Cross-Border Merger, Acquisitions and India: Value Creation or Destruction?

Yathiraju K[1], Dr. Shubha B N[2]

[1](Assistant Professor and Head, Dept. of Management, G.F.G.C Shankaranarayana, India)
[2](Associate Professor, Dept. of Management Studies, BMS College of Engineering, India)

[1]E-mail: yathiraju.karunakaran@gmail.com

[2]E-mail: shub_prak@hotmail.com

Abstract

Mergers & Acquisitions (M&A's) are transactions wherein the ownership of companies, other business organisations or their operating units are transferred or combined. M&A's help business enterprises grow, expand and change the nature of their business or competitive position. Cross-Border Mergers & Acquisitions (CBMA's) are deals between foreign companies and domestic firms in the target country. The trend of increasing CBMA's has accelerated with the globalization of the world economy. The 1990's were extremely significant for CBMA's with nearly a 200% jump in the volume of such deals in the Asia Pacific region. The reason for the prominence of this region was the opening up and liberalization of countries there, which provided a major boost to such deals. This study aims at identifying and measuring the creation or destruction of value resulting from Cross-Border Mergers & Acquisitions. As a company from one country acquires one from another country, it gets a plethora of opportunities in the form of greater production capacity, access to new markets, improved technology, etc. However, it also results in increased costs by way of regulatory hurdles, exchange rate risks, cultural differences, etc. This paper aims at determining whether the benefits of a Cross-Border Merger & Acquisition are justifiable with respect to the costs incurred. the primary motive behind a major organisational restructuring in the form of a Cross-Border Merger & Acquisition should also be to increase the company's profit-earning potential. However, as shown by the study, there has been a negative impact on two major indicators of the profitability of the acquiring company, i.e. Return on Equity and Return on Total Assets. Hence, the impact on the company's profits is negative, which indirectly has a negative impact on its shareholders in the form of lower dividends paid to them.

Key Words: Cross-border Mergers & Acquisitions, Profitability, Return on Equity, Return on total asset.

I. Introduction

In today's dynamic and rapidly evolving business world, it has become necessary for business enterprises to constantly innovate and re-structure in order to survive in the marketplace. Enterprises are looking for opportunities which may help them get a strategic benefit over the rest. Synergy resulting from successfully joining hands with another enterprise has become the need of the hour. Gone are the days when a business could survive for decades, merely by virtue of its reputation or size. Also, time has become an extremely precious resource which no enterprise wants to waste on unproductive activities like setting up a business from scratch, obtaining licenses, trying to create a brand for itself, etc. The one-stop solution for all these problems, and many more, are Mergers & Acquisitions. They help an enterprise get access to a fully functional business, thus giving it a running start.

Mergers & Acquisitions (M&A's) are transactions wherein the ownership of companies, other business organisations or their operating units are transferred or combined. M&A's help business enterprises grow, expand and change the nature of their business or competitive position. By acquiring an existing business, a company need not spend time and resources on obtaining licenses, setting up production facilities, undertaking marketing activities, etc. All these issues are taken care of as the target company is fully functional and hence do not necessitate any major activities to be taken up by the acquirer. These benefits offer inorganic growth opportunities to business enterprises, thus making M&A's attractive to them.

From a legal point of view, a merger is a legal consolidation of two entities into one, whereas an acquisition occurs when one entity takes ownership of another entity's stock, equity interest or assets. From an economic viewpoint, both types of transactions generally result in the consolidation of assets and liabilities under one entity and the distinction between a "merger" and an "acquisition" is less clear.

The two main participants in an M&A deal are the:

- **Acquirer:** This is the enterprise which signs the purchase agreement, pays the purchase price and owns or controls the target's business after the acquisition.
- **Target:** This refers to the company which is acquired in an M&A transaction.

Corporate mergers may be aimed at reducing market competition, cutting costs (by laying off employees, making use of economies of scale, etc.), obtaining tax benefits, empire building, etc. These may not necessarily be consistent with the aim of public welfare. Thus, they can be heavily regulated. For example, M&A's in India are primarily supervised by the High Courts and the Ministry of Company Affairs and the SEBI (for listed companies).

Cross-border Mergers & Acquisitions:

Cross-Border Mergers & Acquisitions (CBMA's) are deals between foreign companies and domestic firms in the target country. The trend of increasing CBMA's has accelerated with the globalization of the world economy. The 1990's were extremely significant for CBMA's with nearly a 200% jump in the volume of such deals in the Asia Pacific region. The reason for the prominence of this region was the opening up and liberalization of countries there, which provided a major boost to such deals.

The rise of globalization has exponentially increased the market for CBMA's. This sudden increase took several M&A firms by surprise as most of them did not possess the skills or capabilities to handle such deals. Earlier, the market's lack of significance and a more national mind-set acted as a disincentive to small and mid-size companies from considering CBMA's, thus leaving M&A firms inexperienced in this field. This was also the reason for the lack of any extensive academic works on a subject.

There are several contrasts between CBMA streams from developing countries to developed countries and vice versa. For instance, CBMA activities involving firms from a developed country are likely to possess monopolistic and internalization advantages compared to firms from a developing country. While firms from developed nations may find it attractive to engage in CBMA's to exploit their own assets abroad, firms from developing nations may engage in them to investigate the likelihood of development.

