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An Analysis of the Impact of Merger and Acquisition of Corus by Tata Steel

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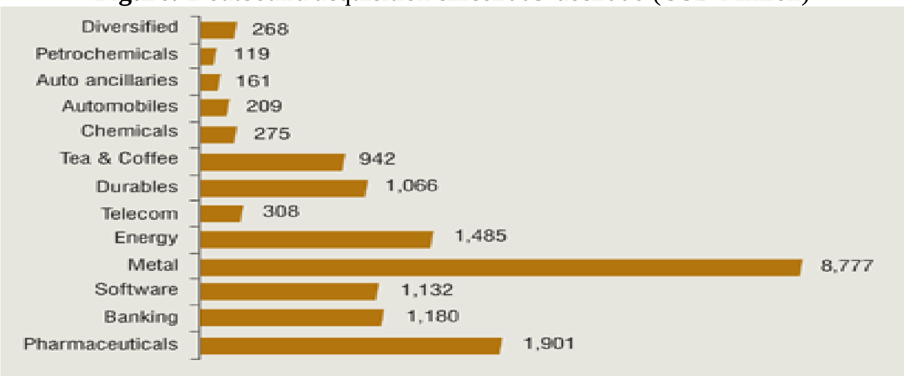
Abstract: *Merger and Acquisition have became exclusive trend in steel industry globally since the beginning of the 21st century. Corporate integration in the corporate world is accomplishing significance and concentration especially with an exciting undertaking of intense globalization. This is the clear evidence from the importance and increasing growth of deal values and resulted with more corporate integration in recent times. These studies examine the key motive drivers and evaluate the impact of mergers and acquisition in steel industry on event study approach. This event study focused on Tata steel – Corus Acquisition during the year 2007. The study used a published financial statement which consists of secondary data. The financial statements are analysed and tested by using correlation co-efficient and t- test. The outcome of the analysis disclosed that there is a significant difference between pre – post merger and acquisition in capital base and level of returns. There is a significant difference between pre – post merger and acquisition EPS. The finding of this study evolves those synergies, increased capitalization with the proof of changes in returns, profitability based on the research findings. It can be summarized that the corporate integration has increase the organizational performance also contributed to the growth of the steel industry.*
Keywords – *Mergers and Acquisitions, Profitability, EPS, Steel Industry, Key drivers*

I. INTRODUCTION

Tata being the winner. As driven by slow growth and substantial profits in the steel industry. Corus asset sale may lift the Tata steel earnings. Tata steel had acquired British largest steel maker Corus for 608 pence per share. It is one of the striking acquisition in 2006, to propose Tata steel from the 56th to the 6th – largest steel maker in the world. A long term gap between their delivered performance of the firm and the strategic plan projected gap was in terms of size, sales and Income. Acquisition could fill the gap (J Fred Weston and Samuel C. Weaver 2002). However, companies can seek for genuine synergies through financial engineering.

Figure: 1 outbound acquisition since2005-dec2006 (USD Million)

