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A POST-MERGER IMPACT STUDY ON FINANCIAL PERFORMANCE OF ACQUIRER – WITH RESPECT TO TATA STEEL

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ABSTRACT

Corporate restructuring and financial engineering are the prerequisite for the organization to be a leader in the globally competitive world. Expansion and diversification are most phenomenal corporate strategy to attain economic viability and competitive edge in the business world. For this they take some strategic decision like merger & acquisition. TATA steels have created a history and acquired four times bigger Corus in 2007 at \$12.15 billion (around Rs. 55,000 cr.) to become 5th largest producer of the world. It aimed to deliver increased \$350 million profit by improved efficiency in production, integrated raw material procurement and marketing of steel and shipment of low-cost basic steel from Jamshedpur for finishing and value addition at the Corus mills. This corporate decision was a big challenge for the acquirer organization. The objective of this paper is to assess the impact on financial performance of the company after 14 years the acquisition of the Corus and its impact on its business. For the analysis, financial data from 2007 to 2021 has been collected to assess liquidity, profitability, solvency, and shareholder's wealth of the company. A combination of descriptive, Regression and t-test has been used to analyze the performance. The result showed that due to huge liability initially organizational group performance was not that much in favor but after 14 years company have significant impact of this merger. The group performance of the company in some segment has increased due to asset integration. This will provide a strategic decision model to the other small and midcap companies to execute this kind of strategic restructuring and reinforce their position in this competitive world.

Keywords: Mergers and Acquisitions, Corporate Restructuring, Financial Performance, Ratio Analysis, Altman 'Z' Score

1. INTRODUCTION

A company may grow organically, or inorganically. The objective of the firm in either case is to maximize the wealth of the existing shareholders. Most corporate growth occurs by internal expansion, which takes place when a firm's existing divisions grow through normal capital budgeting activities. Corporate Restructuring is a broad array of activities that expand or contract a firm's operation which modify its financial structure in organizational structure and financial functioning. It includes mergers, purchases of business units, takeover, and acquisition of the companies.

Corporate Restructuring via mergers, takeovers, divestitures etc., has become a major force in the changed financial and economic environment across the world (Nathan et.al, 1991). It has raised important issues both for business decisions as well as for public policy formulation. There are various economic and institutional factors which motivates for merger and acquisition decisions (Khemani, 1991). On the positive side, M&A may be critical to the healthy expansion of business firms as they evolve through successive stages of growth and development. Through M & A strategies weak business units can turnaround in a profitable unit (Sanker and Rao, 1998). The successful entry into new geographical markets by a firm requires M&A at some stage in the firm's development. The successful competition in international markets depends on capabilities obtained through mode of entry. Earlier, M&A activity was an insignificant part of capital flows to developing countries through FDI, but after 1990s economists started to think via M&A significantly and share of M&A activity in total FDI grown over time. However, the growing share of FDI in total capital flows directed to developing countries, coupled with the increase

in the share of M&A in FDI flows, have incited economists to study more carefully the behaviour as well as the determinants of such activity. The existing literature focusing on the aggregate M&A activity in developing countries is almost non-existent. There are several reasons for this, most of which are related to the availability of data and the way M&A are reported and organized.

Mergers and Acquisition in India

Mergers and Acquisition is playing an important role in the growth of the business whether it belongs to any business. In Indian history, this type of strategic decision has taken from pre-liberalization. In earlier stage of development there were incident of acquiring British companies by Indian companies for the sake of ownership or to have control on management. There were several cases of mergers and acquisitions in banking, stock market companies, insurance, manufacturing etc.

In the past many mergers and acquisition deal has been reported among steel companies. Most of them were successful deals. TATA-Corus deal was also one of the biggest deal that happened in India. This deal was completed in April 2007 after the many phases of negotiations between the two companies.

Table 1: Status of Tata and Corus before acquisition (2006-07)

Items	Assets	Debt	Liabilities	Revenue	Net Income
Company					
TATA Steels (Rs.in billions)	205.5	45.9	30.5	202.4	37.2
Corus (Rs.in billions)	582.7	98.1	231.3	76.5	33.9

Source: Kumara and Satyanarayana (2013)

Table 1a: Economic Status of Tata and Corus before acquisition (2006-07)

Items	Sales	EBITDA	Net Profit	Crude Production	Steel	Market Capitalisation
Company						
TATA Steels (\$in millions)	5007	1480	840	5.3		6510
Corus (\$ in millions)	19367	1962	861	18.2		8227

Source: Kumara and Satyanarayana (2013)

2. REVIEW OF LITERATURE

An extensive review of present literature has been carried out in order to enhance the level of understanding in the area of mergers, gain insight into the impact of mergers on the financial performance of acquirer and target companies and formulate research problem for further investigation in this area. For the purpose of this study, review has been done based on few empirical studies in books, journals, published papers, etc.

