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The Mutual Effect on the NPA Crisis and Integrated Steel Producers

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ABSTRACT: Steel is the most significant manufactured material in the contemporary world that provides the basis of every industrial economy. Steel is regarded a metal which is utilized in every body's everyday life even no one can picture a life without steel as different item being used from morning to night are produced from steel. India, as one of the fastest-growing economies possesses significant interests in steel industry. This study delves into the causes behind Indian integrated steel producer's strong capital productivity rates and examines if the Non-performing assets (NPA) crisis had any impact on it. The NPA issue must be handled with a flawless strategy as it is accountable for a significant loss for companies. A correlation research was performed on a sample of gross NPA's and the average capital productivity rates, the findings revealed a negative connection between the two variables leading to suggestions for the sector given the post-pandemic commodities cycles.

KEYWORDS: Crisis, NPA, Integrated Steel Producers, Productivity, Steel.

1. INTRODUCTION

Steel, regarded to be the world's most significant engineering and construction material affects every area of human existence, from the vehicles we use to the houses we sleep in and the ships that support the enormous supply networks [1]. Until the latter part of the 20th century, steelmaking has been regarded the fundamental industry in a first-world economy and sine qua non industry for the emerging countries. At the time India won its independence on August 15th 1947, TISCO and Indian Iron and Steel Company Ltd. were the integrated steel mills in the nation.

Under the 5-year plans, the Nehru administration began the construction of India's modern temples of steel, the Rourkela Steel Plant with West Germany's assistance and the Bhilai and Bokaro Steel plants with help from the Soviet Union. Since the commencement of more progressive and liberal economic policies and de-restriction of the steel sector, several integrated steel mills sprang up in India, from the Jindal group, Piramal family and the development of the existing TATA group's Plant in Jamshedpur and Greenfield project in Kalinagar [2]. So far the nation has achieved an essential place on the global steel map owing to enormous steel mills, worldwide acquisition to scale up the capacity, constant modernization & up-gradation, increasing the energy efficiency, and via integration to source raw materials (Singh & Raina, 2015)

Banking sector in India had its first tryst with NPAs during the economic crisis of 2008. The banks were overoptimistic due to high economic development in the preceding era that sooner or later came into problems due to stagnant growth rates after the crisis event and the sluggish rate of growth lead to loan defaulting and fraudulent activities [3].

2. REVIEW OF LITERATURE

Literature shows that falling profits have been associated with rapidly rising debt burden in the industry [4]. The situation that plagued the Iron and Steel Industry is decreasing earnings after tax

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in nominal terms for major steel manufacturers. Due to combined strain of increasing debt-service load and decreasing profit rate, the credit growth had been falling over the years as banks had become cautious of lending to businesses for fear of increase in bad loans. This wariness shown by the banks owing to the rising NPA's explain why capital productivity for the integrated steel plants is so high.

The portion of the high capital productivity also resides in the endemic inadequacies of the industries such as the high ash content of cooking coal prevalent in local markets which impair the efficiency of ironmaking, which requires steel factories to import the same along with certain essential components. Other limitations indicated for high capital productivity include excessive taxes, increasing costs of electricity and inadequate infrastructure. The freight cost between Jamshedpur and Mumbai was $50/ton compared to $34 a ton from Rotterdam to Mumbai.

Tata Steel was founded in India as Asia's first integrated private steel business in 1907. With this, they also built India's first industrial city at Jamshedpur. Today, it is a major steel business in the world with annual crude steel capacity of approximately 13 MTPA and a recorded a turnover of US $7889 Mn in FY 2017 [5]. The company has built up a second Greenfield steel factory in the eastern state of Odisha; commissioning the first phase (3 Mn TPA) with 8M tons of steel capacity in 2016. The business owns and runs captive mines that assist preserve the cost-competitiveness and production efficiency via continuous supply of raw material.

Steel Authority of India Limited (SAIL) is one of the biggest steel-making businesses in India and one of the Maharatna enterprises of the country's Central Public Sector Enterprises. SAIL manufactures iron and steel in five integrated facilities and three special steel plants, located primarily in the eastern and central areas of India and positioned near to domestic sources of raw materials. Their annual crude steel output in India is around 15 MTPA and recorded a turnover of approximately 2200 Crores in FY 2019. SAIL also produces and distributes a wide variety of steel goods from Needle to Chandrayan (About us: SAIL, n.d.) [6].

JSW Steel is the main business of the US$ 12 billion JSW conglomerate, which has broad holdings in key sectors that underpin India's infrastructural development. It is country's largest integrated steel producer focusing on increasing capacity from 18 MTPA to 45 MTPA in the coming decade. The first phase of the trip is begun, with a committed Capex expenditure of ` 48,715 crores (FY 2018-19 to FY 2021-22) with nine major domestic production sites, secure raw material sources, broad export reach and strong local retail presence.

