Operating Performance of Mergers and Acquisitions in Energy & Power Sector in India

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Abstract

Acquisitions are important corporate strategy actions that, among other things, said the firm in external growth and provide it competitive advantage. The focus of this research will be on whether performance, after the merger/acquisition, has been announced / completed, has been enhanced or has deteriorated as compared to before the event, and what the magnitude of this change is. In this study, the focus was on the mergers and acquisitions taken place in the Energy & Power Sector of India from the period 2008 to year 2012. The objective of the study was to compare the pre-merger and post–merger performance of companies in Energy and Power Sector. For the same, Du Pont Analysis was used to analyse the operating performance of the five companies from the mergers taken place in that period in energy and power sector. To find this study, we have used sampled paired T test on five companies to compare Return on Equity with Operating profit, Asset turnover ratio and financial leverage. Also, Du Pont Analysis was used to find the Return on equity of the acquiring firms. With the data of five companies in the energy and power sector, which had mergers and acquisitions strategy taken place in the given period, we have found that almost all company's ROE decreases post-merger , that is, does not provide satisfactory results(except JSW).

Keywords: Merger & Acquisitions, Energy & Power Sector, pre-merger, post-merger, Du Pont Analysis, Return on Equity.

Introduction

Acquisitions are important corporate strategy actions that, among other things, said the firm in external growth and provide it competitive advantage. Numerous scholars have carried out research on the performance of the acquired/merged firm. The focus of this research will be on whether performance, after the merger/acquisition, has been announced/completed, has been enhanced or has deteriorated as compared to before the event, and what the magnitude of this change is.

The presence of diverse and varied merger motives serves to highlight the inherent contradictions in any discourse on the performance of merged firms. Almost every aspect of successful performance stands a chance of contraindication by a negative outcome associated with the merger under scrutiny. The performance of merging firms has hence, for long, been an area of study, research and debate.

Mergers in Energy & Power Sector

The Indian Energy & Power Sector has had enormous merger and acquisitions taken place in the recent years, and is likely to have many such deals to be followed in the near future.

"Foreign investors have limited interest mainly in operational projects. They are not interested in taking over execution risk," said Sahil Garg, director-corporate strategy, at New Delhi-based credit rating agency India

Ratings & Research. "A lot of companies entered the power sector when the going was good, now they are trapped. Not all of them will find buyers" he said.

Literature Review

Most merger and acquisition (M&A) studies have examined only the short-term market reaction to merger announcements, leaving the issues relating to long-term operating performance unanswered. The below studies have tried to examine the performances of the acquiring company prior the merger and acquisition and also post merger and acquisition.

Jensen and Ruback (1983) studies on takeovers in corporates and review seven studies that show that the bidding firms' announcement-day abnormal returns can be explained by the method used to pay for the acquisition and the existence of long-term executive incentive plans. This research scientifically reviews various articles to find evidence which helped them conclude that corporate takeovers generate positive gains, that target firm shareholders benefit, and that bidding firm shareholders do not lose. The gains created by corporate takeovers do not appear to come from the creation of market power. This means that the corporate takeovers also improve managerial efficiency which benefits both the acquiring and acquired companies' shareholders.

Jarrell, Brickley and Netter (1988) studies on corporate takeovers and show that the bidding firms' announcement-day abnormal returns can be explained by the method used to pay for the acquisition, i.e., the acquiring firms payment through shares to the shareholders of the acquiring firm or payment through cash or such considerations determines the stock price change of such companies on such announcement days. This research review has confirmed the basic conclusions of Jensen and Ruback's (1983) review article.

Magenheim and Mueller (1988) examined the longer-term market reaction where it used event study methodology with a three-year post-takeover event window that found the stock market performance of the acquiring firms deteriorated over a 36-month period after the acquisition, which may suggest that the gains of target stockholders could simply be a transfer of wealth from the shareholders of the acquiring firm.

Ravenscraft and Scherer (1989) analysed the pre-merger profitability of acquisition targets and post-merger operating results for the years 1957–1977 and found that the financial performance of target firms deteriorated during the post-merger period compared to that of the pre-merger period. It used data on 2,732 lines of business operated by U.S. manufacturing corporations and it was also found that the acquired firms which were extremely profitable pre-merger had declined profitability post-merger. They used Galtonian regression to determine post-merger profitability. They found a huge decline and concluded that the reason could be control loss, as the divestiture rate was also high.