Cheng et.al (1989) found that the purchase price is a negative function of the target's capital- to- asset ratio. The only variable used in their model is the ratio of acquirer-to-target assets. This study provided a greater consideration of bidder related variables, used multiple proxies for certain theoretical determinants of merger pricing, and used principal components regression to control potential multi-collinearity problems. Ruhani and Gupta (1999) examined the prospective drives and effects of corporate takeovers in Malaysia. The Muller's methodology, which involves the use of accounting measures like size, growth, profitability, risk and leverage, is opted for the study to analyze the performance characteristics of takeover firms in the pre & post takeover periods.

Beena (2000) has analyzed the significance of mergers and their characteristics. He found that in the early 1990s those business was rushing to the merger which were belongs to the same business group or houses with similar product lines. Husain (2000) explained that takeovers (hostile or non-hostile) may be advantageous to the shareholders if they are able to reveal the hidden value of Target Company. Trumps (2001) found that success of M&A depends on appropriate amalgamation of employees, organization culture, IT, products, operations and service of both the companies. Accurate IT integration in mergers plays a critical role in determining how effectively merged organizations are able to incorporate business processes and people, and deliver products and services to both internal and external customers of the organization. Pawaskar (2001) examined the impact of mergers on corporate performance. He made comparison between pre- and post-merger operating performance of the corporations involved in merger between 1992 and 1995 to identify their financial characteristics. This study recognized the profile of the profits. By the regression analysis he explained that there was no increase in the post- merger profits. The study of a sample of firms, restructured through mergers, showed that the merging firms were at the lower end in terms of growth, tax and liquidity of the industry. The merged firms performed better than industry in terms of profitability.

Kaur (2002) has tested the efficacy of select financial ratios to envisage corporate takeovers in India. Mantravadi and Reddy (2007) studied the impact of mergers on the operating performance of acquiring corporate in different periods in India, after the announcement of industrial reforms, by examining some pre- and post-merger financial ratios, with chosen sample firms, and all mergers involving public limited and traded companies of nation between 1991 and 2003. He found that there are minor variations in terms of impact on operating performance following mergers in different intervals of time in India. There has been deterioration in performance and returns on investment in case of merger occurred between the same groups of companies in India, Selvam (2007) has analyzed the implications of stock price reactions to mergers and acquisitions activities taken place in banking industry with special reference to private and public sector banks. The author has found that the share prices are market sensitive. From the financial analysis it was observed that majority of the banks went for branch expansion, and this has affected profitability to some extent, and it resulted in unhealthy competition among the players.

Indhumathi, Selvam and Vanitha (2007) analyzed the financial performance of the merged companies, share price reaction to the announcement of merger and acquisition and the impact of financial variables on the share price of merged companies. The author found that the merged company reacted positively to the merger announcement and also, few financial variables only influenced the share price of the merged companies. Vanitha and Selvam. M (2007) observed the pre- and post-merger performance of Indian manufacturing and found that the overall financial performance of merged companies in respect of variables were not significantly different from the anticipations. Sinha and Gupta (2011) have found that leverage and profitability indicators were important before and after merger in case of Indian financial services.

Meena (2014) has discussed global perspective of Indian organisations' which involved in M & A strategies to have business leadership in their respective segments. Author also discussed the major factors like overpayment, integration issues, cultural differences, loss of customers and lack of strategic planning & unskilled execution which were reason for the failure of M & A decision. This also leads financial distress to the acquirer firm. He (2017) has discussed that factors like government policies, ownership structure, industry competitiveness and regional market were the promoting factor for the M & A of chinese firms. Toly et. al (2019) has discussed about the financial distress on the indonesian public listed manufacturing companies with the help of altman 'z' score. He find out that few financial parameter are responsible for financial distress of the the firms. Some times M & A create huge liability on the acquirer firm. If this liability has not managed strategically it may lead to financial distress to acquirer firm.

Conclusively, many contributions have offered different perspectives of merger in different industries worldwide and explained the history of merger, valuation techniques followed by merging companies, and its effect on shareholders wealth.

