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Study of financial performance of Tata steel

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Abstract
Working capital in business is considered as life blood in human body. It is a capital needed to work business on everyday premise and it differs as indicated by the idea of business, creation, deals arrangements, turnover, credit period and so forth Liquidity implies the limit of the firm to change over the resources into feasible incentive in cash. It gauges the capacity of the firm to respect all the developing commitments. No firm can make due without liquidity. A firm not creation benefit might be considered as debilitated, yet having no liquidity may before long meet its defeat and eventually bite the dust. Liquidity the executives has consequently become an essential and expansive part of making a decision about the exhibition of corporate substance. It is, hence, fundamental to keep up a sufficient level of liquidity for smooth running of the business tasks. The liquidity should be neither unnecessary nor deficient.

Keywords: Study tata steel working capital in business is considered as life blood in human body

Introductions
Tata Steel Ltd is the world's tenth biggest steel organization and the world's second most topographically enhanced steel maker. The organization is a broadened steel maker with significant tasks in India, Europe and South East Asia. They have fabricating units in 26 nations and at presence in 50 European and Asian business sectors. The organization along with their auxiliaries, takes part in the assembling and offer of steel items in India and globally. They offer hot and cold moved loops and sheets, excited sheets, tubes, wire poles, development rubbers and orientation. The organization additionally includes in prospecting, finding, and mining iron metal, coal, Ferro amalgams, and different minerals; planning and assembling plants and gear for steel, oil and gaseous petrol, energy and force, mining, railroads, ports, flight, and space ventures; and rural actualizes. Further, they offers alumina, dolomite, and solid refractories, just as silica refractories for coke broilers and the glass business; makes blocks; wipe iron knots and fines; and moves for applications in incorporated steel plants, power plants, and government mint, just as paper, material, and food preparing areas. Tata Steel's activities are gathered under six Strategic Business Units incorporate Bearings Division, Ferro Alloys and Minerals Division, Agrico Division, Tata Growth Shop (TGS), Tubes Division and Wire Division. They have presented a few marked steel items, including Tata Steelium (the world's originally marked Cold Rolled Steel), Tata Shaktee (Galvanized Corrugated Sheets), Tata Tiscon (rubbers), Tata Pipes, Tata Bearings, Tata Structural, Tata Agrico (hand instruments and actualizes) and Tata Wiron (stirred wire items) Tata Steel Ltd was consolidated in the year 1907 with the name Tata Iron and Steel Company Ltd. In the year 1911, the organization started the tasks of the main Blast Furnace or the 'A' Blast Furnace. In December 2, 1911, the clench hand collieries were acquired and the principal cast of pig iron was delivered. In the year 1912, the primary ingot of steel turned out of the Sakchi Plant and in October 1912, the Bar Mills began their business creation. Additionally, the B Blast Furnace got operational during the year. In the year 1918, India's first steel (coke) plant was set up in Jamshedpur. In the year 1925, the New Rail Mill, Merchant Mill and Sheet Mill went into activity. In the year 1931, they opened an understudy shop. In the year 1941, they began production of exceptional steel for war reason. They created a wide assortment of extraordinary prepares needed for protection purposes including heavily clad vehicles called 'Tatanagars'. In the year 1943, Howrah Bridge was built from steel provided by the organization. In the year 1955, the organization consented to an arrangement with Kaiser Engineers for 2,000,000 ton development program. In the year 1980, they began the principal period of the four-staged modernization program. Inordinate liquidity demonstrates collection of inert assets, which don't acquire any benefit for the firm

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and lacking liquidity not just antagonistically influenced the credit value of the firm yet additionally intrudes on the creation cycle and hampers its procuring ability generally. In the flood of globalization and monetary advancement, development and endurance security of the endeavors to a great extent rely upon the successful administration of working capital, which has an immediate bearing on the financial prosperity of the nation in general. Consequently, it is felt that there is a need to oversee different segments of working capital so that a satisfactory measure of working capital is to keeping up for smooth running of the wheel of an undertaking for the satisfaction of twin destinations of liquidity and benefit with the instability of different parts of working capital in the association's working climate. The accentuation of the current examination is to quantify and dissect the working danger, monetary danger, and all out danger via processing the Degree of Operating Leverage (DOL), Degree Of Financial Leverage (DFL), and Degree Of Total Leverage (DTL) of the chose organization *viz*. Tata Steel for the bookkeeping time frame from 2000-01 to 2009-10.

