

Mergers and its Effects in Select Indian Iron and Steel Companies - A Study

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ABSTRACT

As an important sphere of corporate strategy, Mergers and Acquisitions have been undergoing a sea change within the economic set-up since liberalization in India. Massive growth in both Foreign Direct Investment and Foreign Institutional Investors has been witnessed by the economy. Rather than Greenfield Investment, a substantial fraction of the growth in FDI during the late 1990s tends to rapid increase of cross-border deals in form of Mergers and Acquisitions. This study has attempted to identify the performance of some selected Indian Iron and Steel Companies as a regime study through applying techniques like Economic Value Added and Operating Profit.

Keywords: acquisitions, economic value added, iron and steel, operating profit

I. INTRODUCTION

After the Liberalization, Mergers and Acquisitions have acquired a new dimension in the Indian Economy. The implementation of economic reforms in many countries created various kinds of opportunities by way of mergers and acquisitions in the international scenario. Various firms in India have taken up the restructuring activities to sell off non-core businesses and concentrating on achieving core-competencies. In India, Mergers and Acquisitions have emerged to be the utmost effectual way of corporate restructuring and also become an integral part of the long-standing business stratagem of firms. Basant (2000) opined that Economic Liberalization of 1990s and associated opening up of the Indian Economy changed the nature of oligopolistic environment in the form of Mergers and Acquisitions for restructuring of corporate assets. Synergy is the key factor influencing mergers, where the value of the combined firm is significantly more as compared to the aggregate value of the individual firms. As a result, if they are to stay independent, the combination of two firms will yield a more valuable entity than the summation of values of the two firms - Value (A + B) > Value (A) + Value (B)

In Indian context, it has been observed that during the first period of liberalisation, more than 50% of Mergers and 74% of Acquisitions were horizontal due to market share enhancement and consolidation of existing product market. About 16% of mergers and 41% of acquisitions were vertical and the rest were all conglomerate in nature.

II. SURVEY OF THE LITERATURE

Vyas, Narayanan and Ramanathan (2012) analyse in their research paper that Mergers and Acquisitions in pharmaceutical industry and its elements in the context of a developing country. Their findings suggests that small firm are unable to expand due to limited availability of resources, at the same time larger firms have resources to invest on multiple capacity expansion as well as technological expansion. The results show that research and development expenditure for the industry as a whole is just 2.6% and minimum is zero. Therefore, to survive in the competitive scenario, pharmaceutical firms required high amount of investment to continue production by way of continuous upgradation of technology and capital assets. As per Gupta and Mishra (2013) Mergers and Acquisitions can generate synergies and economies of scale by way of magnifying processes and reducing overheads and the investors makes it clear that the above idea can provide augmented market power. However, Mergers and Acquisitions have to be augmented with the regulatory compliance in the country where it takes place. Rani, Yadav and Jain (2013) in their study compares about the performance of the firm involved in their study, before and after Mergers and Acquisitions. The study indicates that Mergers and Acquisitions apparently are beneficial for the buying firms in the long-run with regard to their operating performance. The findings indicate that profitability of buying firms have improved in the post event era. Singh (2013) tries to capture the performance of 20 Public Limited Companies listed on the Stock Exchange through the comparison of financial ratios. Change in the financial leverage of the companies is one of the parameters which was considered in the study. In his study, it shows that, there was a significant increase in the mean operating profit margin, net profit margin ratios, return on net worth and return on capital employed after the merger. Bhalla (2014) focussed on recent trends of Mergers and

Acquisitions in various Indian sectors. In this scenario, the role played by deregulation, technology and globalization in determining Mergers and Acquisitions activity have been highly appreciated. As per the report, it was found that India has been lagging behind other developed economies in terms of both number and valuation. The sectors such as paper products, printing, publishing, media and entertainment, food products, textiles and non-metallic mineral products, metals, machinery, automobiles and miscellaneous manufacturing have shown relatively less involvement in Mergers and Acquisitions activity.

III. OBJECTIVES OF THE STUDY

In this study, an effort has been made to comprehend the performance of some selected Indian Iron and Steel Companies in the pre-merger and post-merger scenario with respect to corporate performance parameters like Economic Value Added and Operating Profit.

