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A STUDY OF WORKING CAPITAL MANAGEMENT IN STEEL COMPANIES OF INDIA

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ABSTRACT

For a flourishing working of a business organization fixed and current assets play a crucial role as organization commonly invests in these options. An effort has been made in this paper to study the various working capital components and the outcome of working capital management policies on profitability of 4 steel companies. This paper also tries to study the correlation between liquidity, profitability and profit before tax (PBT) of selected steel companies. The study is based on secondary data collected which had been collected from annual reports of different steel companies and prowess (CMIE database) for the period 2012 to 2016. In this paper there is an application of correlation analysis to identify the considerable effects of working capital management on the profitability. The management of operating capital is essential as it might persuade a direct impact on profitability and liquidity. In the present study, four steel sector companies operating in India has been selected. For analysis accounting ratios and appropriate statistical tool had been used. Keeping in this view, a study of an analysis of working capital management in steel companies is undertaken in the present work.

KEYWORDS: Inventory, Payables, Profitability and Liquidity

INTRODUCTION

Working capital is the lifeblood of a business. Good working capital management can take a business towards success whereas inefficient working capital management can move the business to downfall. An optimum working capital management is expected to contribute positively to the creation of firm's value. Working capital is of crucial importance in case of capacity utilization and consumption of steels Working capital is the cash available for day to day operations of a business and meets its obligations. Good working capital management will secure a company's financial stature and help build its business. It is necessary for increasing earnings and makes it easier to get business loans and attract potential investors. The main aim of a working capital management plan is to balance current assets against liabilities. This helps companies maintain its planned expenses like salaries and short term financial obligations. If a company's current liabilities are more than its current assets, it signifies a negative working capital. Hiring a good accounts manager who knows various techniques will take care of working capital management in a business efficiently. In case of deficiency, the company can increase the working capital with proper management of outstanding incomes, its creditors and of the company's inventory or by getting a short term loan. The company's growth rate can be increased with cash by regulating its investment plans and by handling profit efficiently. It is important to having good working capital management in order to identify the right time to convert the company's current assets into cash. This is called the cash conversion period. Working capital management always ensures sufficient cash flow in a business. This allows companies to pay their liabilities without delay and more importantly protects them bankruptcy.

A well designed and implemented working capital management has a important role for firms' profitability as well as to sustain liquidity powers. The important component of corporate finance is working capital management; since it directly influences firm's profitability as well as liquidity in everyday activities. In any business organization, it is apparent that there must be sufficient working capital to run day to day operation. Therefore, to operate the business activities smoothly, working capital of firm's must be sufficient. It is obvious that, the importance of efficient working capital management is unquestionable to all business activities. Because, business capability relies on its ability to effectively use manage receivables, inventories and payables.

Therefore, working capital should neither too high nor too low. Excessive working capital indicates an accumulation of idle current assets (resources) which don't contribute in generating income (profit) for the firm during the operating period. On the other side, inadequate working capital harms the credit worthiness and the day to day activities of firms and this may lead to insolvency (bankruptcy).

Steel is vital to the development of any modern economy and is considered to be the backbone of the human civilization. It is a product of a large and technologically complex industry having strong forward and backward linkages in terms of material flow and income generation. All major industrial economies are characterized by the subsistence of a strong steel industry and the growth of many of these economies has been largely shaped by the strength of their steel industries in their initial stages of development.

The establishment of Tata Iron and Steel Company (TISCO) in 1907 was the starting point of modern Indian steel industry. Afterwards a few more steel companies were established namely Mysore Iron and Steel Company, (later renamed Vivesvaraya Iron & Steel Ltd) in 1923; Steel Corporation of Bengal (later renamed Martin Burn Ltd and Indian Iron & Steel Ltd) in 1923; and Steel Corporation of Bengal (later renamed Martin Burn Ltd and Indian Iron and Steel Co) in 1939.

At present, India is among the top producers of all the forms of steel in the world .Easy accessibility of low cost manpower and preferences of plentiful referrers make India completive in the global setup. India occupies 4^{TH} rank in world's in the year 2012 in the crude steel production i.e. 77.6 million tons, while china is the world largest crude steel producer producing 716.5 million tons of crude steel. India per capita steel consumption is 56.9 kg as compared to world average consumption of 216.9 kg so this level of per capita consumption of steel is treated as one of the important indicators of socio-economic development and living standard of the people in any country because of large consumption of steels.