Due to the complexities involved in CBMA's, a vast majority of such deals have unsuccessful results. Issues such as corporate governance, company regulations, political factors, customer expectations and cultural differences can potentially make or break a deal. Due to the presence of such complications, many businesses are finding institutions like the International Corporate Finance Group and other similar organisations to be a necessary component of M&A's today.

Recent Global Trends:

FDI flows to North America and Europe registered significantly large increases in 2015. In North America, the rise in foreign investment rose by 160% to $429 billion, and in Europe, by 65% to $504 billion. A surge in CBMA's during the year was the major factor responsible for this trend. The value of deals rose by 109% to $631 billion, thus reaching its highest level since 2007. Activity was particularly pronounced in the United States where net sales rose from $17 billion in 2014 to $299 billion in 2015. Deal making in Europe was also up significantly (36%).

A large-scale increase in FDI flows to Asia stood in stark contrast to a more modest performance in other developing regions. Overall FDI flows to developing and transition economies registered a modest rise of 6%. This increase however belies a much more complex picture, as a large increase in FDI to some Asian economies offset significant declines in nearly every developing region and in transition economies. Investment flows fell in Africa (by 7% to $54 billion), Latin America and the Caribbean (by 2% to $168 billion) and in transition economies (by 38% to $35 billion). Despite these trends, half of the ten largest recipients of FDI were from developing economies.

Indian Scenario:

Until recently, the news of Indian companies acquiring American and European ones was hard to come by. This situation has however taken a radical turn with Indian acquisitions of foreign entities becoming commonplace. The following factors have contributed to this shift:

- ✓ Availability of excess cash with Indian companies
- ✓ A vibrant and growing Indian economy
- ✓ Favourable government policies
- ✓ Demand for Indian products in foreign markets
- ✓ Prospects of earning greater revenues by entering foreign markets

Indian companies are now looking to enter American, European and other global markets by acquiring companies belonging to these countries. This helps them establish a much-needed global presence and provides them a competitive advantage over other players. The Indian IT and ITES companies lead the pack in terms of presence in foreign markets. Other sectors arealso following suit. The increasing engagement of Indian companies in the world market is not only an indication of the maturity reached by Indian companies, but also the extent of their participation in the process of globalisation.

M&A's are an effective tool of corporate restructuring and have become an integral component of the long-term business strategy of corporates across borders. In India, M&A's came into existence in the post-independence period. M&A's have been undergoing radical changes since liberalization in 1991. The pace of M&A's picked up due to various economic reforms introduced by the Government, in its move towards liberalization and globalization. Size and competence have become the focus of business enterprises in India. Indian companies have realized the need to expand into markets which they understand well, in order to survive in the increasingly competitive market. Several leading corporates have undertaken restructuring activities to sell off non-core businesses, and to create stronger presence in their core business areas.

In India, outbound CBMA's were nearly non-existent before 2000. Nonetheless, the border crossing activity started gaining momentum in 2000 when the value of deals came to $589 million followed by $1875 million in 2001. This was the period when Tata Tea acquired Tetley and made history by becoming the first Indian company to effectively execute a buy-out deal. M&A's in developing countries by firms from emerging economies like India and China may be motivated by the prospect of obtaining intangible assets and resources which they do not possess. International diversification occurs when it permits firms to increase the scale on which intangible assets can be utilized and to exploit technology presently used only in the home market. These assets include superior marketing skills, product differentiation, patent-protected technology, superior managerial knowhow and economies of scale. It is along these lines contended that organizations endeavour to improve their core competencies and fill in the strategic gap by engaging in CBMA activities.

Though the initial costs of CBMA's may be quite high, the benefits received in the form of knowledge and improved competitive advantage can outweigh the costs. Hence, in the long-run, CBMA's may prove to be a significant vehicle to build capacity and improve organizational performance of the firm.

II. Review of Literature

1. **Daniel Ekholm, Petter Svensson (2009):** investigated to what extent M&A's have created value for acquiring companies' shareholders on the Swedish stock exchange. They also found out the determinants of success or failure of the deal, by using a quantitative approach using event study and cross sectional regression analysis. The theoretical perspective takes its starting point from the market efficiency theory and continue with theory of value creation through mergers and acquisitions. Mergers and acquisitions during 1997-2009 done by Swedish public companies have been studies empirically They have found out that mergers and acquisitions on the Swedish market from 1997-2009 have created value of approximately 3.5 % on average measured as abnormal returns. The results are statistically significant. No significance was found for the explanatory regressions and thus, no guidance could be found to help mangers decide when to engage in M&A transactions.

2. **Lucia Duguleana, Lena Iulia Dumitrache (2009):** determined to what extent cross-border mergers and acquisitions in related industries initiated by European companies on US targets are value-enhancing. Further, the study measured the excess wealth gained by foreign target shareholders from announcement up until delisting, by using a deductive approach to determine the excess value measures for the acquirers and foreign target companies. Additionally, distribution analysis and regression analysis are used to observe how the excess value of acquirers varies with different variables. The results show that U.S target firms are overvalued, less profitable, less financially levered and make fewer investments compared to European

firms that have not yet diversified in the U.S. However, the target firm shareholders experience an increase in their wealth of over 25% from the announcement date to delisting. Overall, European bidders do not create or destroy value by adding an overvalued company relative to the year before the acquisition, but adding an overvalued company destroys the possible value created as an effect of the synergies resulting from the merger.

