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Working Capital Management: A Comparative Study on Two Cement Companies in India

Abstract

Working capital is considered to be the life force of an economic entity and its efficient management decides the tradeoff between liquidity and profitability. The working capital management has an important role for the firm's success or failure because of its effect on firm's performance and liquidity. Working capital indicates the money required for daily operations of a business. A corporate pays a lot of importance on planning its long term capital needs. The sources and their cost are identified and then an optimum capital structure is designed. Not only long term funds and their cost affect the profitability of a firm but even working capital has an impact on profitability because effective working capital management is about striking a tradeoff between profitability and liquidity. With this background this paper attempts to make a comparative study on the pattern of working capital management at two selected cement producing companies in India for a period of five years and finally draws out some interesting conclusion.

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Keywords: Working Capital, Debtor turnover, Cash turnover, Inventory turnover, Creditor's turnover.

Introduction

The Indian cement industry is directly related to the country's infrastructure sector and thus its growth is paramount in determining the development of the country. With a current production capacity of around 366 million tons (MT), India is the second largest producer of cement in the world and fuelled by growth in the infrastructure sector, the capacity is expected to increase to around 550 MT by Financial Year 2020.India has a lot of potential for development in the infrastructure and construction sector and the cement sector is expected to largely benefit from it, India is currently growing at an enviable pace. Some of the recent major government initiatives such as development of 100 smart cities are expected to provide a major boost to the sector.

Expecting such developments in the country and aided by suitable government foreign policies, several foreign players such as the likes of Lafarge, Holcim and Vicat have invested in the country in the recent past. Another factor which aids the growth of this sector is the ready availability of the raw materials for making cement, such as limestone and coal.

Working capital management decisions are one of the four important decisions of the firms. Interestingly, working capital components of a firm's financial management deals with the liquidity aspect of a firm and hence fundamental for the effective and efficient operations as well as the sustainability of its going concern status. It is worth mentioning from the outset that working capital and liquidity are used in this paper to mean one and the same thing and relates to the management of current assets and currents liabilities of an enterprise. This synonymy is based on the observation that working capital ratios are the most common measures of liquidity. Liquidity management as it were, determines to a large extent the quantity of profit that result as well as the value of shareholders wealth. This is because, a firm in order to survive must remain liquid as failure to meet its obligation in due time results in bad credit rating by the short term creditors, reduction in the value of goodwill in the market and may ultimately leads to liquidation. Hence, a good and firm financial management policy seeks to maintain adequate liquidity in order to meet its short-term maturing obligations without impairing profitability.

Aim of the study

1. To study the conceptual framework of working capital.

2. To study the pattern of working capital management in two selected Cement producing companies in India
3. To make a comparison of working capital management process in the two selected cement producing companies.

Methodology

The study is mainly based on secondary data .The data relating to the study was obtained from the annual reports of the two sample companies namely, J.K. Cement Limited and J K LAKSHMI Cement Limited. Journals were also referred for finalizing the methodology for the study. The study focuses the period of 5 years covering from 2011-12 to 2015-16.

Necessary Accounting Ratios are applied to arrive at desired values for analysis. Analysis of data is done in two manners, namely, observational analysis and analysis of the basis of graphical impression.

Limitation of the Study

1. The study is based on secondary data sources.
2. A sample of two cement companies is taken under study for time constraint which may not give generalized result.
3. Five years data for each company has been analyzed but the results may not be proper for long run.

Conceptual Framework

Working Capital may be regarded as the lifeblood of a business. In financial affairs of companies, working capital management is a very important factor, which has a direct positive effect on profitability as well as liquidity of the company. Liquidity and profitability are both the two different sides of same coin. Every business needs funds for two purposes. Long term funds are required to create production facilities through purchase of fixed assets such as plants machinery, land, buildings etc. Funds are also needed for short term purposes for the purchase of raw materials, payment of wages and other day –to- day expenses etc. These funds are known as working capital. In other words, Working capital refers to that parts of the firm's capital which is required for financing short term or current assets, such as, cash, marketable securities, debtors, inventories, bills Receivable etc. Working capital is also known as revolving or circulating capital or short-term capital.