Literature Review

Samiloglu & Damirgunes said that even though the profitability is constantly positive, inaccurate working capital management procedures may lead to bankruptcy of the firm. They suggest that current, acid test, and cash ratios as traditional measures of liquidity are incompetent and static balance sheet measures that cannot provide detailed and accurate information about working capital management effectiveness. In their research formulas used for calculating them consider both liquid and operating as sets in common and traditional ratios are not meaningful in terms of cash flow.

Nandi made an attempt to examine the influence of working capital management on corporate profitability. For assessing impact of working capital management on profitability of National Thermal Power Corporation Ltd. during the period of 10 years i.e., from 1999-2000 to 2008-09 Pearson"s coefficient of correlation and multiple regression analysis between some ratios relating to working capital management and the impact measure relating to profitability

ratio (ROI) had been computed and applied. An attempt had been undertaken for measuring the sensitivity of return of investment (ROI) to changes in the level of working capital leverage (WCL) of the studying company.

Karaduman, Akbas & Caliskan have tried to shed light on the empirical relationship between efficiency of working capital management and corporate profitability of selected companies in the Istanbul Stock Exchange for the period of 2005-2009. The companies should focus on working capital management in order to increase their profitability by seriously and professionally considering the issues on their cash conversion cycle which was derived from the number of day's accounts payable, the number of day's accounts receivable and the number of days of inventories. The findings suggested that it may be possible to increase profitability by improving efficiency of working capital.

Mallick And Sur made an attempt to analyze the impact of working capital management on profitability in Indian Tea industry with the help of some statistical tools and techniques. The study revealed that, out of the nine ratios relating to working capital management five ratios registered positive association and the remaining four ratios showed negative correlation with the profitability indicator. Rao & Rao (1999) undertook a similar type of study where ten ratios relating to working capital management were selected. Out of these indicators, positive association was noticed only in three.

Cheakraborty evaluated the relationship between working capital and profitability of 25 selected companies in the Indian pharmaceutical industry during the period 1996-97 to 2007-08. Inadequacy of working capital may lead to the firm to insolvency, whereas excessive working capital implies idle funds which earns no profits. Therefore, efficient management of working capital is an integral part of the overall corporate strategy to improve corporate profitability. The partial regression coefficients shown in the multiple regression equation of ROCE on CR, ITR and DTR fitted in this study revealed that the liquidity management, inventory management and credit management made positive contribution towards improvement of the corporate profitability.

Table 1: Analysis between working capital management and return on capital employed of Tata steel Period: 2000–2010

