IMPLICATIONS OF EVPM IN POST-ACQUISITION- A CASE STUDY OF HINDALCO TECHNOLOGIES PRIVATE LIMITED

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ABSTRACT: In present days, the concept of merger and acquisitions are more common and an important term for every business to reduce their risks and to get more profits with the different strategies. The purpose of this study is to know the impact of changes in hindalco pvt ltd of firm's profitability in post-acquisition of Hindalco by novelies private limited. The study used descriptive statistics and financial (mean, standard deviation, kurtosis and skewness) and T-test as the statistical tools and free cash flow to the firms as financial tool. The study period consisting the 4 years from 2014 to 2017.

1. INTRODUCTION:

Mergers and acquisitions are increasingly turning into key special for policy-making prosperity and performance of economic targets counting cash in, empire building, market control and longtime survival. The ultimate target of this one vital nice of inorganic growth is, on the other hand, inflation of shareowner meaning. The fact of rising M&A venture is observed here and there crosswise a range of tract, although, it has commenced so much in advance in matured countries (as beforehand as 1895 in US and 1920s in Europe), and is comparatively up to date in underdeveloped nations. In India, the true stimulant for improvement in M&A project had been the ushering of monetary reforms imported in the generation 1991, subsequent the monetary deadlock and successive fulfillment of anatomical regulation programmed through International Monetary Fund (IMF). In up to date times, regardless that the momentum of M&As has expanded moderately in India too and sundry varieties of the aforementioned one manmade prosperity planning come crosswise a range of monetary sectors. The course mergers and additions comes to varied activities of award profit and keep watch over of resources of other firms. Besides, you can find numerous motives for various forms of mergers and donations seen incorporate area. This learn about provides an figuring out of one's approach of mergers and returns beginning at activity and regulatory viewpoint and motives for mergers and gains.

2. BACKGROUND OF THE STUDY:

Hindalco industry is one of the main branches of the Adidtya Birla group. Its headquartered in Mumbai and is one of the largest producers of aluminum in the world. On the other hand, Novelis is Canadian company which has been the best in during 2007. Few years back, Hindalco acquired Novelis with an outstanding amount $5.73 billion.

NOVELIES

The noveles acquisition has done quite well for the fortunes has done as it has consistently generated cash, 2009-10, it generated 65 percent Rs 3000cr the percent cash flow. in 2011-12, it generated even more at 72 percent RS 5000crs

HINDALCO INDUSTRY

Apart from this, 2007 hindalco cost of acquiring the company - $6 billion RS 26400 cr – included $ 3.5 billion RS 15400 crs in cash and debts take over of $ 2.5 billion Rs 7600 crs to the parent

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3. LITERATURE REVIEW

Saple V. (2000), he found that the target firms were better than industry averages while the acquiring firm shad lower than industry average profitability. Overall, acquirers were high growth firms which had improved the performance over the years prior to the merger and had a higher liquidity.**Beena P.L (2000),** she attempts to analyze the significance of merger and their characteristics. The paper establishes that acceleration of the merger movement in the early 1990s was accompanied by the dominance of merger between firms belonging to the same business group of houses with similar product line.**Neena (2010)** examines the impact of mergers and acquisitions on the financial efficiency of the selected financial institutions during the period 2000-2008 in India. The objective of paper was examining the significant difference between the financial performance of the companies before and after the merger. The Wilcoxon signed rank test was used to compares the median of a single column of numbers against a hypothetical median. Study produced several interesting findings.

Mahesh focused on the performance of Indian Airline Companies after the consolidation of Airline sector in year 2007-08 in his paper "Post Merger and Acquisition Financial Performance Analysis: A Case study of select Indian Airline Companies". The main objective of this paper was to analyse whether the Indian Airline Companies have achieved financial performance efficiency during the post-merger& acquisition period specifically in the areas of profitability, leverage, liquidity, and capital market standards. **Kumara (2013)** in his research paper found that mergers & acquisition have a significant positive impact on the value creation to the acquired firms. The study shows that the liquidity positions of the merger and acquisition has improved but it is not statistically insignificant.

Abbas et al. (2014) results show that there was no significant difference in financial performance after mergers and acquisition. **Ahmed (2014)** the study concluded that overall financial performance of acquiring manufacturing corporations insignificantly improved in after merger period. The liquidity, profitability and capital position insignificantly improved while the efficiency deteriorated in after- merger period. **Berger and Humphery (1997)** in their study provide on extensive review on the efficiency of baking sector. They pointed out that majority of studies focused on the banking markets of well developed countries with particular emphasis on US market.

