

A Study of Working Capital Management in Tata Steel

Dr. Yogesh Kumar Saxena

C-4, Adarsh Nagar, Meerut, Email : apec.yogeshsaxena@gmail.com

Abstract

A business organization should determine the exact requirement of working capital and maintain the same evenly through out the operating cycle. It is worth mentioning that a firm should have neither excess nor inadequate working capital as both the phenomena of over capitalization and under capitalization of working capital generate adverse effects on the profitability and liquidity of the concerned firm. Thus, some amount of cash is blocked in raw materials, WIP, finished goods, and sundry debtors and day to day cash requirements. However some part of current assets may be financed by the current liabilities also. Tata Steel Limited (formerly Tata Iron and Steel Company Limited (TISCO)) is an Indian multinational steel-making company headquartered in Mumbai and a subsidiary of the Tata Group. The study of working capital is based on tools like Trend Analysis, Ratio Analysis, Working Capital Leverage, Operating Cycle etc. Further the study is based on last three years' Annual Reports of TATA STEEL Pvt. Ltd. The study has been conducted on working capital, ratio analysis, working capital leverage, working capital components which helped the company to manage its working capital efficiency and affectively.

Key Words: Working capital; Steel; Current ratio, Working capital turnover ratio, Current assets turnover ratio, Debt equity ratio, Debtors turnover ratio.

1. INTRODUCTION

Management of working capital is one of the most important functions of corporate management. Every organization, whether profit oriented or not, irrespective of its size and nature of business, needs requisite amount of working capital. The efficient working capital management is the most crucial factor in maintaining survival, liquidity, solvency and profitability of the concerned business

organisation. It needs sufficient finance to carry out purchase of raw material; payment of day-to-day operational expenses including salaries and wages, repairs and maintenance expenses etc. and funds to meet these expenses are collectively known as working capital.

The importance of working capital in any industry needs no special emphasis. Working capital is considered to be life-giving force to an economic entity. Working capital is necessary to finance current assets which include inventories, debtors, marketable securities, bank, cash, short term loans and advances, payment of advance tax and so on. Fundamentally, there are two concepts of working capital and they are (i) Gross Working Capital and (ii) Net Working Capital. Gross Working Capital refers to

Access This Research Paper Online
http://EconPapers.repec.org/RePEc:jct:journal:v:12:y:2017:i:1:p:37-47 https://ideas.repec.org/a/jct/journal/v12y2017i1p37-47.html http://jctindia.org/april2017/v12i1-6.pdf

How to Cite This Research Paper
Saxena, Yogesh Kumar. A Study of Working Capital Management in Tata Steel. Journal of Commerce and Trade April 2017; 12 : 1; Pp.37-47.

financial resource remaining invested in current assets and Net Working Capital represents the gulf between the Gross Working Capital and Current Liabilities or simply it is the difference between Current Assets and Current Liabilities.

A business organization should determine the exact requirement of working capital and maintain the same evenly through out the operating cycle. It is worth mentioning that a firm should have neither excess nor inadequate working capital as both the phenomena of over capitalization and under capitalization of working capital generate adverse effects on the profitability and liquidity of the concerned firm. The effective working capital necessitates careful handling of current assets to ensure short-term liquidity and solvency of the business. To be more specific, neither understocking nor overstocking of raw materials, careful maintenance and trade off between credit receiving period from sundry creditors and credit allowing period to sundry debtors (generally credit period from sundry creditors should be more than credit period allowed to sundry debtors and the gulf between these two periods is technically known as float of comfort), maintenance of requisite cash and bank balance including provision for contingency and planning both the short term and long term investment in appropriate manner without allowing any Cash Bank Balance to remain idle in the business are strictly required to be practiced by management.

Factors requiring consideration while estimating working capital

- ◇ The average credit period expected to be allowed by suppliers.
- ◇ Total costs incurred on material, wages.
- ◇ The length of time for which raw material are to remain in stores before they are issued for production.
- ◇ The length of the production cycle (or) work in process.

- ◇ The length of sales cycle during which finished goods are to be kept waiting for sales.
- ◇ The average period of credit allowed to customers
- ◇ The amount of cash required to make advance payment.

2. NEED OF WORKING CAPITAL MANAGEMENT

The objective of financial decision making is to maximize the shareholders wealth. To achieve this, it is necessary to generate sufficient profits can be earned will naturally depend upon the magnitude of the sales among other things but sales cannot convert into cash. There is a need for working capital in the form of current assets to deal with the problem arising out of lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sales activity. Technically, this refers to operating or cash cycle. If the company has certain amount of cash, it will be required for purchasing the raw material may be available on credit basis. Then the company has to spend some amount for labour and factory overhead to convert the raw material in work in progress, and ultimately finished goods. These finished goods convert in to sales on credit basis in the form of sundry debtors. Sundry debtors are converting into cash after expiry of credit period. Thus, some amount of cash is blocked in raw materials, WIP, finished goods, and sundry debtors and day to day cash requirements. However some part of current assets may be financed by the current liabilities also. The amount required to be invested in this current assets is always higher than the funds available from current liabilities. This is the precise reason why the needs for working capital arise.