There are two concepts of working capital—Gross concept and Net concept. The Gross working capital usually referred to as working capital represents investment in current assets such marketable securities, debtors, inventories, bills Receivable etc. The term "net working capital" represents the deference between current assets and current liabilities.

Factors Determing the Working Capital Requirements

The factors that influence the working capital requirement of a firm can be broadly classified into two categories depending on their relationship with the firm. These categories are:

Endogenous factors

Factors which are internal to the firm and can be controlled to some extent. These factors include:

a. Size of the firm.
b. Debt equity ratio.
c. Operating cash flow.
d. Operating efficiency.
e. Performance of the firm.

Exogenous Factors

These are the factors which are external to the firm and cannot be controlled. These factors include:

a. Business environment.
b. Prices of raw materials.
c. Growth in sales of the firm.

Following Problems Arise due to Inadequate Working Capital in Business

1. Difficult to meet out the short term liabilities because of inadequate working capital.
2. Non availability of institutional finance for working capital.
3. Cumbersome terms and procedure in obtaining and repaying loan.
4. Sometimes it may leads to under utilization of production facilities.
5. High cost of finance.
6. It affect the credit worthiness and reputation of the firm in a long period of time.

To overcome such problems adequate working capital is necessary. Following are the importance of working capital on the overall benefit of a business including profitability

1. To ensure continuous flow of production through regulars supply of raw materials.
2. To obtain the loan from banks and other finical institution on easy terms.
3. To establish the goodwill of the firm due to prompt payment policy.
4. To encourage research and other related development programmers.
5. To achieve higher profitability through the expansion and diversification programme of a concern.
6. Enables to face financial crises during the periods of depression or any emergencies.
7. To achieve highest productivity due to proper utilization of assets.
8. To pay higher return to its owner and also make a capital appreciation.
9. It enables the firm to avail cash discount facilities on bulk purchases, this it reduces the cost.
10. For achieving a good policy on working capital, proper management of working capital is important. There are different Working capital management techniques, such as:
    a. Cash Management.
    b. Receivable Management.
    c. Inventory Management.
    d. Payable Management.

Analysis of Pattern of Working Capital Management

Table showing values related to working capital management of J.K. Cement Limited

Table:1

Indicators	Last 5 years				
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Current Assets (Rs in Lacs)	108470.03	103249.45	129276.01	138147.87	151045.68
Current Liabilities(Rs in lacs)	73766.85	90292.18	97811.80	112947.95	117034.39
Net Working Capital (Rs in lacs)	34703.18	12957.27	31464.21	25199.92	34011.29
Net sales (Rs in lacs)	254678.83	291196.77	279584.60	335716.72	356032.08
Working Capital Turnover (Net Sales ÷ Net working capital) (in times)	7.34	22.47	8.89	13.32	10.47
Average Debtors (Rs. in lacs)	7224.21	9949.66	11348.86	12555.57	15254.93
Debtors Turnover Ratio(Net sales / average debtors)	35.25	29.27	24.64	26.74	23.34
Average Inventory (Rs.in lacs)	34192.46	41210.30	50166.56	52587.01	49201.43
Inventory Turnover Ratio (Net sales / average inventory)	7.45	7.07	5.57	6.38	7.24
Average Cash and Cash Equivalent (Rs. in lacs)	37678.46	38247.36	34000.51	37762.93	44178.73
Cash Turnover Ratio (Net Sales / Average cash and cash Equivalent)	6.76	7.61	8.22	8.89	8.06
Net purchase (Rs in lacs)	31266.60	42119.6	46321.68	55724.06	66731.52
Average Creditors (Rs. in lacs)	20158.21	21222.16	22162.16	23799.21	25495.21
Creditors turnover Ratio (Net purchase /average creditors)	1.55	1.98	2.09	2.34	2.62