3. **Reena Kohli, Bikram Jit Singh Mann (2011):** ascertained and compared acquiring company wealth gains in domestic and cross border acquisitions in India, and assessed the source of wealth gains in such acquisitions. The study used Event Study methodology to assess announcement returns of acquiring companies in domestic and cross border acquisitions separately. Cross-sectional regression analysis was used to identify determinants of value creation in these acquisitions. The sample comprised 268 successful acquisitions (202 cross border and 66 domestic) announced between 01/01/1997 and 31/03/2008. As per Event Study, acquiring company shareholders attained higher wealth gains in cross border acquisitions than in domestic ones. Results of regression analysis state that higher wealth gains in cross border acquisitions accrue when both the acquirer and the target are in a technology intensive sector. Acquisitions pursued by small and mid-sized companies were found to be more wealth creating. Also, acquisitions create value only when the acquiring company can realize synergies by blending together its own intangible resources and capabilities with those of the target company.
4. **Anusha Chari, Paige Ouimet, Linda L. Tesar (2004):** studied stock market reactions to acquisition announcements in emerging markets by using Event Studies. The sample comprised 5040 Cross Border M&A's involving 9Latin American and East Asian target countries from 1988-2002. It was found that Joint monthly returns based on market-capitalisation weighted returns in Dollars increased by 1.79% to 2.28 % when a cross-border acquisition was announced. Target firms experienced monthly returns between 5.05 to 6.68 %. This was due to transfer of majority control from developing market targets to developed market acquirers.
5. **Anirban Ghatak (2012):** studied how far M&A's in the post-reform era helped Indian firms improve their financial performance, by using the Fixed Effects Model (FEM) and Random Effects Model (REM). The sample comprised 52 listed drugs and pharmaceutical companies that merged over the period from 2005 to 2010. He found that profitability of firms depended directly on their size, selling efforts and exports and imports intensities, but inversely on market share and demand for their products. M&A's don't have a significant impact on profitability in the long-run possibly due to the resultant inefficiency and entry of new firms in the market.
6. **Jeremiah Stephen Dorai, Lauri Patolahti(2010):** studied if cross border deals involving UK acquirers on BRIC targets were value-enhancing for acquirers and identified the variables that influenced the result. Quantitative deductive approach, event studies and multiple regression analysis were used on a sample comprising 30 Cross border M&A's between UK-based firms andBRIC targets between 01/01/1997 and 15/04/2010. They found that value is created at around 1% abnormal returns over the days around the announcement. Identifying explanatory variables of value creation bore no statistical significance, and hence there were no firm conclusions.
7. **Wang, Daojuan; Moini, Hamid (2012):** determined the motives of cross-border M&A's, and how external and internal factors influence firms' decisions, by using survey questionnaire and multiple case-study techniques. Top Executives of 140 Danish companies (29 responded to the questionnaire) that were involved in cross border M&A's between 2001-2011 were studied. The main motives were found to be expanding geographically, improving product mix, achieving

more rapid growth, gaining economies of scale and acquiring technical expertise. The nature of firms' business determined the motives for cross border M&A's.

8. **Orhan Yesilyurt (2012):** examined the wealth effects in the Euro Zone due to cross border M&A's, prior to the 2008 economic crisis and during the crisis; and determined macro-economic determinants of wealth effects. Event studies were used wherein changes in stock prices due to M&A announcements were analysed. 345 M&A transactions between 2005 and 2010 of publicly listed companies in the manufacturing industry in the Euro Zone were studied. A wealth effect of 1.1% was found on the announcement day. Wealth effects during (2008-2010) crisis were higher (1.47%) compared to before (2005-2007) crisis (0.93%). In the pre-crisis period, wealth effects were experienced in a longer time period and macro-economic factors were not significant. Firm and deal factors were more important. During the crisis, wealth effects were experienced more quickly and macro-economic factors were significant.
9. **Csaba Balogh (2006):** identified the factors and their critical values characteristic to M&A transactions and companies involved in such transactions which could be used for estimation of planned transaction results, and built a model suitable for Hungarian companies to plan and realize successful cross border M&A transactions. The research integrated traditional and organizational approach in one model. The market based return method using CAR and BAHR procedures was applied. The sample comprised 175 cross border M&A's in the year 2000 worth over $ 1 billion. The study found that both hard (expressible in monetary terms) and soft (not expressible in monetary terms) variables were to be considered while selecting the target company. Cultural differences, differences in expenditure spent on information, quality differences of central political-economical regulations between countries of acquirer and target suggest negative, performance decreasing relationship. Minority share of acquirer company's country living in target company's country suggest positive, performance increasing relationship. Combined discrepant and combined final regression models helped acquiring companies forecast probable results of transactions with targets.
10. **Nicolas Coeurdacier, Roberto A. De Santis, Antonin Aviat (2009):** identified the role of institutional and financial developments on cross border M&A's using regression analysis. They studied CBMA’s in ten manufacturing and ten service sectors in Europe between 1985 and 2004. The study concluded that institutional changes act as a trigger for capital re-allocation of manufacturing across the globe, but that they do not have a significant impact on the service sector. Also, acquiring sector's stock market capitalization is an important explanatory variable of cross border M&A's both within and across sectors.
11. **Rabi Narayan Kar, Munim Kumar Barai, Yasushi Suzuki, Minakshi (2015):** explored and documented evolution and trends of Cross Border M&A's and important factors in them, and also analysed the reasons for cross border M&A's. A hybrid methodology i.e. survey of relevant content and different methods for different data studied was used on a sample comprising Cross-Border M&A's in India between 1990 and 2011. The study found that the maximum outbound deals from India go to developed capital markets. In inbound deals, cash-rich firms are targeted. The main motive of Indian CBMA's is to search for top line revenue growth by adding new capabilities and assets, product diversification and market entry.
12. **Sathyajit R Gubbi, Preet S Aulakh, Sougata Ray, MB Sarkar, Raveendra Chittoor (2009):** analysed the reasons for value creation through international acquisitions, using event study method and regression. The sample comprised 425 CBMA's by Indian firms during 2000-2007. The study concluded that value creation through acquisitions depends on whether complementary resources are acquired, and the quality of such resources. There are no significant wealth gains in domestic acquisitions, due to homogeneity in institutional environment, and resource and capability positions of acquirer and acquired firms. In