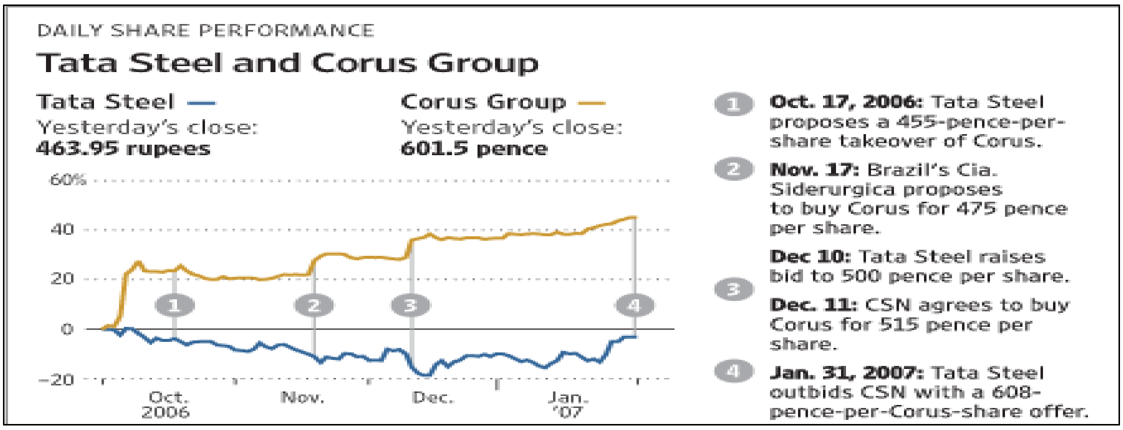


The merger of Tata steel and Corus will result to a saving of $400 million to the company after 3 years of corporate integration.

- Long term strategy
- Strong base in India
- De integrated manufacturing
- Technology advantage
- Economies of scale

- To enter European mature market
- Cost of acquisition is less than setting up a new industry
- Acquiring the holding of Corus through patents and R & D facilities
  The main reasons for Corus to be sold
- Increase in cost of production
- Corus revenue was $18.06 billion, profit was only just $626 million but incase of Tata , the total revenue is $4.84 billion and profit was $824 million
- Target with low cost high quality raw material from India.
- A chance to bailout of debt and financial distress(chapter 11)

Figure: 2



Source: Thomson DataStream

To a large extent, corporate integration is based on a belief that earnings accrued through reduction cost, increase market share, reduction in earning volatility, and sale of economies. However, the main features of the compassionate of reforms inductive mergers and acquisitions of Tata and Corus industry creates potential of realizing efficient gains

The total value of the Tata – Corus acquisition amounted to £6.2 billion (US $ 12 billion). Tata steel declares a bid of 608 pence per share to go beyond the final bid from Brazilian steel maker "Compuhia siderurgica Nacional (CSN) of 603 pence per share. Proceeding of the deal negotiations, both the Tata and Corus were interested to create a corporate bondage by entering into an merger and acquisition deal due to the diversified reasons.

Table no: 1 Comparison of Tata and Corus in pre acquisition period

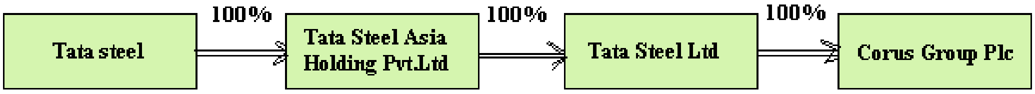
Particulars	Corus(in Rs billions)			Tata steel (in Rs billions)		
Years	2006	2005	2004	2006	2005	2004
Assets	582.7	533.9	487.8	205.5	117.0	147.9
Debt	98.1	105	96	45.9	42	39.9
Liabilities	231.3	178.4	155.5	30.5	33.1	32.7
Revenue	760.5	699.9	596.5	202.4	159.9	111.2
Net income	33.9	33.5	-22.9	37.2	36.03	17.8

Table No: 2 Economies of Corus Acquisition

Particulars	Tata Steel	Corus	Combined
Sales($mill)	5007	19367	24374
EBITDA($mill)	1480	1962	3442
Net profit ($mill)	840	861	1701
Crude steel Production ($mill)	5.3	18.2	23.5
Market Capitalisation ($mill)	6510	8227	14737

Tata steel acquires Corus completely in April 2007; Tata steel manages to win the acquisition to CSN and has the voting right support from the Corus share holders

Figure No: 3 Deal combined group structure of Tata financed



II. THEORITICAL BACKGROUND

Cornell and Tehranian (1992); Switzer (1996); Ghosh (2001) found merger and acquisition firms shows significantly increase in operating performance. Pawaskar (2001) found that the share holders of the acquirers companies increased their liquidity performance after the mergers and acquisitions. A mergers and acquisitions occur when two or more companies connect together, often to share and reduce cost, increase the efficiency or market share. Merger and acquisition frequently assigned to as a tool for exploring and expanding one's business or get around different legal framework such as tax or monopoly regulations. Ross and Westerfield(2002).id debatable issue for all state holders, academicians and for researchers. The purpose of this research paper is to find the rational for merger and acquisition in terms of management incentives, post merger and acquisition value creation and steel industry position of the entity merger and acquisition between Tata steel and European steel giant Corus.