Research Question:

1. What are the Mutual Effect on the NPA Crisis and Integrated Steel Producers?

3. METHODOLOGY

3.1 Design:

The current research is based on secondary data from 2004-2020, the data has been obtained from DION Global solutions ltd for the study. In recent times, i.e., the start of 2021 the steel industry across the world saw a resurgence in value, due to the triggering of what is supposedly a commodities boom (which just might turn into a super cycle) where demand for core commodities like steel, copper etc. has exceeded the possible supply due to post-pandemic spending [7].

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To put it into a better perspective, increased steel prices are beneficial for manufacturers working in the B2B sector of the steel business as they get to enjoy a larger profit on their output. It is now with the company management to determine what to do with their supernormal earnings, either they may use the extra cash and cover its production cutbacks from the lockdown in 2020 or decrease debt levels [8].

3.2 Instrument:

The limitations of the study on which any future work can be rectified upon or improve the same could be to include more Integrated Steel producers in the study, such as the Rashtriya Ispat Nigam plant, Jindal Steel, and Power and ArcelorMittal Nippon Steel ltd to name a few, to provide a deeper view of the Industry and the effect the NPA crisis had on the Indian Steel industry as a whole [9].

If Indian integrated steel manufacturers do decrease their debt levels, it could offer those higher credit ratings and the capacity to leverage additional debt, but doing so would simply be a repetition of 2008. Instead, it would be suggested if Indian Integrated Steel Producers concentrate on meeting the objectives of the National Steel Policy announced on May 9th 2017, i.e.

1. Increase Crude steel capacity to 300 million tones

2. Finished steel per capita usage of 158 kg by 2030 as against the consumption of 61 Kg's (as of 2017)

Keeping this in mind, Indian Integrated Steel Producers should not overstep their limits when it comes to capacity development.

3.3 Sample:

The data for the capital input has been chosen solely on a standalone basis and did not take into consideration any consolidated balance sheet or profit or loss statements as to just take into account the effect of integrated steel plants [10].

3.4 Data collection:

Consolidated financial statements include financial data from said companies' subsidiaries as well, who may not be participating in the same niche of the industry, an example being TATA Steel Long Products ltd, it does not operate an Integrated Steel Plant but its financials are reported along with the TATA Steel's consolidated financials. The total capital Productivity of the chosen Indian steel firms is shown in Table 1.

Table 1: Capital Productivity Of The Three Selected Steel Companies.

Year	TATA Steel	SAIL	JSW	Average
2007-2008	11.69003	27.13496	9.87709	16.23403
2008-2009	10.1309	28.62297	8.931065	15.89498
2009-2010	8.931568	23.52758	9.238287	13.89915
2010-2011	10.38371	21.80535	10.35639	14.18181

2011-2012	11.3167	20.35018	11.07604	14.24764
2012-2013	11.11737	20.45713	9.56844	13.71432
2013-2014	11.33516	17.21644	8.146613	12.23274
2014-2015	10.66248	14.01457	7.965924	10.88099
2015-2016	12.40682	8.187507	5.968121	8.854148
2016-2017	7.769936	8.42922	7.741602	7.980253
2017-2018	9.235201	9.667138	9.599248	9.500529
2018-2019	11.01869	10.13754	10.43135	10.52919

The data for NPA's is obtained from the RBI data warehouse and only the Gross NPA's of Public, Old Private, New private and Foreign banks have been taken into account. The data for the same between 2007 and 2019 is presented below in Table 2.

Table 2: Amount of Gross NPA's Across Public, Old Private, New Private and Foreign Banks

YEAR	PUBLIC	OLD PRIVATE	NEW PRIVATE	FOREIGN	TOTAL
2007-08	40452	1	12997	2859	56309
2008-09	44957	0	16927	6445	68329
2009-10	59927	0	17640	7134	84701
2010-11	74664	0	18241	5069	97974
2011-12	117839	0	18768	6297	142904
2012-13	165006	0	21071	7977	194054
2013-14	228274	0	24542	11565	264381
2014-15	278468	0	34106	10761	323335
2015-16	539956	0	56186	15805	611947
2016-17	684732	221	93209	13629	791791
2017-18	895601	894	129335	13849	1039679
2018-19	739541	1087	183604	12242	936474

3.5 Data Analysis:

To further alleviate the burden on computations and fake results, it was agreed that a capital weighted index of the aforementioned was to be created to make the calculation simpler and better represent the situation. To do so, the weightage of each bank's contribution was calculated by simply dividing a particular type of banks gross NPA's against the total Gross NPA's and then