international acquisitions, shareholders of Indian companies experience wealth increase, which is further enhanced by the quality of resources of target firms and resulting stronger synergy.

13. **Arindam Das, Sheeba Kapil (2011):** compared and contrasted M&A's involving Indian and Chinese firms in technology sector, using Chi-square tests of Independence. The sample comprised 2428 M&A's from 2001-2011 that involved Indian and Chinese technological companies (either acquirer or target was Indian or Chinese). The study found that the proportion of deal volume in inbound, outbound and domestic space vary significantly between these two countries. Deal types of M&A transactions vary for inbound and domestic space, but for outbound deals, acquirers of both countries follow similar patterns.
14. **Rachna Gupta, Dr. Sachindra Kr.Gupta (2013):** examined theimpact of M&A's on financial efficiency of selected pharmaceutical companies in India, using Wilcoxon Signed Rank Test. The study was conducted on Selected Indian merging firms between 2000 and 2008. It found that M&A's have a significant relationship between financial performance and the M&A deal, and that it will generate value in the long run.
15. **Selena Aureli (2014):** shed light on the economic and social impacts with acquisition of western companies by MNC's from emerging countries. The paper studied accounting data from financial statements over an eight-year period to assess financial performance before and after the acquisition of eight unlisted medium-sized Italian companies acquired by Indian multinationals. The study found that foreign investors mainly search for technical expertise and their arrival does not lead to improved financial performance, and that Indian investors do not destroy profitable organizations as these were recording negative results already before the merger.
16. **Tomasz P. Bednarczyk, Dirk Schiereck, Hardrik N. Walter (2010):** identified the wealth generated for shareholders of energy assets in Central and Eastern Europe by announcement of cross border M&A's involving a bidder from a Western industrialized country by using event studies. The sample included 37 M&A transactions between 1995 and 2005 involving listed target firms in Central and Eastern European countries. The study found that cross border M&A's create short-term positive shareholder value for target firms. Over longer time horizons of upto 61 days, performance of target stocks is significantly negative. Shareholders of acquiring firms lose significantly, at least for event windows longer than 15 days.
17. **Bu¨lent Aybar, Aysun Ficici (2009):** examined the value implications of cross border M&A's of Emerging Market Multinationals (EMM's) by using event study to explore the impact of announcements on the value of acquiring firms. The sample comprised 433 M&A's associated with 58 EMM's between 1991 and 2004. The study found that Cross Border expansion through acquisitions does not create value, but point to value destruction for more than half of the transactions analysed. Equity markets react negatively to the cross-border acquisition announcements of EMM's. Target size, ownership structure of target (private vs public), and structure of the bidder (diversified vs non-diversified) positively affect bidder value. High-tech nature of bidder and pursuit of targets in related industries negatively affect bidder value.
18. **P.C. Narayan, M. Thenmozhi (2014):** investigated whether cross border M&A's involving emerging markets either as acquirers or as targets create value, and how the performance outcome in such acquisitions is impacted by deal-specific characteristics. They used Wilcoxon Signed Rank Test and OLS regression. The sample comprised cross border acquisition transactions between 1999 and 2007 listed in SDC Platinum database, where the domicile country of either the acquirer or target belongs to "Emerging and Developing countries" list in World Bank website. The study found very pronounced value destruction when emerging market firms acquire targets in developed markets. This may be due to the limited experience among emerging market firms to undertake cross border acquisitions. However, when

developed market firms acquire targets from emerging markets, there is a 50% chance of value-creation, the outcome being favourable influenced by pre-acquisition performance of the two firms, relative size of target and cash (not stock-swap) as mode of payment.

