

A Study on Working Capital Management of Water and Effluent Treatment Industry (L&T), Chennai

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ABSTRACT: Working capital plays an important role in managing day-to-day business activities and maintaining smooth operations. It helps firms handle short-term needs like paying expenses, managing inventory, and collecting receivables. Proper management of current assets and liabilities supports financial stability and business growth. The main objective of this study is to analyse the working capital management of Larsen & Toubro Water and Effluent Treatment Industry in Chennai. It also aims to understand different components of working capital such as current assets and current liabilities. Another objective is to examine how efficiently the company manages its working capital. The study also focuses on analysing trends in assets and liabilities over time and checking the liquidity position. This study used quantitative research design and probability sampling method. The secondary data used in this study that consist of financial statements of the company over five years 2020-21 to 2024-25, published annual reports, financial statements, company publication and online sources. Ratio analysis, schedule of changes in working capital, comparative balance sheet and common size balance sheet analysis are applied. The study found that liquidity position showed slight fluctuations but remained stable with gradual improvement in some periods, while efficiency ratios like inventory and working capital turnover showed inconsistent trends. It revealed that Larsen & Toubro Water and Effluent Treatment division faced delays in collecting receivables, as seen in the increasing debtor collection period and declining debtors turnover ratio. It concluded that even though the company maintained a reasonable liquidity position, the efficiency in managing current assets and converting them into sales has reduced over time. It also indicated that inventory management was unstable with frequent ups and downs in turnover and holding period. It suggested that the company should focus on improving receivable collection, better utilization of current assets, and maintaining a balanced level of working capital.

KEYWORDS: working capital, financial performance, liquidity asset.

I. INTRODUCTION

The term working capital means the circulation of capital in one form or another during the day to day operations business. Working capital is defined in the annual survey of the industries to include stock of material, stores, fuels, semi finished goods including work-in-progress and finished and by products, cash in hand and algebraic sum of sundry creditors. Management of working capital is concerned with the problem that arises in attempting to manage the current assets, current liabilities. The basic goal of working capital management is to manage the current assets and current liabilities of a firm in such a way that a satisfactory level of working capital is maintained, i.e. it is neither adequate nor excessive as both the situations are bad for any firm. There should be no shortage of funds and also no working capital should be ideal. Working capital management policies of a firm has a great on its probability, liquidity and structural health of the organization. Working capital may be regarded as the life-blood of a business. Its effective provision can do much to ensure the success of a business, while its inefficient management can lead not only to loss of profit, but also to the ultimate down fall of what otherwise might be considered as a promising concern.

Capital required for a business can be classified under two main categories i.e., fixed capital and working capital. Fixed capital stands for the amount of capital which is required for long term to create production facilities through purchase of fixed assets such as plant, machinery, land and buildings etc. Working capital refers to that part of the firm's capital which is needed for financing short terms or current assets such as marketable securities, debtors and inventories etc. Working capital management deals with the management of current assets over current liabilities. Working capital

management is a significant fact of financial management. Both current assets and fixed assets are similar in the sense that the firm analysis their effects on its return and risk.

OBJECTIVES OF THE STUDY

- To understand the working capital components of the company.
- To analyse the working capital efficiency of the company.
- To analyse the trends of various components of current assets and current liabilities.
- To study the liquidity position of the firm.
- To study the optimum level of current assets and current liability of the company.

II. REVIEW OF LITERATURE

Mora, Wu and Chang (2024) examined the impact of supply chain risks on working capital management. The objective was to understand how external risks affect financial decisions of firms. The study found that higher supply chain risk increased net working capital levels. The results showed firms increased inventory and receivables to manage uncertainty. The study concluded that firms adjust working capital strategies to handle risk and maintain stability.

Valiña-Sotelo and Iglesias (2025) examined working capital management and firm performance in developed and emerging countries. The objective was to study how financial decisions affected firms during crisis periods like COVID-19. The study found that increase in inventory days reduced firm performance across countries. The results showed that economic growth improves performance but crisis periods reduce it. The study concluded that proper working capital control helps firms handle economic shocks better.

Umar Nawaz Kayan (2023). The paper aims to investigate the empirical impact of working capital management (WCM) on firm performance (FP) in the emerging markets of Africa. This paper also aims to investigate this relationship during the global financial crisis of 2008 (GFC, 2008). The sample of this study comprises two leading emerging markets in Africa (Egypt and South Africa) based on the MSCI world market classification list for the period 2007-2020. The study employs various regression techniques such as fixed effect and system generalized method of moments. In addition to baseline regressions, the authors applied various preliminary tests and, finally robustness measures. Besides the dependent, independent variables, the study uses firm-level and country macroeconomic-level explanatory variables. The study's results indicate that (1) WCM and FP exhibit a direct relationship and (2) the WCM components such as cash conversion cycle, average collection period and the average age of inventory, have a significant inverse relationship, whereas the average payment period has a direct relationship with FP. The robustness results are assessed based on the selection of an alternative proxy for FP measurement, controlling for industry, country, year effect and the exclusion of the GFC 2008.