3. COMPANY PROFILE

Tata Steel Limited (formerly Tata Iron and Steel Company Limited (TISCO) is an Indian

multinational steel-making company headquartered in Mumbai, Maharashtra, India, and a subsidiary of the Tata Group. It has an annual crude steel capacity of 28 million tonnes, and the largest private-sector steel company in India measured by domestic production. Tata Steel has manufacturing operations in 26 countries, including Australia, China, India, the Netherlands, Singapore, Thailand and the United Kingdom, and employs around 80,500 people. Its largest plant is located in Jamshedpur, Jharkhand. In 2007 Tata Steel acquired the UK-based steel maker Corus which was the largest international acquisition by an Indian company till that date.

It was ranked 471st in the 2013 Fortune Global 500 ranking of the world's biggest corporations. It was the seventh most valuable Indian brand of 2013 as per Brand Finance.

(a) Acquisition By Tata Steel

- (i) **NatSteel in 2004:** In August 2004, Tata Steel agreed to acquire the steel making operations of the Singapore based NatSteel for S\$486.4 million in cash.
- (ii) **Millennium Steel in 2005:** Tata Steel acquired a majority stake in the Thailand-based steelmaker Millennium Steel for a total cost of \$130 million. It paid US\$ 73 million to Siam Cement for a 40 per cent stake and offered to pay 1.13 baht per share for another 25 per cent of the shares of other shareholders. Millennium Steel has now been renamed to Tata Steel Thailand and is headquartered in Bangkok. On March 31, 2013, it held approx. 68 per cent shares in the acquired company.
- (iii) **Corus in 2007:** On 20 October 2006, Tata Steel signed a deal with Anglo-Dutch company, Corus to buy 100 per cent stake at £4.3bn (\$8.1 billion) at 455 pence per share. On 19 November 2006, the Brazilian steel company Companhia-Siderúrgica- Nacional (CSN) launched a counter offer for Corus at 475 pence per share, valuing it at £4.5

billion. On 11 December 2006, Tata preemptively upped its offer to 500 pence per share, which was within hours trumped by CSN's offer of 515 pence per share, valuing the deal at £4.9 billion. The Corus board promptly recommended both the revised offers to its shareholders. On 31 January 2007, Tata Steel won their bid for Corus after offering 608 pence per share, valuing Corus at £6.7 billion (\$12 billion).

- (iv) **Rolling Mill Companies In Vietnam in 2007:** Tata Steel through its wholly owned Singapore subsidiary, NatSteel Asia Pte Ltd, acquired controlling stake in two rolling mill companies located in Vietnam: Structure Steel Engineering Pte Ltd (100 per cent stake) and Vinausteel Ltd (70 per cent stake). The enterprise value for the acquisition was \$41 million. With this acquisition, Tata Steel got hold of two rolling mills, a 250k tonnes per year bar/wire rod mill operated by SSE Steel Ltd and a 180k tonnes per year reinforcing bar mill operated by Vinau steel Ltd.

(b) Share Holding By Tata Steel

As on 31 March 2016, Tata Group held 31.35 per cent shares in Tata Steel. Over 1 million individual shareholders hold approx. 21 per cent of its shares. Life Insurance Corporation of India is the largest non-promoter shareholder in the company with 14.98 per cent shareholding.

Table 1
Shareholding

Shareholders	Shareholding
Promoters : Tata Group companies	31.35%
Insurance Companies	24.09%
+Individual shareholders	21.06%
Foreign Institutional Investors	14.36%
GDRs	01.86%
Others	07.28%
Total	100.0%

(c) Major Competitor

Tata Steel's major competitors include Arcelor Mittal, Essar Steel, JSW Steel, SAIL and VISA Steel.

4. RESEARCH METHODOLOGY

Data can be defined as the quantitative or qualitative values of a variable. Data is plural of Datum which literally means to give or something given. Data is thought to be the lowest unit of information from which other measurements and analysis can be done. Data can be numbers, images, words, figures, facts or ideas. Data in itself cannot be understood and to get information from the data one must interpret it into meaningful information. There are various methods of interpreting data. Data sources are broadly classified into primary and secondary data.

(a) Objectives of the Study

Study of the working capital management is important because unless the working capital is managed effectively, monitored efficiently, planned properly and reviewed periodically at regular intervals to remove bottlenecks if any the company can not earn profits and increase its turnover. With this primary objective of the study, the following further objectives are framed for a depth analysis.

1. To study the working capital management of TATA STEEL Pvt. Ltd.
2. To study the liquidity position through various working capital related ratios.
3. To study the way and means of working capital finance of the of TATA STEEL Pvt. Ltd.

