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WORKING CAPITAL MANAGEMENT IN TAMIL NADU CEMENTS CORPORATION LIMITED, ARIYALUR

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Introduction:

Management is basically concerned with the performance of planning organizing, directing, coordinating and controlling which in fact are its main functions. Management is also regarded as the act of getting things done through the others. The work is always shared with others. The term management accounting refers to accounting for the management. Management accounting provides necessary information to assist the management in the creation of policy and in the day-to-day operations or working capital. It enables the management to discharge all its functions i.e., planning, organization, staffing, direction and control efficiently with the help of accounting information system.

Working capital is the amount of funds which a company must have to finance its day to day operation. It can also be regarded as that proportion of the company's total capital which is employed in short term operation in other word, it is the amount available at all times in the form of near-cash and assets, which can be converted into cash within a short period.

Working capital is the amount of funds which a company must have to finance its day-to-day operations. In the words it is the capital that makes a company work. The total capital employed consists of fixed assets and working capital. Fixed assets form a support to the company long term operation which working capital is regarded as that portion of the company's total capital which is employed in short term operation. Working capital is also known by other terms, viz. circulating capital fluctuating capital, revolving capital and its part of the firm's capital etc.

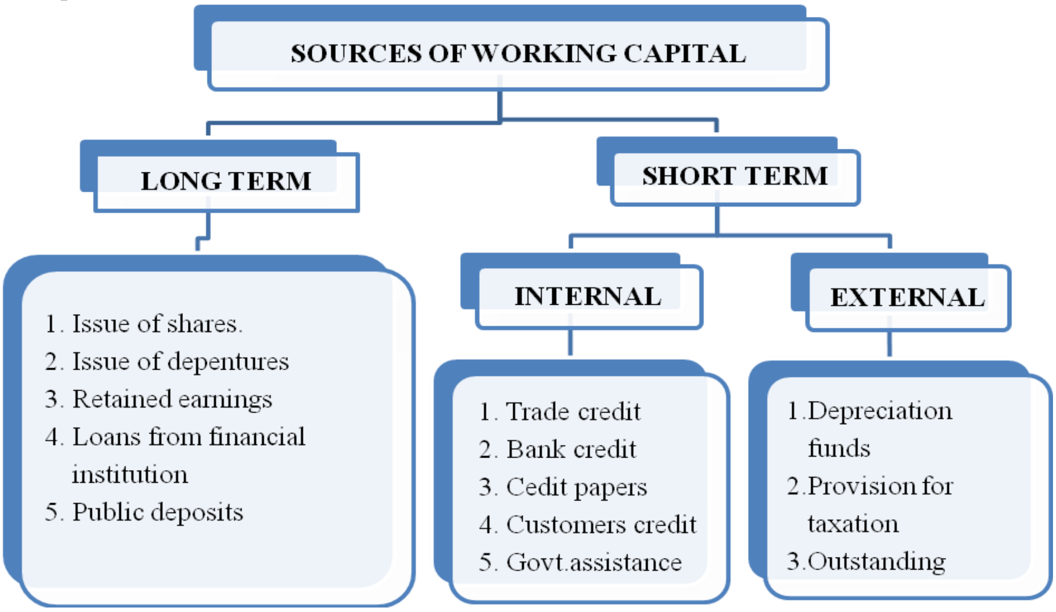
Need For Working Capital:

Working capital is needed for the following purpose.

- For the purpose of raw materials, spares and other stores for conversion into finished goods.
- To pay wages and salaries to workers and managerial staff.
- To pay expenses on account of running maintenance and serving of plant and machinery.
- To pay rates and taxes such as import and custom duties.
- To pay general administration expenses such as salaries to office staff, rent, interest, electricity and telephone bills.
- To pay expanses on sales such as expenses on packing, advertisements and publicity, salaries and commissions to salesman, discount and commission to dealers, railway freight loading charges and so on.

Sources of Working Capital:

There is several of working capital. The sources may differ from one concern to other, depending on the organizations requirements. Each whether trading or manufacturing concern may procure funds from various sources to meet its working capital requirements from time to time.



