A STUDY ON THE EFFECTIVENESS OF WORKING CAPITAL MANAGEMENT IN KERALA SOLVENT EXTRACTION (KSE) LTD. IRINJALAKUDA

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ABSTRACT

Effective working capital management is vital for the sustenance of any company. It plays a crucial role in creating value for firms, while poor working capital management not only erodes value but can also push a company towards insolvency. Hence, both managers and scholars are actively engaged in the quest to identify the factors that impact working capital management. This study empirically explores the factors influencing the need for effective working capital management within the specific context of a developing country. Understanding the drivers of working capital management is particularly crucial in developing countries, where firms often grapple with limited access to financial resources. Identifying these determinants equips managers with the insights needed to make well-informed decisions in the daily operations of their organizations. This enables them to strike a balance between ensuring they have enough cash on hand for operational needs and avoiding the excessive holding of cash, which could hinder investments for future growth of the firm.

KEY WORDS: working capital management, developing country, efficiency, resource scarcity

INTRODUCTION

Efficient working capital management is a crucial aspect of corporate finance as it has a direct impact on a company's profitability. Successful management of working capital is a prerequisite for the prosperity of a business. Effective working capital management involves overseeing the various elements of working capital to ensure that there is a sufficient amount available for the smooth operation of the firm and for achieving the twin goals of profitability (BPP Learning Media, 2010). Companies must strike a balance between profitability and day-to-day operations. Inadequate working capital can harm a company's liquidity, while excessive working capital can reduce profitability (Ghosh & Maji, 2003). Estimating the exact amount of working capital required can be challenging for management, as it varies between firms and over time, depending on factors such as the nature of the business, the scale of operations, the production cycle, credit policies, and the availability of raw materials. This is why a significant amount of funds needs to be permanently invested in various current assets. For example, due to the time lag between selling goods and receiving cash, a sufficient amount of working capital is always needed to support the desired level of sales. A company can be highly profitable if it can generate cash from its operations within the same operating cycle. Otherwise, the company would need to borrow to meet its ongoing working capital requirements. Therefore, the twin objectives of profitability need to be aligned (Brigham & Houston, 2004). Investments in current assets are essential to ensure the delivery of goods or services to customers, and effective management of these assets should have the desired impact on profitability. If resources are tied up at different stages of the supply chain, it can extend the cash operating cycle. While this may increase profitability due to higher sales, it can also negatively impact profitability if the costs associated with working capital exceed the benefits of holding more inventories or granting additional trade credit to customers (Khan & Jain).

WORKING CAPITAL MANAGEMENT

Working capital management is a critical facet of corporate finance as it has a direct impact on a company's profitability. The effective management of working capital is a prerequisite for the success of any enterprise. Efficient working capital management entails overseeing the various components of working capital to ensure that an adequate amount is available to facilitate the smooth operation of the firm, while simultaneously achieving the dual objectives of profitability and liquidity. Striking the right balance between profitability and day-to-day operations is essential for a company. Inadequate working capital can compromise a firm's liquidity, while excess working capital can diminish profitability (Ghosh & Maji, 2003). Accurately estimating the required working capital is a challenging task for management. A company can be highly profitable if it can generate cash from its operations within the same operating cycle; otherwise, it may need to borrow to support ongoing working capital needs. Thus, the dual objectives of profitability must be harmonized (Brigham & Houston, 2004). Investments in current assets are indispensable for ensuring the timely delivery of goods or services to customers, and effective management of these assets should positively impact profitability. If resources are tied up at various stages of the supply chain, it can extend the cash operating cycle. While this may boost profitability due to increased sales, it could also negatively affect profitability if the costs associated with holding excess inventory and granting more trade credit to customers outweigh the benefits (Khan & Jain).

This study focuses on the working capital management of KSE Ltd., a publicly traded company, is involved in the extraction of coconut oil from copra cake produced by various oil mills across the state. KSE Ltd. was the first solvent extraction unit in Kerala and commenced commercial production in 1972. It remains the premier solvent extraction unit in the state. The company has an authorized share capital of Rs. 100,000,000, divided into 994,000 equity shares of Rs. 110 each and 6,000 13.5% redeemable cumulative preference shares of Rs. 100 each. Compared to other solvent extraction companies, KSE Ltd. is in a strong position, consistently achieving a gross profit over the past year, making it a benchmark for other solvent extraction units.

WORKING CAPITAL

Working capital is the lifeblood of any enterprise, making its management a critical task for the Financial Manager of a firm. The requirement for working capital is directly tied to the firm's growth. Working capital encompasses the financial resources invested in a firm's current assets, including raw materials, work-in-progress, finished goods, receivables, cash, and more. From a manufacturing perspective, working capital represents the capital necessary to ensure the seamless and continuous flow of production.

