Analysis of Price Metrics in Post-Acquisition – A Case Study of Yahoo and Book Pad Acquisition

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Abstract- **Mergers is the combination of two companies to form one, while Acquisitions is one company taken over by the other. M&A is one of the major aspects of corporate finance world. The present study focus on analyze the changes in price matrix in pre and post-merger considering a study period of 5 years from 2013-2017. The methodology used both financial and statistical tool to proven the said objective. The study proven that high leverage position and it leads to negative profitability and the companies need to get the profitability leverage position.**

Index Terms- **Price metrics, P/E, P/S and Market Performance.**

1. INTRODUCTION

Mergers and acquisitions (M&A) are defined as consolidation of companies. Differentiating the two terms, *Mergers* is the combination of two companies to form one, while *Acquisitions* is one company taken over by the other. M&A is one of the major aspects of corporate finance world. The reasoning behind M&A generally given is that two separate companies together create more value compared to being on an individual stand. With the objective of wealth maximization, companies keep evaluating different opportunities through the route of merger or acquisition.

2. BACKGROUND OF THE CASE

Yahoo has bought Bangalore-based tech start upBook pad in a deal worth around Rs 50 crore ($ 8.3 million). Yahoo has so far bought over 100 companies. Earlier this month, Yahoo bought Luminate, a start up that focuses on advertising on top of online images. The company had also acquired mobile analytics firm Flurry in July. A person with direct knowledge to the ongoing talks told *ET*, "The deal is done. The team will be moving to Silicon Valley soon. Large firms like Autodesk and Dropbox were also eyeing Book pad." Book pad was founded just about a year ago by three youngsters – NikethSabbineni, Aditya Bandi and Ashwik Reddy – who passed out of IIT-Guwahati over the past three years. Book pad is competing with large companies like Google and Crocoduc in document viewing. Like Google Docs, Book pad enables customers create and format text documents online and also collaborate with other people in real time.

However, what differentiates the firm from global competitors, is that they allows enterprises to modify the product as per their needs and promote their brand. Book pad, currently has a team of eight people, earns revenue of around Rs 1 crore per annum and is focused on the US market. Bookpad pivoted its business model by focusing on enterprises rather than consumers. It bagged customers ranging from e-Learning firms to cloud storage companies. Last October when Bookpad made a pitch at the Nasscom product conclave, the Microsoft Ventures director Ravi Narayan got impressed and selected them for the company's accelerator programme.

According to the report, the talks started in May when Sabbineni met Yahoo officials during the InnoTrek trip, organised by industry body Nasscom, to the Silicon Valley in the United States. The trip saw 25 top innovative startups of India going to SIlicon Valley to absorb the tech culture there, and also to gain much needed exposure.

This acquisition makes BookPad the second Indian firm to be lapped up by a tech giant. In January, Bangalore-based Little Eye Labs became the first Indian firm to be bought by Facebook.

3. LITERATURE REVIEW

Mergers and acquisition have become common phenomenon in recent times. Mergers & Acquisitions (M&A) are the strategic growth devices in the hands of more and more Companies not only to stay in the competition but also to extend their margins, market share and dominance globally (Andreea Nicoleta, 2014). The development of mergers & acquisitions (M&A) is not an invention of recent times. The first appearance of M&A in a high frequency evolved at the end of the 19th century. Since then, cyclic waves are observed with different waves emerging due to radical different strategic motivations (Pradeep Kumar Gupta, 2012). To keep the head high in globalized economy one has to follow the path of growth, which contains various challenges and issues; one has to overpower these challenges and issues to become a success story ((Dr. K.A.Goyal and Vijay Joshi, 2012)). When considering the impact of mergers and acquisitions on the market value of shares, the authors study how the performance of the bidder institution or/and the target bank grows or remains the same (Rima Tamosiuniene and Egle Duksaite,). M&A's have many potential benefits, which mainly focus boosting profits and shareholder value through the economies of scale produced by increasing market share, the expended use of an existing distribution network by the acquisition of new products capabilities, the extension of a strong product capabilities into new markets and the diversification of products and market risks.