IV. RESEARCH METHODOLOGY

The present paper is established on secondary sources and is essentially empirical in nature. The companies considered are from the Iron and Steel sector. The sample size is 6. Only those companies which had mergers during the year 2006-07 to 2010-11 were considered. The time frame used for the comparison of both the parameters is from 2002 to 2016 for which the charts have been constructed. The research work is based on secondary data collected from database of Capitaline, Published Books, Repute Journals and Research Papers etc.

Table 1: Merger of Iron and Steel

Sl. No.	Company Name	Date	Acquirer	Target
1	JSW Steel	25/10/2007	JSW Steel Ltd	Southern Iron & Steel Company Ltd (merged)
2	Southern Ispat	26/05/2009	Southern Ispat & Energy Ltd	Kerala Sponge Iron Ltd
3	Tata Steel	29/07/2009	Tata Steel Ltd	Hooghly Met Coke & Power Ltd
4	SAIL	16/09/2010	Steel Authority of India Ltd	Maharashtra Elektros melt Ltd
5	Indian Metals	22/01/2010	Indian Metals & Ferro Alloys Ltd	B Panda and Company Pvt Ltd
6	Mount Ever. Trd.	16/03/2010	Monnet Ispat & Energy Ltd	Mount Everest Trading & Investment Ltd (merged)

Following are the sets of equations for ascertaining the Economic Value Added:

Return on Equity = Equity Earnings / Average Equity =

Profit after Tax / (Equity + Reserves)

... (i)

Growth Rate = 1 x Pay-out Ratio x Return on Equity

... (ii)

Cost of Equity = Dividend in the next period / (Current Market Price + Growth Rate)

... (iii)

Economic Value Added (EVA) = Profit after Tax - (Cost of Equity x Equity Capital)

... (iv)

Table 2: Economic Value Added - JSW Steel

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Reported Net Profit	-3498.28	2166.48	1334.51	1801.22	1625.86	2010.67	2022.74	458.5	1728.19	1292
Equity Paid Up	302.75	302.75	302.75	284.15	284.15	284.15	248.08	248.08	248.08	225.01
Reserves Total	20685.77	24657.41	23216.99	19374.19	17934.31	16132.71	9179.23	7422.24	7140.24	5068.25
Payout (%)	-5	13	23	13	11	14	9	4	16	17
Dividend Per Share Adj.(Rs)	7.5	11	11	10	7.5	12.25	9.5	1	14	0
Year End Price (BSE)	1280.55	907.65	1035.55	670.7	721.6	916.3	1235.9	231.85	819.1	493.45
ROE	0.166675878	0.086797521	0.056739998	0.091626251	0.08924245	0.12247592	0.214561736	0.059775863	0.233908385	0.244083986
Growth Rate	0.008333794	0.011283678	0.0130502	0.011911413	0.009816669	0.01714663	0.019310556	0.002391035	0.037425342	0.041494278
Cost of Equity	0.00585682	0.012119058	0.010622241	0.014909531	0.010393428	0.01336873	0.007686586	0.004313089	0.017091149	0
EVA	3500.053152	2162.810955	1331.294117	1796.983457	1622.906707	2006.87127	2020.833112	457.4300089	1723.950028	1292

Source: Author's Calculation

V. ANALYSIS AND FINDINGS

Figure 1: Comparison of Operating Income and Economic Value Added for JSW Steel for 10 years