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simply utilize the below formula to create the index, where w 1 is the weightage of each bank sector at a particular point in the table and t_1 is the total NPA of each bank sector at the same point in the table.

$$(w_1 \times t_1) + (w_2 \times t_2) + (w_3 \times t_3) + (w_4 \times t_4) + (w_5 \times t_5) \ldots . . (w_n \times t_n)$$

Taking the values of the Index and the average capital productivity, the final table of values is created. To compute the correlation between the two columns, Excel's inbuilt Correl function was employed which gave a result of -0.884. On doing the same using excels integrated data tools, the following table was produced.

4. RESULTS AND DISCUSSION

With the result in hand, i.e., the correlation value of -0.884, The conclusion that can be drawn from this is that while the gross NPA's are increasing the Average Capital Productivity of the Integrated Steel Producers have come down (Figure 1).

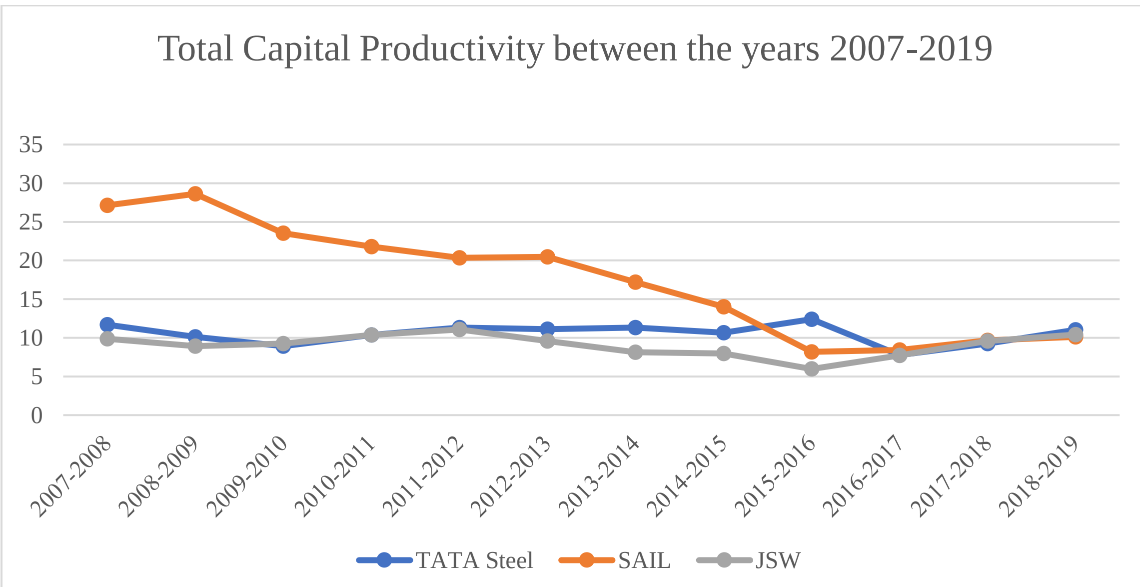

Figure 1: Total Capital Productivity between The Years 2007-2019.

Illustrated as Figure 1 is the Average Capital Productivity of the three Integrated Steel producers that showcase a surprisingly common trend, i.e., the 3 steel companies seem to have reached a point of equilibrium with their capital productivity, one of the reasons for such a synchronization could be the result of them over-leveraging their position with banks to the point, the Indian banking Industry has an exposure close to Rs. 3.20 Lakh Crore in the steel industry of which 1.15 lakh crores stand as gross NPA's (Rai, 2018). Therefore refusing to hand out loans at competitive interest rates to be able to expand their output which has in a manner stopped growth plans, enabling Chinese imports to flood the market therefore lowering prices of steel goods and draining earnings from local businesses.