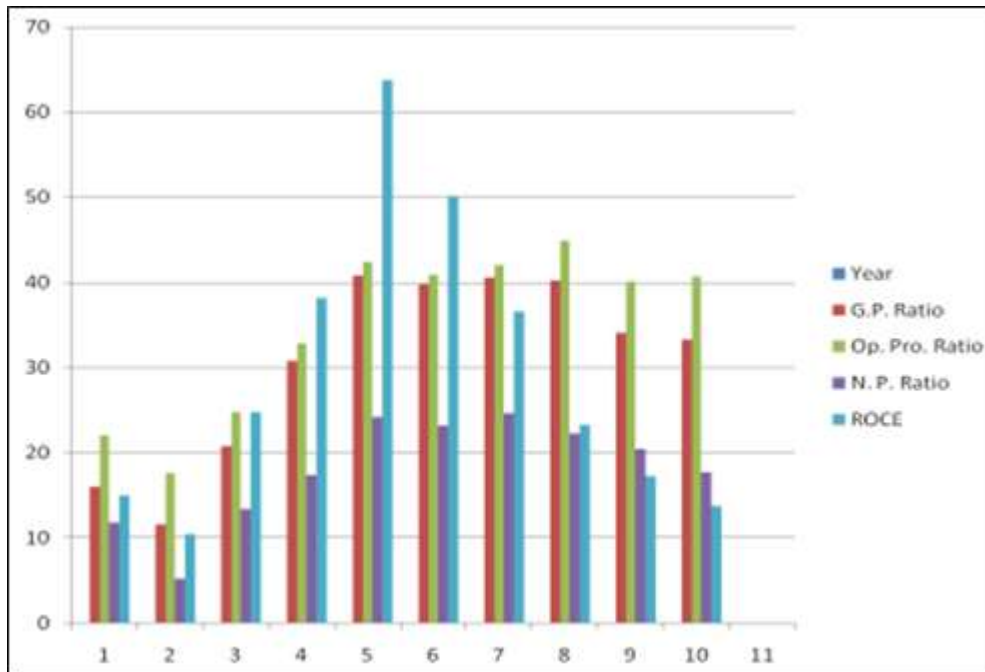| Year	CR	QR	CATAR	CASR	WCTR	ITR	DTR	CTR	ROCE
2000-01	0.95	0.78	0.34	0.47	0.04	8.31	6.30	3.50	14.98
2001-02	0.76	0.69	0.38	0.46	0.01	7.82	6.46	3.27	10.51
2002-03	0.70	0.60	0.49	0.42	-0.06	9.01	9.64	4.28	24.82
2003-04	0.67	0.36	0.36	0.26	-0.14	9.93	14.81	2.34	38.18
2004-05	0.65	0.42	0.42	0.28	-0.08	10.17	25.74	1.70	63.79
2005-06	0.71	0.40	0.35	0.28	-0.06	8.47	30.57	1.91	50.13
2006-07	1.27	1.73	0.58	0.78	0.41	8.77	33.75	44.00	36.63
2007-08	2.88	4.39	0.82	1.88	1.48	8.99	37.77	2.37	23.27
2008-09	2.30	0.73	0.19	0.44	0.03	8.82	45.52	6.53	17.23
2009-10	1.05	0.90	0.20	0.49	0.08	8.16	49.98	12.97	13.70
Correlation (r)	-0.33	-0.20	0.16	-0.24	-0.17	0.71	0.034	0.007	-
Calculated value of \t\ with (n-2) d. f.	0.994	0.58	0.46	0.70	0.49	2.85	0.09	0.0187	-