Recently, the steel industry is receiving significant foreign investments such as POSCO (South Korean steel producer) and Arcelor-Mittal Group (UK/Europe) based steel producer announcing plans for establishing about 12 million tonnes of production units in India. This change has also induced the government to come up with a National Steel Policy in 2005. The policy targets steel production to reach at 110 mt by 2019-20 with annual growth rate of 7.3 Percent.

The future, selective steel producers in India is very high making it prone to increasing returns to scale and the consequent market structure. TISCO, public sector entities, POSCO, Jindal, Essar, and Arcelor-Mittal will be among the major players accounting for the bulk of the 100 plus million tonnes of production.

MARKET SIZE

Steel production capacity of the country prolonged from 75 Million Tonnes Per Annum (MTPA) in 2009-10 to 90.5 Million Tonnes (MT) in 2014-15.

India produced 7.4 MT of steel in the month of June 2015 reporting the third highest production level globally which was 0.8 per cent higher than the country's steel production in the same month last year.

The steel sector in India contributes nearly two per cent of the country's gross domestic product (GDP) and employs over 600,000 people. The per capita consumption of total finished steel in the country has risen from 51 Kg in 2009-10 to about 59 Kg in 2014-15. India's steel consumption for FY 2015-16 is estimated to increase by 7 per cent, higher than 2 per cent growth last year, due to improving economic activity, as per E&Y's 'Global Steel 2015-16' report.

INVESTMENTS

Steel industry and its associated mining and metallurgy sectors have seen a number of major investments and developments in the recent past.

According to the data released by Department of Industrial Policy and Promotion (DIPP), the Indian metallurgical industries attracted foreign direct investments (FDI) to the tune of US$ 8.7 billion, respectively, in the period April 2000–May 2015.

Some of the major investments in the Indian steel industry are as follows:

- Posco Korea, the multinational Korean steel company, has signed an agreement with Shree Uttam Steel and Power (part of Uttam Galva Group) to set up a steel plant at Satarda in Maharashtra.
- SAIL plans to invest US$23.8 billion to increase the steel production to 50 MTPA by 2025.
- Arcelor Mittal, world's leading steel maker, has agreed a joint venture with Steel Authority of India Ltd (SAIL) to set up an automotive steel manufacturing facility in India.
- Iran has shown interest in strengthening ties with India in the steel and mines sector, said ambassador of the Islamic Republic of Iran, Mr Gholamreza Ansari in his conversation with Minister of Steel and Mines, Mr Narendra Singh Tomar.
- Public sector mining giant NMDC Ltd will set up a Greenfield 3-million tonne per annum steel mill in Karnataka jointly with the state government at an estimated investment of Rs 18,000 crore (US$ 2.8 billion).
- JSW Steel has announced to add capacity to make its plant in Karnataka the largest at 20 MT by 2022.

GOVERNMENT INITIATIVES

The Government of India is aiming to increase the steel production in the country from 81 MT in 2013-14 to 300 MT by 2025.

The Ministry of Steel has announced to invest in modernisation and expansion of steel plants of Steel Authority of India Limited (SAIL) and Rashtriya Ispat Nigam Limited (RINL) in various states to

increase the crude steel production capacity from 12.8 MTPA to 21.4 MTPA and from 3.0 MTPA to 6.3 MTPA respectively.

The Ministry of Steel is facilitating setting up of an industry driven Steel Research and Technology Mission of India (SRTMI) in association with the public and private sector steel companies to spearhead research and development activities in the iron and steel industry at an initial corpus of Rs 200 crore (US$ 31.67 million).

Some of the other initiatives taken by the government in this sector are as follows:

- Government has planned Special Purpose Vehicles (SPVs) with four iron ore rich states i.e., Karnataka, Jharkhand, Orissa, and Chhattisgarh to set up plants having capacity between 3 to 6 MTPA.
- SAIL plans to invest US$ 23.8 billion for increasing its production to 50 MTPA by 2025. SAIL is currently expanding its capacity from 13 MTPA to 23 MTPA, at an investment of US$ 9.6 billion.
- A Project Monitoring Group (PMG) has been constituted under the Cabinet Secretariat to fast track various clearances/resolution of issues related to investments of Rs 1,000 crore (US$ 152 million) or more.
- To increase domestic value addition and improve iron ore availability for domestic steel industry, duty on export of iron ore has been increased to 30 per cent.

LITERATURE REVIEW

To propose and defend the research work, a number of research papers are analysed. Following are the excerpts from the different research work performed by number of academicians and researchers.