Many studies have been done made on the effects of corporate integration on their share prices, share holders wealth. There is no conclusive evidence of life after acquisition. So the study helps to understand and evaluate the performance by analyzing the value creation through pre and post merger and acquisition study.

III. REVIEW OF LITERATURE

A deal that dies at the due diligence stage almost always dies for the right reason. In most of the merger and acquisition, the target has a choice, and negotiations may even be taking place in the context of structured action. Before deciding on tactics, therefore, acquires should assess their advantages and disadvantages relative to their potential bidder HBR (2001).Rao and Sankar (1997)examine that a positive effect on the liquidity, leverage, and profitability of the bidder firms. Other studies have also showed a positive impact on financial performance Hitt, Harrison and Best (1998)

In accordance with empire building theory (The Hubris Theory), managers may derive both financial and non financial benefits in proportion to the size of the business units they manage; this provides a strong intensive to increase firm size by merger and acquisition and places managers in conflicts with shareholders interest. Rau and Vermalen (1997) has investigated that the determinants of poor performance of the bidding firm after acquisition and concluding that firms having low boo to market ratio in general make poor decisions regarding merger and acquisition. However, higher profitability of the firm being acquired is found to be existing pre and post merger and acquisition Acharys (2000). Clear and factual communication among the employees of the acquiring and acquired firms is very crucial to increase their productivity which will resultantly have positive impact on performance of firms during or even after merger and acquisition Appelbaum etal (2000)

IV. RESEARCH METHODOLOGY

The approach for examination of value creation of both bidder and target around the announcement of an offer and includes both successful and unsuccessful merger and acquisition. The three hypothesized statements tested using correlation co-efficient and T- test.

Hypothesis

Based on the research gap areas from literature review, the following hypothesis is tested.

$H_{0:}$ there is no significant difference between pre merger and acquisition equity capital base and Profit after Tax.

$H_{0:}$ there is no significant difference between post merger and acquisition equity capital base and Profit after Tax.

$H_{0:}$ there is no significant difference between pre and post merger and acquisition earning per share.

Mode Specifications

Correlation co-efficient = $r = \frac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{[N(\sum x^2) - (\sum x)^2][N(\sum y^2) - (\sum y)^2]}}$

The T- test is used to determine the prior and post performance of an activity.

$$t = \frac{\sum d}{\sqrt{\frac{N(\sum d^2) - (\sum d)^2}{N-1}}}$$

Decision Rule

If the profitability (the level of significance) of the t calculated is less than 5%, we accept the alternative hypothesis and otherwise, we should accept the null hypothesis.

V. DATA ANALYSIS

Hypothesis: 1

Table No-3

There is significant difference between pre merger and acquisition equity capital base and Profit after Tax.

Pre-Merger and Acquisition

	Capital(X)	PAT(Y)	x^2	y^2	X y
1	3184.81	1012.31	10143014.73	10247714.54	3224015.01
2	4515.86	1746.22	20392991.53	3049284.29	7885685.05
3	7059.92	3474.16	49842470.4	12069787.7	24527291.66
4	9755.3	3506.38	95165878.09	12294700.7	34205788.81
5	13949.04	4222.15	194575716	17826550.62	58894939.24
	∑x =38464.93	**∑y = 13961.22**	**$\sum x^2$ = 128737719.77**	**$\sum y^2$ =370120071.65**	**∑xy =46265094.85**