2.1 Research Gap:

From the Review of Literature, it is evident that there is a need to examine the wealth effects in India due to Cross-Border M&A's, prior to the 2008 economic crisis and during the crisis, and to determine the macro-economic determinants of wealth effects. Also, the value-creation through Cross-Border Mergers & Acquisitions initiated by Indian companies on foreign targets; and the variables that influence the result need to be identified. The differences in value-creation through Cross-Border Mergers & Acquisitions initiated by companies in developed and developing countries also needs to be studied. It is also important to identify the variables whose values have increased due to Cross-Border Mergers & Acquisitions, and also those whose values have been destroyed.

2.2 Statement of Problem:

Despite the rapid growth in Cross-Border Mergers & Acquisitions, it is necessary to study the real value created by them and the costs arising as a result of them. This will help Indian firms decide whether it is worth investing in them, so that they can make better financial and operating decisions.

2.3 Need & Importance of the Study:

Cross-Border Mergers & Acquisitions have become an increasingly popular trend adopted by companies all over the world due to the inorganic growth opportunities they provide. India has emerged a hotspot for CBMA's with the number of deals going up rapidly over the years. Investments abroad were started by a few major Indian groups such as Tata, Kirloskar and Birla, and have now traversed to enterprises of all sizes and in multiple industries. The number of Indian firms with branches abroad has multiplied over 40 times in the space of 20 years between 1986 (208) and 2006 (8,620). From 1995 to 2006, FDI stock increased from $212 million to $8,181 million. As a result of this phenomenal increase in the global presence of Indian companies, it becomes vital to measure the tangible benefits and costs arising out of Cross-Border M&A's, in order to understand whether they really end up creating any value for the acquirers. This will help prospective acquirers understand whether it is worth investing in a Cross-Border M&A and will help them make better decisions for their business.

III. Research Methodology

3.1 Research Objective:

1. To study the value created through Cross-Border Mergers & Acquisitions initiated by Indian companies
2. To know the impact of Cross-Border Mergers & Acquisitions on the acquiring company's share price

3.2 Type of Research:

This research is a descriptive one as it studies the characteristics of the sample of companies identified.

It aims to measure the value creation or destruction arising from Cross-Border Mergers & Acquisitions undertaken by Indian companies.

3.3 Sources of Data:

The data used for this study has been obtained from secondary sources. The following sources have been tapped into to obtain details regarding Cross-Border Mergers & Acquisitions and research articles related to the same:

- ✓ CMIE Prowess database
- ✓ Proquest and JSTOR databases
- ✓ Moneycontrol website
- ✓ BSE website

3.4 Sampling Technique:

For the purpose of this study, simple random sampling has been used. In statistics, a simple random sample is a subset of individuals (a sample) chosen from a larger set (a population). Each individual is chosen randomly and entirely by chance, such that each individual has the same probability of being chosen at any stage during the sampling process. In this study, the sample has been chosen randomly from different manufacturing industries. Preference has not been given to any specific industry or company.

3.5 Sample Size:

The sample chosen for this study includes eleven Cross-Border Mergers & Acquisitions undertaken by seven Indian companies belonging to six different industries in the manufacturing sector. All the acquiring companies are listed on the BSE.

3.6 Scope of Study:

All the deals studied in this paper have taken place between December, 2009 and June, 2013 and relating to Indian acquirers of foreign targets.

3.7 Limitations of the Study:

- ✓ Presence of time constraint in completion of the research
- ✓ Study of a limited number of companies undertaken
- ✓ Insufficiency of data

3.8 Statistical Tools Used:

A two-tailed paired-sample t-test has been used for this study. This method helps in determining the impact of an activity on a certain variable, by determining whether the mean of differences between two paired samples differs from zero. This test calculates the difference between each “before” and “after” pair of measurements, determines the mean of these changes, and reports whether this mean of differences is statistically significant. There are two competing hypotheses in a paired-sample t-test, the null hypothesis and the alternative hypothesis.

3.9 The hypotheses in this study are as follows:

Null Hypothesis: There is no difference in the means of variables before and after the CBMA, thus signifying no value creation or destruction