**** Average Debtors = (Opening Trade Receivables + Closing Trade Receivables)/2**

**** Average Inventory = (Opening Inventories + Closing Inventories)/2**

****Average Creditors = (Opening Trade Payables + Closing Trade Payables)/2**

****Net Purchase = Cost of Materials Consumed + Purchases of Stock-in-Trade**

Observations

The above table shows five years figures for different indicators of working capital management of J.K. Cement Limited. A primary analysis can be made on the basis of observations from the above figures as follows:

In the case of net working capital, it was observed that net working capital is positive throughout the last 5 financial years. The observation shows that net working capital in 2011-12 is Rs. 34703.18 lacks but it has declined to Rs. 12957.27 lacks in the year 2012-13 and again has increased in the year 2013-14 (Rs. 31464.21 lacks) but again in the year 2014-15 it has reduced to Rs. 25199.92 lacks. In the financial year 2015-16 it has again gone up to Rs. 34011.29 lacks. This shows that net working capital management is not consistent. From the above observation it is clear that current assets is more than current liabilities between the financial years 2011-12 to 2015-16. From liquidity point of view of course, it is observed that there is fluctuation in the amount of working capital which indicates source of fund in one year (when working capital is less) and application of fund in another year (when working capital is more). Thereby there is a balance in between the source and application of fund.

Sales figures show that it was increase from 2011-12 to 2012-13 but again decrease in the year 2013-14 after that it has upward trend from the year 2013-14 to 2015-16 although the magnitude of increase is low. In 2011-12 it was Rs. 254678.83 lacks and has increased up to Rs. 291196.77 lacks in 2012-13 but again decrease to Rs. 279584.60 lacks in 2013-14. From the year 2013-14 it has increased up to Rs. 356032.08 lacks in 2015-16. The Debtors Turnover shows a declining trend from 2011-12 to 2013-14 and then it was slightly increased in 2014-15 but again decreased in 2015-16. This could be due to moderate fluctuations in the net working capital from 2011-12 to 2013-14 as evident from previous analysis. In case of Inventory Turnover it is observed that there is a decline in the ratio from 2011-12 onwards up to 2013-14 and then there is a gradual increase from 2014-15 to 2015-16. In the case of Cash Turnover it is seen that there is an increase in the ratio from 2011-12 (6.76 times) to 8.89 times in 2014-15 and then it has declined to 8.06 in 2015-16. This shows that cash realized from sales is frequent. So far liquidity is concerned, the position is satisfactory. In case of Creditors Turnover, the observation shows that there is a gradual increase in the ratio from 2011-12 (1.55 times) to 2.62 times in 2015-16. This shows payables management is consistent. Considering the match between debtors and creditors turnover ratios it is evident that the company does not have a consistent credit period policy. From liquidity point of view the position is not as satisfactory as is being observed in Cash turnover.

Table showing values related to working capital management of JK LAKSHMI Cement Limited

Table:2

Indicators	Last 5 years				
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Current Assets (Rs in Crs)	784.98	629.86	709.69	824.00	823.86
Current Liabilities(Rs in Crs)	544.29	630.69	730.68	1170.14	1257.56
Net Working Capital (Rs in Crs)	240.69	(0.83)	(20.99)	(346.14)	(433.7)
Net sales (in Rs)	1718.10	2054.95	2056.60	2307.06	2619.85
Working Capital Turnover (Net Sales÷ Net working capital) (in times)	7.14	2475.84	97.98	6.67	6.04
Average Debtors (Rs. in crs)	33.10	44.18	52.82	63.01	83.49
Debtors Turnover Ratio(Net sales / average debtors)	51.91	46.51	38.94	36.61	31.38
Average Inventory (Rs. in crs)	120.01	117.47	108.64	162.95	230.01
Inventory Turnover Ratio (Net sales / average inventory)	14.32	17.49	18.93	14.16	11.39
Average Cash and Cash Equivalent (Rs. in crs)	88.89	50.84	23.93	25.25	13.53
Cash Turnover Ratio (Net Sales / Average cash and cash Equivalent)	19.33	40.42	85.94	91.37	193.63
Net purchase (Rs. in crs)	366.93	469.62	548.5	627.56	710.19
Average Creditors	91.87	116.72	129.07	173.88	208.51
Creditors turnover (Net purchase /average creditors)	3.99	4.02	4.25	3.61	3.41