Nimalathasan Balasundaram (2003) stated the impact of working capital management on profitability and by reducing the number of day's inventory and accounts receivables one can increase the profitability.

Lazaridis et al (2006) investigated the relationship between profitability and working capital management in Athens Stock market Exchange (ASE) using a sample of 131 firms for the period from 2001 to 2004. Their findings showed that cash conversion cycle connected with gross profit margin negativity.

Raheman Abdul et al (2007) affirmed the effect of Working Capital Management on liquidity as well on profitability of the firm. They had taken a sample of 94 Pakistani firms which were listed on Karachi Stock Exchange for 6 years of period from 1999 – 2004, they had taken into consideration various variables of working capital management like the Average collection period, Inventory turnover in days, Average payment period, Cash conversion cycle and Current ratio on the Net

operating profitability of Pakistani firms. Pearson's correlation and regression analysis were used for analysis. The results revealed that there was a study negative relationship between variables of the working capital management and profitability of the firm. They initiate that there was a significant negative relationship between liquidity and profitability. They also found that there was a positive relationship between size of the firm and its profitability. There was also a significant negative relationship between debt used by the firm and its profitability.

Nazir et al (2009). The sample consisted of 204 non-financial firms active in Karachi Stock Exchange (KSE) over the period from 1998 to 2005. Their result showed that the rate of assertiveness in working capital polices and financing measures were negatively associated with both profitability ratios including return on assets and Tobin's q. More aggressive policies should be followed in managing current liabilities.

Ramachandran Azhagaiah et al (2009) analyzed the relationship between Working Capital Management Efficiency and Earnings before Interest& Taxes of the Paper Industry in India during the period 1997–1998 to 2005– 2006. For that he took three index values into consideration Performance Index, Utilization Index, and Efficiency Index, and was connected with explanatory variables, viz., Cash Conversion Cycle, Accounts Payable Days, Accounts Receivables Days, and Inventory Days. Various control variables were considered in the analysis like Fixed Financial Assets Ratio, Financial Debt Ratio and Size (Natural log of Sales) and were connected with the EBIT. The study revealed that the Paper Industry had managed the working capital satisfactorily. The Accounts Payable days had a significant (–) ve relationship with EBIT, showed that by deploying payment to suppliers will improve the EBIT. The Paper Industry in India performed outstandingly well during the period, however, less profitable firms wait longer to pay their bills, and follow a decline in cash conversion cycle. He concluded that the Indian paper firms performed extremely well during the period

Dănuleţiue Adina Elena (2010), the principle of this study was to analyse the efficiency of working capital management of companies from Alba County. The conclusion to the study was that there was a weak linear correlation between working capital management indicators and profitability rates.

Singh Karamjeet (2010) stated that working capital management should be well designed and it had a momentous contribution for firms' profitability so as to maintain the liquidity powers. The rationale of this study was to investigate the liaison between profitability and liquidity of firms. Therefore, the working capital should neither too high nor too low. Excessive working capital indicates a gathering of idle current assets (resources) which didn't contribute in generating income (profit) for the firm during the operating period. On the other side, inadequate working capital

troubles the credit worthiness and the day to day activities of firms and this might lead to insolvency (bankruptcy).

Raheman Abdul et al (2010) Working capital management played an important role in better performance of manufacturing firms. The results indicate that the cash conversion cycle, net trade cycle and inventory turnover in days are significantly affecting the performance of the firms. The study also concluded that firms in Pakistan are following conservative working capital management policy and the firms were needed to concentrate and improve their collection and payment policy. The effective policies must be formulated for the individual components of working capital.

Mumtaaz Adeel et al (2010) in the paper they analyzed how working capital management impact's the firm's performance in the market which was progressive in nature such as Karachi stock exchange. He took a sample of 22 firms of the chemical sector for 6 years i.e. from 2005-2010.He utilized diverse variables for the analysis of working capital management and firm performance. Various control variables were used in the study i.e. number of day's receivables, number of day's inventory and the Size, Leverage, Inventories, Equity, Sales, and GDP. The dependent variable that was used in the study to measure the performance was Return on Asset. The firm's profitability was greater affected by the size of the firm. The higher profit firms were not interested in managing working capital and firm performance. The result of the study concluded that there was a negative relationship between the working capital and firm performance. The relationship between the size and profitability was positive. If the size of the firm was increased or decreased then the profitability increased or decreased respectively and concluded that there was a negative relationship between the profitability and the debt utilized by firms that support to pecking order theory.