Concepts of working capital

Gross working capital pertains to the total investment in all current assets, encompassing raw materials, work-in-progress, finished goods, book debts, bank balances, and cash balances. The gross working capital concept holds importance when assessing the required working capital, evaluating the scale of the business, ensuring the continuous and seamless operation of the business, and similar considerations.

Net working capital is the surplus of current assets over current liabilities. In other words, it is the value of current assets minus the value of current liabilities, which include trade creditors, bills payable, outstanding expenses such as wages, salaries, dividend payments, and tax obligations, as well as bank overdrafts, and so forth. The net working capital concept is significant when addressing working capital financing, focusing on the short-term liquidity aspects of the business, and related matters.

SOURCES OF WORKING CAPITAL

1. Ploughing back of own profit
2. Loans from commercial banks
3. Public deposits
4. Specialized financial institution
5. Issue of debentures
6. Issue of shares

The key factors influencing the working capital needs of a company include the following:

Nature of the business: Public utility enterprises such as water supply, electricity, and transportation require limited working capital as they provide services on a cash-only basis. Their funds are not tied up in inventories and accounts receivable. In contrast, manufacturing, trading, and financial firms necessitate a substantial amount of working capital.

Scale of operations: Larger-scale operations demand more working capital than smaller ones, as they require more investment in current assets.

Duration of the production cycle: The length of the production cycle pertains to the time needed to complete the manufacturing process, converting raw materials into finished products. A longer production cycle necessitates more working capital.

Working capital: The speed at which the working capital completes one cycle influences the working capital requirement. If it takes an extended period to complete the working capital cycle, the business unit will require more working capital. In a manufacturing concern, the working capital cycle commences with the purchase of raw materials and concludes with the cash realization from debtors. This cycle includes stages such as raw material to work in progress, work in progress to finished goods, finished goods to debtors, and ultimately from debtors to cash. This cycle is repeated. Companies benefitting from credit purchases and cash sales will have lower working capital requirements compared to those that make cash purchases and offer credit sales.

Need for the study

The present study aims to assess various working capital concepts and evaluate the viability of implementing improved planning and control measures for working capital. The primary objective in working capital management should be to optimize the firm's investments. A financial management expert asserts that the issue of working capital is a contributing factor to the diminished profitability in the manufacturing sector.

Statement of the problem

The success of an enterprise depends on the effective management of working capital. Efficient working capital management involves overseeing the different elements of working capital to ensure that a sufficient amount is maintained, facilitating the smooth operation of a firm as it is linked with liquidity and profitability. A study on working capital management of KSE Ltd is very much important that the investment in working capital is carefully controlled.

OBJECTIVES OF THE STUDY

- To examine the relationship between working capital and liquidity
- To know the efficiency of working capital utilization in KSE Ltd,
- To suggest the measures for improving the working capital performance of the company.

Literature Review

A typical manufacturing firm's current assets often constitute more than half of its total assets. Maintaining excessively high levels of current assets can easily lead to the firm achieving a lower return on investment Padachi (2006)

Nevertheless, firms that possess inadequate current assets may face shortages and encounter challenges in maintaining seamless operations. Effective working capital management entails the strategic planning and control of both current assets and current liabilities to mitigate the risk of being unable to meet short-term obligations while also steering clear of overinvesting in these assets, as highlighted by Eljelly (2004)

Effective management of working capital is a crucial aspect of financial management, (Deloof 2003). The adoption of substantial inventory levels and a liberal trade credit policy can facilitate an increase in sales volume. Additionally, maintaining a substantial inventory stock helps mitigate the risk of stock outs. The findings of this study demonstrate that companies with a significant cash investment in working capital also rely on a substantial amount of short-term payables as a means of financing. Furthermore, the practice of delaying payments to suppliers allows a company to assess the quality of the products purchased and can serve as a cost-effective and flexible source of financing for the firm.

Reason (2008) emphasized that working capital decisions typically pertain to the upcoming year. Unlike capital investment decisions, these choices are primarily guided by considerations of cash flows and profitability. To navigate these decisions, management will employ a blend of policies and techniques for effective working capital management.

Mahmood and Qayyum (2010) have highlighted that two primary objectives of working capital management are enhancing a company's profitability and ensuring sufficient liquidity to meet short-term obligations as they become due. Profitability is inherently linked to the aim of maximizing shareholders' wealth, and investments in current assets are justified only if they yield an acceptable return. On the other hand, liquidity is vital for a company's ongoing operations, and a company may opt to maintain a higher cash reserve than strictly necessary for operational or transactional purposes, such as for precautionary or speculative reasons.

