriou and L. Renneboog (eds.), Massachusetts: Elsevier, pp 1-40.

[6] P. L. Beena, (2004): 'Towards understanding the merger wave in the Indian corporate sector – a comparative perspective', working paper 355, February, CDS, Trivandrum

[7] Timothy A. Kruse, Hun Y. Park, Kwangwoo Park, and Kazunori Suzuki, (2003): 'Long-term Performance following Mergers of Japanese Companies: The Effect of Diversification and Affiliation', presented at American Finance Association meetings in Washington D.C, pp 1-40

[8] Katsuhiko Ikeda and Noriyuki Doi (1983): 'The Performances of Merging Firms in Japanese Manufacturing Industry: 1964-75', The Journal of Industrial Economics, Vol. 31, No. 3, March, pp 257-266

[9] V. Pawaskar (2001): 'Effect of Mergers on Corporate Performance in India', Vikalpa, Vol.26, No.1, January – March, pp 19-32

[10] Michail, Pazarskis, Manthos Vogiatzogloy, Petros Christodoulou and George Drogalas (2006): 'Exploring the Improvement of Corporate Performance after Mergers – The Case of Greece', International Research Journal of Finance and Economics, Issue 6, pp 184-92. The Science Centre Berlin, Vol 24, Cambridge MA, Oelgeschlager, Gunn & Hain, pp 299-314

[11] Swaminathan, S (2002): 'Indian M&As: Why They Have Worked So Far', Indian Management, pp 72-77.

[12] Key financial ratios retrieved from database of Capitaline, www.capitaline.com

Annexure

1. List of companies used in the study – domestic acquisitions

S.No	Acquirer	Target
1	Aban Offshore Ltd.	Hitech Drilling Services India Ltd
2	Abhishek Industries Ltd.	Varinder Agro Chemicals Ltd.
3	Asahi India Safety Glasses	Floatglass (India) Ltd.
4	Bayer (India) Ltd.	Aventis Cropscience India Ltd.
5	B A S F India Ltd.	Cyanamid Agro
6	Gulf Oil Corporation Ltd.	IDL Industries Ltd.
7	CESC	Cescon
8	Indian Aluminium Company Ltd	Annapurna Foils Ltd
9	Cosmo Films Ltd.	Gujarat Propack Ltd.
10	Camphor & Allied Projects Ltd	Mulberry Investment & Trading Co
11	Alstom Projects India Ltd.	Alstom Power Builders Ltd.
12	Zuari Industries Ltd	Zuari Leasing & Finance Corp. Ltd.
13	Glaxo Smith Kline Pharmaceuticals Ltd	Croydon Chemicals Works Ltd.

14	Khaitan Chemicals & Fertilizers Ltd	Shrinivas Fertilizers Ltd
15	Gujarat Ambuja Cement	Ambuja Cement Rajasthan
16	ACC	Damodar & Slag Ltd
17	Eveready	BPL Soft Energy System
18	McLeod Russell India	Williamson Tea Assam
19	Rallis India	Ralchem Ltd
20	Jet Airways	Air Sahara
21	Aarti Industries Ltd	Alchemic organic ltd
22	Gujarat Petrosynthese Ltd	Karnataka Petrosynthese Ltd.
23	Sandvik Asia Ltd	Kanthal India Ltd
24	Motherson Sumi Systems Ltd	Motherson Automotives Technologies & Engineering Ltd.
25	Hotel Leela Venture Ltd	Kovalam Hotels Ltd
26	Bharthi Televentures	Hexacom
27	IOC	IOBL

2. List of companies used in the study – cross-border acquisitions

S.No	Acquirer	Target
1	Tata Steel	Corus Group plc
2	Hindalco	Novelis
3	Videocon	Daewoo Electronics Corp.
4	Dr. Reddy's Labs	Betapharm
5	Suzlon Energy	Hansen Group
6	HPCL	Kenya Petroleum Refinery Ltd.
7	Ranbaxy Labs	Terapia SA
8	Tata tea	Tetley
9	Mahindra nad Mahindra	Jiangling Tractor Company
10	Infosys	Expert Information Services
11	TCS	Pearl Group
12	Wipro	Infocrossing
13	Satyam	Citisoft
14	United Spirits	Whyte and Mackay
15	Crompton Greaves	Pauwels
16	Bharat Forge	Federal Forge Inc
17	NIIT Tech	Element K
18	Sun Pharamceuticals	Taro Pharma
19	Gujarat Heavy Chemicals Ltd	Dan River
20	Tata Coffee	Eight o clock Coffee
21	UCAL Fuels	Amtec Precision Products
22	Oracle Financial Services	Castek Software
23	Ashok Leyland	Avia
24	Polaris	Orbitech
25	Nicholas Piramal	Rhoda Organique Fine
26	RIL	Trevira
27	Amtek Auto	JLF