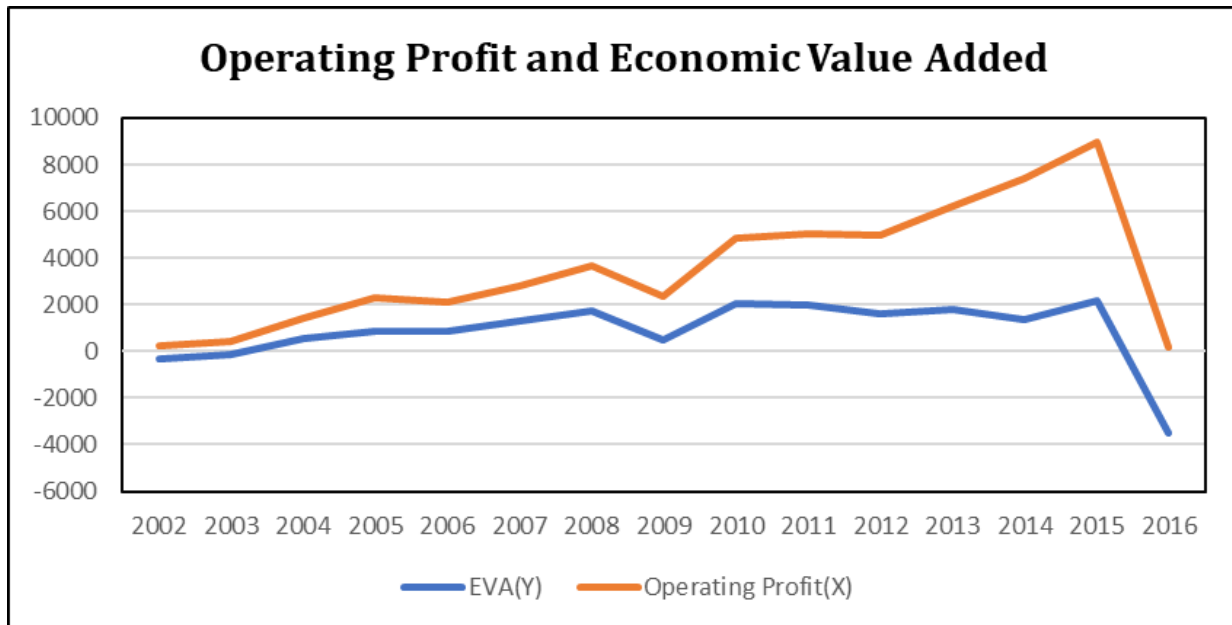


Figure 1 show the trend of Economic Value Added (EVA) and Operating profit for JSW Steel and it is clear that there was a huge fall in the operating profits which also resulted in a fall for the EVA. The year of the merger has not resulted any drastic fall for the profits for the company. There is a significant drop in 2015 in both which continues in 2016 also.

Table 3: Economic Value Added - Southern Ispat

	2015	2014	2013	2012	2011	2010	2009	2008	2007
Reported Net Profit	0.36	0.13	0.71	0.53	11.25	8.23	0.74	0.02	0.01
Equity Paid Up	132.15	132.15	132.15	132.15	132.15	11.03	11.03	5.87	5.87
Reserves Total	77.92	70.2	69.63	57.26	41.19	11.71	3.47	2.6	2.58
Payout (%)	0	0	0	0	0	0	0	0	0
Dividend Per Share Adj.(Rs)	0	0	0	0	0	0	0	0	0
Year End Price (BSE)	0.13	0.15	0.4	0.34	0.81	1.69	0.8	2.36	0.9
ROE	0.001714	0.000642	0.003519	0.002798	0.064901	0.361917	0.051034	0.002361	0.001183
growth rate	0	0	0	0	0	0	0	0	0
cost of equity	0	0	0	0	0	0	0	0	0
EVA= PAT- (cost of equity * equity)	0.36	0.13	0.71	0.53	11.25	8.23	0.74	0.02	0.01

Figure 2: Comparison of Operating Income and Economic Value Added for Southern Ispat for 15 years