Herman and Lowenstein (1988) examined the post-takeover performance of hostile takeovers and found contradictory results for takeovers in different time-periods. These studies used primarily two accrual accounting variables, which could be affected by the accounting choices for consolidation of financial statements.

Healy, Palepu and Ruback (1992) examined post-merger performance using the "median operating cash flow return on actual market value for 50 combined target and acquirer firms in years surrounding mergers completed in the period 1979 to mid-1984" and found that "the merged firms have significant improvements in postmerger asset productivity relative to their industries leading to higher operating cash flow returns. There is a strong positive relation between post-merger increases in operating cash flows and abnormal stock returns at merger announcements, indicating that expectations of economic improvements underlie the equity revaluations of the merged firms." The study also found that "Although cash flow performance improves on average, a quarter of the sample firms have negative post-merger cash flow changes."

Methodology

Objectives of the Study

1. To measure the post-merger operating performance of Indian acquiring firms in Energy & Power sector.

2. To compare the pre and post-merger operating performance of acquiring firms in Energy & Power sector.

3. To provide suggestions based on the study.

Methodology and data collection:

The methodology aims at examining whether the financial performance of the acquiring firm really improves following mergers and acquisitions.

The company shall employ a financial tool and a statistical tool-

Financial tool:

In order to ascertain the sources of the better long-term returns subsequent to M&A, the measure of operating performance has been decomposed into its constituents in terms of Du Pont analysis. Du Pont analysis indicates that the profitability is improved either by improving profit margin per rupees of sales or by generating more sales revenue per rupee of investment.

Statistical tool:

To determine the significant difference over pre-and post-merger and acquisition, two-sample paired t- test has been conducted for each measure used in the study.

The null hypothesis for each test is that the mean level for the post-merger and acquisition period is not significantly different from the mean from pre-merger and acquisition period. A positive t-value indicates a higher mean value for post-merger and acquisition period and vice-versa.

The secondary sources of data have been used for the present study. The major sources are:

1. Annual reports of the company
2. National Stock Exchange (NSE)
3. Bombay Stock Exchange (BSE).

Data Analysis and Interpretation

Table 1

ROE (%)	Operating Profit (%)	Asset Turnover (%)	Financial Leverage (%)
8.572576998	10.09	100.60	8,444.59
13.38820963	13.97	92.75	10,330.98
9.72928384	10.46	59.49	15,630.66
6.197983501	7.84	90.84	8,699.02
6.126566799	5.90	115.13	9,022.93
6.504490554	5.66	116.52	9,864.08
p-values	0.212	0.000	0.000

Source: Authors' Research

Reliance Natural Resources Ltd (RNRL) merged with sister firm Reliance Power (R-Power) in a Rs 50,000crore (Rs 500 billion), all-stock deal in 2010.

From the above data, we can observe that the ROE of Reliance Power after the merger with RNRL has led to a constant decline in its ROE. Hence the merger strategy was not satisfactory as planned by the Reliance Power.

H0: There is no change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

H1: There is a change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

Confidence level: 95% ; $p < 0.05$

In the above case, in case of operating profit $p = 0.212 > 0.05$. We can say that 21.2% change in operating profit, causes a 1% change in ROE. Similarly a 0% change in asset turnover and financial leverage changes ROE by 1%.

As data is not statistically important, therefore we accept the null hypothesis.

Table 2

ROE (%)	Operating Profit (%)	Asset Turnover (%)	Financial Leverage (%)
10.12025836	29.73	72.79	4,676.41
7.313569188	27.35	74.24	3,601.54
7.80855958	27.62	32.08	8,812.64
7.839374629	27.73	31.68	8,923.37
4.423810592	27.57	32.77	4,897.66
5.872914797	32.68	34.70	5,180.19
p-values	.000	.005	.001

Source: Authors' Research

Oil and Natural Gas Corp. Ltd (ONGC) took control of Imperial Energy UK Based firm operating in Russia for the price of $1.9 billion in early 2009.

We observe that the ROE is ONGC was already decreasing before the merger and has continued to decrease post merger. Hence the merger did not result in a significant effect on the ROE. We can interpret that the company ROE starts increasing once the merger has settled within the company.

H0: There is no change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

H1: There is a change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

Confidence level: 95%; $p < 0.05$

In the above case, in case of operating profit $p = 0.000 < 0.05$. We can say that 0% change in operating profit causes a 1% change in ROE. Similarly a 0.5% change in asset turnover and 0.1% change in financial leverage changes ROE by 1%.