**** Average Debtors = (Opening Trade Receivables + Closing Trade Receivables)/2**
**** Average Inventory = (Opening Inventories + Closing Inventories)/2**
****Average Creditors = (Opening Trade Payables + Closing Trade Payables)/2**
****Net Purchase = Cost of Materials Consumed + Purchases of Stock-in-Trade**

Observations

The above table shows five years figures for different indicators of working capital management of J K Laxmi Cement Limited. A primary analysis can be made on the basis of observations from the above figures as follows:

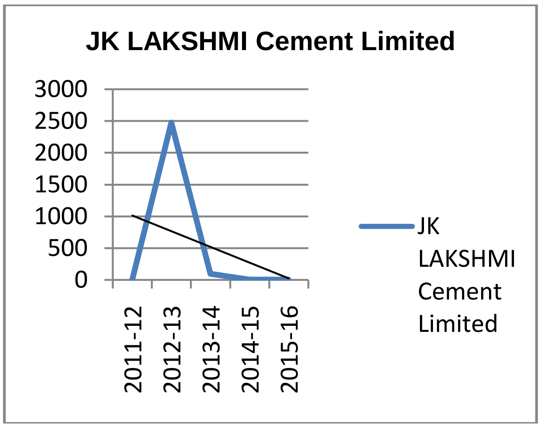
In the case of net working capital, it is observed that net working capital is positive and high only in the year 2011-12 at Rs. 240.68 (Crores) but the same has made a decline gradually towards negative figures from the year 2012-13 onwards. In 2012-13 net working capital was Rs. (-) 0.83 crores and this figure have touched upto Rs. (-) 433.7 crores in 2015-16. This shows there is a gradual increase in current liabilities as against current assets or gradual decrease in current assets as against current liabilities. The position is not satisfactory so far the figures are concerned. From liquidity point of view of course, this position shows source of fund, which again may indicate a good activity of the company. This may be confirmed from activity ratios such as Debtors turnover, Creditors Turnover and Cash Turnover. But more amount of source of fund if unutilized might create overcapitalization, which might be dangerous.

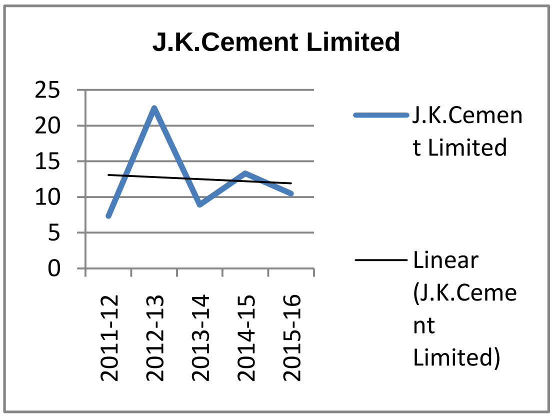
Sales figures show an upward trend from 2011-12 onwards although the magnitude of increase is low. In 2011-12 it was Rs. 1718.10 cr. and has increased up to Rs. 2619.85 in 2015-16. The Debtors Turnover shows a declining trend from 2011-12 onwards. This could be due to the sharp decline in the net working capital as evident from previous analysis. In case of Inventory Turnover it is observed that there is an increase in the ratio from 2011-12 onwards up to 2013-14 and then there is a gradual decline from 2014-15 to 2015-16. In the case of Cash Turnover it is seen that there is an increase in the ratio from 2011-12 (19.33 times) to 193.63 times in 2015-16. This shows that cash realized from sales is much frequent. So far liquidity is concerned, this is more than satisfactory. In case of Creditors Turnover, the observation shows that there is a gradual increase in the ratio from 2011-12 (3.99 times) to 4.25 times in 2013-14 but there is a decline from 2014-15 to 2015-16. This shows payables management is not consistent. The cause might be in the matching of credit periods of receivables (debtors) and payables (creditors).