(b) Rationale of the Study

Working capital management implicates the administration of current assets as well as current liabilities. The scope of the study is identified after and during the study is conducted. The study of working capital is based on tools like trend Analysis, Ratio Analysis, working capital leverage, operating cycle etc.

Further the study is based on last 3 years Annual Reports of TATA STEEL Pvt. Ltd. Even factors like competitor's analysis, industry analysis were not considered while preparing this project. Firms with

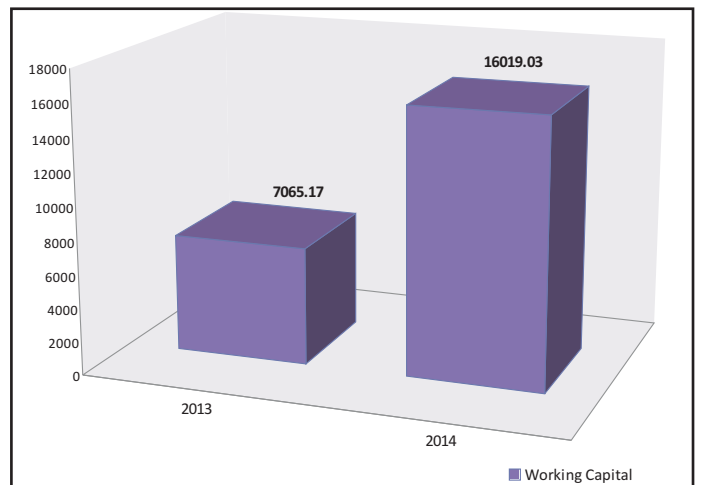
too few current assets may incur shortages and difficulties in maintaining smooth operations.

5. FINDINGS

Table 2
Statement Showing Changes in Working Capital
Statement 2013 - 2014

Particular	Mar 31st 2013 (in crore)	Mar 31st 2014 (in crore)	Working Capital	
			INC	DEC
Current Asset:				
Sundry Debtors	11512.44	14816.28	3303.84	
Cash & Bank	6815.11	10892.66	4077.55	-
Balance	7.63	9.83	2.2	-
Interest	1715.11	1847.58	132.47	-
Accrued On	16971.53	22213.66	5242.13	-
Investment				-
Stores & Spare				
Parts				
Stock-in-trade				
TOTAL				
CURRENT ASSET	37021.82	49780.01	12758.19	-
Current Liability:				
Current Liability	23392.49	26671.06	3278.57	-
Provisions	6594.16	7089.92	495.76	-
TOTAL				
CURRENT LIABILITY	29956.65	33760.98		
Working Capital	7065.17	16019.03	8953.86	
Increase In Working Capital	8953.86			8953.86
TOTAL	16019.03	16019.03		8953.86

Figure 1
Current Assets & Current Liabilities for the Year
2013-2014



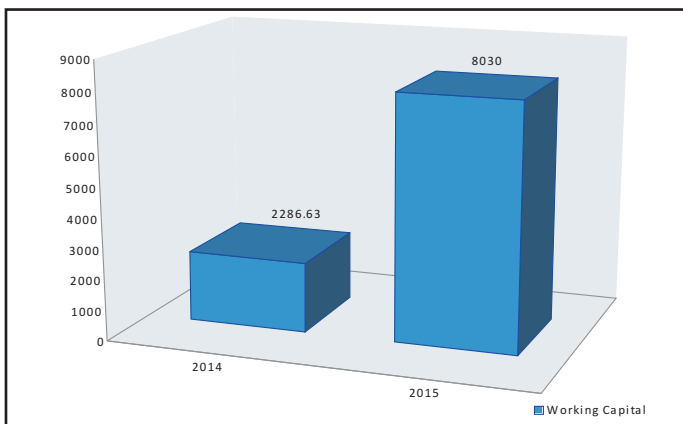
Interpretation (Figure 1)

The statement shows increase in working capital which enables a firm to avail cash discount facilities offer to it by the suppliers. It also enables a firm to make prompt payment. Making prompt payment is a base to create and maintain goodwill.

Table 3
Statement Showing Changes in Working Capital
Statement 2014-15

Particular	Mar 31st 2014 (in crore)	Mar 31st 2015 (in crore)	Working Capital	
			INC	DEC
Current Asset:				
Current investments	3159.28	1398.37	-	1760.91
Cash & Bank Balance	10859.05	10801.58	-	57.47
Trade receivable	14811.92	14878.48	66.56	-
Short term Loan & Advances	3547.18	3868.73	321.55	-
Inventories	10591.30	8538.08	-	2053.22
Other current assets	56.29	32.74	-	23.55
TOTAL CURRENT ASSET	43025.02	39517.98		
Current Liability:				
Current Liability	15001.22	18860.99	3859.77	-
Provisions	3395.25	3370.05	-	25.2
Short term borrowings	3794.44	4699.08	904.64	-
Trade payable	18547.48	20617.86	2070.38	-
TOTAL CURRENT LIABILITY	40738.4	47547.98		
Working Capital	2286.63	8030		5743.37
Increase In Working Capital	5743.37			
TOTAL	8030	8030		5743.37