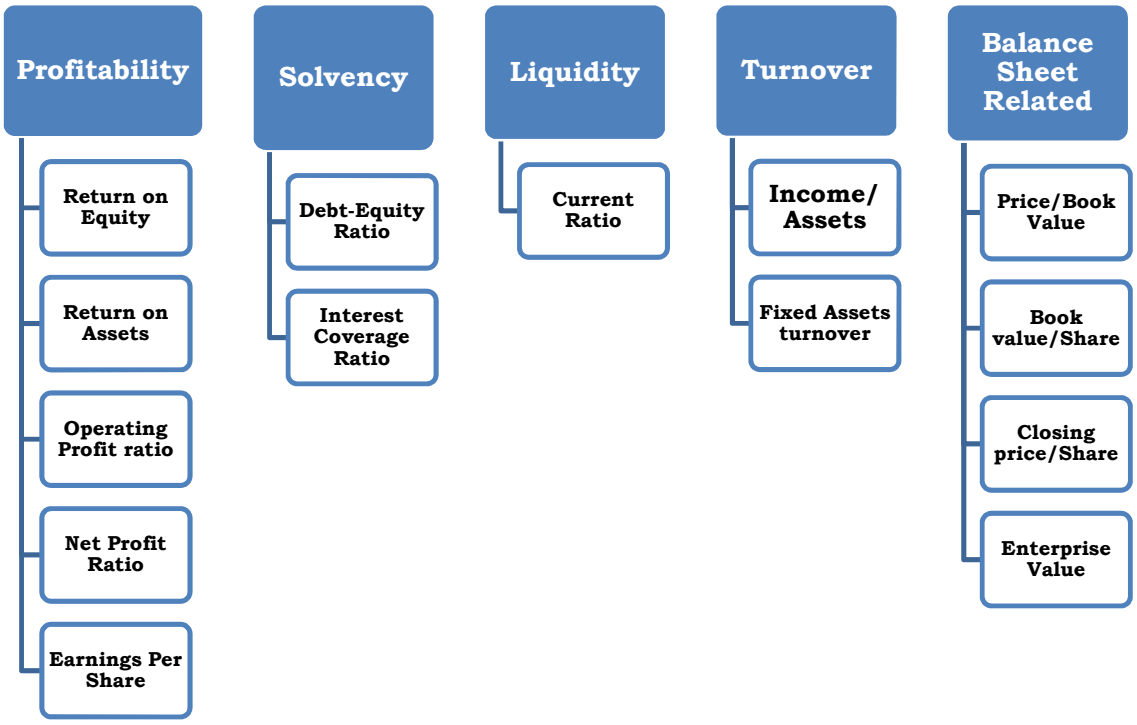
Alternative Hypothesis: There is a difference in the means of the variables before and after the CBMA, thus signifying either value creation or destruction

The null hypothesis assumes that the true mean difference between the paired samples is zero. If this holds true, all observable differences are explained by random chance and the event has no significant impact on the variables. Conversely, the alternative hypothesis assumes that the true mean difference between the paired samples is not equal to zero. If this holds true, observable differences are caused due to the event.

As the primary objective of this study is to determine the value-creation through Cross-Border Mergers & Acquisitions, this test is very apt in measuring the impact of the deal on the variables being studied. As the impact can be either positive or negative, a two-tailed test has been used instead of a one-tailed test. The Arithmetic Mean of each variable three years before the M&A and the three years after it have been compared with each other.

IV. Theoretical Framework

This study will analyse the changes in fourteen variables caused due to a Cross-Border Merger & Acquisition. The variables can be categorized into the following groups:



Value-Creation can be defined as the sum of all these variables. It can be expressed mathematically in the following way:

VC = P + S + L + T + BS

Where: VC stands for Value Creation

P stands for change in Profitability

S stands for change in Solvency

L stands for change in Liquidity

T stands for change in Turnover

BS stands for changes in Balance Sheet related variables

- If the value of VC obtained from this equation is positive, it means value has been created due to the Cross-Border Merger & Acquisition
- If the value of VC obtained from this equation is negative, it means value has been destroyed due to the Cross-Border Merger & Acquisition
- If the value of VC obtained from this equation is zero, it means value has neither been created nor been destroyed due to the Cross-Border Merger & Acquisition.

V. Data Analysis and Interpretations

Paired Samples T – test

Variables		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
ROE	Pair 1 before - after	26.65364	23.03610	6.94565	11.17777	42.12950	3.837	10	.003
Return on Total Assets	Pair 2 before – after	6.28182	3.76085	1.13394	3.75525	8.80839	5.540	10	.000
Operating Profit Ratio	Pair 3 before – after	4.59818	11.94272	3.60087	-3.42505	12.62141	1.277	10	.230
Net Profit Ratio	Pair 4 before – after	3.52000	8.39791	2.53207	-2.12179	9.16179	1.390	10	.195
Earnings Per Share	Pair 5 before – after	6.81000	20.91270	6.30542	-7.23934	20.85934	1.080	10	.305

Debt-Equity ratio	Pair 6 before – after	.18991	.39045	.11773	-.07240	.45222	1.613	10	.138
Interest Coverage ratio	Pair 7 before - after	- 6.72636	32.84548	9.90328	-28.79226	15.33953	- .679	10	.512
Total Income/Total Assets	Pair 8 before – after	5.38091	15.22424	4.59028	- 4.84687	15.60869	1.172	10	.268
Fixed Assets Turnover Ratio	Pair 9 before – after	117.95727	179.94205	54.25457	- 2.92944	238.84398	2.174	10	.055
Current ratio	Pair 10 before – after	- .03245	.36877	.11119	-.28020	.21529	-. 292	10	.776
Price/Book Value	Pair 11 before – after	2.19636	3.37539	1.01772	- .07126	4.46398	2.158	10	.056
Book Value per share	Pair 12 before – after	- 45.60000	63.45964	19.13380	- 88.23276	-2.96724	-2.383	10	.038
Closing price / share	Pair 13 before – after	-251.49273	205.43090	61.93975	-389.50309	-113.48237	- 4.06	10	.002
Enterprise Value	Pair 14 before - after	-59349.485	63839.037	19248.1938	-102237.134	-16461.837	-3.083	10	.012