Lehto Eero & Bockerman Petri (2008) They focused cross border Merger and Acquisitions as well as domestic Merger and Acquisitions and analyzed the effect of employment of several different types of Merger and Acquisitions. **Hijzen Alexander et al., (2008)** studied the impact of cross border Merger and Acquisitions. The result suggested that aggregate trade cost affects cross border merger activity negatively, its impact differ importantly across horizontal and non-horizontal mergers. They also indicated that the less negative effects on horizontal merger, which is consistent with the tariff jumping agreement, put forward in literature on the determinant of horizontal FDI. **Müslümov Alövsat (2002)** examined the post-merger creates additional value and shows the improvement of bidder firm with price to book ratio, used non-parametric test as most suitable method of testing post-merger performance.

R. Srivassan et al., (2009) gave the views on financial implications and problem occurring in Merger and Acquisitions (M&As) highlighted the cases for consolidation and discussed the synergy based merger which emphasized that merger is for making large size of the firm but no guarantee to maximize profitability on a sustained business and there is always the risk of improving performance after merger. **Sinha (2016)**

4. OBJECTIVE OF THE STUDY:
➢ To Analyze and compare the changes in EV in post-merger period.

5. RESEARCH METHODOLOGY

5.1 Types of Research
- **Descriptive research :-**
  Descriptive research may be characteristics as simply the attempt to determine, describe or identify what is, while analytical research attempts to establish why it is that way or how it came to be.

5.2 Sampling design
- **Sample**

SL.NO	ACQUIRING	ACQUIRED	TYPE OF RESEARCH	DEAL VALUE	YEAR OF OCCURANCE	STRATEGIC MOTIVES
1	Hindalco industry	Canadian based company novelis	Acquisition	$5.73billion	2007	Hindalco was looking to manufacture finished products in mature markets of Europe.

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5.3 Sources of data
- **Secondary data:-**
  Secondary data is research data that has previously been gathered and can be accessed by researchers. The term contrasts with primary data, which is data collected directly from outside.

5.4 Tools for the study
- **Financial tools:-**
  Entrepreneur value price metrics financial data

The Ratios which are taken into consideration for the calculations are Adjusted Cash Margin, Net Profit Margin, Adjusted Net Profit Margin, Return on Capital Employed, and Adjusted Return on Net Worth, Current Ratio, Quick Ratio, Debt Equity Ratio, and Long Term Debt Equity Ratio.

Adjusted Cash Margin: Adjusted gross margin is a calculation used to determine the profitability of a product, product line or company. The adjusted gross margin includes the cost of carrying inventory, whereas the gross margin calculation does not take this into consideration. The adjusted gross margin, therefore, provides a more accurate look at the profitability of a product than the gross margin allows because it takes an additional costs out of the equation that affect the business bottom line.

Net Profit Margin: It is the ratio of net profits to revenues for a company or business segment. Typically expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit.

Return on Capital Employed: It is a financial ratio that measures a company's profitability and the efficiency with which its capital employed. It is calculated as ROCE= Earnings before interest and tax(EBIT) / Capital Employed.

Current Ratio:The current ratio is a liquidity ratio that measures a company's ability to pay short-term and long-term obligations. To gauge this ability, the current ratio considers the current total assets of a company (both liquid and illiquid) relative to that company's current total liabilities.

Quick Ratio: The quick ratio is an indicator of a company's short-term liquidity, and measures a company's ability to meet its short-term obligations with its most liquid assets. Because we're only concerned with the most liquid assets, the ratio excludes inventories from current assets.

Debt Equity Ratio: Debt/Equity (D/E) Ratio, calculated by dividing a company's total liabilities by its stockholders' equity, is a debt ratio used to measure a company's financial leverage. The D/E ratio indicates how much debt a company is using to finance its assets relative to the value of shareholders' equity.

Long term Debt Equity Ratio: The ratio is calculated by taking the company's long-term debt and dividing it by the book value of common equity. The greater a company's leverage, the higher the ratio. Generally, companies with higher ratios are thought to be more risky.

Adjusted Return on Net Worth: Adjusted net worth calculates the value of an insurance company, using capital values, surplus values and an estimated value for business on the company's books. It starts with the estimated value for business and adds unrealized capital gains, the capital surplus and the voluntary reserves.

5.5 Statistics tools:-

Mean:- the mean is the average you're used to, where you added up all the numbers and then divide by the number of number.

Standard deviation:- standard deviation is a measure of the dispersion of a set of data from its mean. Its calculated as   the square root of variance each data point relative to mean.

Kurtosis:- it is a measures of the tiredness of the probability distribution of a real valued random variables.

Skewness :- skewness is a term in statics used to describes asymmetry from the normal distribution in a set of statistical data. Skewness can come positive or negative skewness.

T-test :- a test is most commonly applied when the test statistic would follow a normal distribution if value of a scaling term in the test statistic were known.