Scope of the Study:

Working capital management policies have a great effect on firm's profitability, liquid and its structural health. A financial manager therefore chalks out appropriate working capital management policies in respect of each of the component working capital, so as to ensure higher profitability, proper liquidity and sound structural health of the organization. The research helps the management to ensure maximum wealth of the firm, maximum utilization of available resources, increase the rate of return on investment and also helps the factory to manage the working capital in an efficient manner.

Statement of the Problem:

The company movement is necessary to protect the interest of weaker section of the factory. The primary objective of this movement is how to safeguard economically the weaker sections of the company from the opposition strong segment of the company. In all forms of organization, it a sole trade partnership or join stock company, the primary motive is to increase profits. The philosophy behind co-operative movement is "all for each and each for all". Hence, the researcher would like to carry out the research in **Tamilnadu Cements Corporation Limited (TANCEM)** in order to know how far this company is more helpful in fulfilling the needs of the weaker section of the company.

Research Methodology:

A structured and scientific way to solve the problems under study is main purpose of research methodology. It includes all the tools irrefutable. The research explains the means of collecting data, the area under study, the determination of the sample size and various statistical tools used to analyze the data in order to follow a structured path of conducting the study

Research methodology is a way to systematically solve the research problems. According to Clifford woody, "Research comprises defining and redefining problems, formulating hypothesis or suggested solutions, collecting organizing and evaluating data, making deductions and reaching conclusions; and at last carefully testing the conclusions; to determine whether they fit the formulating hypothesis.

Research Design:

A research design is the overall plan or programmers of research. According to this project, the descriptive and diagnostic research was used because this in rigid and must focus attention of the total working aspects of the organization.

Objectives of the Study:

The objectives framed for the study are as follows:-

- To analyze the working capital position of a company for the past five years.
- To assess the liquidity of the firm.
- To find out whether the company maintains a satisfactory level of working capital.

Limitations of the Study:

The study is subject to the following limitations,

- The study is only pertaining to TANCEM Ariyalur.
- The period of study is of 5 years and the performance evaluation is also limited.
- The study is purely based on the data available in the form of annual reports and appraisal reports.

Review of Literature:

A review of literature helps the researcher to have a firsthand knowledge about the existing work done by others. A review of literature would be of immense help in gaining and inside into the studies which can be made areas related to the subject of the study. There are number of studies and the working capital in public and private limited companies from times to times available.

Concept of Working Capital:

There are two concept of working capital

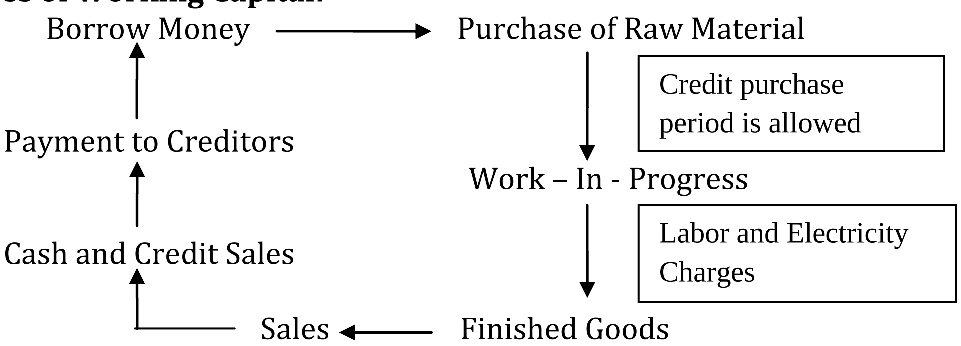
- **Gross Concept:**

According to this concept the working capital refers to the firm's total investments in current assets. It is also called the circulation capital. It is equal to the total sum of current assets only and it may represent both owned capital as well as loan capital used for financing the current assets.

- **Net Capital:**

This concept refers to the differences between the net working capital and help the management that for permanent sources for its financing since working capital under this approach does not increase with increases in short-term borrowings.

Process of Working Capital:



Review of Related Literature:

Many researchers have studied working capital from different views and in different environments. The following ones were very interesting and useful for our research:

Chakraborty (2010):

Chakraborty (2010) made a study to examine the relationship between working capital turnover and profitability in Indian cement, fertilizer and sugar industries. As finding of the study, he reported positive association between profitability and working capital turnover.