3. OBJECTIVES OF THE STUDY

From the review of many excellent research papers and articles analyzing the pre- and post-merger performance of merged companies, it is inferred that majority of the studies strongly support the concept of enhanced post-

merger performance due to merger and it is beneficial to the acquirer companies. This research paper has been designed to focus on the case study of TATA-Corus deal. Tata acquired Corus, the largest steel producer in the U.K, in April 2007 for a price of \$12 billion made Tata Steel the world's fifth largest steel producer. Though Corus was four times bigger than TATA, but operating profit of TATA steels was \$840 million, whereas of Corus, it was \$860 million in the year 2006.

The objective of present research paper is to evaluate: (1) Analyzing the driving factors behind the acquisition which motivated TATA to bid for this acquisition, (2) Post Merger performance of TATA after TATA-Corus deal, and (3) post-acquisition impact with the help of financial analysis This study found mixed result, some aspect of performance shows positive effect while some are indicating negative performance.

4. RESEARCH METHODOLOGY

4.1 Data Set

Source of Data: This study is based on secondary data collected from the various years Annual Reports of TATA-Steel, published Research Reports by various industries and research organization, books, periodicals and business dailies.

Period of the Study: This study is mainly anticipated to examine the financial performance of merged company's post fourteen years of merger i.e., 2007 -2021.

Tools used for Analysis: This study has analyzed the financial performance of TATA-Steel. In order to evaluate the financial performance, ratio analysis along with descriptive, 't' test and two stage regression model have been used. to evaluate the effect of this event paired t-test has used and to define the strength of this association regression has used. For this purpose, data were collected, tabulated and analyzed with the help of SPSS20.

Hypothesis of the Study:

Hypothesis Based on the research gap areas from the literature survey, the following research hypothesis has been tested:

H₀: The post-merger financial performance of the combined firm is not significantly different from the aggregate performance of the TATA-Steel prior to the merger.

H_a: The long-term post -merger financial performances significantly changed in the post -merger period of the TATA-Steel.

Parameters of the Study

In order to test the validity of the null hypothesis- "The merged manufacturing company TATA-Steel achieve better liquidity, better solvency, improve profitability and growth in shareholder's wealth after the merger." The following parameters have been selected to test the results of post-merger periods (average of fourteen years).

Table 2: Performance Parameters			
Parameters	Financial Ratios	Formula	Literature Support
Liquidity	Current ratio	Current Assets/Current Liabilities	Kumar and Rajib, 2007a; Leepsa & Mishra, 2012; Srivastava & Srivastava,2014
	Quick ratio	Quick Assets/ Quick Liabilities	(Kumar and Rajib, 2007a); Leepsa & Mishra, 2012; Srivastava & Srivastava, 2014
	Net Working Capital	(Current Assets - Current Liabilities) / Sales	(Kumar and Rajib, 2007a); Leepsa & Mishra, 2012; Srivastava & Srivastava, 2014
Solvency Ratio	Debt To Equity (DE)	Total Debt/Total Equity	Srivastava & Srivastava, 2014
	EBITDA/Turnover (ET)		Srivastava & Srivastava, 2014
	Interest Coverage Ratio (ICR)	Earnings before interest and taxes (EBIT)/Interest	(Kumar and Rajib, 2007a; Kumar and Bansal, 2008); Leepsa & Mishra, 2012; Srivastava & Srivastava, 2014
Profitability	Operating Profit Margin (OPM)		Srivastava & Srivastava, 2014
	Net Profit Margin (NPM)		Srivastava & Srivastava, 2014
	Return on Capital Employed (ROCE)	EBIT/Capital Employed	Kumar, 2009; Leepsa & Mishra, 2012; Srivastava & Srivastava, 2014;Kandžija et al. 2014
	Return on Worth	Profit after Tax /Net Worth	Saboo and Gopi, 2009; Leepsa & Mishra, 2012; Srivastava & Srivastava, 2014; Kandžija et al. 2014
Shareholders' Funds	Earnings Per Share (EPS)	Total Market Value of Share/Total No. of Shares	Srivastava & Srivastava, 2014; Kandžija et al. 2014
	P/E Ratio (PE)		Srivastava & Srivastava, 2014; Kandžija et al. 2014

**Authors' compilation*

4.2 Altman Z-Score Model

Edward I. Altman in 1968 has developed Altman Z-Score model by the sampling of 66 manufacturing companies.

