IMPACT OF MERGERS AND AMALGAMATION ON THE PERFORMANCE OF INDIAN COMPANIES

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ABSTRACT:-

This paper is an attempt to evaluate the impact of Mergers on the performance of the companies. Theoretically it is assumed that Mergers improves the performance of the company due to Increased market power, Synergy impact and various other qualitative and quantitative factors. Although the various studies done in the past showed totally opposite results. These studies were done mostly in the US and other European countries. I evaluate the impact of Mergers on Indian companies through a database of 40 Companies selected from CMIE's PROWESS, using paired t-test for mean difference for four parameters; Total performance improvement, Economies of scale, Operating Synergy and Financial Synergy. My study shows that Indian companies are no different than the companies in other part of the world and mergers were failed to contribute positively in the performance improvement.

KEY WORDS:-

Mergers, Amalgamation, Acquisition, Horizontal Mergers, Vertical Mergers, Backward Integration, Foreword Integration, Circular Mergers, Conglomerate Mergers, Congeneric Mergers,

1. INTRODUCTION:-

M&A are very important tools of corporate growth. A firm can achieve growth in several ways. It can grow internally or externally Internal Growth can be achieved if a firm expands its existing activities by upscaling capacities or establishing new firm with fresh investments in existing product markets. It can grow internally by setting its own units in to new market or new product. But if a firm wants to grow internally it can face certain problems like the size of the existing market may be limited or the exisiting product may not have growth potential in future or there may be government restriction on capacity enhancement. Also

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firm may not have specialized knowledge to enter in to new product/ market and above all it takes a longer period to establish own units and yield positive return.

One alternative way to achieve growth is resort to external arrangements like Mergers and Acquisitions, Takeover or Joint Ventures. External alternatives of corporate growth have certain advantages. In case of diversified mergers firm can use resources and infrastructure that are already there in place. While in case of congeneric mergers it can avoid duplication of various activities and thus can achieve operating and financial efficiency. In addition, economic circumstances of industries may also favour M&As. *Horizontal mergers in industries with excess capacity may be used to close the plants to bring capacities and sales into better balance. Firms in fragmented industries may become more effective when joined together*. (Weston, pp123)

Mergers and amalgamations can be further classified based upon the objective profile of such arrangements as Horizontal, Vertical, Circular and Conglomerate mergers. A horizontal merger is the combinations of two competing firms belongs to the same industry and are at the same stage of business cycle. These mergers are aimed at achieving Economies of Scale in production by eliminating duplication of facilities and operations and broadening the product line, reducing investment in working capital, eliminating competition through product concentration, reducing advertising costs, increasing market segments and exercising better control over the market. It is also an indirect route to achieving technical economies of large scale. For example merger of Tata Industrial Finance Ltd. With Tata Finance Ltd., GEC with EEC and TOMCO with HLL.

A vertical merger is one where companies at different product or business life cycle combines. It can be Backward Integration where company merges its suppliers or Forward Integration where it merges its customers. The basic motive of these sorts of merges is to reduce cost and dependence. Merge of Reliance Petrochemicals Ltd. With Reliance Industries Ltd. can be placed in this category. *In circular combination, companies producing distinct products in the same industry seek amalgamation to share common distribution and research facilities in order to obtain economies by eliminating costs of* *duplication and promoting market enlargement. The acquiring company obtains benefits in the form of economies of resource sharing and diversification* (Ansoff and Weston, 1962). Here we can cite the merger of BBLIL with HLL.

Conglomerate merger are the one where companies belongs to different or unrelated lines of business. The basic motive of these mergers are to reduce risk through diversification. It also enhances the overall stability of the acquirer and improves the balances in the company's total portfolio of diverse products and production processes. It also encourages firms to grow by diversifying into other markets. Diversification is a vital strategy for the firm when present market does not have much additional opportunities for growth. Here we can cite the example of Torrent group, which identified power as one of the growing field, acquired Ahmedabad Electric Company and Surat Electric Company in order to diversify the risk of its existing line of Pharmaceuticals business.

In the last two decade Merger activities in the world rose to unprecedented level. This reflects the powerful change force in the world economy. In fact this respond to the changes, which took place due to high level of technology changes, reduction in cost of communication and transportation that created international market, Increased competition, emergence of new industries, favorable economic and financial environment and deregulation of most of the economies also motivate Mergers..