Research methodology

Source

To tackle the issue at hand, we employ secondary data collection methods, which involve sourcing information from a diverse range of secondary outlets. Our data compilation encompasses research journals, books, reports, and newspapers. Through this comprehensive approach, offer a precise understanding of the problem

Tools used : An intra-firm comparison is made for 7 years. The work carried out in this study are based on the information collected from accounts ledger ,financial records and other documents in the form of Balance Sheet. Income statements which are published from the company. The following tools are used for analyzing the financial statements

1. Ratio analysis
2. Karl -Pearson’s co-efficient of correlation

Data analysis and interpretation

Ratio analysis

Liquidity ratios: liquidity ratios are used to measure the liquidity position or financial position of a firm these ratios are used to assess the short term debt paying ability of a firm these ratios are very useful for short-term credit providers and commercial banks.

Current ratio: this is one of the oldest ratio of all financial ratios.it is most common ratio for analyzing liquidity or short term financial position, it reflects the proporion **o**f total current asset to current liability.and it measure the company's ability to pay off on time.

Current ratio=current asset/current liability

Table showing current ratio

(Figures are taken from annual report)

Current ratio (RS.in lakhs)

Particulars	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**
Current asset	8802.19	12553.67	20029.79	16903.07	16291.30	30623.49	23662.59
Current liability	3725.38	6215.84	7925.3	6034.01	3870.06	8128.28	4543.92
Current ratio	2.36	2.02	2.53	2.80	4.21	3.77	5.21
MEAN							3.271429
SD							1.158755

Particulars		**Current asset**	**Current liability**
Current asset	**Pearson correlation**	**1**	**0.592**
	Sig.(2-tailed)		**0.162**
Current liability	**Pearson correlation**	**0.592**	**1**
	Sig.(2-tailed)	**0.162**	

*.Correlation is significant at the 0.05 level (2-tailed).

Interpretation: Current ratio of KSE Ltd**.** is always shows better position in liquidity in the year 2016-17,decreased to 2.02 ,but in the last years after(Covid-19) pandemic, current ratio increased because amount locked in debtors and inventory.in 2021-22 the current ratio is 5.21 ,means low rate of return on investment.

Liquid ratio: liquid ratio is the liquid liability ratio.it is based on the current assets that are highly liquid inventories that are omitted from this ratio‘s numerator as inventories are considered to be the least liquid portion of current asset. An asset is liquid if it can immediately or quickly be converted in to cash without a loss.

Liquid ratio

RS.inlakhs)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Liquid asset	1502.47	5121.67	10977.9	8140.46	8055	13628.39	7416.33
Current liability	3725.38	6215.84	7925.3	6034.01	3870.06	8128.28	4543.92
Liquid ratio	0.40	0.82	1.39	1.35	2.08	1.68	1.63

MEAN	1.335714
SD	0.56329

Source: calculated from the company’s annual statements.

particulars		Liquid asset	Current liability
Liquid asset	Pearson correlation	1	
	Sig.(2-tailed)		0.047
Current liability	Pearson correlation		1
	Sig.(2-tailed)	0.047	

**. Correlation is significant at the 0.01 level (2-tailed).

(Source: calculated from the company’s annual statements)

Interpretation Liquidity ratio of KSE Ltd .shows an increasing trend the highest ratio is 2.08 tin 2019-20.after that it shows a decreasing trend in 2021-22 it is 1.68:1,because all debtors may not be liquid or cash may be required immediately. The ideal ratio which is 1:1

Working capital turnover ratio

With the changes in revenue, currnt asset will change, it assumes sales are linked with working capital. The relationship between sales and working capital is called working capital turn oer ratio, It determines the efficiency with which the working capital is being utilized.

Working capital turnover ratio (RS.in lakhs)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Net Sales	92493.46	104724.53	130417.33	120940.70	142851.82	154326.47	167005.82
Working capital	5076.81	6337.83	12104.49	10869.06	12421.24	22495.21	19118.67
Working capital turnover ratio	18.21881	16.52372	10.77429	11.12706	11.50061	6.860415	8.735222
Mean							11.96288
Standard deviation							4.056187

Particulars		Net sales	Working capital
Net sales	Pearson correlation	1	
	Sig.(2-tailed)		0.003
Working capital	Pearson correlation		1
	Sig.(2-tailed)	0.003	

**. Correlation is significant at the 0.01 level (2-tailed).

Source: calculated from the company's annual statements.

Interpretation: Working capital ratio indicates the firm's ability to generate sales per rupee of working. This ratio is decreasing in the last two years. Higher the ratio is better this means lower investment in working capital has created more volume of sales. Standard ratio is 7-8 times. In 2020-21 the ratio shows less than standard ratio (6.86)in 2021-22 it shows an increasing trend and reached the ideal position.

Inventory turnover ratio: This ratio shows how many times the stock is turned over.,i.e. sold during the year.it test the company's sales and stock. Higher the ratio means, high sales, quick inventory turnover and low ratio means high stock level.