Through this we can assess company's financial distress situation with 95% prediction accuracy

This research applied the modified Altman Z-Score model with the following equation:

$$Z = 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4$$

Where:

X_1 =Net Working Capital/Total Assets (NWCTA)

X_2 =Retained Earnings/Total Assets (RETA)

X_3 =Earnings before Interest and Tax/Total Assets (EBITTA)

X_4 =Book Value of Equity/Total Liability (BVETL)

Based on the Z-Score calculation, the companies were classified with the following criteria:

1. Z-Score < 1.1; financial distress situation of the company in coming year
2. Z-Score = 1.1 to 2.6; business is belonged in the grey area.

3. Z-Score > 2.6; business is not experiencing financial distress.

Altman Hypothesis:

- H1: NWCTA has a positive effect on company’s financial distress
- H2: RETA has a positive effect on company’s financial distress.
- H3: EBITTA has a positive effect on company’s financial distress.
- H4: BVETL has a positive effect on company’s financial distress

5. ANALYSIS, INTERPRETATION AND DISCUSSION

In the year 1999 Corus group emerged out due to deal between British Steel and Koninklijke Hoogovens. This Anglo-Dutch merger was intended to revive the bedridden British Steel which had incurred a net loss of £81 million (Dutt, 2016). This deal didn’t help because organization was suffering by many issues like much as rationalization, labor unrest, cultural mismatch, absence of clear leadership, severe lack of communication between departments, low morale of labor force, poor productivity and poor organizational culture. These issues replicated in the company's financial performance. The market value of Corus dropped from \$6 billion (1999) to \$230 million (2003). Due to this drop Corus seek out a buyer. Many companies, including Arcelor Mittal and TATA Steels joined into this bid option. TATA Steel became successful to finalize biggest foreign acquisition by any Indian company till date and merged Corus into TATA Steel for \$12 billion deal in 2007. Steel was at the peak of its cycle and Tata Steel paid 608 pence a share, a premium of 34% to the original offer price to ward off a challenge from Brazilian miner and steelmaker CSN. For CSN, however, it might have been different because of the raw material support. Save for one good year, Corus has remained a problem for Tata Steel. The steel market started deteriorating from the second half of 2008-09, and the company went for restructuring. The fact that there were three CEOs since acquisition didn't help.