Correlation co-efficient = r = $\dfrac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{[N(\sum x^2) - (\sum x)^2]\,[N(\sum y^2) - (\sum y)^2]}}$

$\dfrac{5(46265094.85) - (38464.93)(13961.22)}{\sqrt{[5(128737719.77) - (38464.93)^2]\,[5(370120071.65) - (13961.22)^2]}}$

$\dfrac{643688598.85 - 537017350.014}{\sqrt{[1850600358.25 - 1479550839.9]\,[231325474.25 - 194915663.88]}}$

$\dfrac{106671248.836}{\sqrt{[371049518.35]\,[36409810.37]}}$

$\dfrac{106671248.836}{116231848.5}$

Hypothesis: 2

R^2=	0.918

Table No-4

There is significant difference between post merger and acquisition equity capital base and Profit after Tax.

Post- Merger and Acquisition

	Capital(X)	PAT(Y)	x^2	y^2	X y
1	27300.73	4687.03	745329858.53	21968250.22	127959340.53
2	29704.65	5201.74	882366231.62	27058099.03	154515866.09
3	37168.75	5046.80	1381515976.56	25470190.24	187583247.50
4	48266.43	6865.69	2329648264.94	47137699.18	331382345.79
5	52216.46	6696.42	2726558694.93	44842040.82	349663347.07
	∑x =194657.02	**∑y = 28497.68**	**$\sum x^2$ = 8065419026.58**	**$\sum y^2$ =166476279.49**	**∑xy =1151104146.98**

Correlation co-efficient = r = $\dfrac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{[N(\sum x^2) - (\sum x)^2][N(\sum y^2) - (\sum y)^2]}}$

$\dfrac{5(1151104146.98) - (194657.02)(28497.68)}{\sqrt{[5(8065419026.58) - (194657.02)^2]\,[5(166476279.49) - (28497.68)^2]}}$

$\dfrac{5755520734.9 - 5547273465.71}{\sqrt{[40327095132.9 - 37591355435.2]\,[832381397.45 - 812117765.38]}}$

$\dfrac{208247269.19}{\sqrt{[2435739697.7][20263632.07]}}$

$$\frac{208247269.19}{222164202.9}$$

R^2=	**0.937**

Hypothesis: 3
Table No-5
There is significant difference between pre and post merger and acquisition Earning per Share

T-Test

	Pre EPS	Post EPS	D	D^2
1	27.53	63.85	36.32	1319.14
2	47.48	69.70	22.22	493.73
3	62.77	56.37	-6.4	40.96
4	63.35	71.58	8.23	67.73
5	72.74	68.95	-3.79	14.36
			D=56.58	**D^2=1935.92**

$\sum$**d** = 56.58 /5 =**11.32**

$$t = \frac{\sum d}{\sqrt{\dfrac{N(\sum d^2) - (\sum d)^2}{N^2(N-1)}}}$$

$$t = \frac{11.32}{\sqrt{\dfrac{5(1935.92) - (11.32)^2}{5^2(5^2-1)}}}$$

$$t = \frac{11.32}{\sqrt{\dfrac{5(1935.92) - (11.32)^2}{25(24)}}}$$

$$t = \frac{11.32}{\sqrt{\dfrac{9679.6 - 128.14}{25(24)}}}$$

$$t = \frac{11.32}{\sqrt{\dfrac{9551.46}{600}}}$$

$$t = \frac{11.32}{\sqrt{15.9191}}$$

$$t = \frac{11.32}{3.99}$$

t =	**2.84**

Degree of freedom = N-1 = 5-1 = 4 at 5% level of significance The tabulated values 2.776, since this value is lesser than the computed value above 2.84, therefore reject the null hypothesis and accept the alternative hypothesis.