Figure 2
Current Assets & Current Liabilities
for the Year 2014-2015



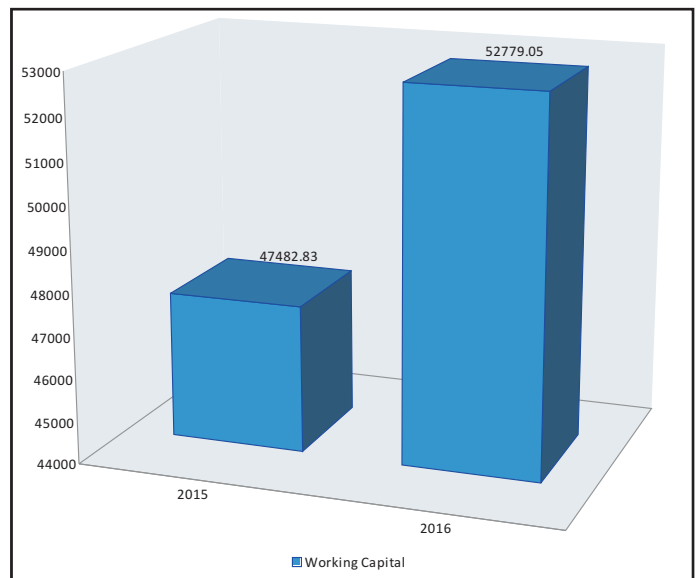
Interpretation (Figure 2)

The statement shows decrease in working capital which signifies that company has to rely less on cash credit limit to be taken from the bank for the purpose of meeting its working capital requirements.

Table 4
Statement Showing Changes in Working Capital
Statement 2015-16

Particular	Mar 31st 2015 (in crore)	Mar 31st 2016 (in crore)	Working Capital	
			INC	DEC
Current Asset:				
Current investment	1398.37	760.29	-	638.08
Cash & Bank Balance	9859.67	10798.81	939.14	-
Other current assets	417.25	1478.50	1061.25	-
Loan & Advances	3717.42	4060.54	343.12	-
Inventories	25598.00	24091.19	-	15068.81
Trade receivable	14878.48	13993.96	-	880.52
TOTAL CURRENT ASSET	55869.19	55183.29		
Current Liability:				
Current Liability	18779.01	19942.36	1163.35	-
Provisions	3476.19	2943.29	-	532.9
Short term borrowings	4699.08	8114.56	3415.48	-
Trade payable	20528.55	21778.84	1250.28	-
TOTAL CURRENT LIABILITY	47482.83	52779.05		
Working Capital	8386.36	2404.24		
Decrease In Working Capital		5982.12	5982.12	-
TOTAL	8386.36	8386.36	5982.12	

Figure 3
Current Assets & Current Liabilities for the
Year 2015-2016



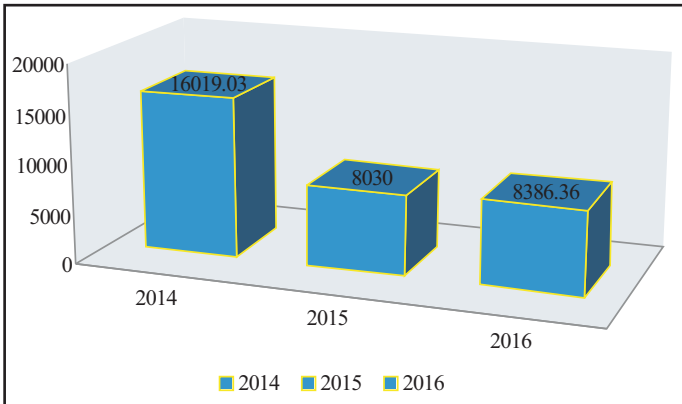
Interpretation (Figure 3)

The statement shows increase in working capital which enables a firm to avail cash discount facilities offer to it by the suppliers. It also enables a firm to make prompt payment. Making prompt payment is a base to create and maintain goodwill.

**Table 5
Comparison Of Working Capital for the Year
2014 - 2016**

2014		2015			2016		
W.C.	INC/DEC	W.C.	INC/DEC	%	W.C.	INC /DEC	%
16019.03	-	8030	5743.37	1.39	8386.36	5982.12	1.39

**Figure 4
Comparison of Working Capital
for the Year 2014-2016**



Interpretation (Figure 4)

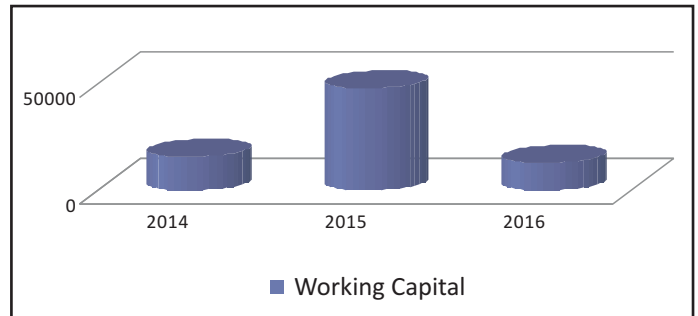
The working capital of the company is positive this is because the current assets of the company are more than the current liabilities of the company. It was observed that in the year 2014 working capital was 16019.03, in 2015 it was 8030.00 and in 2016 it was 8386.36.