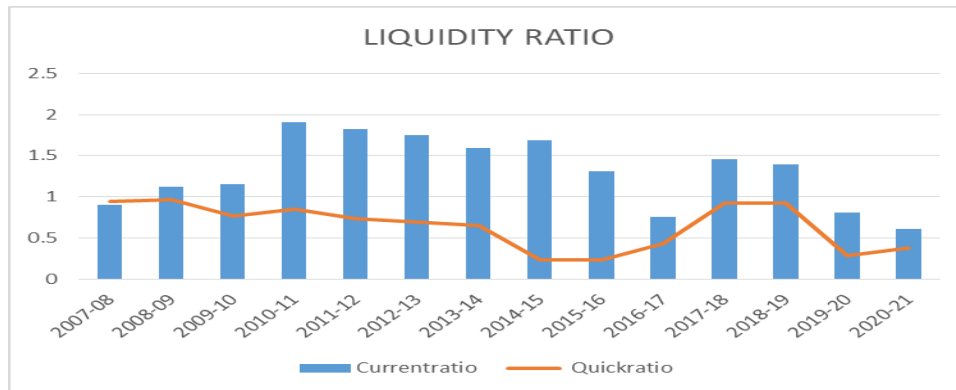


Figure 1: Liquidity Ratio

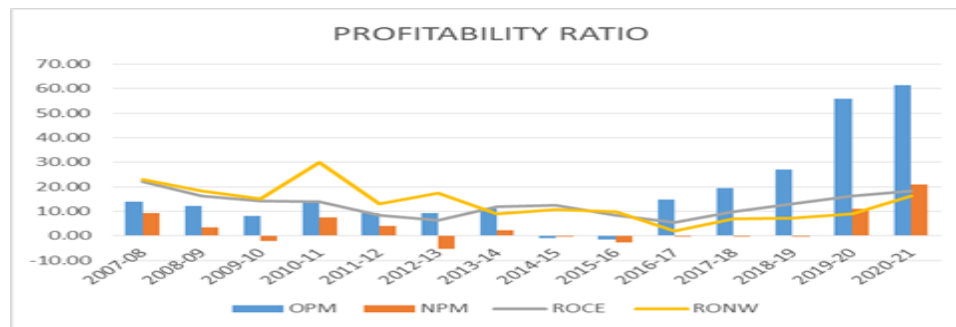


Figure 2: Profitability Ratio

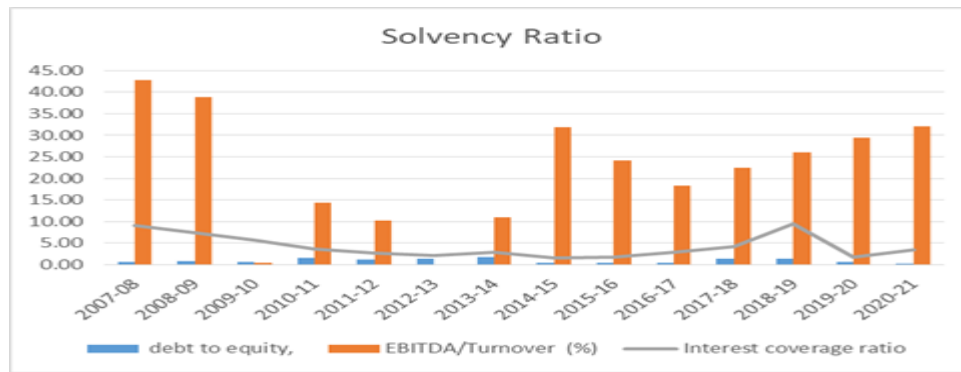


Figure 3: Solvency Ratio

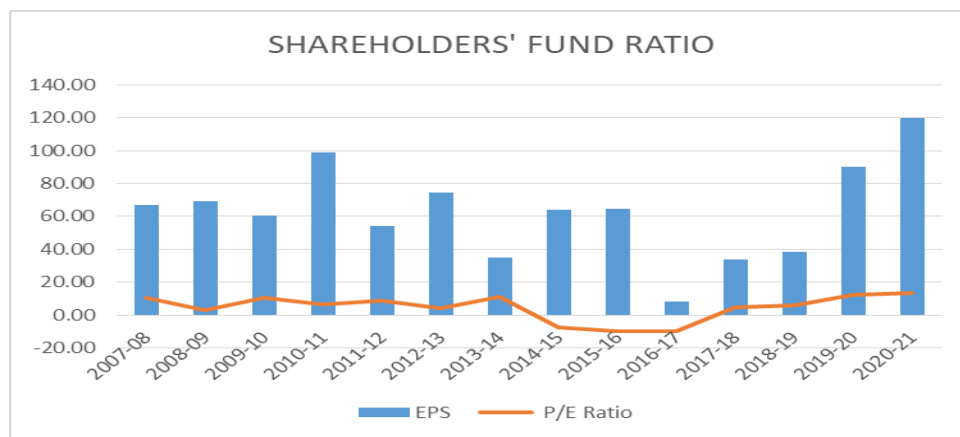


Figure 4: Shareholder's Fund Ratio

Model I

For the study of post-merger performance of the company, consolidated data of the acquirer company has used. The normality has tested for post-merger data series by using Kolmogorov Smirnov test. For all the series were normal so 't'-test has been used to test the post-merger performance of the company.

Financial Ratios	Post-Merger	't'-Value	p-Value	Hypothesis Result
Current Ratio	1.305	11.516	0.000	Accepted
Quick Ratio	0.645	8.661	0.000	Accepted
Net Working Capital	5453.424	2.279	0.040	Accepted
Debt to Equity,	0.932	6.884	0.000	Accepted
EBITDA/Turnover (%)	23.752	7.513	0.000	Accepted
Interest Coverage Ratio	4.170	5.767	0.000	Accepted
EPS	62.808	8.143	0.000	Accepted
P/E Ratio	4.539	2.134	0.052	Accepted
Operating Profit Margin	8365.901	1.472	0.165	Rejected
Net Profit Margin	3.471	1.895	0.081	Rejected
ROCE	12.657	10.185	0.000	Accepted
Return on Net Worth	13.371	6.895	0.000	Accepted

Source: Author's compilation; * Significant at 5%

Table 4 shows significant result of all the financial parameters except for operating profit margin and net profit margin. After the 14year of merger operating profit margin (t=1.472, p=0.165 > 0.05) and net profit margin (t=1.895, p=0.081 > 0.05) of the acquirer is still insignificant. The average earnings of the company became almost half of the pre-merger, but it was not significant for the company. In case of interest coverage ratio after merger averagely it became 1/5th of the pre-merger but it does not show the impact on the capacity of the company to meet its liability. This merger activity resulted the wealth maximization opportunity for the shareholders of the company. The market price of the company’s shares increased 1.5 times and earnings per share has also increased in the same proportion while average Price earnings ratio decreased somewhat. The overall change in the status of shareholders remained unchanged. The change in profitability of the company remained insignificant. Only there is the significant change in operating profit margin of the company after merger. It has decreased after acquisition of the firm. The reason may be to manage all liability arising after merger.