This means that data is statistically significant, and we reject null hypothesis and accept alternate hypothesis.

Table 3

ROE (%)	Operating Profit (%)	Asset Turnover (%)	Financial Leverage (%)
3.69053664	28.01	119.98	1,098.19
2.853732277	15.26	110.94	1,685.41
4.732556198	20.40	69.23	3,350.95
-4.54180183	-40.34	26.55	4,241.38
-0.52229443	-4.25	32.77	3,749.08
-1.42172335	-7.35	57.08	3,387.12
p-values	.900	.006	.002

Source: Authors' Research

Suzlon Energy Limited, a wind turbine supplier based in Pune, India acquired RePower, a German wind turbine company for $1.7 billion in 2009.

The merger led to change of ROE from a positive 4% to a negative 4%. Hence, we observe that the increasing

ROE before the merger decreases significantly after the merger and it doesn't seem to gain back to its original ROE in near future.

H0: There is no change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

H1: There is a change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

Confidence level: 95% ; $p < 0.05$

In the above case, in case of operating profit $p = 0.900 > 0.05$. We can say that 90% change in operating profit, causes a 1% change in ROE. Similarly a 0.6% change in asset turnover and 0.2% change in financial leverage changes ROE by 1%.

This means the data is not statistically significant, and we accept the null hypothesis.

Table 4

ROE (%)	Operating Profit (%)	Asset Turnover (%)	Financial Leverage (%)
1.582775609	10.99	93.25	1,544.00
1.640778955	9.70	100.44	1,683.49
2.064556609	10.82	119.58	1,596.31
1.921736173	5.30	116.98	3,102.50
1.786865034	7.89	76.33	2,967.94
1.603053136	6.32	86.71	2,923.58
p-values	.001	.000	.001

Source: Authors' Research

Tata Chemicals Ltd, India's largest soda ash maker acquired the US-based General Chemical Industrial Products Inc (GCIP), among the top five global soda ash producers with interests in mining, for $1.005 billion in2008.

The ROE of Tata Chemicals is not much affected by the merger as the ROE before and after the merger is almost the same.

H0: There is no change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

H1: There is a change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

Confidence level: 95%; $p < 0.05$

In the above case, in case of operating profit $p = 0.001 < 0.05$. We can say that 0.1% change in operating profit causes a 1% change in ROE. Similarly a 0% change in asset turnover and 0.1% change in financial leverage changes ROE by 1%.

This means that data is statistically significant, and we reject null hypothesis and accept alternate hypothesis.

Table 5

ROE (%)	Operating Profit (%)	Asset Turnover (%)	Financial Leverage (%)
1.057650438	36.33	21.29	1,367.03
0.516246456	35.68	21.03	688.00
0.539989634	22.89	34.79	678.01
0.605487638	15.52	55.09	707.94
0.367354654	10.38	50.96	694.29
0.606414439	15.71	56.73	680.57
p-values	.004	.002	.001

Source: Authors' Research

JSW acquired Himachal Baspa Power Company for Rs.9275 crore in 2012.

JSW is the only company in the sample whose ROE has increased after the merger. Therefore we see the merger has provided the satisfactory results as expected and interpreted by the company.

H0: There is no change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

H1: There is a change in ROE due to change in operating profit, asset turnover ratio and financial leverage.

Confidence level: 95% ; $p < 0.05$

In the above case, in case of operating profit $p = 0.004 < 0.05$. We can say that 0.4% change in operating profit, causes a 1% change in ROE. Similarly a 0.2% change in asset turnover and 0.1% change in financial leverage changes ROE by 1%.

This means that data is statistically significant, and we reject null hypothesis and accept alternate hypothesis.

Conclusion

The above study showed us that mergers and acquisitions taken place in the energy and power sector are only a good strategy to increase its market share or enter into a new market. A lot of foreign companies invested in the Indian power sector as it was easy means of entrance in the Indian power sector. The findings suggest that mergers and acquisition strategy does not increase the shareholders' value, which means that the return on equity has decreased post-merger, showing significant fall in the magnitude of the sample companies taken into consideration.

To conclude, mergers and acquisitions in energy and power sector is a strategy to not earn higher profits but are to get entry into energy and power sector market. Also, the profits do not increase in future years hence decreasing the shareholders' value and its return on equity invested.

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