Rimo Alexandra et al (2010) they investigated the consequence of company characteristics on the working capital management. Quantitative methods were employed to examine the relationship between company characteristics and the cash conversion cycle in Swedish listed companies. A sample of 40 companies was taken listed on NASDAQ OMX Stockholm Exchange. Annual reports of year 2007 and 2008 in order to calculate financial ratios were used in the study. Using regression analysis, their results indicated that profitability, operating cash flow; company size and sale growth affected the company's working capital management. They found that there was a significant positive relationship between profitability and the cash conversion cycle. Second, they found that the cash conversion cycle had negative relationship with operating cash flow, company size and sale growth.

Tahmina Quayyum Sayeda (2011) in this paper she investigated how the profitability of corporations can be affected with working capital management efficiency as well as maintaining

liquidity. Corporations enlisted with Dhaka Stock Exchange (cement industry) had been selected this covered a time period from year 2005 to 2009. The purpose of this paper was to explain the prerequisite of firms optimizing their level of working capital management and maintaining enough liquidity as it affects the profitability. The outcome of this study clearly showed a significant level of relationship between the profitability indices and various liquidity indices as well as working capital components. This study found a negative relationship between cash conversion cycle and profitability of the Firm.

Filipa Lourenço Garcia Joana et al (2011) studied that one can influence their profitability by using working capital approach. This study was based on a sample of 2,974 non - financial companies listed in 11 European Stock Exchanges for a period of 12 years: 1998 - 2009. The results of GLS and OLS regression analysis found a significant negative relationship between Receivables Collection Period, Inventory Conversion Period, Payables Deferral Period, Cash Conversion Cycle and profitability. This study further suggested that companies can improve their profitability by sinking the time span during which working capital was tied up within the company.

2Alipour Mohammad, (2011) avowed that the vital measuring tool to evaluate the efficiency of working capital management was cash conversion cycle. After that multiple regression and Pearson's correlation was used to test the hypothesis. The outcome of the research showed that there was a significant relation between working capital management and profitability and working capital management had a enormous effect on the profitability of the companies and the managers could generate value for shareholders by means of decreasing receivable accounts and inventory.

Azam Dr. Muhammad (2011) the principle of this study was to investigate the impact of working Capital Management on firms' performance for non-financial institutions listed in Karachi Stock Exchange (KSE-30) Index. The results are obtained by using Canonical Correlation Analysis for identifying the relationship between working capital management and firms' performance. The results of the study showed that working capital management had significant impact on firms' performance and it was concluded that managers could increase shareholder's value and return on asset by plummeting their inventory size, cash conversion cycle and net trading cycle.

Niresh J. Aloy (2012) declared that central element in determining the financial performance of an organization was working capital management. The conclusions divulge that, there was no significant relationship between cash conversion cycle and performance measures. The study also concluded that manufacturing firms in Sri Lanka should follow conservative working capital management policy.

Venkatesan T. (2012) stated that finance is needed for the day to day operations of an organization. Therefore the firm should maintain its profitability. He clearly stated that profitability more or less depends upon the better utilization of resources, cut-off expenses and quality of management function to improve the goodwill and market share. One should use an advance technology to cut down cost of production in order to increase profitability.

Malik Zafar Ullah (2012) study showed that the impact of working capital management on firm's profitability in sugar industry of Pakistan for years 1999 to 2009. To analyse this, data of 19 sugar mills which are listed at Karachi Stock Exchange was used. The result showed that the Sales Growth, Current Ratio, No of Days Inventory and No of Days Accounts Payables are appreciably affecting the profitability of the firms while Sales, Gearing Ratio and No. of Days Account Receivables are of no consequence in the research.

Joshi Lalit Kumar et al (2012) examined the working capital performance of Cipla Ltd. from 2004-05 to 2008-09. Various financial ratios had applied in measuring the working capital performance and statistical as well as econometric techniques were employed in order to evaluate the behavior of the ratios. The findings revealed that considerable positive trend growth in most of the selected performance indicators. Motaals test also indicated significant improvement in liquidity performance during the period. There was a negative relationship between liquidity and profitability indicated that Cipla Ltd. had maintained post optimal level of liquidity (i.e., excess liquidity) during the period under study and concluded that the working capital management of Cipla Ltd. was satisfactory during all the years under study. Moreover, the company had shown significant improvement in liquidity position over the years under study.