**Table 6
Calculation of Working Capital for the Year
2014 - 2016**

Particulars	2014	2015	2016
CURRENT ASSET			
Inventories		8538.08	24091.19

Stock –in– trade	22213.66		
Sundry Debtors	14816.28		
Cash & Bank	10892.66	10801.58	10798..81
Other Current Assets		14878.48	1478.50
Stores & Spare Parts	1847.58		
Current Investment			760.29
Loan & Advances		3868.73	4060.54
Interest Accrued On Investment	9.83		
Trade Receivable		14878.48	13993.96
Total Current Assets	49780.01	39517.98	55183.29
Current Liability			
Current Liability	26671.06	18860.99	19942.36
Provisions	7089.92	3370.05	2943.29
Short term borrowing		8114.56	8114.56
Trade Payable		21778.84	21778.84
Total Current Liability	33760.98	47547.98	52779.05
Working Capital	16019.03	-47547.98	12872.30

**Figure 5
Working Capital**



Interpretation (Figure 5)

The working capital of the company is positive this is because the current assets of the company are more than the current liabilities of the company.

It was observed that in the year 2014 working capital was 16019.03, in 2015 it was - 47547.98 & in 2016 it was 12872.30.

6. CALCULATION OF RATIOS

(a) Current Ratio :

Current Ratio = Current Assets/Current Liabilities

Table 7

Current Liability	2014	2015	2016
Current Liability	26671.06	18860.99	19942.36
Provisions	7089.92	3370.05	2943.29
Short term borrowing		8114.56	8114.56
Trade Payable		21778.84	21778.84
Total Current Liability	33760.98	47547.98	52779.05

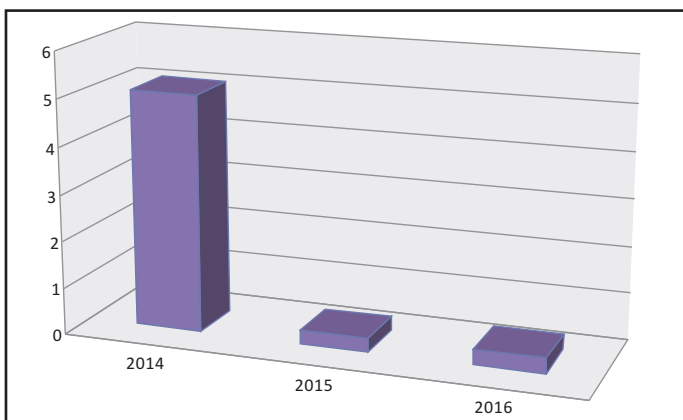
Table 8

Particular	2014	2015	2016
Current assets	17119.72	13991.72	17880.82
Current liabilities	33760.98	47547.98	52779.05
Current ratio	5.07times	0.29 times	0.34 times

Table 9

Current Assets	2014	2015	2016
Inventories		8538.08	24091.19
Stock –in– trade	22213.66		
Sundry Debtors	14816.28		
Cash & Bank	10892.66	10801.58	10798.81
Other Current Assets		14878.48	1478.50
Stores & Spare Parts	1847.58		
Current Investment			760.29
Loan & Advances		3868.73	4060.54
Interest Accrued On Investment	9.83		
Trade Receivable		14878.48	13993.96
Total current Assets	17119.72	13991.72	17880.82

**Figure 6
Current Ratio**



Interpretation (Figure 6)

Current ratio indicates the availability of current assets in rupees for every rupee of current liability. This ratio reflects the financial stability of the enterprise. The standard of the normal ratio is 2:1. Now if we analyze the three years data it can be predicted that it holds a declining position in the year 2014-2013 And it is seen that it holds a low position than the standard one and the company is required to improve its position.