Hypothesis regarding performance of the company after the merger is accepted i.e., there is no change in the performance of the company after this event. The liquidity, leverage, profitability, and shareholder’s funds remained unchanged.

Model –II

Model –II helps to estimate post- merger (POST-M) data of the companies. Here ROSHF has been used for Return on shareholder’s funds.

$$\begin{aligned}
 \text{ROLF}_{\text{POST-M}} &= \alpha + \beta_1 \text{CR} + \beta_2 \text{QR} + \beta_3 \text{NWC} + \epsilon \\
 \text{ROPF}_{\text{POST-M}} &= \alpha + \beta_1 \text{OP} + \beta_2 \text{NPM} + \beta_3 \text{ROCE} + \beta_4 \text{RONW} + \epsilon \\
 \text{ROSE}_{\text{POST-M}} &= \alpha + \beta_1 \text{DE} + \beta_2 \text{ET} + \beta_3 \text{ICR} + \epsilon \\
 \text{ROSHF}_{\text{POST-M}} &= \alpha + \beta_1 \text{EPS} + \beta_2 \text{PE} + \epsilon
 \end{aligned}$$

Table 5: Post-Merger Liquidity Performance								
Explanatory Variables	Statistical Value							
	Coefficient	't'-Value	p-value	F-statistic	p-value	R ²	Adjusted R ²	Durbin-Watson Coefficient
Constant	8.829	3.156	0.10	9.961	0.002	0.749	0.674	1.325
Current Ratio (CR)	0.041	0.234	0.820					
Quick Ratio (QR)	-0.378	-2.273	0.046					
Net Working Capital (NWC)	0.708	4.080	0.002					

Source: Author’s compilation, * Significant at 5%

Table-5 shows the result of linear regression analysis of estimated model for the company. Interest coverage ratio was negatively significant while net profit margin also has significant change throughout the period. Current ratio shows insignificant change. This liquidity ratio has significant impact on the performance of the firm as a whole. Post-merger it has been observed that net profit margin and current ratio have shown opposite association with same independent variable i.e. liquidity of the firm. But interest coverage has negative impact on the liquidity of the firm as a group performance. The performance of these measures as standalone TATA Steel India is performing well throughout the period. All the liquidity variables have some percentage of collinearity (1.325) among the variables. They also influence each other and shows overall impact on the liquidity performance of the firm. F-statistics (f =9.961) is significant (p=0.002 < 0.05) and this model is around 75% (74.6%) fit for the variables. Below mentioned equation shows the quantitative regression (r) score of the TATA Steels after 14 years of merger.

$$\begin{aligned}
 \text{ROLF}_{\text{POST-M}} &= \alpha + \beta_1 \text{CR} + \beta_2 \text{QR} + \beta_3 \text{NWC} + \epsilon \\
 &= 8.829 + 0.041 \text{CR} - 0.378 \text{QR} + 0.708 \text{NWC} + \epsilon
 \end{aligned}$$

Table 6: Post-Merger Profitability Performance

Explanatory Variables	Statistical Value							
	Coefficient	't'-Value	p-value	F statistic	p-value	R ²	Adjusted R ²	Durbin-Watson Coefficient
Constant	13.365	5.388	0.000	7.858	0.005	0.777	0.678	2.199
OPM	0.000	1.946	0.084					
NPM	0.091	0.411	0.691					
ROCE	-0.247	-1.137	0.285					
RONW	-0.301	-2.0538	0.032					