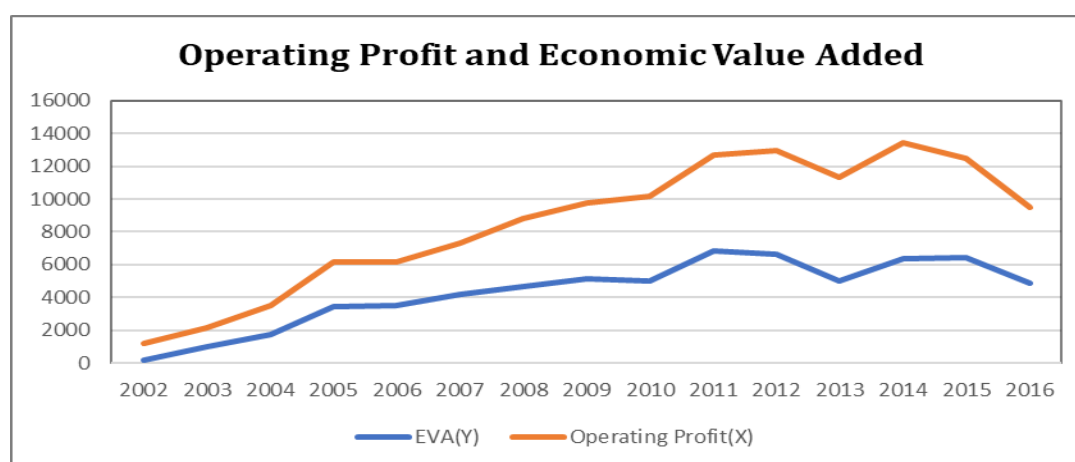


Figure 2 of Southern Ispat shows a different trend since in the year of the merger which is 2009, both the Economic Value Added (EVA) and the Operating profit have increased and then reached a high in 2012, after which the profits have again normalized to the previous year levels.

Table 4: Economic Value Added (Iron and Steel sector) - TATA STEEL

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Reported Net Profit	4900.95	6439.12	6412.19	5062.97	6696.42	6865.69	5046.8	5201.74	4687.03	4222.15
Equity Paid Up	971.41	971.41	971.41	971.41	971.41	959.41	887.41	730.79	730.78	580.67
Reserves Total	69505.31	65692.48	60176.58	54238.27	51245.05	45807.02	36074.39	23972.81	21097.43	13368.42
Payout (%)	16	12	26	16	18	17	15	24	26	23
Dividend Per Share Adj.(Rs)	8	8	10	8	12	12	8	16	16	13.7
Year End Price (BSE)	319.5	316.85	393.85	312.3	470.4	620.5	632.65	206	693.15	397.36
ROE	0.069539984	0.096590823	0.104863463	0.09170439	0.12824347	0.146808084	0.136540969	0.210566071	0.214723516	0.302682827
growth rate	0.011126397	0.011590899	0.0272645	0.014672702	0.023083825	0.024957374	0.020481145	0.050535857	0.055828114	0.06961705
cost of equity	0.025038252	0.025247617	0.02538862	0.025615191	0.025508952	0.019338465	0.012644813	0.077650854	0.023081168	0.034471512
EVA= PAT- (cost of equity * equity)	4876.627592	6414.594213	6387.527241	5038.087147	6671.640349	6847.136484	5035.578866	5144.993533	4670.162744	4202.133427

Figure 3: Comparison of Operating Income and Economic Value Added for Tata Steel for 10 years

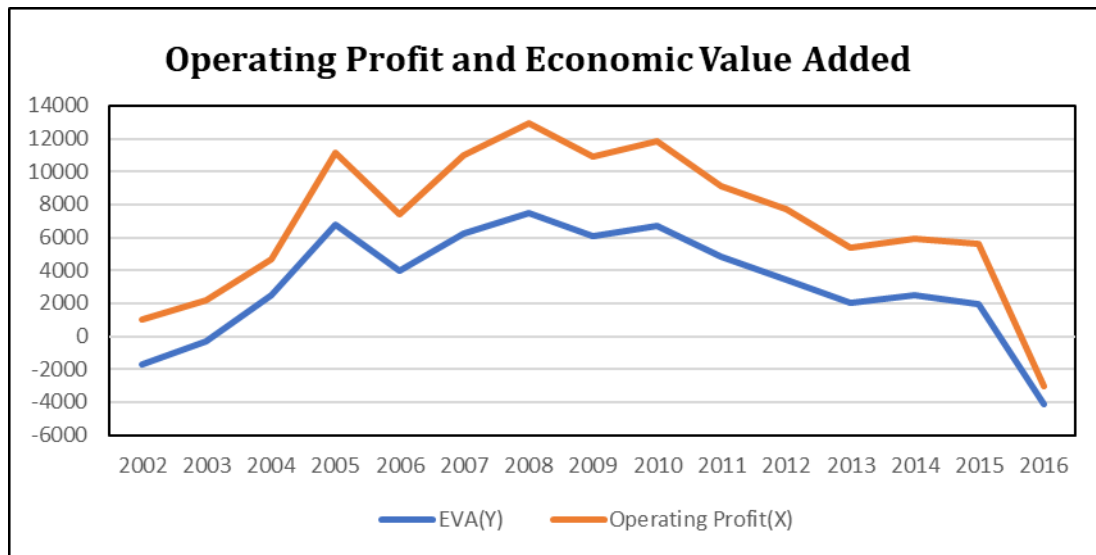


Figure 3 depicting the Economic Value Added (EVA) and the Operating profit of Tata Steel has a steady trend over the 15-year timeline. The merger year of 2009 witnesses a steady move on the positive and continues the upper trend.