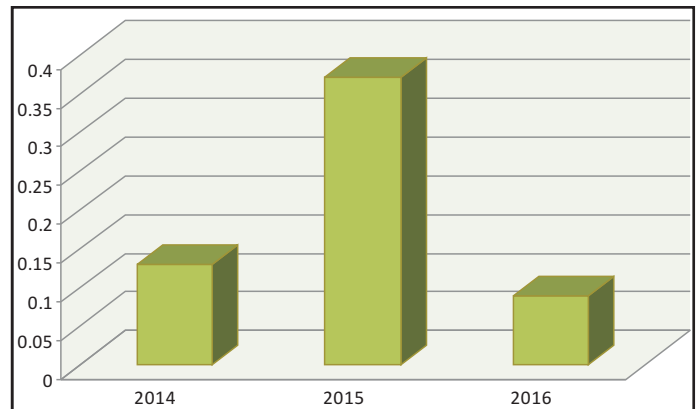
(b) Working Capital Turnover Ratio

Working Capital Turnover Ratio = Net Sales/Working Capital

Table 10

Particular	2014	2015	2016
Net sales	121345.75	132899.70	134711.54
Working capital	16019.03	47547.98	12872.30
W/c turnover ratio	0.13times	0.37times	0.09times

**Figure 7
(Working Capital Turnover Ratio)**



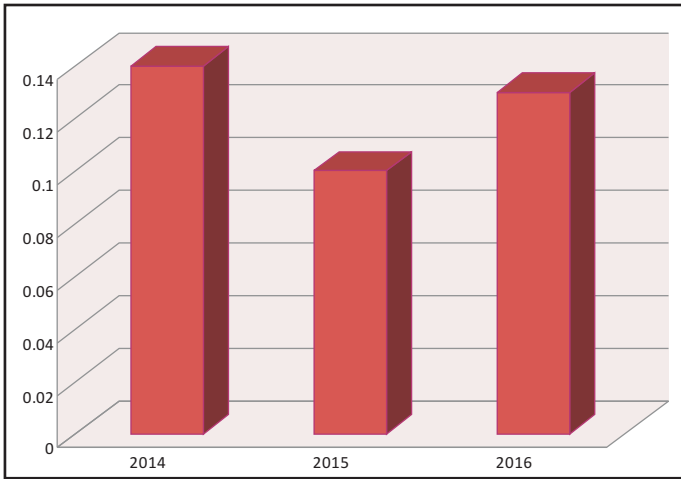
Interpretation (Figure 7)

Here we can interpret that the working capital turnover ratio is increasing because current assets are decreasing over the current liabilities therefore working capital decreasing from 2014 to 2016.

(c) Current Assets Turnover Ratio

Current Assets Turnover Ratio = Sales/Current Assets

Figure 8
Current Assets Turnover Ratio



Interpretation (Figure 8)

We observed that the current asset turnover ratio is increasing because of increase in current assets and sales in 2014-16.

Table 11

Current Assets	2014	2015	2016
Inventories		8538.08	24091.19
Stock –in– trade	22213.66		
Sundry Debtors	14816.28		
Cash & Bank	10892.66	10801.58	10798..81
Other Current Assets		14878.48	1478.50
Stores & Spare Parts	1847.58		
Current Investment			760.29
Loan & Advances		3868.73	4060.54
Interest Accrued On Investment	9.83		
Trade Receivable		14878.48	13993.96
Total current Assets	17119.72	13991.72	17880.82

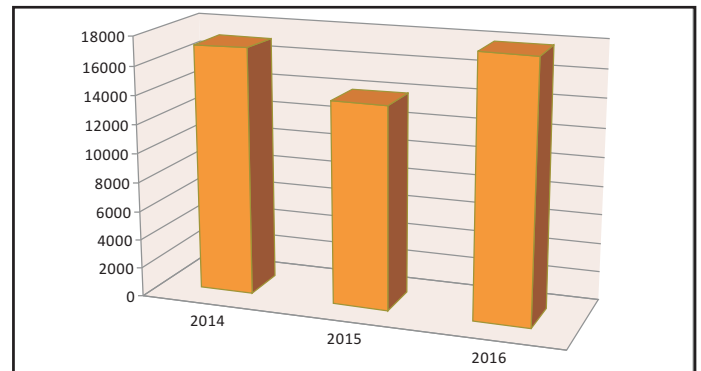
Table 12

Particulars	2014	2015	2016
Sales	121345.75	132899.70	134711.54
Current Assets	17119.72	13991.72	17880.82
Current Assets Turnover Ratio	0.14times	0.10times	0.13times

Table 13

Current Assets	2014	2015	2016
Inventories		8538.08	24091.19
Stock –in– trade	22213.66		
Sundry Debtors	14816.28		
Cash & Bank	10892.66	10801.58	10798..81
Other Current Assets		14878.48	1478.50
Stores & Spare Parts	1847.58		
Current Investment			760.29
Loan & Advances		3868.73	4060.54
Interest Accrued On Investment	9.83		
Trade Receivable		14878.48	13993.96
Total current Assets	17119.72	13991.72	17880.82

Figure 9
Current Assets



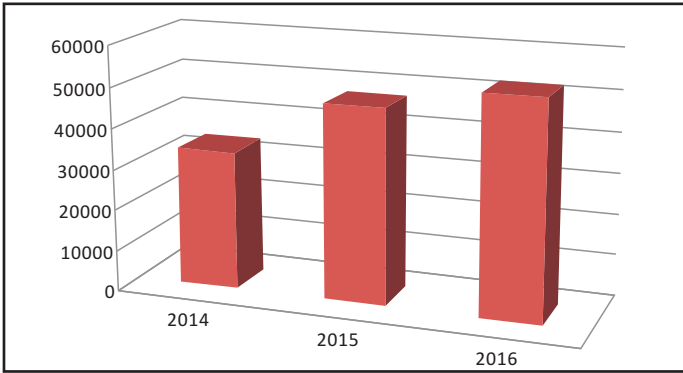
Interpretation (Figure 9)

Here we observe that a current asset of the company is decreasing in the year 2015 and increasing in the year 2016.