Desai Hiral et al (2015) studied that one can only survive with efficient working capital. It is the life blood of any business. It is the challenging aspect of the financial management. The rationale behind the study was to investigate the impact of working capital management on profitability, liquidity & risk on the Dabur India & Maric. Various statistical tools like average, Spearman's coefficient of correlation and accounting technique such as ratio were used. Further it revealed that there was a negative relationship between liquidity and profitability and a positive relationship between profitability and risk.

OBJECTIVES OF RESEARCH

• To establish a relationship between Working Capital Management and Profitability over a period of **5** years from **2012 to 2016**.

• To study a relationship between profitability and liquidity ratios of four steel companies.

RESEARCH METHODOLOGY

The Management of working capital is essential as it might have a direct bang on profitability and liquidity. This paper also tries to study the correlation between liquidity, profitability and Profit before Tax (PBT) of selected steel companies. The study is based on secondary data collected which had been collected from annual reports of different steel companies and PROWESS (CMIE Database) for the period 2012 to 2016 .Now, with the help of profitability **(ROCE)** and liquidity **(Quick ratio, Current ratio, Debtors turnover & Inventory turnover)** ratios obtained, we can engender relationship between these ratios using Correlation analysis . Thus, it can be concluded as the working capital management is an important aspect which is very crucial for the success of different steel companies.

SAMPLE DESIGN

In order to understand the pulsation of Indian Steel Industry it is essential to select the major players. The Steel companies which satisfied the following criteria have been short listed for further research.

- Market Capitalization can be taken as a base.
- Availability of data for at least for the period of 5 years.

Companies that meet the above conditions are:-

S.NO	NAME OF THE COMPANY	COMPANY WEBSITE	LISTED ON BSE	LISTED ON NSE
1.	JSW STEEL LTD.	www.jsw.in	YES	YES
2.	TATA STEEL LTD.	www.tatasteel.com	YES	YES
3.	SAIL	www.sail.co.in	YES	YES
4.	STEEL EXCHANGE OF INDIA	www.seil.co.in	YES	NO

ANALYSIS FOR STEEL COMPANIES IN INDIA

1. JSW STEEL LTD

YEAR	ROCE	Quick Ratio(times)	Current Ratio(times)	Debtors Turnover Ratio(times)	Inventory Turnover Ratio (times)
2012	13.22	0.54	0.76	29.12	7.97
2013	12.59	0.69	0.88	22.02	8.1
2014	12.96	0.71	0.82	22.2	7.96
2015	12.72	0.67	1.02	21.71	5.87
2016	7.00	0.55	0.77	16.18	6.03

Table: 1

ANALYSIS: In (Table 1) Profitability (ROCE) and Liquidity (Quick ratio, Current ratio, Debtors turnover & Inventory turnover) ratios can be seen for the period of 2012-2016 for JSW Steel Ltd.

	ROCE	QR	CR	DTR	ITR
ROCE	1.00				
QR	.510	1.00			
CR	.358	.603	1.00		
DTR	.787	-.116	-.118	1.00	
ITR	.593	.236	-.411	.619	1.00

Table 2: Correlation Matrix

CORRELATION ANALYSIS:

In (Table 2) analysis shows that there is positive Correlation between ROCE and Quick ratio (.510), Current ratio (0358), Debtors turnover ratio (.787) Inventory turnover ratio(.593) for the time period 2012 to 2016.There is a high degree of correlation between ROCE and DTR. Hence, from Correlation matrix it can be concluded that with increase in debtor's ratio there is an increase in Profitability (ROCE) and vice-versa.

2. TATA STEEL LTD

YEAR	ROCE	Quick Ratio(times)	Current Ratio(times)	Debtors Turnover Ratio(times)	Inventory Turnover Ratio (times)
2012	14.77	0.69	0.93	51.10	7.62
2013	12.80	0.61	0.86	44.91	8.05
2014	13.37	0.32	0.57	53.21	7.71
2015	9.25	0.27	0.62	66.21	5.79
2016	9.03	0.32	0.52	67.97	6.03

Table: 3

ANALYSIS: In (Table 1) Profitability (ROCE) and Liquidity (Quick ratio, Current ratio, Debtors turnover & Inventory turnover) ratios can be seen for the period of 2012-2016 for Tata Steel Ltd.