Source: Author’s compilation, * Significant at 5%

Table 6 reflects the linear regression result of profitability performance of the firm post-merger. Only RONW shows significant change and hypothesis got accepted. But due its impact on the profitability performance of the firm do not show significant change in the post-merger performance of the firm. OPM, NPM and ROCE have insignificant p-value in the result. So, hypothesis got rejected. It means that these profitability parameters-OPM, NPM and ROCE have shown significant change in the profitability performance of the TATA Steels as a group. ROCE and RONW have negative association with profitability and have overall negative impact on the profitability performance of the company as a whole. All the profitability variables have high percentage of collinearity (2.199) among each other. F-statistics (f = 7.858) is significant (p=0.005 < 0.05) and this model is around 78% (77.7%) fit for the variables. Below mentioned equation shows the quantitative regression (r) score of the TATA Steels as a group after 14 years of merger.

$$\begin{aligned}
 \text{ROPF}_{\text{POST-M}} &= \alpha + \beta_1 \text{OP} + \beta_2 \text{NPM} + \beta_3 \text{ROCE} + \beta_4 \text{RONW} + \epsilon \\
 &= 13.365 + 0.00 \text{OP} + 0.091 \text{NPM} - 0.247 \text{ROCE} - 0.301 \text{RONW} + \epsilon
 \end{aligned}$$

Table 7: Post-Merger Solvency Performance

Explanatory Variables	Statistical Value							
	Coefficient	't'-Value	p-value	F statistic	p-value	R ²	Adjusted R ²	Durbin-Watson Coefficient
Constant	9.183	2.122	0.060	0.564	0.651	0.145	-0.112	0.303
DE	-0.064	-0.202	0.844					
ET	0.143	0.435	0.673					
ICR	-0.370	-1.197	0.259					

Source: Author’s compilation, * Significant at 5%

Table 7 shows post-merger solvency performance of the firm. All the parameters are insignificant. So, hypothesis got rejected. DE and ICR were negatively associated, and ET was positively associated with post-merger solvency performance of the firm as a performance of whole group in across border. This result shows that DE, ET and ICR have impact on the solvency of the firm in long-term. All the solvency parameters have low percentage of collinearity (0.303) among each other. F-statistics (f = 0.564) is insignificant (p=0.651 > 0.05) and this model is around 14% (14.5%) fit for the variables which is not good to present the model. Below mentioned equation shows the quantitative regression (r) score of the TATA Steels as a group

after 14 years of merger. It has been observed from the FY22 financial statement of the TATA Steels that EBITDA of the TATA steels group has been continuously increased as compared to TATA Steel India. The same scenario has been observed in the other solvency parameters too.(TATA Steels FR, 2022)

$$ROSF_{POST-M} = \alpha + \beta_1 DE + \beta_2 ET + \beta_3 ICR + \epsilon$$

$$= 9.183 - 0.064 DE + 0.143 ET - 0.370 ICR + \epsilon$$

Table 8: Post-Merger Shareholders’ Wealth Performance

Explanatory Variables	Statistical Value							
	Coefficient	t'-Value	p-value	F-statistic	p-value	R ²	Adjusted R ²	Durbin-Watson Coefficient
Constant	7.270	2.398	0.035	0.039	0.962	0.007	-0.173	0.069
EPS	0.007	0.149	0.884					
PE	-0.049	-0.279	0.786					

Source: Author’s compilation, * Significant at 5%

Table 8 shows post-merger shareholder’s wealth performance of the firm. All the parameters are insignificant. So hypothesis got rejected. PE was negatively associated, and EPS was positively associated with post-merger shareholder’s wealth performance of the firm as a performance of whole group in across border. This result shows that EPS and PE have impact on the shareholder’s wealth in long-term. All the shareholder’s wealth parameters have low percentage of collinearity (0.069) with each other. F-statistics (f = 0.039) is insignificant (p=0.962 > 0.05) and this model is around 0.7% fit for the variables which is not good to present the model. Below mentioned equation shows the quantitative regression (r) score of the TATA Steels as a group after 14 years of merger.

$$ROSHF_{POST-M} = \alpha + \beta_1 EPS + \beta_2 PE + \epsilon$$

$$= 7.270 + 0.007 EPS - 0.049 PE + \epsilon$$

Model-II : Altman ‘Z’-Score Analysis

Table 9: Post-Merger Altman ‘Z’-Score Analysis

Test	2020	2021
Z-Score	1.61	1.53

*Author’s Compilation

Table-9 reflects the Z-score to assess the future financial distress situation for the sample company (TATA-Steel Group). As z-score lies in between 1.1 to 2.6. It shows the grey financial condition for the company. If company remains successful to increase its earning and shareholders’ equity value by reducing their liability, then it may not face financial distress situation in company. As per this prediction the merger company has strategically managed their debt and other liabilities.