Inventory turnover ratio **(RS.in lakhs)**

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Net Sales	92493.46	104724.53	130417.33	120940.70	142851.82	154326.47	167005.82
Average Stock	6950.19	7365.86	8241.95	8907.25	8499.46	9481.78	13331.93
Inventory turnover ratio	13.30805	14.21756	15.8236	13.57778	16.80716	16.27611	12.52675

Source ;company's annual report

		Net sales	Average stock
Net sales	Pearson Correlation	1	
	Sig. (2-tailed)		.017
Average stock	Pearson Correlation		1
	Sig. (2-tailed)	.017	
*. Correlation is significant at the 0.05 level (2-tailed).			

**. Correlation is significant at the 0.01 level (2-tailed).

Source: calculated from the company's annual statements

Interpretation: Inventory turnover ratio of KSE Ltd. shows a fluctuating trend in the last year 2021-22 (12.526) it is higher than ideal ratio ,which means good inventory management .but comparing previous years the shows a decreasing tendency. Low stock turnover ratio indicates that stock is not selling quickly and it is remaining as unsold.

Debtors turnover ratio: This ratio explains the relationship between net credit sales and average debtors including bills recievables.it shows how quickly debtors are converted to cash.

Debtors turnover ratio (RS. in lakhs)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Credit Sales	92493.46	104724.53	130417.33	120940.70	142851.82	154326.47	167005.82
Average Debtors	18.82	9.88	14.02	16.27	48.53	39.42	80.48
DTR	4915.h4	1065.02	9305.55	7433.36	2943.58	3914.93	2075.12

		Net sales	Average debtors
Net sales	Pearson Correlation	1	.827*
	Sig. (2-tailed)		.022
Average debtors	Pearson Correlation	.827*	1
	Sig. (2-tailed)	.022	

Average collection period

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-2021	2021-22
No.of days	365	365	365	365	365	365	365
DTR	18.82	9.88	14.02	16.07	48.53	39.42	80.48
Average collection period(days)	20	37	26	23	8	10	5

**. Correlation is significant at the 0.01 level (2-tailed).

Source: calculated from the company's annual statements

Note: Total sales are taken as credit sales

Interpretation: Higher the ratio means the amount from debtors is being collected quickly.after Covid-19 pandemic the debtor's turnover ratio is reduced.
Source: company's annual report

Interpretation: After covid-19 it shows a fluctuating trend .if the company liberalizes its collection policy it can use its idle stock.

Creditors turnover ratio

This ratio shows the relationship between credit purchase and average creditors including bills payable. This ratio indicates the number of times the creditors are paid.

Creditors turnover ratio (RS in lakhs)

particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Credit purchase	80800.12	90295.44	97736.41	105097.79	124685.28	127809.34	136778.55
Average creditors	1217.63	776.75	1131.81	1156.31	754.01	1316.09	1891.78
Creditors turnover ratio	66.36	116.25	86.35	90.89	165.36	97.11	72.30

Source: calculated from company's annual report

Note: here the credit purchase is not available. s net purchase is taken as credit purchase

		Credit purchase	Average creditors
Credit purchase	Pearson Correlation	1	.472
	Sig. (2-tailed)		.284
Average creditors	Pearson Correlation	.472	1
	Sig. (2-tailed)	.284	

Correlation is significant at the 0.05 level (2-tailed

Interpretation A higher ratio indicates a shorter payment period. This analysis shows that company needs sufficient fund to meets its creditors. Lower ratio means creditors allowed a long period In 2021-22 the ratio is and 72.30 means the creditors grant more time to pay off its

Suggestions

Working capital is very essential to maintain smooth running of a business. following are the suggestion to improve the efficiency of working capital management

- The company has to increase its sale by liberalizing credit policy to maintain high inventory turn over ratio
- The working capital turnover ratio shows a decreasing trend in the last years. Efforts should be taken to make effective use of working capital for enhancing the turn over of the comany
- The company can increase the investments in current assets especially in liquid asssets like cash and cash equivalents so the company does not face any liquidity to pay off its short term debt.
- The company should maintain optimum amount of working capital.

Conclusions

Finance is the money available to spend on business, every enterprise whether big, small and medium needs finance to carry out its operations moreover finance guides and regulates investment decisions and expenditure. A business enterprise requires two types of asset fixed as well as current. Current assets are required to make effective utilization of fixed asset. The and amount invested in fixed asset called fixed capital and in current asset called working capital.

The article titled "An analysis of the efficacy of working capital management at KSE Ltd." aims to provide insights into the company's working capital status. The findings suggest that the overall working capital position of the company is unsatisfactory. A proficient working capital is crucial for the success of any enterprise. It is expected that an optimized working capital management approach will have a positive impact on firm value creation. Through the adoption of improved management practices, the company can potentially achieve a robust financial position in the future, effectively steering its working capital. To ensure ongoing progress, it is recommended that the company implements an efficient working capital management system.

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