Second set of factors that gave rise to these activities, relates to efficiency of operations. Economies of scale that reflects in cost reduction by avoiding duplicating works and operating efficiency, which is the result of combining complementary strength, are the other reasons. Different growth opportunity among different products, birth of new industries, and concept of value creation through specialization, under capacity utilization are the other forces. (J.Fred Weston and Samual C. Weaver, Page 3).

Mergers and takeovers are prevalent in India right from the post independence period. But Government policies of balanced economic development and to curb the concentration of economic power through introduction of Industrial Development and Regulation Act-1951, MRTP Act, FERA Act etc. made these activities almost impossible and only a very few M&A and Takeovers took place in India prior to 90s. But policy of decontrol and liberalization coupled with globalization of the economy after 1980s, especially after liberalization in 1991 had exposed the corporate sector to severe domestic and global competition. This had been further accentuated by the reversionary trends resulted in falling demand, which in turn resulted in overcapacity in several sectors of the economy. Companies started to consolidate themselves in areas of their core competence and divest those businesses where they do not have any competitive advantage. It led to an era of corporate restructuring through Mergers and Acquisitions in India.

The structural adjustment program and the new industrial policy adopted by the Government of India allowed business houses to undertake without restriction any program of expansion either by entering into a new market or through expansion in an existing market. In that context, it also appears that Indian business houses are increasingly resorting to mergers and acquisitions as a means to growth.

Apart from above mentioned motives like Synergy effect, Economy of scale, Improved profitability, Market power etc. there are numerous other qualitative and quantitative factors also that inspires firms to resorts to this route of corporate growth like to limit competition, utilization of under utilized capacity/ resources/ managerial skills, improved assets turnover, inventory turnover, reduction in consumer surplus, overcome the problem of slow growth and profitability in one's own industry, To establish a transnational bridgehead without excessive startup cost to gain excess to a foreign market, to circumvent Govt. regulations, empire building, to change P/E ratio favourbly etc.

P/E ratio is an important motive in this exercise, when P/E ratios of two companies are different. When a firm with high P/E ratio acquires another firm with low P/E ratio, the EPS of the buyer will increase. At the same time return to the target's shareholder also increases. Here it is assumed that the P/E ratio of the buyer will carry over to the combined firm. But, in real life P/E magic works in the short run only. In the longer run, the lower growth of the *seller (which was reflected by its low P/E ratio) will depress the earning growth of the buyer*. (Weston, pp88/90)

2. LITERATURE SURVEY:-

All the theories of mergers can be summarized into three categories. First category is the category of Synergy; it says that total value from the combination is greater than the sum of the values of individual firms. The second category (Hubris) says that total value from the merger is zero. This happens because of the mistake of the bidder to overpay for merger. Third category of merger theories says that total value from merger is negative. This is the result of the mistakes of the manager who put their own preferences above the well being of the firm.

*Several studies have been done on the relationship between M&As and performance of the company. Using a variety of financial measures (e.g. Profit, Stock price) and non-financial measures (e.g. firm's reputation) and time frame (e.g. pre-measurement and post-measurement, initial market reaction etc.). These studies show that on average, M&As consistently benefits the target's shareholders, but not the acquirer's shareholders. In fact, there are varying result with respect to the buying firm's performance. (*Schweiger, pp4)

There are two types of empirical studies on M&A performance. One is "Event Studies", by comparing share prices before and after the merger. Even though there are numerous studies but there results are consistent. The target firm's shareholders benefit, and the bidder firm's shareholders generally break even. The combined gain is mostly positive. Another type of empirical studies includes those which compares individual firm's profit few years before and after the merger. Results from these studies are more complex due to difference in methodology. For example, some studies concern absolute performance, while other concern relative performance. However a general conclusion is that most mergers reduce profitability.

One empirical study done on the basis of stock market prices in the US shows that around the announcement date of the transaction average return to target firms shareholders are about 30%. In contrast the shareholders of the acquiring firms generally show returns that range from slightly negative to modestly positive around the announcement date. M&A, however under perform their industry peers or shareholder value over a longer time horizon. Another empirical studies that concentrated on the efficiency measurement pre and post mergers revealed that changes in ownership are associated with significant improvements in total factor productivity.