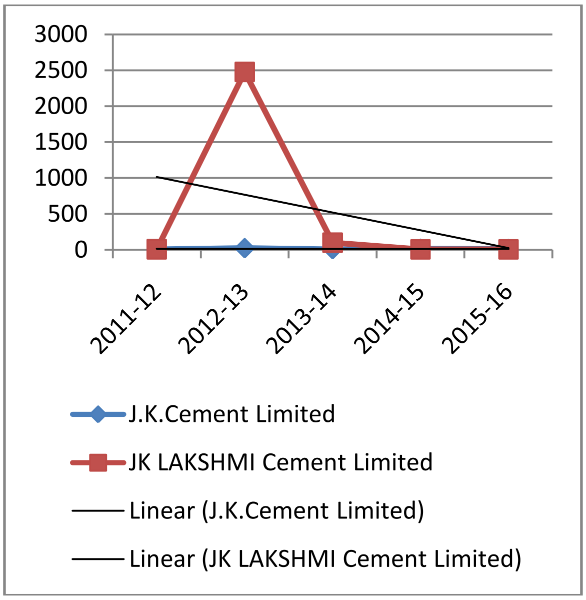
Comparative Analysis

1. Working Capital Turnover

Year	J.K.Cement Limited	J.K. Lakshmi Cement Limited
2011-12	7.34	7.14
2012-13	22.47	2475.84
2013-14	8.89	97.98
2014-15	13.32	6.67
2015-16	10.47	6.04