Analysis of T-test

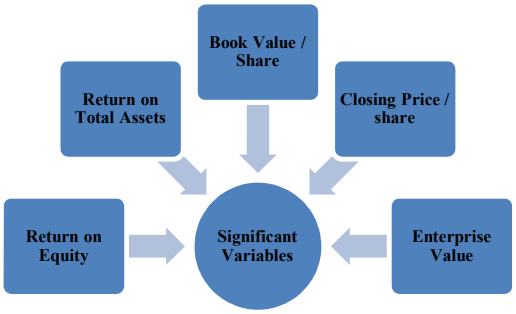
- **ROE is a significant variable** (p value is 0.03 < 0.05) with a t-value of 3.837. The average ROE before the Merger & Acquisition is greater than the average after it by approximately 26.65 % and it shows us that the average ROE before acquisition is greater than the average ROE after acquisition for every company, except Mahindra. Hence, there has been a **value destruction** in ROE for majority of the companies.
- **Return on Total Assets is a significant variable** (p value is 0 < 0.05) with a t-value of 5.540. The average Return On Total Assets before the Merger & Acquisition is greater than the average after it by approximately 6.28 % and shows us that Return on Assets is greater before the M&A for every company except Mahindra. Thus, there has been a **value destruction** in Return on Total Assets due to the M&A.
- **Operating Profit Ratio is an insignificant variable** (p value is 0.23 > 0.05) with a t-value of 1.277. The average Operating Profit Ratio before the Merger & Acquisition is greater than the average after it by approximately 4.6 % and it shows a mixed behaviour after the M&A with most companies having a greater ratio before the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Net Profit Ratio is an insignificant variable** (p value is 0.195 > 0.05) with a t-value of 1.390. The average Net Profit Ratio before the Merger & Acquisition is greater than the average after it by approximately 3.52 % and it shows a mixed behaviour after the M&A with most

companies having a greater ratio before the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.

- **Earnings Per Share is an insignificant variable** (p value is 0.305 > 0.05) with a t-value of 1.080. The average EPS before the Merger & Acquisition is greater than the average after it by approximately Rs. 6.81 and it shows a mixed behaviour after the M&A with most companies having a greater EPS before the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Debt-Equity ratio is an insignificant variable** (p value is 0.138 > 0.05) with a t-value of 1.613. The average Debt-Equity ratio before the Merger & Acquisition is greater than the average after it by approximately 0.19 and it shows a mixed behaviour after the M&A with most companies having a greater ratio before the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Interest Coverage ratio is an insignificant variable** (p value is 0.512 > 0.05) with a t-value of (- 0.679). The average Interest Coverage before the Merger & Acquisition is less than the average after it by approximately 6.73 times and it shows a mixed behaviour after the M&A with most companies having a greater ratio after the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Total Income / Total Assets is an insignificant variable** (p value is 0.268 > 0.05) with a t-value of 1.172. The average Total Income / Total Assets before the Merger & Acquisition is greater than the average after it by approximately 5.38 times and it shows a mixed behaviour after the M&A with most companies having a greater ratio before the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Fixed Assets Turnover Ratio is an insignificant variable** (p value is 0.055 > 0.05) with a t-value of 2.174. The average turnover before the Merger & Acquisition is greater than the average after it by approximately 117.96 times and it shows a mixed behaviour after the M&A with most companies having a greater ratio after the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Current ratio is an insignificant variable** (p value is 0.776 > 0.05) with a t-value of (- 0.292). The average Current Ratio before the Merger & Acquisition is less than the average after it by approximately 0.03 and it shows a mixed behaviour after the M&A with most companies having a greater ratio after the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Price / Book Value is an insignificant variable** (p value is 0.056 > 0.05) with a t-value of 2.158. The average ratio before the Merger & Acquisition is greater than the average after it by approximately 2.2 times and it shows a mixed behaviour after the M&A with most companies having a greater ratio before the M&A. However, as it is an insignificant variable, it cannot be concluded that the change has been brought about by the M&A.
- **Book Value is a significant variable** (p value is 0.038 < 0.05) with a t-value of (- 2.96724). The average Book Value before the Merger & Acquisition is less than the average after it by approximately Rs. 45.6 and it shows the Book Value of a majority of companies is greater after the M&A. Hence, there has been **value creation** due to the M&A.
- **Closing price is a significant variable** (p value is 0.002 < 0.05) with a t-value of (-4.06). The average price before the Merger & Acquisition is less than the average after it by approximately Rs. 251.49 and it shows us that the average closing price of shares of most of the companies is greater after the M&A than before it. This shows the **value created** by the M&A in this regard.
- **Enterprise Value is a significant variable** (p value is 0.012 < 0.05) with a t-value of (-3.083). The average value before the Merger & Acquisition is less than the average after it by

approximately Rs. 59,349.49 million and it shows us that Enterprise Value after the M&A is greater than that before it for a majority of the companies. Thus, there has been a **value creation** in this variable due to the M&A.