Chart 1: Diagrammatic representation of selected liquidit

Table 2: Analysis of Profitability of Tata Steel Period : 2000–2010

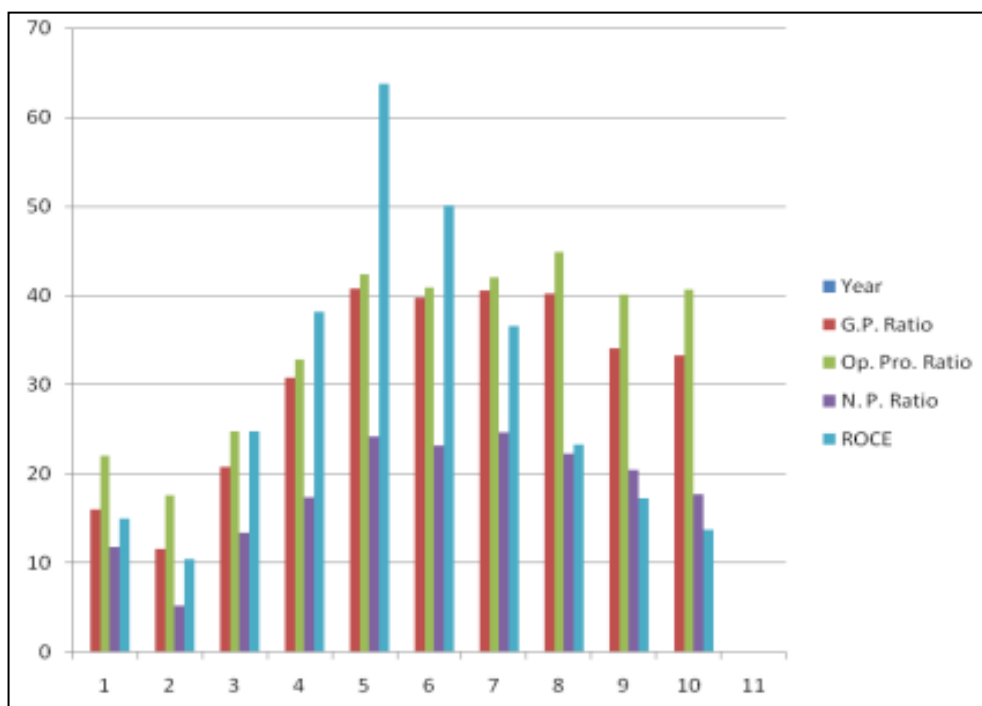| Year	G.P. Ratio	Op. Pro. Ratio	N. P. Ratio	ROCE
2000-01	16.01	22.04	11.85	14.98
2001-02	11.58	17.60	5.21	10.51
2002-03	20.85	24.77	13.46	24.82
2003-04	30.75	32.87	17.44	38.18
2004-05	40.82	42.40	24.21	63.79
2005-06	39.74	40.89	23.17	50.13
2006-07	40.56	42.00	24.66	36.63
2007-08	40.20	44.93	22.26	23.27
2008-09	34.04	40.16	20.46	17.23
2009-10	33.27	40.68	17.73	13.70

Chart 2: Diagrammatic Representation of Table-2

Study in respect of working capital management

In table-1 an endeavor has been had to quantify the effect of working capital administration on benefit by figuring Karl Pearson's connection coefficients among ROCE and the chose measures identifying with the working capital administration. Table-1 shows that the relationship coefficient among ROCE and CR is (-) 0.33, which demonstrates that there is a reasonably negative relationship between the benefit and the liquidity of the organization and connection coefficient is discovered to be measurably inconsequential both at 5% and 1% levels separately. That implies there is an immaterial relationship among ROCE and CR during the period under examination. It is seen from table-1 that the connection coefficient among ROCE and QR during the period under examination is negative and is determined at (-) 0.20, which is discovered to be measurably unimportant both at 5% and 1% levels separately. It is obvious from these two proportions that the higher the Company's edge of security to the momentary loan bosses, the lower is the productivity of the organization. The registered estimation of relationship coefficient among ROCE and QR for the examination time frame adjusts to the acknowledged rule. It is featured from table-1 that the coefficient of relationship among's ROCE and CATAR during the examination time frame is 0.16. It suggests that there is a positive relationship between the benefit and the Current Assets to add up to resources proportion. The coefficient of connection is discovered to be factually irrelevant both at 5% and 1% levels during the examination time frame. The by and large acknowledged principle is that the more noteworthy the CATAR, the lower will be the benefit of the organization. The figured estimation of relationship coefficient among ROCE and CATAR for the examination time frame doesn't adjust to the acknowledged guideline. Table-1 shows that the coefficient of relationship among's ROCE and Current proportion to Sales proportion (CASR) during the investigation time frame is (-) 0.24, which is additionally discovered to be factually inconsequential both at 5% and 1% levels separately. This shows that there is a low level of negative relationship between the two factors. As a rule the lower the current resources for deals proportion (CASR), the more prominent will be the proficiency of the work of working capital and bigger will the extent of productivity and the other way around. The determined estimation of relationship coefficient among CASR and ROCE adjusts to that guideline. It is seen from table-1 that the connection coefficient among ROCE and WCTR is (-) 0.17 which infers that there is negative relationship between these two factors. The determined estimation of relationship coefficient is discovered to be measurably inconsequential both at 5% and 1% levels individually. It is an acknowledged rule that quicker the working capital turnover proportion (WCTR) the more slow the overall venture and more prominent is the benefit of the organization. The processed estimation of relationship coefficient among ROCE and WCTR under the examination time frame doesn't adjust to the acknowledged guideline.