(Mehroz Nida Dilshad, 2012). Reasons behind decision to participate in M & A dealers Growth, Synergy and Access to intangible assets (Halen Anderson, 2003). The extensive literature on the implications of M&A produces mixed results regarding the merits of M&A on outcomes for specific stakeholder groups, with most attention going to shareholders (Sandra A. Waddock and Samuel B. Graves, 2006). Analysed on cost efficiency, economies of scale, and the scope of the Taiwanese banking industry, specifically focusing on how bank mergers affect cost efficiency, and concluded that bank merger activity is positively related to cost efficiency (Harari 1997). Acquiring-firm shareholders may suffer from overpayment, while target-firm shareholders may benefit in the short term, although some claim that the question remains unsettled. Some of the Reasons of Failure the mergers and acquisitions are Cultural differences,

Lack of Experience and Knowledge, External Environment and Over-optimism (Deepak Khazanchi, 2016)."Productivity and Operating Performance of Japanese Merging Firms: Keiretsu-related and Independent Mergers" examined the effects of M&As on the firms' OP using a sample of 86 Japanese corporate mergers between 1970 and 1994. The success of M&As was tested based on their effects on efficiency, profitability, and growth. The results reveal insignificant negative change in productivity, significant downward trend in profitability, significant negative effect on the sales growth rate, and downsize in the workforce after M&As (Ming and Hoshino 2002). In this study "The Performance of Merging Firms in Japanese Manufacturing Industry during 1964 – 1975" examined the financial performance of 49 merging corporate firms in the Japanese manufacturing industries over the period from 1964 to 1975. The study performance was tested on parameters, such as, profitability, efficiency, firm growth, and research and development Ikeda and Do (1983). Made an empirical study entitled "Takeovers as a Strategy of Turnaround" and analysed the implications of M&As from the financial point of view with the help of certain parameters like liquidity, leverage, profitability and more. They observed that if a sick firm is taken over by a good management and makes serious attempts, it is possible to turn it around successfully Sankar and Rao (1998). Carried out an analysis entitled "Operating Performance and the Method of Payment in Takeovers" wherein they investigated the relation between the method of payment, earnings management, and OP. The study depended on a sample of 959 M&As (mergers and tender offers) announced and completed between January 1985 and December 1997, where current and long-term accumulations have been separately used to detect any earnings management Heron and Lie (2002).

4. OBJECTIVES OF THE STUDY

To analyze the changes in price matrix in pre and post merger

5. RESEARCH METHODOLOGY

In research methodology it's a process of recognize the problem and solve it in systematic research

manner through collection of data, sampling design, financial tools and statistical tools to analysis the merger and acquisition.

5.1 Types of research:

Descriptive research:

It is used define the characteristic of population. The case is analyses it is focused on the descriptive research describe what, when, why, who and how. Its also evaluate through financial tools or performance of the company followed by this.

5.2 Sampling design:

Sl. no	Acquiring	Acquired	Types of activity	Deal value	Year of acquiring	Strategic motives
1	Yahoo	Book Pad	acquisition	50cr ore	22/09/2014	Yahoo emerged as a market-leading company in mid 90s and how it suddenly lost this position by the end of 2001. In order to fulfill this objective, this study firstly, audits various macro-environmental, micro-environmental, external and internal level factors with the help of some well-established analytical techniques.

The sampling design includes in the study sample size is collecting data of 5 years from the year

5.3 Sources of data:

The sources of data collected it is based on the secondary data regarding this topic.

Secondary data:

It is already existed information available in following likewise literatures, websites, newspaper journals articles etc.

5.4 Tools used for analysis:

i)Descriptive statistics:

In this tool it describe the features of the data in this study. They shows simple summaries about the measures and sample.

Simple or arithmetic average of a range of values or quantities, computed by dividing the total of all values, also called Arithmetic mean.

Standard deviation: It is a measure of the dispersion of a set of data from its mean. It is calculated as the square root of variance by determining the variation between each data point relative to the mean.

Kurtosis & Skewness

Skewness is a measure of symmetry, or more precisely, the lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the centre point.

Kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution.

ii)T-test – A t-test is an analysis of two populations means through the use of statistical examination; s t-test with two samples is commonly used with small sample sizes, testing the difference between the samples when the variance of two normal distributions are not known.

Financial tools –

Ratios – A ratio is a relationship between two numbers indicating how many times the first number contains the second. It is a quantitative analysis of information contained in a company's financial statements. Ratio analysis is used to evaluate various aspects of a company's operating and financial performance such as its efficiency, liquidity, profitability and solvency.

5.5 Hypothesis:

There is no significant change in price matrix in pre and post.