6. CONCLUSION

The above study shows that the merger of a giant steel company into another giant company increases the size of the company. This deal created a milestone for the company and increases its efficiency and productivity. After the acquisition of Corus, TATA became heavily indebted because of leverage buyout. This is clearly reflected on its profitability measures. Due high debt borrowings the market was suspicious on the success of this event. In spite of this the owner of the company was totally confident on the potential and synergies of this merger which were proven a strong competitive decision. In long-term liquidity, solvency, profitability as well as shareholder’s fund have increased. It made effective impact on the company’s overall performance. It has also given clear indication to reform their policies of merger and acquisition. TATA steels performance as a

group across border and in India, at both front is continuously increasing. Many reports have been signaling that this deal may have negative impact on the overall performance of TATA steels group. But in long-term TATA Steels group have proved that their financial restructuring decision was very much visionary.

REFERENCES

- Annual Reports of TATA–Steel (2000-14), Accessed at May 25, 2015
- Beena, P L. (2000). An Analysis of Mergers in the Private Corporate Sector in India. *Centre for Development Studies*, Thiruvananthapuram, Working Paper No 301.
- Canagavally, R. (2000). An Evaluation of Mergers and Acquisitions. M.Phil Dissertation (Unpublished), Pondicherry University, Pondicherry. retrieved on May 20,2015
- David, Cheng C, et. Al. (1989) Financial Determinants of Bank Takeovers. *Journal of Money, Credit and Banking*, 21(4), 524- 536.
- Edward, A. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy, *Journal of Finance*, 589-609.
- Gupta, P. S. (2011, June). *Mergers and Acquisitions: A pre-post analysis for the Indian Sector*. Retrieved June 04, 2015, from <http://mpr.ub.uni-muenchen.de/31253/>
- He, J. (2017). Study on deviation of policy of Merger and Acquisition of Steel Industry. *International Journal of Science*.4(4). 182-188
- Huzaifa, Husain. (2000). M & A: Unlocking Value. *Chartered Financial Analyst*, 4(6), 65-66
- Julia, Liebeskind et.al. (1992). LBOs, Corporate Restructuring, and The Incentive- Intensity Hypothesis. *Journal of Financial Management Association*, 21(1), 73-86.
- Khemani, R.S. Recent Trends in Merger and Acquisition Activity in Canada and Selected Countries. Paper presented at the Investment Canada Conference, Corporate Globalization through Mergers and Acquisitions, Toronto, November 1990 retrieved on May 30, 2015
- Kumara Manoj and Satyanarayana . (2013). An Analysis of the Impact of Merger and Acquisition of Corus by Tata Steels. *IOSR Journal of Business and Management (IOSR-JBM)*, 11(1), 41-47.
- Leepsa, Mishra. (2012). Post Merger Financial Performance: A Study with Reference to Select Manufacturing Companies in India. *International Research Journal of Finance and Economics*.83, 6-17.
- Meena, S. (2014). Prospects of Global Mergers and Acquisitions - An Indian Overview. *IMPACT: International Journal of Research in Business Management*. 2(9). 71-80
- Pandey, Ajay. (2001). Takeover Announcements, Open Offers, and Shareholders' Returns in Targets Firm. *Vikalpa*, 26(3), 19-30.
- Raghunathan, V. et.al. (1991). The New Economic Package and the Agenda for Restructuring the Financial Sector. *Vikalpa*, 1(16), 3-11.
- Ravi, Sankar and Rao, K V. (1998). Takeovers as a Strategy of Turnaround- An Empirical Study. *The Indian Journal of Commerce*, 51, 47- 56.
- Rohit, Rao. (2001).UTI Global Bank: The Newest Biggest. *Treasury Management Journal*,1(8), 46- 49.
- Ruhani, Ali and Gupta, G S. (1999). Motivation and Outcome of Malaysian Takeovers: An International Perspective. *Vikalpa*, 24, 41- 49.
- Surjit, Kaur. (2002) “A Study of Corporate Takeovers in India”, Ph. D Dissertation (Unpublished), University of Delhi, New Delhi, Retrieved on May30, 2015.
- Toly, A. A et.al. (2019). The Effect of Financial Ratio (Altman Z-Score) on Financial Distress Prediction in Manufacturing Sector in Indonesia 2016-2018. *Advances in Economics, Business and Management Research*. 144. 47-53