Table 14

Current Liability	2014	2015	2016
Current Liability	26671.06	18860.99	19942.36
Provisions	7089.92	3370.05	2943.29
Short term borrowing		8114.56	8114.56
Trade Payable		21778.84	21778.84
Total Current liability	33760.98	47547.98	52779.05

Figure 10
Current Liabilities



Interpretation (Figure 10)

If we analyze the above table then we can see that it follow an uneven trend. The important component of current liabilities is sundry creditors and other liabilities. This is liability for company so this should be less. When companies have minimum liabilities it creates a better goodwill in market. High current liabilities indicate that company is using credit facilities by creditors.

(d) Debt Equity Ratio :

$$\text{Debt Equity Ratio} = \frac{\text{Long term liabilities/}}{\text{Shareholders fund}}$$

Table 15

Particular	2014	2015	2016
Long Term Debt	32079.04	45328.24	46857.62
Shareholder Equity	1136.74	43021.12	4172.24
Debt Equity ratio	0.03times	0.95times	0.08times

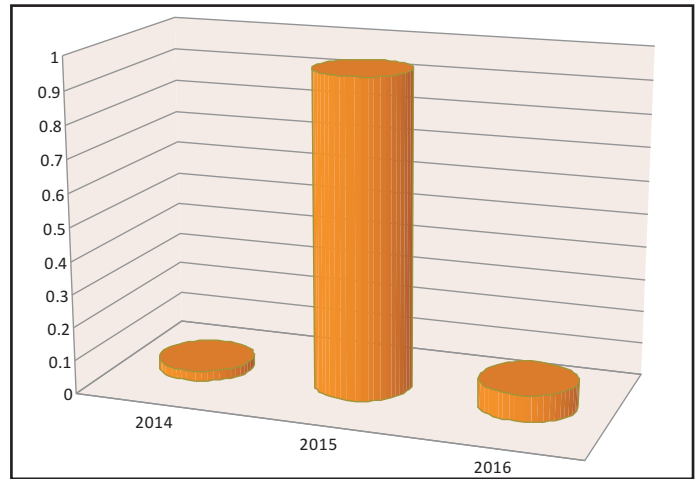
Table 16

Long term liabilities	2014	2015	2016
Unsecured loan	32079.04	45328.24	46857.62
Total	32079.04	45328.24	46857.62

Table 17

Shareholders' Funds	2014	2015	2016
Share capital	958.54	971.41	971.41
Adv against warrents	178.20	-	-
Reserves and surplus	-	42049.71	33200.83
Total	1136.74	43021.12	4172.24

Figure 11
Debt Equity Ratio



Interpretation (Figure 11)

Debt equity ratio of the company is below 1 which is below the standard norms and hence the company has good financial position and less of financial risk and insolvency.

(e) Debtors Turnover Ratio

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit sales/}}{\text{Debtor}}$$

Table 18

Particulars	2014	2015	2016
Credit Sales	121345.75	35975.56	1,38,821.14
Debtors	14816.28	14878.48	13,993.96
Debtors Turnover Ratio	0.12times	0.14times	0.10times

Figure 12
Debtors Turnover Ratio

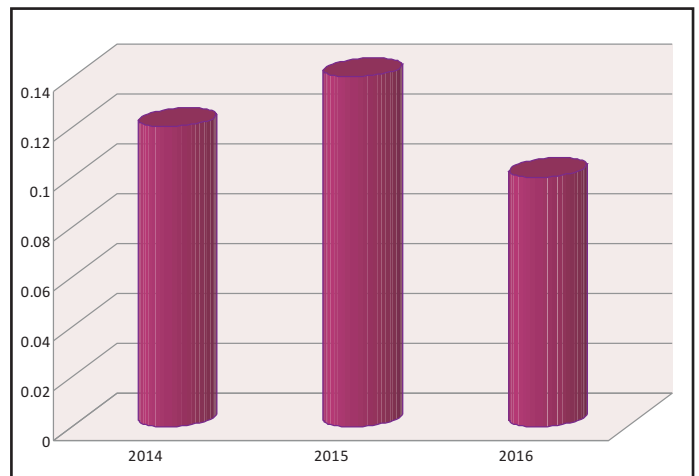


Table 19
Abstract of Funds Flow (2013-14)

Sources of funds	Amount	Application of funds	Amount
		Increase in Working Capital	8953.86

Observation (Table 19)

The above shows that there has been increase in working capital in the year 2013-14 because sources are increasing over uses of funds.