Nunn (2011):

As for the determinants of working capital practices, we find even less prior research on which to draw. Nunn (2011) uses the PIMS database to examine why some product lines have low working capital requirements, while other product lines have high working capital requirements. In addition, Nunn is interested in "permanent" rather than temporary working capital investment as he uses data averaged over four years. Using factor analysis, he identifies factors associated with the production, sales, competitive position, and industry.

Eljelly (2004):

Eljelly (2004) made an attempt to examine the association between liquidity and profitability by using current ratio and conversion cycle on a sample of joint stock companies in Saudi Arabia. As findings, the study showed that the cash conversion cycle was more important that the current ratio as a more of liquidity indicators. Such study also reported a significant variation among industries with respect to the relevant measure of liquidity.

Raheman and Nasr (2007):

Raheman and Nasr (2007) made a study on working capital management and profitability on a sample of 94 selected Pakistani firms listed on Karachi Stock Exchange for the period of six years (1999-2004). They actually examined the average collection period, average payment period, inventory turnover, cash conversion cycle and current ratio on the net operation profitability of Pakistani firms. They have also found a significant negative relationship between liquidity and profitability.

Eljelly (2010):

Eljelly, 2010 elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets. The relation between profitability and liquidity was examined, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. The study found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability. The size variable was found to have significant effect on profitability at the industry level. First, it was clear that there was a negative relationship between profitability and liquidity indicators such as current ratio and cash gap in the Saudi sample examined. Second, the study also revealed that there was great variation among industries with respect to the significant measure of liquidity.

Enschede (February 2012):

Even though I have written this thesis individually, I would like to thank the people who have lent their continuous support, encouragements and guidance throughout the period of making this thesis. First of off all I am very grateful to my supervisors at the University of Twente, Prof. Dr. RezaulKabir and Dr. Xiaohong Huang for their support and valuable advices given to me in the making of this thesis. I am also very thankful to my parents for their continuous support and for all the given opportunities and encouragements, which enabled me to reach the goals in my live. I would also like to thank my family and friends for all the support given throughout my study. Now it is time for me to test how well my knowledge can be applied in practice.

Current Ratio:

Current ratio is the relationship between current assets and current liabilities. It is calculated by dividing the total current assets by total current liabilities.

Current Ratio = Current Assets/Current Liabilities

Current Ratio:

Years	Current Asset (Rs)	Current Liabilities (Rs)	Ratio
2009-2010	635419796	262075978	2.42
2010-2011	517712239	388740731	1.33
2011-2012	668157031	420804654	1.60
2012-2013	728460002	379846771	1.91
2013-2014	742036000	394326000	1.88

Source: Secondary Data:

The above table indicates the current ratio of the Factory for the past five years. The current ratio of a Factory measures its short-term solvency, that is, its abilities to meet short-term obligation. As measures of short-term / current financial liquidity it indicates the rupees of current assets available for each rupee of current liability / obligation payable. As majority the current ratio had showed an increasing and decreasing trend over the years.

Quick Ratio:

This ratio is also termed as 'acid test ratio' or 'liquid ratio'. This ratio is ascertained by comparing the liquid assets to current liabilities. The prepaid expenses and stock are not taken as liquid assets.

Quick Ratio = Liquid Assets/ Liquid Liabilities

Quick Ratio:

Years	Quick Asset(Rs)	Current Liabilities(Rs)	Ratio
2009-2010	502429414	262075978	1.91
2010-2011	401082338	388740731	1.03
2011-2012	541784091	420804654	1.28
2012-2013	523259470	379846771	1.38
2013-2014	513900000	394326000	1.30

Source: Secondary Data:

The above table explains the quick ratio of the Factory for the past five years. The quick ratio is a rigorous measure of a Factory to reduce short-term liabilities. The usefulness of the ratio lies in the fact that it is widely accepted as the best available test of the liquidity position of a Factory. From the year 2009-2010 to 2013-2014, the quick ratio was higher than the standard ratio i.e., 1:1. As majority, the liquid ratio had showed an increasing and decreasing trend over the years.

Current Assets Turnover Ratio:

The firm may wish to know its efficiency of utilizing current assets such as, cast debtor's stock, inventories.