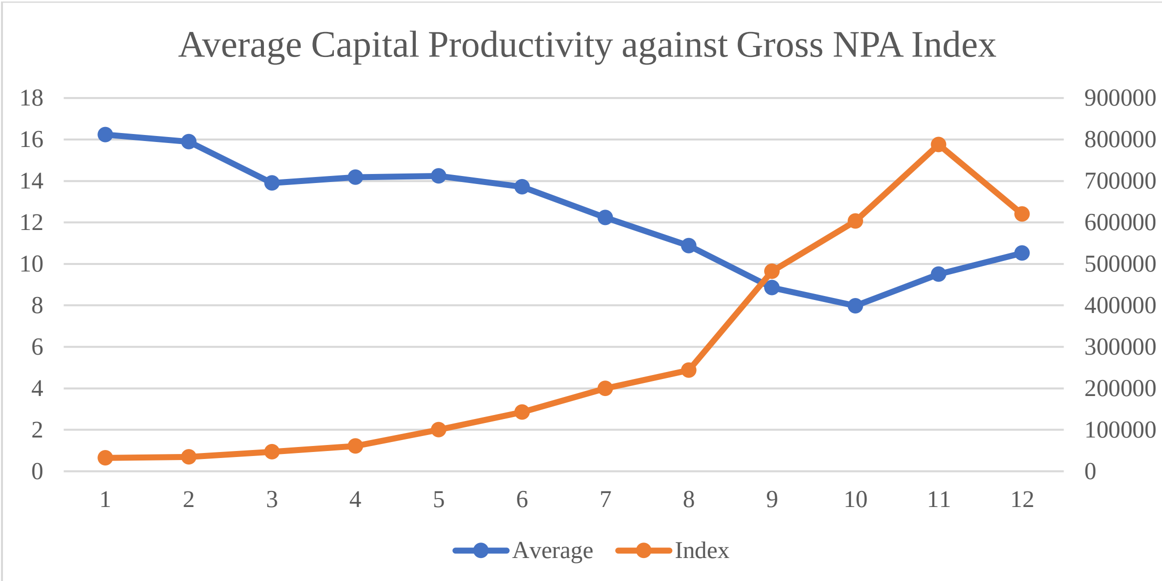

Figure 2: Average Capital Productivity against the Gross NPA Index.

Further contributing to the issue, the rise in gross NPA's is that most of the loans that turn bad are not necessarily from the steel industry but other sectors, given that the Steel Industry is a priority sector. Priority sector lending as a percentage of gross NPA's was at 24.1 percent of all NPA's in Public Sector banks while Non-Priority Sector's share of Gross NPA's stood at 75.9 percent in the same year (RBI) shown in Figure 2.

5. CONCLUSION

With the industry now seemingly consolidated post the slew of bankruptcies and M&A's after 2008, it would certainly be an interesting next few years to watch the now trenched industry move upwards to challenge china's supremacy on the backbone of massive investments by private persons and the government in the industry, private players either upgrading their capacity in existing plants or developing greenfield sites or the government re-investing into its existing 'temples of steel' to further strengthen and consolidate production to meet public demand. All this without disturbing the precarious NPA situation in the domestic banking sector would be nothing short of a grand act of juggling priorities, especially due to the decrease of household savings followed closely by a new trend of reduction in the percentage of household savings in the economy which shifts into focus the paradigm shift between the public sector and private sector banks in the lending market.

REFERENCES

[1] S. Bhatia, "Crisis in Indian Steel Industry: Issues and Challenges," *Int. J. Sci. Res. Publ.*, 2017.

[2] N. C. Mathur and R. Kumar, "Present status of stainless steel industry in India & it's future prospects," 2013, doi: 10.4028/www.scientific.net/AMR.794.26.

[3] "Productivity Measurement of Steel Industry in India," *Glob. J. Enterp. Inf. Syst.*, 2015, doi: 10.18311/gjeis/2015/6231.

[4] S. S. - and H. K. -, "WORKING CAPITAL MANAGEMENT AND PROFITABILITY: EVIDENCE FROM SELECTED STEEL MANUFACTURING COMPANIES IN INDIA," *Indian J. Commer. Manag. Stud.*, 2017, doi: 10.18843/ijcms/v8i2/10.

[5] E. Noronha and P. D'Cruz, "A Necessary Evil: The Experiences of Managers Implementing Downsizing Programmes," *Qual. Rep.*, 2015, doi: 10.46743/2160-3715/2006.1686.

[6] P. N. Pattnaik and M. K. Shukla, "The evolution of CSR efforts at Steel Authority of India Limited," *Glob. Bus. Organ. Excell.*, 2018, doi: 10.1002/joe.21854.

[7] Shubham, V. K. Kalakbandi, and S. Mittal, "POSCO's great Indian fiasco," *Emerald Emerg. Mark. Case Stud.*, 2018, doi: 10.1108/EEMCS-02-2018-0014.

[8] E. Belhadj *et al.*, "Methods of Physical Tests for Methods of Physical Tests for," *Constr. Build. Mater.*, 2015.

[9] M. Krishnamurthy *et al.*, "Occupational Heat Stress Impacts on Health and Productivity in a Steel Industry in Southern India," *Saf. Health Work,* 2017, doi: 10.1016/j.shaw.2016.08.005.

[10] A. Roy, "Capitalism: A Ghost Story," *Outlook India Mag.*, 2012.