Evidences suggest that M&A activities tends to benefit society because it results in an increase in shareholders value of both target and acquiring companies without increasing concentration. The increase in related to improve operating efficiency of the combined firms. (H.R. Machiraju, page 170). A study done by J. Fred Weston and Samual C. Weaver shows that around 50% mergers are successful in terms of creation of values for shareholders. Anslinger and Copeland (1996) studied returns to shareholders in unrelated acquisition covering the 1985 to 1995 and they found that in two third cases companies were failed to earn their cost of acquisition.

In 1993 Berkovitch and Narayanan conducted a study on the gain and concluded that total gains from M&A are always positive and thus can say that synergy appears.
Vin (1996) and Schwert conducted an event study for a period of fourty days prior merger to 40 days post merger and concluded that Merged firms were under performing than their industry counterparts. Healy, Palepu and Ruback (1992) studied post merger performance of 50 largest US merger between 1979-1984 for both operating and investment characteristic using industry adjusted technique and concluded that as a result of merger Assets turnover and Return on market value of assets improved but investment in capital goods and R&D expenditures not improved significantly.

In 1992 agarwal, Jaffe and Mandelkar also studied post merger performance of the companies with a different perspective. They adjusted data for size effect and beta weighted market return and found that shareholders of the acquiring firms experienced a wealth loss of about 10% over the period of five years following the merger completion. According to a study done by Loughran and Vijh (1997) for a period 1970 to 1989, five year buy and hold return for sample was 88.2% compared to 94.7% for their matching firms. This has a t-statistic of 0.96, which was not significant.

Berg, Duncan and Friedman (1982) conducted a comprehensive cross-firm and cross-industry analysis to measure the effect of joint venture activities on the performance of the companies and found ambiguous but positive short-term gains and insignificant long-term impact on profitability. They further noted that even short-term gains were negative for technological or knowledge-oriented acquisitions and were positive for production and marketing oriented acquisitions, because of increased market power leading to increased profit margins and efficiency gains. They further found that while short term gains depend on industry to industry, no industry (Out of 19 industries in their sample) show long-term significant gain.

Revenscraft and scherer (1986) found that on average Mergers and acquisitions made by over 450 US companies during 60-70s did not lead to an increase of market shares and profitability but instead they found declining performance for most companies. They also found that mergers did slightly worse than their industry peers at the time of acquisition, but results were clearly poorer after about 10 years from acquisitions. Odagiri and Hase (1989) found a growing number of Japanese firms engaging in mergers and acquisitions. However they found no evidence that in general profitability or growth improved significantly. Porter (1987) attempted to study this relationship in a slightly different way. He took rate of divestment of new acquisitions by companies within a few years as an indicator of success or failure. He found that about 75 percent of all unrelated acquisition in the sample was divested after few years and 60 percent of acquisitions in entirely new industry.

2. OBJECTIVE:-

Theoretically it is assumed that Mergers and Amalgamations improve the performance of the company. Because of Synergy effect, increased market power, Operational economy, Financial Economy, Economy of Scales etc. But does it really improve the performance in short run as well as long run. Various studies have already been done on this matter. All these studies are related to European countries or US market. I have not come across with any of such study in Indian context.

So I made an attempt to analysis the impact of M&A on the performance of the companies in Indian context.

3. METHODOLOGY

There are two different tests to measure merger gains-Product market test and Stock market test. The former measures the effect of mergers directly on consumers and indirectly on stockholders of merging firms. The later measures the effect of mergers directly on stockholders of merging firms and indirectly on consumers. There is a linkage between the two. Abnormal Stock returns are correlated with profit changes. This signifies that the stock market anticipates profit changes and adjusts accordingly.

To test the impact of Mergers on performance, there are various alternative ways. Like "Event Studies", where we compare stock prices of the firms a certain days before and after the mergers. Another way is "Regression Analysis", where we can take after tax rate of return as dependant variable and Size of the firm, rate of increase in capital stock, R&D expenditures etc. as independent variables. Third way is 'T-test: Paired two samples for mean' which I am going to use in this paper. I am selecting this test because so far we have studied this test and the data that will be required for this test is available with me.

In this paper I test impact of mergers on the performance of the company in terms of four parameters. ROCE, Economies of scale, Operating Synergy and Financial Synergy. I used T-test: Paired two samples for means'.