Current Asset Turnover Ratio =Net Sales/Current Asset

Current Assets Turnover Ratio:

Years	Net sales (Rs)	Current Asset (Rs)	Ratio
2009-2010	1430300346	635419796	2.25
2010-2011	1159839221	517712239	2.24
2011-2012	1636778149	668157031	2.44

2012-2013	1512206105	728460002	2.08
2013-2014	1298884000	742036000	1.75

Source: Secondary Data:

The above table indicates the cash to current asset ratio of the Factory for the past five years. During the year 2011-2012, the cash to current asset ratio was high i.e., 2.44. During the year 2013-2014, the cash to current asset ratio was low i.e.1.75. As majority, the cash to current asset ratio had showed a decreasing and increasing trend over the years. The ratio is also known as the **investment turnover ratio**. It is based on the relationship between the cost of goods sold and assets/investment of a Factory.

Cash Turnover Ratio:

Case turnover ratio is the most liquid asset a financial analysis examines net sales and its equivalent to cash bank. Trade investment or marketable securities are equivalent of net sales. The may be included in the computations of the cash turnover ratio.

Cash Turnover Ratio= Net Sales/Cash & Bank

Cash Turnover Ratio:

Years	Net sales(Rs)	Cash bank(Rs)	Ratio
2009-2010	1430300346	212162217	6.74
2010-2011	1159839221	85689873	13.54
2011-2012	1636778149	29204813	56.04
2012-2013	1512206105	49891316	30.31
2013-2014	1298884000	37515000	34.62

Source: Secondary Data:

The above table indicates the cash turnover ratio of the Factory is increasing trend and decreasing trend. The ratio measure liquidity of a firm by comparing actual cash turnover ratio. To conclude the decision of liquidity ratio. The short-term solvency of a firm can be judged not merely in to term of the traditional liquidity ratio.

Hypothesis Testing:

The Association Table between Current Ratio and Quick Ratio:

Null Hypothesis (Ho):

There is a significant relationship between Current ratio and Quick ratio.

Alternative Hypothesis (Ha):

There is no significant relationship between Current ratio and Quick ratio.

Two Ways Table

S.No	Current Ratio	Quick Ratio	Total
1	2.42	1.91	4.33
2	1.33	1.03	2.36
3	1.6	1.28	2.88
4	1.91	1.38	3.29
5	1.88	1.30	3.18
Total	9.14	6.9	16.04

Chi – Square Test:

OI	EI	Oi - Ei	$(Oi- Ei)^2$	$(Oi-Ei)^2 /Ei$
2.42	2.47	-0.05	0.0025	0.001012146
1.91	1.86	0.05	0.0025	0.001344086
1.33	1.34	-0.01	0.0001	0.000007462

1.03	1.02	0.01	0.0001	0.000009804
1.6	1.64	-0.04	0.0016	0.00097561
1.28	1.24	0.04	0.0016	0.001290323
1.91	1.87	0.04	0.0016	0.000855615
1.38	1.42	-0.04	0.0016	0.001126761
1.88	1.81	0.07	0.0049	0.002707182
1.30	1.37	-0.07	0.0049	0.003576642
Total				0.01306103

Degree of Freedom:

= (r-1) (C-1) = (2-1) (5- 1) = 1 × 4
= 4

Table value 5% significant level.

= 9.488
Calculated value = 0.01306103
= 0.01306103 <9.488

Result (Ho):

There is significant relationship between Current ratio and Quick ratio of the respondents in the study.

The Association Table Between Current Assets Turn Over Ratio and Cash Turnover Ratio:

Null Hypothesis (Ho):

There is a significant relationship between Current assets turnover ratio and Cash turnover ratio.

Alternative Hypothesis (Ha):

There is no significant relationship between Current assets turnover ratio and Cash turnover ratio.