Table 5: Economic Value Added - Steel Authority of India

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Reported Net Profit	-4137.26	2092.68	2616.48	2170.35	3542.72	4904.74	6754.37	6170.4	7536.78	6202.29
Equity Paid Up	4130.53	4130.53	4130.53	4130.53	4130.53	4130.4	4130.4	4130.4	4130.4	4130.4
Reserves Total	35150.73	39374.25	38535.82	36894.11	35680.79	32939.07	29186.3	24017.82	18933.17	13182.75
ROE	-0.105324015	0.0481023	0.061324205	0.052903572	0.088987755	0.132312116	0.202732263	0.219211019	0.326782887	0.358241568
ROE %	-10.53240146	4.810230048	6.132420514	5.29035721	8.898775524	13.23121156	20.27322634	21.9210194	32.67828875	35.82415678
payout ratio	0	43	34	41	24	21	21	18	21	21
growth rate	0	0.020683989	0.02085023	0.021690465	0.021357061	0.027785544	0.042573775	0.039457983	0.068624406	0.075230729
Dividend Per Share Adj.(Rs)	0	2	2.02	2	2	2.4	3.3	2.6	3.7	0
Year End Price (BSE)	43	68.35	71.4	62.35	94.05	169.75	251.8	96.45	184.75	114.1
cost of equity	0	0.029252304	0.028283057	0.03206583	0.021260457	0.014136125	0.013103424	0.026945949	0.020019627	0
EVA=pat-cost of equity *equity	-4137.26	1971.852483	2499.655983	2037.901129	3454.903046	4846.352149	6700.247618	6059.102453	7454.090931	6202.29

Figure 4: Comparison of Operating Income and Economic Value Added for Steel Authority of India Limited for 10 years

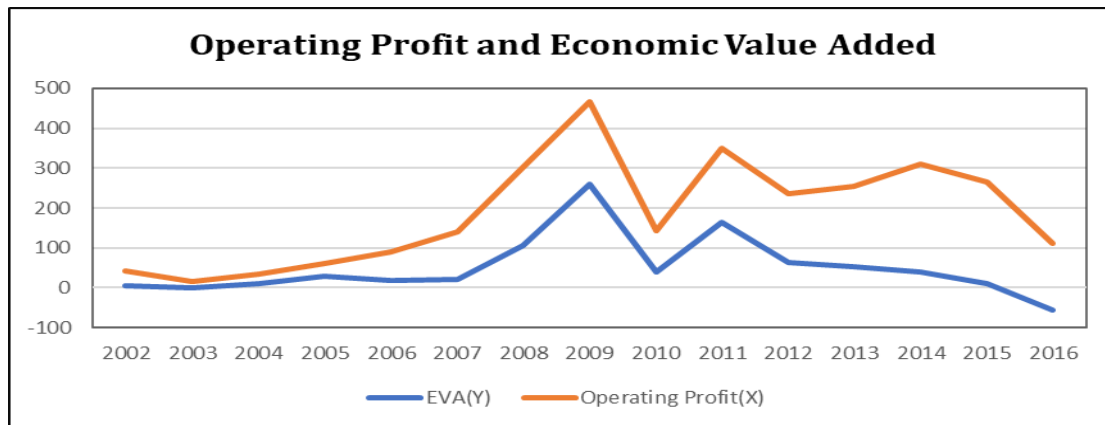


Figure 4 of Steel Authority of India Limited the merger year, which is 2010, witnesses a shift in the performance of both the Economic Value Added (EVA) and the Operating profit resulting in the decline and a continues fall of each of the factors. There is no revival of the factors and they continue to dip throughout the study timeline of 15 years.

