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Research Paper on

Analysis of Working Capital Performance of ESSAR OIL LTD. – En empirical study

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Abstract:

The present paper examines the performance working capital of Essar Oil Ltd. during the period 2009-10 to 2013-14. Descriptive statistics has been used to calculate the mean and standard deviation and co-efficient of variation has been used to analyse the performance of working capital of selected company using IBM SPSS 22.

The findings reveal that the Essar Oil Ltd. is working under very critical situation. The ratios prove that the poor performance of working capital throughout the study period.

Keywords: *Working capital, Performance, Profitability, Essar Oil Ltd.*

Introduction

Working capital is meant to support the day to day normal operations of an enterprise. This working capital generates the important elements of cost viz., material, wages and expenses. This cost usually leads to production and sales in case of manufacturing concern and sales alone in case of others. One of the distinguishing features of the fund employed as working capital is that it constantly changes its form to drive the business wheel. It is also known as circulating capital which means current assets of a company that are changed in the ordinary course of business from one form to another form.

Basically there are two types of working capital concept. They are balance sheet concept and operating cycle concept. According to the balance sheet concept, working capital is meant by gross working capital (i.e., sum of current assets) and net working capital (i.e., the difference between total current assets and total current liabilities). On the other hand, according to the operating cycle concept, working capital is meant to support all the operational activities of the

firm and cost there off. Here operating cycle represents the period during which investment of one unit of money will remain blocked in the normal course of operation till recovery out of revenue.

It is usually seen that there is always a negative relationship between liquidity and profitability. But it cannot be denied that unless there is a minimum level of investment in the current assets, output and sales cannot be maintained up to a certain level. Therefore, one is complementary to each other. Maintenance of a sound liquidity position increases profit, provided that the established liquidity level harmonizes with the nature of the firm.

Objective of the research

Working capital performance is really important in analyzing the strength of the company. The main aim of working capital management is solvency and profitability. An adequate level of working capital helps concern to enjoy the operational flexibility. The centered aim of working capital management is to have equilibrium between liquidity and profitability. Objective of the research paper is to indicate the effect of working capital on the performance of the selected company during study period. Working capital performance has been examined by implicating the important ratios for the selected company

Hypothesis

The hypothesis of the research paper is described as under. The null hypothesis is determined that there is no change in the performance of working capital in the selected company. On the basis of this hypothesis the study is based, which are mentioned as under :

H0: There is no change in the performance of working capital in the selected company.

H1: There is change in the performance of working capital in the selected company.

Usefulness of the research

This study will add to the existing research in terms of working capital performance. Furthermore the study also attempt to analyse the different ratios which are directly associated with the working capital. The findings of our research can be used not only by manufacturing organizations but also by other organizations to improve their financial performance and financial crisis of the country.

Literature review

Gul, Khan, Raheman, Khan, Khan, & Khan, (2013) investigated the influence of working capital management (WCM) on performance of small medium enterprises (SMEs) in Pakistan. Using

various ratios their results suggested that APP, GROWTH and SIZE have positive association with Profitability whereas ACP, INV, CCC and DR have inverse relation with profitability.

Oladipupo & Okafor, (2013) examined the implications of a firm's working capital management practice on its profitability and dividend payout ratio. The study focused on the extent of the effects of working capital management on the Profitability and Dividend Payout Ratio. Using both the Pearson product moment correlation technique and ordinary least square (OLS) regression technique, they observed that shorter net trade cycle and debt ratio promote high corporate profitability. On the other hand, they observed that dividend payout ratio was influenced positively by profitability and net trade cycle but negatively by growth rate in earnings

Almazari (2013) investigated the relationship between the working capital management (WCM) and the firms' profitability for the Saudi cement manufacturing companies. The study results showed that Saudi cement industry's current ratio was the most important liquidity measure which effected profitability. It was also found, as the size of a firm increases, profitability increased. Besides, when the debt financing increased, profitability declined.

Akoto, Awunyo-Vitor, & Angmor (2013) analyzed the relationship between working capital management practices and profitability of listed manufacturing firms in Ghana. The study suggests that managers can create value for their shareholders by creating incentives to reduce their accounts receivable to 30 days. It is further recommended that, enactments of local laws that protect indigenous firms and restrict the activities of importers are eminent to promote increase demand for locally manufactured goods both in the short and long runs in Ghana.

Maradi, Salehi, & Arianpoor (2012) compared working capital management of two groups of listed companies in Tehran Stock Exchange (TSE), which comprised of chemical industry and medicine industry. The results show that, in medicine industry compared to chemical industry, debt ratio makes more impact on reduction of net liquidity. But examination of impact of LEV over WCR indicate that, in chemical industry, debt ratio makes more impact on reduction of working capital requirements, compared to medicine industry.

Nyabwanga, Ojera, Lumumba, & Odondo (2012) assessed the effect of working capital management practices on the financial performance of SSEs in Kisii South District. Consequently, the findings of the study were that, working capital management practices were low amongst SSEs as majority had not adopted formal working capital management routines and their financial performance was on a low average.