Figure No: 4 Return on capital employed post period performance

Figure No: 5 Interest coverage ratios based on capital base

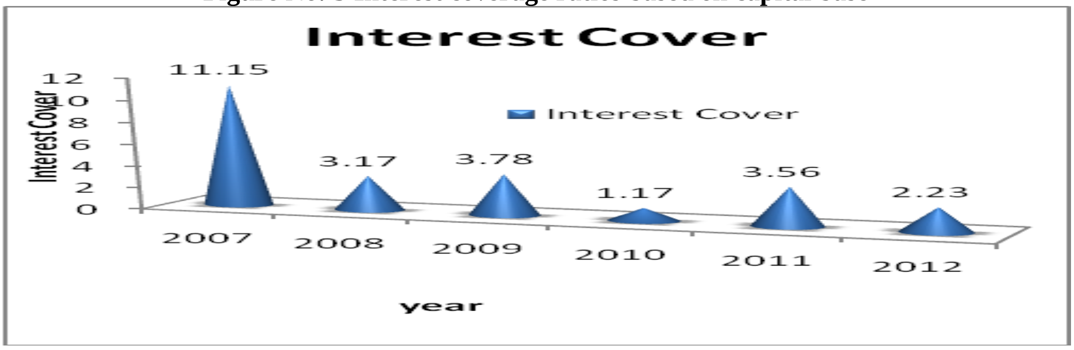
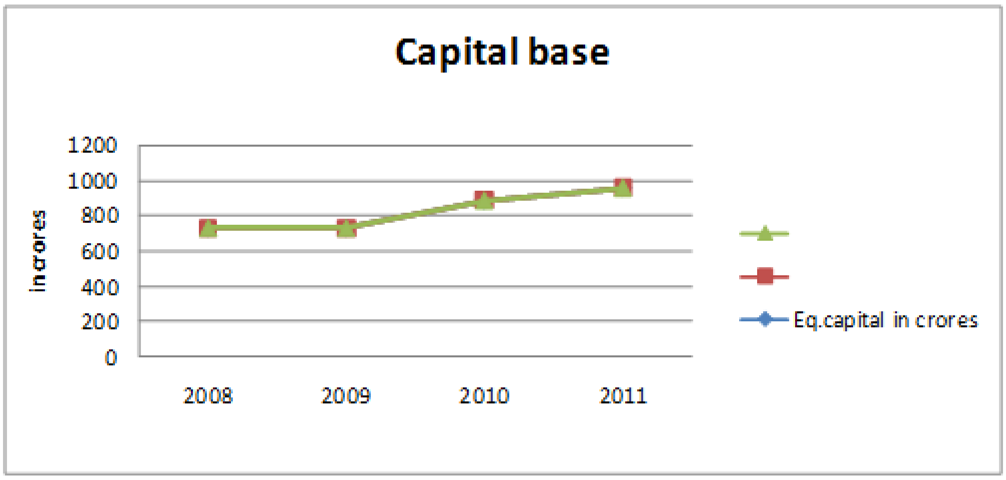


Figure No: 5 Interest coverage ratios based on capital base



VI. Findings And Suggesstions

The study findings are reviewed as follows

i. Corporate integration of Tata and Corus has consequently increased the capital base.
ii. Aggregate steel industry capacity of around 28.1 million tones.
iii. In May 07 earning before interest tax and depreciation of 13%, 25 million tones of production also ranked 5th.
iv. 2012 earning before interest tax and depreciation of 25%, 40 million tones of production and ranked 2nd.
v. Recapitalization was made possible as a result of corporate integration.
vi. Mergers and acquisitions , has significantly affected 5the earning per share of investors

VII. CONLUSION

The results of the study shows that evident hypothesis, the research study conclude that merger and acquisition of Tata and Corus with respect of profitability, performance, turnover, capacity, economies of scale and enhanced control. This study of impact of merger and acquisition on value matters resulted with positive influenced in profitability, capital base, dividends and earnings for share holders. This is a positive characteristics for strong future. There will be a lot of potential synergies in terms of sharing of best practices across the companies

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