	ROCE	QR	CR	DTR	ITR
ROCE	1.00				
QR	.750	1.00			
CR	.712	.958	1.00		
DTR	-.869	-.771	-.752	1.00	
ITR	.907	.705	.638	-.973	1.00

Table 4: Correlation Matrix

CORRELATION ANALYSIS:

In (Table 2) analysis shows that there is positive Correlation between ROCE and Quick ratio (.750), Current ratio (.712), Inventory turnover ratio(.907)and negative relation between ROCE and Debtors turnover ratio (-.869) for the time period 2012 to 2016.There is a high degree of correlation between ROCE and ITR. Hence, from Correlation matrix it can be concluded that with increase in inventory turnover ratio there is an increase in Profitability (ROCE) and vice-versa.

3. SAIL

YEAR	ROCE	Quick Ratio(times)	Current Ratio(times)	Debtors Turnover Ratio(times)	Inventory Turnover Ratio (times)
2012	10.91	0.82	1.22	10.39	3.37
2013	6.67	0.68	1.01	9.71	2.79
2014	4.60	0.62	0.79	9.43	3.45
2015	5.43	0.55	0.68	10.54	2.88
2016	-7.25	0.44	0.62	12.97	2.90

Table: 5

ANALYSIS: In (Table 1) Profitability (ROCE) and Liquidity (Quick ratio, Current ratio, Debtors turnover & Inventory turnover) ratios can be seen for the period of 2012-2016 for steel authority of India limited.

	ROCE	QR	CR	DTR	ITR
ROCE	1.00				
QR	.899	1.00			
CR	.785	.968	1.00		
DTR	-.825	-.651	-.493	1.00	
ITR	.383	.498	.374	-.378	1.00

Table 6: Correlation Matrix

CORRELATION ANALYSIS:

In (Table 2) analysis shows that there is positive Correlation between ROCE and Quick ratio (.899), Current ratio (.785), Inventory turnover ratio(.383)and negative relation between ROCE and Debtors turnover ratio (-.825) for the time period 2012 to 2016.There is a high degree of correlation between ROCE and Quick ratio. Hence, from Correlation matrix it can be concluded that with increase in quick ratio there is an increase in Profitability (ROCE) and vice-versa.

4. STEEL EXCHANGE OF INDIA

YEAR	ROCE	Quick Ratio(times)	Current Ratio(times)	Debtors Turnover Ratio(times)	Inventory Turnover Ratio (times)
2012	29.47	0.80	0.78	7.87	5.11
2013	19.28	0.75	0.80	3.75	2.47
2014	21.58	0.53	0.80	5.29	2.26
2015	17.44	0.63	0.83	6.00	2.38
2016	15.74	0.56	0.78	5.81	2.42

Table: 7

ANALYSIS: In (Table 1) Profitability (ROCE) and Liquidity (Quick ratio, Current ratio, Debtors turnover & Inventory turnover) ratios can be seen for the period of 2012-2016 for steel exchange of India.

	ROCE	QR	CR	DTR	ITR
ROCE	1.00				
QR	.626	1.00			
CR	-.396	-.183	1.00		
DTR	.627	.234	-.298	1.00	
ITR	.897	.728	-.498	.785	1.00

Table 8: Correlation Matrix

CORRELATION ANALYSIS:

In (Table 2) analysis shows that there is positive Correlation between ROCE and Quick ratio (.626), Debtors turnover ratio (.627) ,Inventory turnover ratio(.897)and negative relation between ROCE and Current ratio (.-.396), for the time period 2012 to 2016.There is a high degree of correlation between ROCE and Inventory turnover ratio. Hence, from Correlation matrix it can be concluded that with increase in Inventory turnover ratio there is an increase in Profitability (ROCE) and vice-versa.

LIMITATIONS OF THE STUDY:

1. The study solely depends on the secondary published data for the working capital analysis of sample units.
2. Only period of five years shall be taken with limited no. of financial indicators.
3. The study will be restricted to only four sample units.
4. Inflation could not be taken into consideration in the present study because it is not possible to convert the relevant financial data intro their present values because of non-accessibility of ample information essential for the study.

CONCLUSION

In this research paper, four steel companies had been selected to study significant/insignificant impact of Working Capital ratios on Profit ROI). On the basis of analysis conducted we have found out that **JSW Steel Ltd** have significant impact of working capital ratios on Profitability whereas, Hence, it may be concluded that the increase in the Working capital ratios of the company decreases the profitability of steel companies throughout the study period i.e. significantly effecting ROI. The research paper shows that the liquidity of the company has an impact on profitability. When there is an increase in liquidity the profitability of the company decreases and vice versa.

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