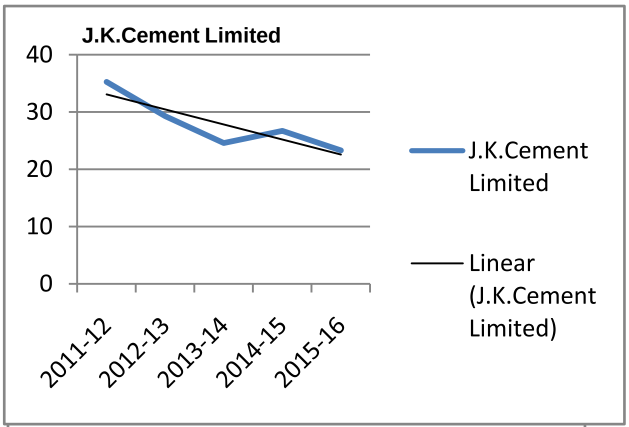


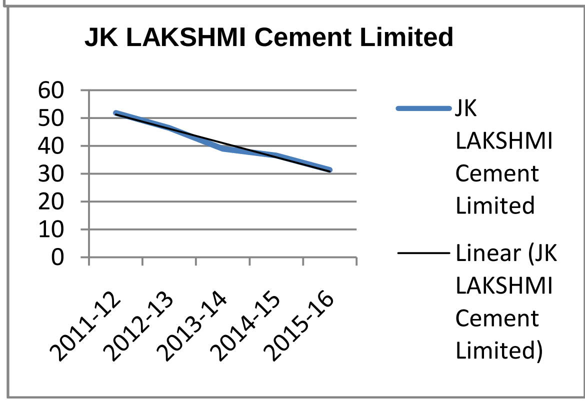
Comparative Observation

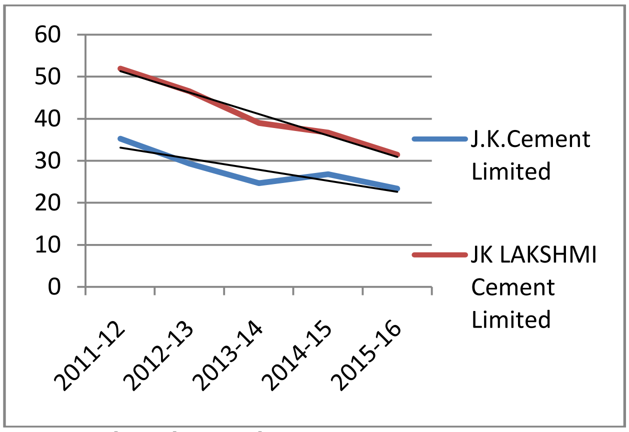
Working Capital Turnover shows a downward trend for both the companies under study but the slope of downward trend line is much steep in case of J.K. Lakshmi Cement Ltd. as compared to J. K. Cement Ltd. In 2012-13 the ratio for J.K.Lakshmi Cements Ltd is the highest of the two companies under study which is due to high amount of current assets or very low amount of current liabilities as found in the Balance Sheet.

2. Debtors Turnover

Year	J.K.Cement Limited	JK Lakshmi Cement Limited
2011-12	35.25	51.91
2012-13	29.27	46.51
2013-14	24.64	38.94
2014-15	26.74	36.61
2015-16	23.34	31.38





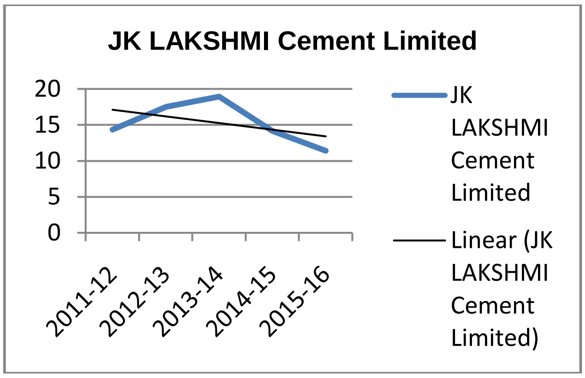


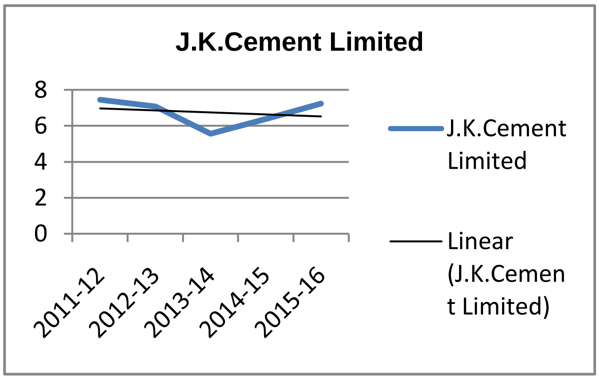
Comparative Observation

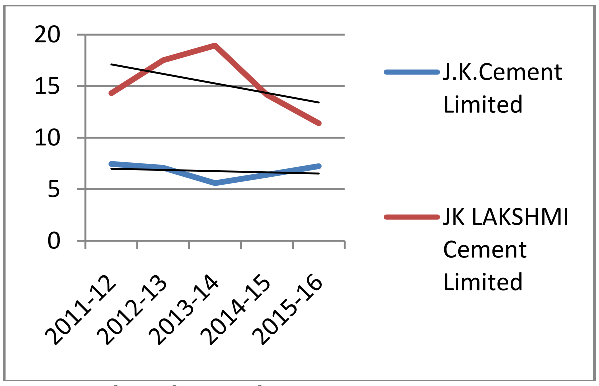
From the above it is clear that debtor's turnover of both the companies show downward trends but as compared to J.K. Cement the debtors turnover is high in J.K. Lakshmi cement Ltd and also it indicates that collection from debtors is more frequent. Hence, it indicates a better liquidity in case of J.K. Lakshmi cement Ltd as compared to J.K cement Ltd