Gakure, Cheluget, Onyango, & Keraro (2012) analyzed the relationship between working capital management and performance of 15 manufacturing firms listed at the Nairobi NSE from 2006 to 2010 and for a total 75 firms year observations. The study found that there is a negative coefficient relationship between accounts collection period, average payment period, inventory holding period and profitability while the cash conversion cycle was found to be positively

correlated with profitability. However, the effects of the independent variables except the average payment period were no statistically significant though the overall model was statistically significant.

Sharma & Kumar (2011) examined the effect of working capital on profitability of Indian firms. They collected data about a sample of 263 non-financial BSE 500 firms listed at the Bombay Stock (BSE) from 2000 to 2008 and evaluated the data using OLS multiple regression. The results revealed that working capital management and profitability is positively correlated in Indian companies. The study further reveals that inventory of number of days and numbers of day's accounts payable are negatively correlated with a firm's profitability, whereas number of days accounts receivables and cash conversion period exhibit a positive relationship with corporate profitability.

Raheman, Afza, Qayyum, & Bodla (2010) analyzed the impact of working capital management on firm's performance in Pakistan for the period 1998 to 2007. They concluded that manufacturing firms were in general facing problems with their collection and payment policies. Moreover, financial leverage, sales growth and firm size also had significant effect on the firm's profitability. They study recommended that effective policies must be formulated for the individual components of working capital.

Mathuva (2010) in his study on the influence of working capital management on corporate profitability found that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and profitability. He explained that the more profitable firms take the shortest time to collect cash from the customers. The study further revealed that there exist a highly significant positive relationship between the inventory conversion period and profitability. It was explained that firms, which maintain sufficiently high inventory levels reduce costs of possible interruptions in the production process and loss of business due to scarcity and products. Finally, the study established that there exists a highly significant positive significant positive relationship between the average payment period and profitability. He held that the longer a firm takes to pay its creditors, the more profitable it is.

Gill, Biger, & Mathur (2010) analyzed the relationship between working capital management and profitability of 88 American firms listed on New York Stock Exchange for a period of 3 years from 2005 to 2007 was selected. They found statistically significant relationship between the cash conversion cycle and profitability, measured through gross operating profit. It followed that managers can create profits for their companies by handling correctly the cash conversion cycle and by keeping accounts receivables at an optimal level.

Research Methodology

To carry out the present study, the methodologies that have been adopted are stated as follows:

Sample Design

The study has been carried out by selecting a company namely Essar Oil Ltd., which is one of the leading company in the Indian Petroleum Industries.

Data Source

The data required to complete the study has been collected from the published annual reports of the selected company.

Study Period

Taking into account the availability of data, we have chosen the study period spanning from 2009-10 to 2013-14.

Tools and Techniques of Data Analysis

The data collected from the published annual reports of the selected company for the 5 year period have been suitably re-arranged, classified and tabulated as per requirements of the study.

Working Capital Performance of the selected company

To analyze the working capital performance of the selected company, the technique of ratio analysis has been used. The ratios which are taken into consideration are as follows:

Table 1 Ratios taken into consideration for measuring the performance of working capital

Performance Drivers	**Performance Measures**
Current Ratio	Current Assets ÷ Current Liabilities
Quick Ratio	(Current Assets – Stock)÷ (Current Liabilities – Bank Overdraft)
Absolute Liquid Ratio	(Cash + Cash Equivalent + Marketable Securities) ÷ (Current Liabilities – Bank Overdraft)
Inventory Turnover Ratio (times)	Cost of Goods Sold ÷ Average Stock
Inventory Turnover Ratio (days)	365 ÷ Inventory Turnover Ratio (times)
Debtors Turnover Ratio (times)	Net Sales ÷ Closing Debtors
Debtors Turnover Ratio (days)	365 ÷ Debtors Turnover Ratio (times)
Working Capital Turnover Ratio	Net Sales ÷ Net Working Capital
Current Assets Turnover Ratio	Sales ÷ Current Assets

Other Methods

Apart from the above, simple statistical measures like mean, standard deviation, coefficient of variation have been used in the study.

Transforming data in to information

Microsoft Excel 2007 and IBM SPSS 22 have been used to analyse the data.

Analysis of the working capital performance of Essar Oil Ltd.

The ratios selected for this purpose are shown in Table-2 below:

Table 2 Selected ratios of working capital in Essar Oil Ltd. during 2009-10 to 2013-14

Ratio/Year	2009-10	2010-11	2011-12	2012-13	2013-14	Mean	S.D.	Co-efficient of Variation
Current Ratio	0.71	0.74	0.75	0.95	0.82	0.80	0.09	11.90 %
Quick Ratio	0.45	0.37	0.36	0.48	0.43	0.42	0.05	11.83 %
Absolute Liquid Ratio	0.10	0.09	0.11	0.24	0.13	0.13	0.06	46.31 %
Inventory Turnover Ratio (times)	0.27	0.12	0.24	0.34	0.92	0.38	0.31	83.32 %
Inventory Turnover Ratio (days)	1363	2989	1526	1086	395	1472	-	-
Debtors Turnover Ratio (times)	13.89	18.78	14.60	19.42	17.95	16.93	2.52	14.88 %
Debtors Turnover Ratio (days)	26	19	25	19	20	22	-	-
Working Capital Turnover Ratio	-9.71	-12.21	-11.94	-74.10	-20.23	-25.64	27.38	-106.80 %
Current Assets Turnover	3.95	4.20	3.97	4.07	4.36	4.11	0.17	4.11 %