5.6 Hypothesis

H0: There is no significant changes in EV in post-merger period.

6.   DATA ANALYSIS AND INTERPRETATION

The following study is to analyse the impact of changes in EVPM in post-acquisitionHindalco private limited. The study has consisting the period from 2013 to 2017. The study use both statistical and financial tools for data analysis and interpretation.

Table 6.1   calculation EVPM

YEARS	2013	2014	2015	2016	2017
EV/NET OPERATING REVENUES	1.54	1.96	1.57	1.35	1.67
EV/EBITDA	12.67	15.06	12.64	10.67	10.61
MARKET CAP/ NET OPERTAING REVENUES	0.67	1.05	0.77	0.53	1.18
PRICE/ NET OPERATING REVENUE	**0.67**	1.05	0.77	0.53	1.18
EV/ SALES	1.16	1.35	0.398	1.743	1.398

The above table 6.1 shows that the EVNET of the company is significantly decrease and increase in every year compared to 2013 to 2017, i.e. 1.54 to 1.67. The EEVEBIT of the company is also decreasing in every year from 2013 to 2017, i.e. 15.06 to 10.61. the EVMKT of the company degreese and increase in a 2013 to 2017 is 0.67 to 1.18. the EVPRI also decreasing ina 2013 to 2017 is 1.05 to 1.18. The company have EVS in a 2013 to 2017, i.e. 1.06 to 1.398.

Tables 6.2   descriptive research

Mean	2.73666667	3.06666667	2.772	2.78033333	2.74311111
Standard Error	1.26637497	1.51560952	1.28118569	1.05455341	1.02679367
Kurtosis	8.01395373	8.44200406	7.16154011	5.9624189	6.90741004
Skewness	2.78856433	2.88167102	2.61803997	2.34809408	2.59024939

Minimum	0.67	1.04	0.398	0.53	1.1
Maximum	12.67	15.06	12.64	10.67	10.61

The mean of the firm is frequently decreasing from 2013 to 2017, i.e.2.736 to 2.74311. The change in percentage of the firm is increased from 2013 to 2017, and in 2017 it has . The kurtosis is positively high from 2013 to 2014, and in 2017 it has negative value, i.e. (6.907). Skewness of the firm is positively skewed in 2014, 2015 and 2017, and in 2016, it negatively skewed. The minimum value of the firm is in 2014 and 2015 is 0.67, 2016 is 1.04 and in 2017 is 1.1. And the maximum value of the firm is in 2014 is 15.06, in 2015 is 12.64 and in 207 is 1.061

Table 6.3   T test

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
EVNET	16.184	4	0.001	1.618	1.3404	1.895
EEVEBIT	15.075	4	0.001	12.33	10.059	14.60
EVMKT	6.980	4	0.002	0.84	0.505	1.174
EVPRI	6.980	4	0.002	0.84	0.505	1.174
EVS	5.408	4	0.005	1.2098	0.588	1.830

The above table 6.3 the represents the calculation of one sample T test considering the study period of 2014 to 2017. The above table shows that all the variables of the t-test are positive. The degree of freedom of the company is constant, i.e. 4. The mean differences in all the descriptive are have highly positive values. In EVNT, EEVEBIT, EVMKT, EVPRI, EVS, the hypothesis (H_0) is rejected, and there is an impact of changes in EVPM of post-acquisition. And in CWCAP, it has more than the standard value, hence hypothesis is accepted, and there is no impact of EVPM in this case.

7. FINDINGS AND RECOMMONDATIONS

- Compared to 2014 to 2017, the EVNT of the firm is positively decreased year by year.
- The EVPM of the company is highly changes after the acquisition. And there is a highly decreased in it.
- The maximum value of the firm is also very decreased in 2014 to 2017
- There is a highly impact in EVPM of the firm after the acquisition
- There is a poor working capital in their business activities
- There is a negative impact in the working capital of the firm
- There is a huge difference in mean of the company, i.e. from 12574 to 5242
- The degree of the freedom is constant in all the cases
- In 2017, EVPM has the positive values, but when compared to 2014, it is highly decreased and the firm may not able to pay the interest and all to their investors
- The company is need to maintain their current assets and current liabilities to manage their day to day business activities properly.
- The company is need to select the best method of capital structure to pay the interest and dividends to their investors
- From the overall, the study observes that there is a highly negative impact in EVPM of the firm in post-acquisition

8. CONCLUSION

The concept of merger and acquisitions are an important part in the current world. The above study helps to know the impact of EVPM in post-acquisition in Hindalco technologies private limited. In this study, there is a negative impact of the EVPM in post-acquisition of NOVELIS by Hindalco private limited. The

company have to maintain an effective and best method of capital structure, to pay the interest and dividend to their investors and to run their businesses smoothly.

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