3. Inventory Turnover

Year	J.K.Cement Limited	JK Lakshml Cement Limited
2011-12	7.45	14.32
2012-13	7.07	17.49
2013-14	5.57	18.93
2014-15	6.38	14.16
2015-16	7.24	11.39





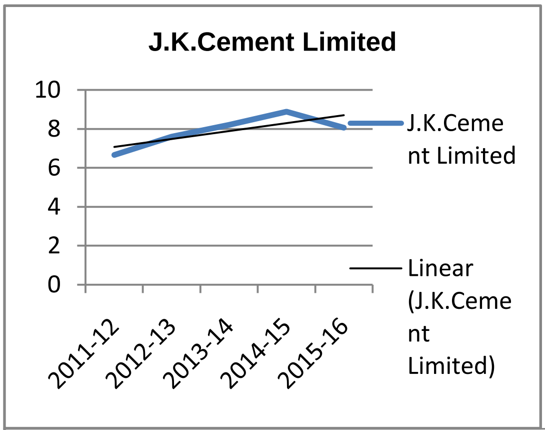


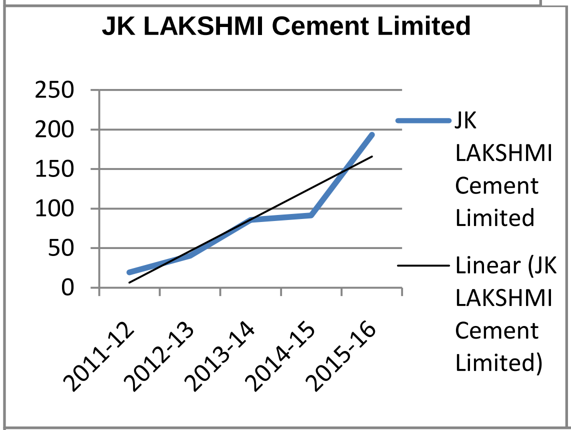
Comparative Observation

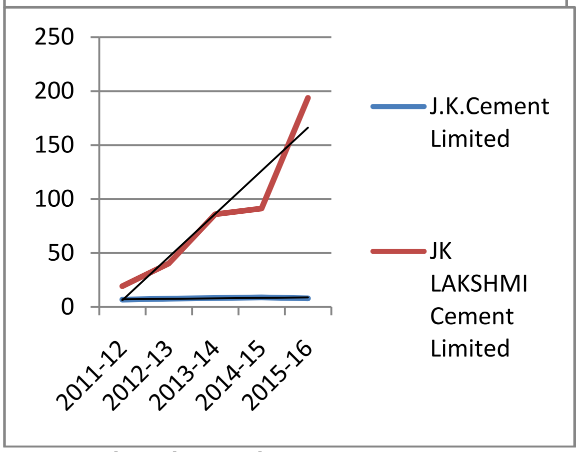
From the above graphical impression it is observed that inventory turnover has a downward trend for both the companies but the downward slope is steeper in case of J.K Lakshmi Ltd as compared to J.K cement Ltd. Again the trend shows moderately consistent in J.K.Cement Ltd. From liquidity point of view inventory turnover is more frequent in J.K Lakshmi Ltd and hence it indicates a better liquid position as compared to J.K cement.

4. Cash Turnover

Year	J.K.Cement Limited	J.K. Lakshmi Cement Limited
2011-12	6.67	19.33
2012-13	7.61	40.42
2013-14	8.22	85.94
2014-15	8.89	91.37
2015-16	8.06	193.63







Comparative Observation

From the above Figures it is observed that cash turnover shows upward trend for both the companies under study. The comparative analysis shows that the cash turnover is more frequent and high in case of J.K. Lakshmi cement Ltd as compared to J.K Cement Ltd. From Liquidity point of view the position of J.K Lakshmi Cement Ltd is much better.