Table 6: Economic Value Added - Indian Metal and Ferro Alloys

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Reported Net Profit	-54.76	11.98	39.12	53.89	63.93	165.44	41.01	260.64	104.8	19.99
Equity Paid Up	25.98	25.98	25.98	25.98	25.98	26.33	26.34	21.33	21.33	21.33
Reserves Total	782.33	836.91	829.62	799.62	760.93	715.09	580.29	437	201.29	116.45
Payout (%)	0	35	21	25	21	16	34	8	17	28
Dividend Per Share Adj.(Rs)	0	1.5	3	5	5	10	5	10	0	0
Year End Price (BSE)	110.8	153.1	255.25	228.6	315.4	586.1	739.05	157.2	37.5	37.5
ROE	-0.06774 6285	0.0138 83577	0.0457 223	0.0652 7374	0.0812 41819	0.2231 39381	0.0676 02987	0.5686 73227	0.4707 57344	0.1450 8637
growth rate	0	0.0048 59252	0.0096 01683	0.0163 18435	0.0170 60782	0.0357 02301	0.0229 85016	0.0454 93858	0.0800 28749	0.0406 24183
cost of equity	0	0.0097 97207	0.0117 52741	0.0218 70705	0.0158 52028	0.0170 60896	0.0067 65232	0.0635 94827	0	0
EVA	-54.76	11.725 46856	38.814 66379	53.321 79909	63.518 16432	164.99 07866	40.831 8038	259.28 35223	104.8	19.99

Figure 5: Comparison of Operating Income and Economic Value Added for Indian Metal for 10 years

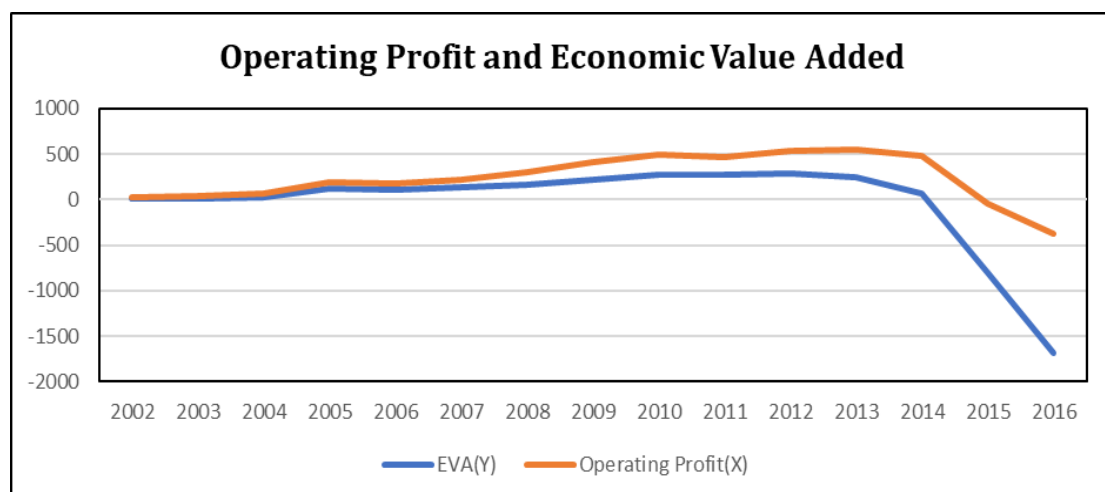


Figure 5 of Indian Metal shows a high performance in the immediate pre-merger years of 2008 and 2009, while the merger year of 2010 shows a sudden fall of both the Economic Value Added (EVA) and the Operating profit. There is a recovery trend which again is not consistent and results in a greater fall in the performance in 2015 and 2016.

Table 7: Economic Value Added - Monnet Ispat and Energy

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Reported Net Profit	- 1683.2 3	- 795.8 7	66.63	250.3 2	288.8 6	281.1 6	269.1	216	166.16	134.78
Equity Paid Up	200.79	65.84	65.84	63.75	64.36	64.36	52.28	47.96	48	34.34
Reserves Total	439.05	1776. 85	2598. 8	2516. 01	2295. 99	2025. 78	1591.6 9	1238. 3	1019.8 4	536.6
Payout (%)	0	0	13	4	6	13	11	11	15	12
Dividend Per Share Adj.(Rs)	0	0	1	1	2.5	5	5	5	5	0
Year End Price (BSE)	22.25	50.1	89.05	228.0 5	464.9	510.8 5	427.25	154.6 5	486.2	238.85
ROE	- 2.6307 046	- 0.431 9066	0.025 0052 54	0.097 0322 82	0.122 3801 55	0.134 5173 05	0.1636 89118	0.167 9287 24	0.1556 03836	0.23606 6837
growth rate	0	0	0.003 2506 83	0.003 8812 91	0.007 3428 09	0.017 4872 5	0.0180 05803	0.018 4721 6	0.0233 40575	0.02832 802
cost of equity	0	0	0.011 2292 36	0.004 3849 29	0.005 3774 16	0.009 7872 74	0.0117 02257	0.032 3272 09	0.0102 8334	0
EVA	- 1683.2 3	- 795.8 7	65.89 0667 08	250.0 4046 08	288.5 1390 95	280.5 3009 11	268.48 8206	214.4 4958 71	165.66 63997	134.78