Table 20
Abstract of Funds Flow (2014 - 2015)

Sources of funds	Amount	Application of funds	Amount
Increase in Working Capital	5743.37		

Observation (Table 20)

The above shows that there has been increase in working capital in the year 2014 - 2015 because sources are decreasing over uses of funds.

Table 21
Abstract of Funds Flow (2015 - 2016)

Sources of funds	Amount	Application of funds	Amount
		Decrease in Working Capital	5982.12

Observation (Table 21)

The above shows that there has been increase in working capital in the year 2015 -2016 because sources are decreasing over uses of funds.

7. LIMITATIONS OF THE STUDY

Following limitations were encountered while preparing this project:

(a) Limited Data

This paper has completed with annual reports; it just constitutes one part of data collection i.e. secondary. There were limitations for primary data collection because of confidentiality.

(b) Limited Period

This paper is based on three year annual reports.

Conclusions and recommendations are based on such limited data. The trend of last three year may or may not reflect the real working capital position of the company

(c) Limited Area

Also it was difficult to collect the data regarding the competitors and their financial information. Industry figures were also difficult to get.

(d) Type Data Used

This paper is completely based on secondary data collected from various sources like internet, books etc.

8. CONCLUSION

Working capital management is important aspect of financial management. The study of working capital management of TATA STEEL Pvt. Ltd. has revealed that the current ratio was as per the standard industrial practice but the liquidity position of the company showed an increasing trend. The study has been conducted on working capital ratio analysis, working capital leverage, working capital components which helped the company to manage its working capital efficiency and affectively.

- (i) Working capital of the company was increasing and showing positive Working capital per year. It shows good liquidity position.
- (ii) Positive working capital indicates that company has the ability of payments of short terms liabilities.
- (iii) Working capital increased because of increment in the current assets is more than increase in the current liabilities.
- (iv) Company's current assets were always more than requirement it affect on profitability of the company.
- (v) Current assets are more than current liabilities indicate that company used long term funds for short term requirement, where long term funds are most costly then short term funds.

- (vi) Current assets components shows sundry debtors were the major part in current assets it shows that the inefficient receivables collection management.
- (vii) In the year 2013-14 working capital increased because decreased the expenses as manufacturing expenses and decrease the price of raw material as increased in the inflation rate.
- 9. SUGGESTIONS**
- Suggestion can be use by the firm for the betterment increased of the firm after study and
- analysis of paper on study and analysis of working capital. Following are some suggestions that may be put forth :
- (i) Company should raise funds through short term sources for short term requirement of funds, which comparatively economical as compare to long term funds.
 - (ii) Company should take control on debtor's collection period which is major part of current assets.
 - (iii) Company has to take control on cash balance because cash is non earning assets and increasing cost of funds.

REFERENCES

1. Bari, R.R., "Cash Planning and Management", Triveni Publicaitons, Delhi I Edition.
2. Bierman, Harold (Jr.) and Mcadams, Alan K., "Management Decisions for Cash and Marketable Securities", Cornell University (U.S.A.), 1992.
3. Bogen, Jules J., "Financial Hankbook", The Ronald Press Co., New York.
4. Brealey & Myres, "Principles of Corporate Finance", Tata McGraw Hill.
5. Datt, Ruddar, K.P.M. Sundharam, "Indian Economy", New Delhi, Chand & Company Ltd, 2000.
6. Donnell, John L. and Coldberg, Milton S., "Eliments of Financial Administration", Prentice Hall of India (P) Ltd., New Delhi, 2001.
7. Gitman, Lawrence J., "Principles of Managerial Finance", Harper & Row Publishers, New York.
8. Husband, Williams, H. and Dockeray, James, C., "Modern Corporation Finance", Richard D. Irwin, Illiionis.
9. Man Mohan and Geol, S.N., "Principles of Management Accounting", Sahitya Bhawan, Agra, 2000.
10. Mishra, R.K., "Problems of Working Capital (with Special Reference to Selected Public Undertakings in India)", Somaiya Publications Private Ltd., New Delhi.
11. Pandey, I.M., "Financial Management", Vikas Publishing House Pvt. Ltd., Delhi.
12. Ramesh Gupta, "Inflation Accounting", Tata McGraw Hill Publishing Co. Ltd., New Delhi.
13. S.K. Mishra, V.K. Puri, "Indian Economy", Himalya Publishing House, Delhi.
14. Walker, E.W. and Baughn, W.H., "Financial Management and Policy", New Delhi.
15. Yasaswy, N.J. "Finance for Non-Financial Executives", Allied Publishers Pvt. Ltd., New Delhi.

PERIODICALS

- ❖ Annual Reports of TISCO
- ❖ Annual Reports of SAIL
- ❖ The Management Accountant-ICWAI
- ❖ The Chartered Accountant-ICAI
- ❖ The Chartered Secretary-ICSI