To test the impact I selected a sample of 40 companies (pre merger and resulting 19 companies after merger), which were merged during the financial year 2000-2001. Source for all databases is CMIE's PROWESS. Further, I take FY 1998-99 and 1999-2000 as pre-merger years and FY 2001-02 and 2002-03 as Post-merger years.

i. RETURN ON CAPITAL EMPLOYED

Here I test the overall impact of the mergers on the performance of the acquirer company (or amalgamated Company). For, ROCE, I take PBIT (Profit Before Interest and Tax) minus Tax. And to calculate pre merge ROCE, I used weighted Average. I first calculated weighted average ROCE for each year than I take simple average of two years Wt. Average ROCE.

Similarly I obtained Wt. Average ROCE for post merger. Thus I obtained two series of ROCE; one for Pre-merger and one for Post-merger.

When I run the 't-test' on this series I obtained following results. Mean (pre) is 14.41263 against the Mean (Post) 14.94895. While variance are 184.6018(pre) and 50.54995(post). I obtained statistic t-value –0.13844 against the critical t-value 2.100924. That shows that we can accept null hypothesis at 5% confidence level. In other words mergers did not improve the performance of the companies under study.

ii. TEST OF ECONOMIES OF SCALE HYPOTHESIS

Economy of scale refers to the cost reduction due to large number of units produced. Because there are various fixed cost involved in the operation and per unit cost component of such cost reduces when a firm produces more units. This economies of scale also arises because merger increases the size of the firm, so now firm become enable to get better terms and conditions on purchases i.e. ram material cost also decrease. For all these reasons, ' cost of production per unit' is taken as a measure of economies of scale. But due to unavailability of number of units produced, I selected ' cost of production to produce per rupee sale' as a measure.

When I run the t-test on the series (Average cost of production/ sale for the companies pre-merger and post-merger) I obtained t-statistic 0.40103 against the critical value of t 2.100924 at 5% confidence level. That shows that companies under study did not achieved economies of scale by merger.

iii. TEST OF OPERATING SYNERGY

It is assumed that merger improves the performance of the company, because it helps to avoid the duplication of tasks like duplicating Advertisement Expenses, Duplicating sales and Distribution expenses etc. This should results in decreasing operating expenses and increasing operating profit. To test this aspect I selected Operating Profit Margin as a criterion and take weighted average of each year and simple average of these wt. Average OPM to calculate pre and post OPM figures.

When I run the ‘t-test’ on this series, I obtained t-statistic –0.75494 against the table value 2.100924 at 5% confidence level. That proved that mergers do not even contribute in the operating synergy, for the sample under consideration.

iv. TEST OF FINANCIAL SYNERGY

Theoretically it is also assumed that mergers provide the financial synergy. According to Lewellen (1971), Higgins and Schall (1975), Galai and Masulis (1976) and Kim and McConnell (1977)- Mergers increases the debt capacity of the firm, especially in case of diversified mergers, where cash flows of the two companies are not positively correlated. This decreases lender’s risk and as a result cost of capital decreases. Financial synergy can also be obtained by reducing Interest or taking benefits of Tax shield and depreciation.

To test the financial synergy, I selected Net Profit Margin as a criteria and calculated Pre and Post Net Profit Margin in the same way I calculated OPM.

When I run t-test on this series, our results were totally opposite to the theoretical assumption. I obtained t-statistic –0.20972 against the critical t-value 2.100924 at 5% confidence level. That proved that mergers even do not contribute in achieving financial synergy.

5. CONCLUSION

This study proves that Merges have failed to contribute positively in the performance of the company, especially for the sample under consideration. It neither provides Economies of scale nor synergy effect. When I calculate overall impact (i.e. ROCE), mergers were failed to provide any positive contribution here also. In fact, these results are not surprising. They are in line with what I was expecting on the basis of literature survey.

But still here I would like to add one thing. There are numerous motives that motivate a company to enter in to merger activities. Some times these motives are qualitative and cannot be interpreted in to quantitative figures. Again, a merger may be effective or successful to deliver the immediate objective but may be failed to deliver all the theoretically defined benefits. So, it will be fallacious to assume, on the basis of this study, that overall mergers do not contribute any thing to the companies and it is a useless exercise.