VI. Findings



The above variables have been identified as the significant ones using the Paired-Sample Two-Tailed t-test. Hence, these are the only ones which are affected either positively or negatively after a Cross-Border Merger & Acquisition. The impact on each of these is found to be as follows:

1. **Return on Equity:** The average ROE of the sample before the CBMA (44.52 %) is greater than that after it (17.87 %). Hence, there has been a **destruction** in the value of this variable by 26.65 %.
2. **Return on Total Assets:** The average Return on Assets before the CBMA (16.95 %) is greater than that after it (10.67 %). Hence, there has been a **destruction** in the value of this variable by 6.28 %.
3. **Book Value / Share:** The average Book Value before the CBMA (Rs. 158.11) is less than that after it (Rs. 203.71). Hence, there has been a **creation** of Rs. 45.60 worth value in this variable.
4. **Closing price of shares:** The average closing price before the CBMA (Rs. 367.47) is less than that after it (Rs. 618.96). Hence, there has been a **creation** of Rs. 251.49 worth value in this variable.
5. **Enterprise Value:** The average Enterprise Value before the CBMA (Rs. 52,093.96 million) is less than that after it (Rs. 111,443.45 million). Hence, there has been a **creation** of Rs. 59,349.49 million worth value in this variable.

All the other variables are insignificant to the study as their p values are greater than 0.05. This indicates that any changes observed in them after a Cross-Border Merger & Acquisition are most probably due to chance and not as a result of the Merger. Hence, the impact of the Cross-Border Merger & Acquisition on them is not analysed. Among the variables that have been affected due to the Cross-Border Merger & Acquisition, it is observed that there is a negative impact on two variables related to profitability and a positive impact on three variables related to share prices.

VII. Conclusion

This study has helped draw conclusions with respect to two major groups of stakeholders in a Cross-Border Merger & Acquisition, i.e. the acquiring company and the shareholders of the acquiring company. The primary motive of any business is to maximize its profits. In this regard, the primary motive behind a major organisational restructuring in the form of a Cross-Border Merger & Acquisition should also be to increase the company's profit-earning potential. However, as shown by the study, there has been a negative impact on two major indicators of the profitability of the acquiring company, i.e. Return on Equity and Return on Total Assets. Hence, the impact on the company's profits is

negative, which indirectly has a negative impact on its shareholders in the form of lower dividends paid to them.

In such a situation, it can be reasonably expected that there is also a negative impact on the share prices of the acquirer due to the lower returns to shareholders, and the resultant poor perception of the company by investors. However, there has been an increase in three major indicators of the company's share prices, namely the Book Value per share, Closing Price per share and the Enterprise Value. This leads to wealth maximisation of shareholders, which is an important objective of companies.

It can be safely concluded that Cross-Border Mergers & Acquisitions undertaken by Indian companies do not lead to any significant value creation or destruction in most areas of the business. However, they tend to have a positive impact on three indicators of share prices and a negative impact on two indicators of profitability. Thus, there is a slightly greater level of value creation than destruction.

Bibliography

[1] Ekholm, D., & Svensson, P. (2009). Value Creation through Mergers and Acquisitions: A study on the Swedish market

[2] Duguleana, L., & Dumitrache, L. I. (2009). Value creation through Cross-Border Mergers and Acquisitions: An empirical study on European acquirers of US targets

[3] Kohli, R., & Singh, B. J. (2011). Analyzing determinants of value creation in domestic and cross border acquisitions in India

[4] Chari, A., Ouimet, P., & Tesar, L. L. (2004). Cross Border Mergers and Acquisitions in Emerging Markets: The Stock Market Valuation of Corporate Control

[5] Ghatak, A. (2012). Effect of Mergers and Acquisitions on the Profitability of India Pharmaceutical Industry

[6] Dorai, J. S., & Patolahti, L. (2010). Value Creation through Cross-Border Mergers and Acquisitions: An Empirical Study on UK Acquirers of BRIC Targets

[7] Wang, D. & Moini, H. (2012). Motives for Cross-border Mergers and Acquisitions: Some Evidence from Danish Firms

[8] Yesilyurt, O. (2012). International Expansion Strategies: Are Cross-Border Mergers & Acquisitions Successful?

[9] Balogh, C. (2006). Analysis of factors determining success of Cross-Border Mergers & Acquisitions

[10] Coeurdacier, N. & Santis, R. A. (2009). Cross-Border Mergers and Acquisitions: Financial and Institutional forces

[11] Kar, R. N., Barai, M. K., Suzuki, Y. & M. (2015). Cross Border M&As in Emerging Economies: Evidence from Indian Trends and Future Directions

[12] Gubbi, S.R., Aulakh, P. S., Ray, S., Sarkar, M. B., Chittoor R. (2009). Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms

[13] Das, A. & Kapil, S. (2011). Analysis of Cross-border and Domestic M&A Deals in Technology sector in India and China

[14] Gupta, R. & Gupta, S. K. (2013). Measuring Post-Merger & Acquisition financial performance in selected Indian pharmaceutical industry
[15] Aureli, S. (2014). Performance of unlisted Italian companies acquired by multinationals from emerging markets: The case of Indian acquisitions
[16] Bednarczyk, T. P., Schiereck, D. & Walter, H. N. (2010). Cross-border acquisitions and shareholder wealth: Evidence from the energy and industry in Central and Eastern Europe
[17] Aybar, B., Ficici, A. (2009). Cross-border acquisitions and firm value: An analysis of emerging-market multinationals
[18] Narayan, P. C. & Thenmozhi, M. (2014). Do cross-border acquisitions involving emerging market firms create value: Impact of deal characteristics

Web References

1. http://www.moneycontrol.com
2. http://www.bseindia.com/