5. Creditors Turnover

Year	J.K.Cement Limited	J.K. Lakshmi Cement Limited
2011-12	1.55	3.99
2012-13	1.98	4.02
2013-14	2.09	4.25
2014-15	2.34	3.61
2015-16	2.62	3.41

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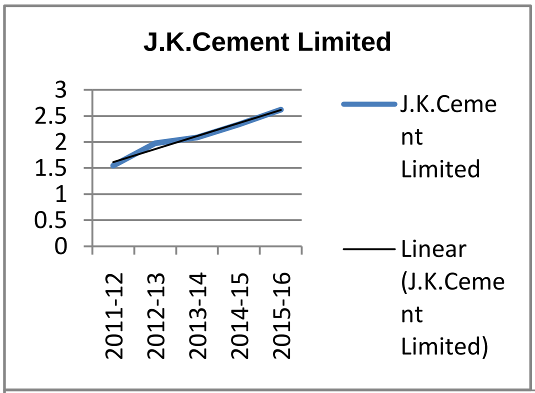

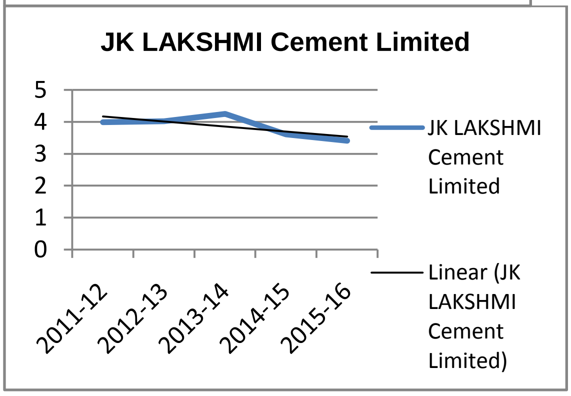

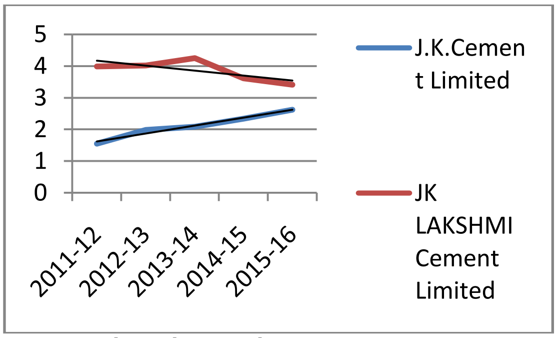

Comparative Observation

From the above graphical impression it is cleared that Creditor turnover shows downward trend in case of J.K. Lakshmi Cement Ltd. On the other hand, in case of J.K cement Ltd the same shows upward trend. From the Liquidity point of view a decreasing trend in creditor turnover is a good sign which is being shown by J.K Lakshmi Cement Ltd.

Conclusion and Suggestions

Working Capital is one of the crucial elements in the overall financing of a business. Management of working Capital is therefore important because the sustenance of a business is largely depended on working capital. The present study has highlighted upon the main elements describing working capital management in two selected cement companies in India for a five years period. The findings of analysis have indicated an overall pattern of working capital management which has thrown light upon the liquidity factor of the companies under study. Among the two companies J.K.Lakshmi Cement Ltd has shown a better Liquidity and an efficient Working Capital management. In the case of setting credit period both the companies have shown an inconsistent pattern. The overall impression regarding the pattern of working capital management can taken as satisfactory with a need of little bit of modification in the policies in both the companies under study especially that of J.K. Cement Ltd.

For the betterment of working capital management following suggestive points are offered:

1. Sales may be preferably made in cash in order to assure cash collection in proper time.
2. Credit Period in case of both debtors and creditors is to be maintained in a manner to retain adequate amount of cash with the business for immediate short term obligations.
3. The turnover ratios show a high fluctuation in the values in inventory turnover, working capital turnover, cash turnover, debtors turnover and creditors turnover. It is suggested that the companies must take proper steps through policy guidelines so that there exists a consistency in the values.

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