Two Ways Table

S.No	Current Assets Turnover Ratio	Cash Turnover Ratio	Total
1	2.25	6.74	8.99
2	2.24	13.54	15.78
3	2.44	56.04	58.48
4	2.08	30.31	32.39
5	1.75	34.62	36.37
Total	10.76	141.25	152.01

Chi – Square Test:

OI	EI	Oi - Ei	$(Oi- Ei)^2$	$(Oi-Ei)^2$ /Ei
2.25	0.64	1.61	2.5921	4.05015625
6.74	8.38	-1.64	2.6896	0.32095465
2.24	1.12	1.12	1.2544	1.12
13.54	14.66	-1.12	1.2544	0.08556617
2.44	4.14	-1.7	2.89	0.69806763
56.04	54.34	1.7	2.89	0.05318366
2.08	2.29	-0.21	0.0441	0.01925764
30.31	30.10	0.21	0.0441	0.00146512
1.75	2.57	-0.82	0.6724	0.26163424
34.62	33.80	0.82	0.6724	0.01989349
Total				6.63017885

Degree of Freedom:

= (r-1) (C-1) = (2-1) (5- 1) = 1 × 4

= 4

Table value 5% significant level.

= 9.488

Calculated value = 6.63017885

= 6.63017885<9.488

Result (Ho):

There is significant relationship between Current assets turnover ratio and Cash turnover ratio of the respondents in the study.

Working Capital Turnover Ratio:

Working Capital Turnover Ratio= Sales/Net Working Capital

Years	Net Sales (Rs)	Net Working Capital (Rs)	Ratio
2009-2010	1430300346	373343818	3.83
2010-2011	1159839221	128971508	8.99
2011-2012	1636778149	247352377	6.61
2012-2013	1512206105	348613231	4.33
2013-2014	1298884000	347710000	3.73

Source: Secondary Data:

From the above table it can be inferred that the working capital turnover ratio of TANCEM, in the year of 2010-11 is highly increased in 8.99. It observed from the above table working capital turnover ratio status in the year of 2009-10 the ratio 3.83, in the year of 2010-11 the ratio 8.99, in the year of 2011-12 the ratio 6.61, in the year of 2012-13 the ratio 4.33, in the year of 2013-14 the ratio 3.73.

Findings, Suggestions and Conclusion:

Findings:

- The Current ratio had showed a decreasing trend over the past five years from 2.42 to 1.88.
- The Quick ratio was decreased from 1.91 in the year 2009- 10 to 1.30 in the year 2013-14.
- The Current assets turnover ratio is increased from 2.24 in the year 2010-11 to 2.44 in the year 2011-12. It was further decreased to 1.75 in the year 2013-14.
- The Cash turnover ratio showed an increased trend from 6.75 to 56.04 over the past three years from 2009-10 to 2011-12.
- The working capital turnover ratio showed a highly increased in the year of 2010-11 at 8.99.

Suggestions:

The following suggestions were offered for improving the performance of Tamilnadu Cements Corporation Limited (TANCEM), Ariyalur:

- Current assets are more than current liabilities. In order to improve it is solvency position more, the TANCEM should take measured to reduce current liabilities i.e. creditors, Long-term debt, accrued expenses etc., and increase current assets i.e. debtors, inventories etc.
- Cash is the most liquid assets. So the preparation of cash and bank balance in the total current assets as to be increased to improve the liquidity position of TANCEM.
- The company has to more improve the working capital because decreased in net working capital during the last three years.

Conclusion:

The TANCEM limited financial position is very good. It is export in allover international contract and the employees of the company fully enjoying there were doing a job. The ratios are very good in year. It also provides various promotional activities exclusively for the benefits of the employees. The working capital management of Tamilnadu Cements Corporation Limited (TANCEM) Ariyalur was found satisfactory but last three years decreased in net working capital ratio. It was analyzed that the factory was effectively running its operations, as its liquid ratio was more than the standard ratio. Hence, it was evident that the Tamilnadu Cements Corporation Limited (TANCEM) Ariyalur was well managed and formed exclusively to promote and develop the weaker section of the factory.

References:

1. C. R. Kothari, 2002 "Research Methodology Method and Techniques" Wishwa Prakasham, New Delhi.
2. R.S.N. Pillai And Bagavathi."Management Accounting"
3. S. Chandand Company Ltd Publication, New Delhi, Third Edition (2009)
4. M. Pandey "Financial Management", New Delhi, Vikas Publication, Ninth Edition (2014)
5. T.S Reddy, Y.Hari Prasad Reddy"Management Accounting" Chennai, Margham Publication, Third Edition (2011)
6. Dr. R. Ramachandaran & Dr. R. Srinivasan "Financial Management", Sriram Publication (2010)

Websites:

1. www.tancem.com
2. www.managementstudyguide.com
3. www.investopedia.com