6. DATA ANALYSIS AND INTERPRETATION

The following study is to analyze of changes in leverage position of Suzlon-repower in pre and post-merger acquisition. The study consists the period from 2013 to 2017. The study used both statistical and financial tools.

Table no: 6.1   ratios

years	EV PER NET SALES	PRICE TO BOOK VALUE	PRICE TO SALES	PRICE/ NET OPERATING REVENUE	PRICE/CE	P/E
2017	15.14	4.13	5.33	5.33	00.13	19.87
2016	13.95	3.73	4.50	4.50	0.0014	20.64
2015	14.96	4.13	5.29	5.29	0.0016	22.47
2014	13.64	4.13	4.37	4.37	0.0013	17.35
2013	13.21	4.10	4.23	4.23	0.0016	21.57

From the above table, its shows that the EV Per Net Sales is increased from 2013 to 2017 0.5 and 1 points. The Price to book value is increased but in 2016 is decreased but next year it is increased again. In Price to Sales increased 3 years but in 2016 it is decreased then next year it has increased. In price/net operating revenue here also the ratios are increased yearly but in 2016 it is decreased again but in next year it is increased. In Price/CE is not goes increasing / decreasing it is fluctuated. In P/E is annually the values are fluctuated it is based on the Price and earing per share it is increased in 2013 and 2016.

Table no:6.2 Descriptive Statistical Tools:

Years	Mean	Standard Deviation	Sample Variance	Kurtosis	Skewness	Minimum	Maximum
2017	8.321667	7.515681	56.48546	-0.78291	0.83403	0.13	19.87
2016	7.8869	7.769245	60.36117	-0.05746	1.060137	0.0014	20.64
2015	8.690267	8.349889	69.72064	0.086052	1.047948	0.0016	22.47
2014	7.310217	6.658636	44.33744	-0.95467	0.804956	0.0013	17.35
2013	7.890267	7.985323	63.76539	0.680834	1.217856	0.0016	21.57

The above table mean range increased every year. In standard deviation range are not increased every year it is vary in every year. In Sample variance the range is increased every year except 2014 in that year the range is low. In kurtosis range is start with positive in 2013 but in 2017 it is negative value. In skewness every year the range is positive but the values are vary the negative values are not appears. In minimum the values are under the point something it is in positive. In maximum the values are either it is increasing in 2 years but rest of other years are decreased based on the range.

Table no: 6.3 One-Sample Test

Ratio	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
EVNET	16.18	4	8.53	1.618	1.34	1.89
EEVEBIT	15.07	4	0.00	12.33	10.05	14.60
EVMKT	6.98	4	0.00	0.84	0.50	1.17
EVPRI	6.98	4	0.00	0.84	0.50	1.17
EVS	5.40	4	0.00	1.2098	0.58	1.83

The above table 6.3 that represents the calculation of one sample t-test considering the study period of 5 years. The study found that, all the variables of T-test have both positive and negative values with the degree of freedom at 4. This table shows the mean differences of the company is very high in the EEVEBIT and the rest of ratios it shows low percentage of values but positive values. In EEVEBIT, the hypothesis (H0) is rejected and for that there is a significant changes in price matrix position 1 post acquisition of this firm and there is a statistically significant.

7. FINDINGS AND RECOMMONDATIONS

- Compared to 2013 to 2017, the company has increase its DER of 2.49
- In LTDER, the firm has increased its ratio of 1.24
- The mean of the firm has high positive values in the DER and LTDER

- The skewness of the firm is positively skewed in all the ratios except FCCOVT
- The company has the high maximum values in all the cases
- The degree of freedom is constant in all the cases
- There is a significant changes in leverage position in DER and LTDER in post-acquisition
- In T-Test, the DER and LTDER have the same values in both the cases
- The company should have the better capital structure to reduce its performance cost, because of the DER shows that cost incurred to the company.
- The firm should maintain an effective combination of debt-equity, to maintain a better leverage position.
- From the overall observations, the study found that high leverage position and it leads to negative profitability and the company need to get the profitability leverage position.

8. CONCLUSION

Mergers and acquisitions are played an important role in the modern days. From the above study, this concludes that there is a changes in leverage position in post-acquisition of the Suzlon-Repower in DER and LTDER. In all the descriptive variables, the mean, skewness, kurtosis are positively skewed and increased and there is a constant degree of freedom. Finally, this study concludes with the company has need to maintain an effective debt-equity and capital structure for the company to run their businesses smoothly and effectively.

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