6. LIMITATION

Although the results obtained through this study are acceptable in light of the previous study, yet there are few limitations of this study. And my discussion would not be complete if I do not list them here. These limitations includes; ***First***, my study included results of only two years which may not provide the true picture, especially in case of post merger results, because generally a merger activity takes around 6months to 2years to deliver results. ***Second,*** there are various other variable that should have been included in my study like: Assets turnover, Inventory turnover, Market power/Market Share, Cost of Capital, EPS, Rate of increase in capital stock etc., but due to the time constraint and non-availability of data I could not include them in my study. **Third**, Sample size should have been wider.

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ANNEXTURE: 1

LIST OF COMPANIES

S. No.	Target Company	Merged Company
1ABC	Motherson Automotives Technologies & Engineering Ltd. + Motherson Sumi Electric Wires Ltd.	Motherson Sumi Systems Ltd.
2AB	Alchemic Organics Ltd.	Aarti Industries Ltd.
3AB	Wartsilla Operations & Maintenance India Ltd.	Wartsilla India Ltd.
4AB	Hitech Drilling Services India Ltd.	Aban Lyod Chiles Offshore Ltd.
5AB	Karnataka Petrosynthese Ltd.	Gujarat Petrosynthese Ltd.
6AB	Varinder Agro Chemicals Ltd.	Abhishek Industries Ltd.
7AB	Futura Polymers Ltd.	Futura Polysters Ltd.
8AB	Zuari Leasing & Finance Corp. Ltd.	Zuari Industries Ltd.
9AB	Kanthal India Ltd.	Sandvik Asia Ltd.
10AB	J D Properties Ltd.	B L B Ltd.
11AB	Shrinivas Fertilizers Ltd.	Khaitan Chemicals & Fertilizers Ltd
12AB	Alstom Power Builders Ltd.	Alstom Projects India Ltd.
13AB	Mulberry Investment & Trading Co.	Camphor & Allied Projects Ltd.
14AB	Annapurna Foils Ltd.	Indian Aluminium Co. Ltd.
15AB	Ideaspace Financial Technologies (P) Ltd.	Ideaspace Solutions Ltd.
16AB	Gujarat Propack Ltd.	Cosmo Films Ltd.
17ABC	Sandeep Traders & Investments Ltd. + Stanrose Holdings Ltd.	Stanrose Mafatlal Lubecham Ltd.
18AB	Croydon Chemicals Works Ltd.	Glaxo Smith Kline Pharmaceuticals Ltd.
19AB	Cescon Ltd.	C E S C Ltd.

ANNEXTURE: 2

(Summarized results on Return on Capital Employed, Operating Profit Margin, Net Profit Margin and Cost of Production for per Rupee Sale)

	ROCE		OPM		NPM		COST/SALE	
COMPANY	PRE	POST	PRE	POST	PRE	POST	PRE	POST
1abc	24.4	21.5	5	12	8	7	0.79	0.74
2ab	20	22.4	11	11	5	7	0.92	0.81
3ab	18.73	22.6	6	8	5	6	0.82	0.77
4ab	41.8	12.32	19	26	16	5	0.41	0.49
5ab	9.35	2.14	9	13	7	2	0.72	0.62
6ab	9.15	11.49	5	12	-1	3	0.84	0.78
7ab	13.76	8.13	-2	-3	6	-2	0.87	0.85
8ab	7.95	8	2	1	0	1	0.86	0.85
9ab	13.5	16.91	7	5	3	5	0.79	0.79
10ab	28.78	7.4	81	42	47	12	0.11	0.43
11ab	15.83	6.1	8	2	4	-1	0.79	0.82
12ab	-29.15	27.75	-34	0	-36	7	1.12	0.84
13ab	10.5	9.75	7	4	5	4	0.8	0.86
14ab	10.53	13	8	8	7	9	0.71	0.85
15ab	19.5	22.35	18	16	4	7	0.39	0.34
16ab	11.85	23	3	19	-3	13	0.8	0.72
17abc	13.45	19.54	-2	5	0	3	0.69	0.76
18ab	25.44	14.25	8	12	10	7	0.73	0.7
19ab	8.47	15.4	3	13	-7	-2	0.82	0.75

(Sources of Data : CMIE PROWESS)