Figure 6: Comparison of Operating Income and Economic Value Added for Monnet Ispat for 10 years

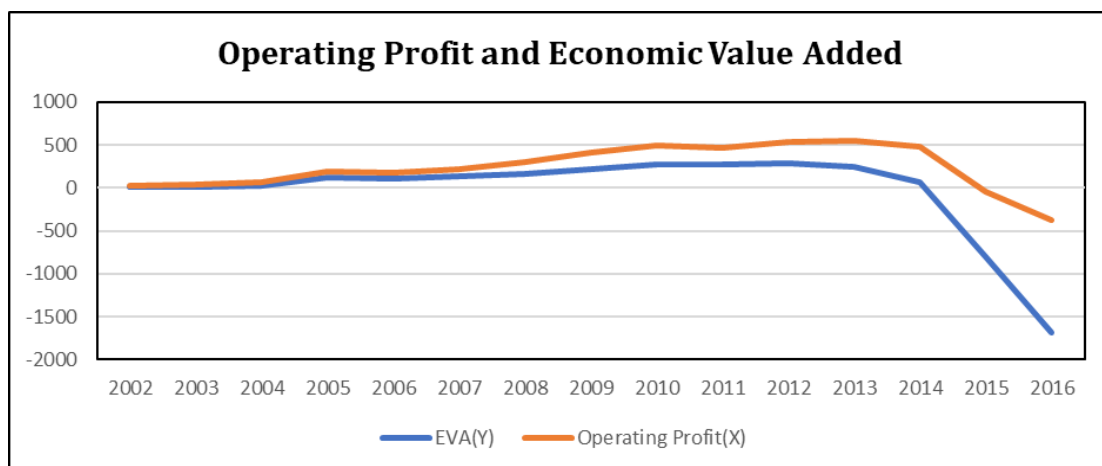


Figure 6 of Monnet Ispat is consistent throughout the 15- year timeline. It shows a steady rate of both the Economic Value Added (EVA) and the Operating profit but there is a steep fall in the factors in 2014. The merger year of 2010 does not witness any synergistic benefits which are cited as the major motivation for the firms.

VI. CONCLUSION

The above study is an attempt to understand the relationship between the Operating Profit and the Economic Value Added and their movement during the pre- and post-merger years. Some of the companies show no behavioral changes due to the merger event, yet some are more reactive to it. It is observed that the Iron and Steel sector companies

have not reacted significantly to the merger and there is no quantum shift of performance of the companies. There is a further scope where it may be ascertained whether there is any significant change in pre- and post-merger performance.

REFERENCES

1. Agrawal, Anup, Jaffe, Jeffrey F., & Mandelker, Gershon N. (1992). The post merger performance of acquiring firms: A re-examination of an anomaly. *The Journal of Finance*, XVII(4).
2. Andrade, Gregor, Mitchell, Mark, & Stafford, Erik. (2001). New evidence and perspectives on mergers. *The Journal of Economic Perspectives*, 15(2), 103-120.
3. Ashenfelter, Orley, & Hosken, Daniel. (2008). The effect of mergers on consumer prices: Evidence from five selected case studies. *National Bureau Economic Research, NBER Working Paper No. 13859*.
4. Baxamusa, Mufaddal. (2006). Mergers that create value. *Carlson School of Management, University of Minnesota*.
5. Beena, P.L. (2000). An analysis of mergers in the private corporate sector in India. *Centre for Economics Studies and Planning, Jawaharlal Nehru University, New Delhi, Working Paper No. 301*.
6. _____ (2004). Towards understanding the merger wave in the Indian corporate sector: A comparative perspective. *Working Paper 355*.
7. _____(2008). Trends and perspectives on corporate mergers in contemporary India. *Economic and Political Weekly*, 48-56.