It is seen from table-1 that the connection coefficient among ROCE and ITR is positive and is processed at 0.71 during the period under examination. The coefficient is discovered to be factually critical at 5% degree of hugeness. The most acknowledged guideline is that higher the Inventory turnover proportion (ITR), more prominent is the productivity of stock administration and bigger is the extent of benefit. The figured estimation of connection coefficient among ROCE and ITR adjusts to the acknowledged standards during the period under investigation. It very well may be reasoned that the stock administration impacts the benefit of the organization during the investigation time frame. Table-1 features that the connection coefficient among ROCE and DTR is positive and is processed at 0.034 during the period under investigation. It is discovered to be measurably immaterial at 5% and 1% levels individually. The investigation of connection between the benefit (estimated regarding ROCE) and the credit the board (estimated as far as DTR) adjusts to the for the most part acknowledged guideline that more noteworthy the DTR, the lower is the relative interest in the receivable and higher is the productivity. Ultimately, the relationship coefficient among ROCE and CTR shows (from table-1) an exceptionally low level of positive affiliation and is figured at 0.007 which is discovered to be measurably immaterial both at 5% and 1% degrees of criticalness separately. The more satisfactory rule is that higher the CTR, the more will be the proficiency of money the executives and bigger will be the extent of improving capital profitability. The investigation of relationship coefficient among ROCE and CTR uncovers that the processed estimation of connection coefficient adjusts to the acknowledged guideline.

Table 3: Analysis of various leverage ratios with roe of tata steel Period : 2000–2010

Year	DOL	DFL	DTL	ROE
2000-01	1.49	1.68	2.50	11.32
2001-02	1.80	2.61	4.70	6.83
2002-03	1.35	1.27	1.71	31.41
2003-04	1.22	1.09	1.32	38.66
2004-05	1.11	1.04	1.16	49.06
2005-06	1.14	1.03	1.18	37.53
2006-07	1.13	1.04	1.17	29.69
2007-08	1.10	1.13	1.25	17.63
2008-09	1.11	1.20	1.34	17.04
2009-10	1.12	1.26	1.41	14.11
Correlation (r)	-0.513	-0.665	-0.60	-
Calculated value of \t\ with (n-2) d. f.	1.69	2.46	2.12	-

Note: (i) Tabulated value of 't' with (n-2) d .f. i.e., 8 d. f. both at 5% and 1% levels of significance for both tailed tests are 2.31 and 3.36 respectively. (ii) Since, the calculated value of \t\ of correlation coefficient between ROE and DFL is higher than the tabulated value of 't' at 5% level of significance, so, the correlation coefficient between DFL and ROE is statistically significant at 5% level of significance. Except this, in all other cases, the calculated values of \t\ are lower than the tabulated values of 't' both at 5% and 1% levels of significance so, the correlation coefficients are not statistically significant both at 5% and 1% levels of significance.
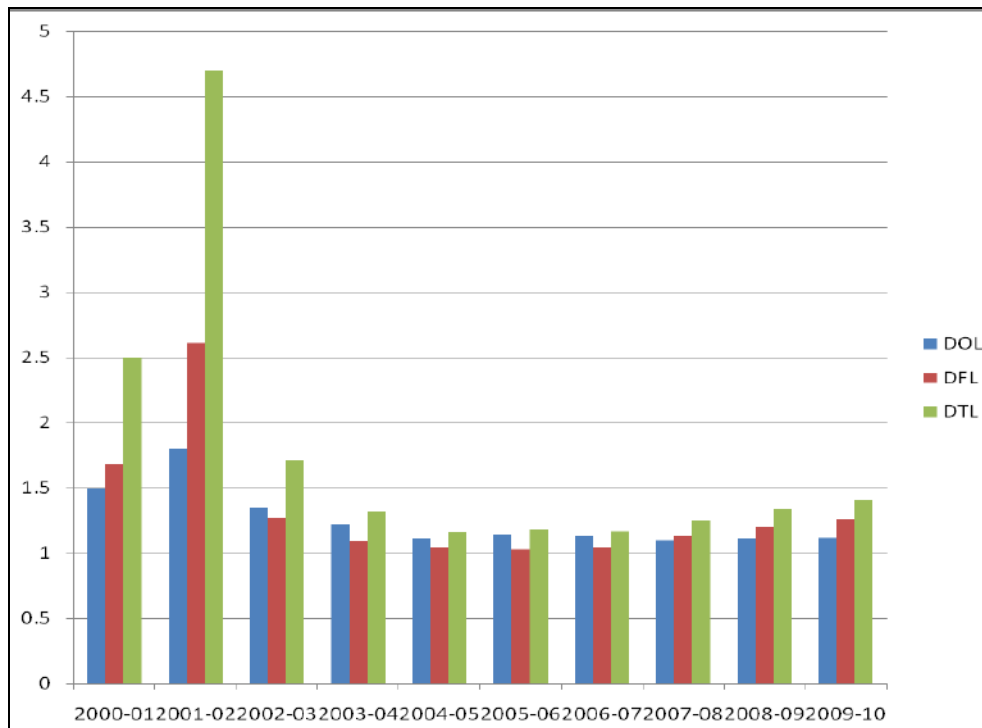
Chart 3: Diagrammatic Representation of Leverage Ratios of Tata steel