Ratio								

Source: Published Annual Reports of Essar Oil Ltd. (2009-10 to 2013-14)

CURRENT RATIO

From Table-2, it is observed that the current ratio shows an increasing trend for the first four years of the study and decreased in the fifth year of study with an average of 0.80. It ranged from 0.71 to 0.95 during 2009-10 to 2013-14. Further, the ratio is below the conventional standard norm of 2:1 in all the years under study. Hence, the performance of the selected company in terms of current ratio is not satisfactory during the study period. The S.D. of the ratio is 0.09 and C.V. is 11.90 %.

QUICK RATIO

The quick ratio of the selected company also shows a fluctuating trend (Table-2) for the study period with an average of 0.42. The ratio is also below the standard norm of 1:1 in all the years under study. Hence, the performance of the company is also not satisfactory in terms of quick ratio. The ratio varies from 0.36 to 0.48 during the study period. The S.D. of the ratio is 0.05 and C.V. is 11.83 %.

ABSOLUTE LIQUID RATIO

From Table -2, it is observed that the absolute liquid ratio shows a fluctuating trend in the years under study. The ratio ranged from 0.09 to 0.24 with an average of 0.13. In all the years under study, the ratio is found to remain below the conventional norm of 0.5:1. Hence, the liquidity position in terms of this ratio is not satisfactory during the study period. The S.D of the ratio is 0.06 and C.V. is 46.31 %.

INVENTORY TURNOVER RATIO

As per Table-2, inventory turnover ratio of the company shows also fluctuating trend during the entire study period, which indicates poor management of inventory. The ratio varies from 0.12 to 0.91 with an average of 0.38. The S.D of the ratio is 0.31 and C.V. is 83.32%.

Similarly, the age of inventory reflects not a steady trend during the study period. The age of inventory ranged between 395 days to 2989 days with an average of 1472 days.

DEBTORS TURNOVER RATIO

According to Table-2, the debtor's turnover ratio shows fluctuating trend during the study period. The ratio lies between 13.89 to 19.42 with an average of 16.93, which indicates a satisfactory debtor's management of the company. The S.D of the ratio is 2.52 and C.V. is 14.88 %.

Similarly, the age of debtors varies between 19 days to 26 days with an average of 22 days during the period under study.

WORKING CAPITAL TURNOVER RATIO

From Table-2, it is observed that this ratio shows a decreasing trend during the study period. The ratio ranged between -9.71 to -74.10 with an average of -25.64. This indicates the working capital utilization of the company during the study period. The S.D of the ratio is 27.38 and C.V. is -106.80 %.

CURRENT ASSETS TURNOVER RATIO

According to Table-2, it is observed that this ratio shows mixed trend during the study period. It ranged from 3.95 to 4.36 with an average of 4.11. The ratio indicates the overall efficiency of working capital management of the company during the study period. The S.D of the ratio is 0.17 and C.V. is 4.11 %.

Summary of finding

1. The current ratio, quick ratio of the company always remained below the standard norm of 2:1 and 1:1 respectively, during all the years under study. Hence, the performance of the company is not satisfactory in terms of current and quick ratio during the study period.
2. The performance of the company in terms of absolute liquid ratio is not satisfactory. The ratio remained below the standard norm of 0.5:1 during all the years of the study.
3. The inventory turnover ratio as well as debtor's turnover ratio shows satisfactory performance during the study period.
4. The working capital turnover ratio is negative which indicated the excess of current liabilities over current assets. This leads to prove that company is not operated efficiently and effectively.
5. Current assets turnover ratio is high and therefore indicates over utilization of working capital during all the years under study.
6. In relation to the main objective, it may be concluded that the working capital management of Essar Oil Ltd. is not satisfactory during all the years under study.
7. However, there is a need for further improvement in working capital turnover ratio as well as in the current assets turnover ratio in order to generate liquidity efficiently in the coming years. Besides, inventory of slow moving items, if any, should be reduced to the maximum possible extent.

Limitations of the study

The study suffers from certain limitations which are stated as follows:

1. The study has been conducted over a very limited period of five years only.
2. The study is based on secondary data.
3. The study is limited to a single company. Hence, it will reflect only a partial view of the overall working capital management in the Indian Petroleum Industry.

4. The study is based on consolidated financial statements of the selected company, which may leave some grounds of error.
5. Different tools used to analyse the data, have own limitation that applies to this study also.

Direction for future research

The present study is limited to the extent of a single company. Hence, further research may be conducted to reflect the overall view of working capital management in the Indian Petroleum Industry.

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