Major findings in respect of leverage ratios
Diagram-3 depicts that there is a decreasing trend in the values of DOL during the period under study except the financial year 2001-02. That means, on an average, the degree of operating risk decreases during the said accounting period. So, we can conclude that the ratio of fixed operating costs to total costs decreases during the period under study except in the accounting year 2001-02.

The calculated value of correlation coefficient between the degree of operating leverage (DOL) and return on equity (ROE) is (-) 0.513. It signifies that there is a moderately negative association between these two variables and this relationship is statistically insignificant both at 5% and 1% levels of significance. So, we can conclude that with the decrease in the value of DOL the return on equity increases but this association is not statistically significant both at 5% and 1% levels of significance.

Again, the computed value of correlation coefficient between DFL and ROE is (-) 0.665. It signifies that there is a moderately high degree of negative association between these two variables and this relationship is statistically significant at 5% level of significance during the study period.

The computed value of correlation coefficient between DTL and ROE is (-) 0.60, which signifies that there is a moderately high degree of negative association between these two variables and also this association is not statistically significant both at 5% and 1% levels of significance during the study period.

If we go through the rate of return on equity it can easily be seen that in the very first two years of study (i.e., 2000-01 and 2001-02) the rate of return is low and after that for the accounting years 2002-03 to 2006-07 this rate is high and then there is a decreasing trend in the rate of return, but there is no stability in that rate; rather there is a fluctuating trend in the rate of return on equity throughout the study period.

Conclusion
The investigation of connection coefficient uncovers that out of eight proportions portrayed on table-1 identifying with the working capital administration four have enrolled positive affiliation and rest four have enlisted negative relationship with the chose productivity proportion (for example ROCE). Out of the over eight proportions thought about table-1, identifying with working capital administration just ITR has a serious level of positive relationship with the productivity proportion (i.e., ROCE), and which impacts the benefit of the organization at 5% degree of importance. The fundamental suggestion is that if an organization has both the influences at a significant level, it will be an unsafe position on the grounds that the joined impact of the two is a various of these two influences. Thusly, if an organization has a high working influence, the monetary influence should be kept at a low level. Appropriately, if an organization has high working influence and low monetary influence, it can mostly weaken the impact of high working influence. A low working influence implies high controllable costs (variable expenses) and low wild costs (fixed expenses) and along these lines a safer circumstance. In the current investigation, the organization has the high working and monetary influences during the initial three years of the examination. That implies the organization is in an extremely unsafe situation during the initial three years of the examination when contrasted with the whole investigation time frame.

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