III. RESEARCH METHODOLOGY

This study adopts a Quantitative research design. probability sampling is adopted in this study. Both primary data and secondary data are applied to the study. The size of the sample to be used in this study (2020 – 2025) respondents. Ratio analysis, schedule of changes in working capital, comparative balance sheet, common size balance sheet have been used in this study.

Data analysis and interpretation

Table No. 1 ABSOLUTE LIQUIDITY RATIO

Year	Cash and bank balance	Current Liabilities	Ratio
2020-2021	4.59	122.58	0.04
2021-2022	8.76	149.57	0.06
2022-2023	17.37	177.73	0.1
2023-2024	10.04	157.1	0.06
2024-2025	9.68	164.54	0.06

Interpretation

The above table shows the absolute liquidity ratio is 0.04 in the year of 2020-2021. It has increased to 0.06 and 0.10 in the year of 2021-2022 and 2022-2023. It has decreased to 0.06 in the year of 2023-2024 and 2024-2025.

Table No.2 INVENTORY TURNOVER RATIO

Year	Cost of goods sold	Average inventory	Ratio
2020-2021	121.77	10.77	11.31
2021-2022	96.08	9.43	10.19
2022-2023	93.35	4.32	21.61
2023-2024	24.51	4.24	5.78
2024-2025	53.25	5.54	9.61

Interpretation

The above table shows the inventory turnover ratio is 11.31 in the year of 2020–2021. It has decreased to 10.19 in the year of 2021–2022. It has increased to 21.61 in the year of 2022–2023. It has decreased to 5.78 in the year of 2023–2024. It has increased to 9.61 in the year of 2024–2025.

Table No.3 DEBTORS TURNOVER RATIO

Year	Sales	Average Debtors	Ratio
2020-2021	185.23	85.61	2.16
2021-2022	197.37	99.7	1.98
2022-2023	173.38	113.32	1.53
2023-2024	136.26	111.75	1.22
2024-2025	136.13	118.03	1.15

Interpretation

The above table shows that the debtors turnover ratio was 2.16 in the year 2020–2021, which decreased to 1.98 in the year 2021–2022. It further decreased to 1.53 in the year 2022–2023, and it declined to 1.22 in the year 2023–2024. Finally, it reduced to 1.15 in the year 2024–2025, indicating a continuous decline in the debtors turnover ratio over the study period.

Table No.4 INVENTORY CONVERSION PERIOD

Year	Average Inventory	Cost of Goods Sold	Days
2020-2021	10.77	121.77	32.3
2021-2022	9.43	96.08	35.8
2022-2023	4.32	93.35	16.9
2023-2024	4.24	24.51	63.1
2024-2025	5.54	53.25	38

Interpretation

The above table shows that the inventory conversion period was 32.3 days in the year of 2020–2021. It has increased to 35.8 days in the year of 2021–2022. It has decreased to 16.9 days in the year of 2022–2023. It has increased to 63.1 days in the year of 2023–2024. It has decreased to 38.0 days in the year of 2024–2025.

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Table No. 5 AVERAGE DEBTOR COLLECTION

Year	Average Debtors	Credit Sales	Collection Period Days
2020-2021	85.61	185.23	168.64
2021-2022	99.7	197.37	184.4
2022-2023	113.32	173.38	238.53
2023-2024	111.75	136.26	299.26
2024-2025	118.03	136.13	316.32

Interpretation

The above table shows that the average debtor collection period was 168.64 days in the year 2020–2021, and it increased to 184.40 days in the year 2021–2022. It further increased to 238.53 days in the year 2022–2023, and it rose to 299.26 days in the year 2023–2024. Finally, it increased to 316.32 days in the year 2024–2025, indicating a continuous increasing trend in the debtor collection period over the study period, which shows a delay in the collection of receivables from customers.

Table No.6 WORKING CAPITAL TURNOVER RATIO

Year	Net Sales	Working Capital	Ratio
2020-2021	185.23	21.45	8.64
2021-2022	197.37	37.09	5.32
2022-2023	173.38	28.26	6.14
2023-2024	136.26	50.15	2.72
2024-2025	136.13	55.63	2.45

Interpretation

The above table shows that the working capital turnover ratio is 8.64 in the year of 2020–2021. It has decreased to 5.32 in the year of 2021–2022. It has increased to 6.14 in the year of 2022–2023. It has decreased to 2.72 in the year of 2023–2024. It has further decreased to 2.45 in the year of 2024–2025.

Table No.7 CURRENT ASSET TURNOVER RATIO

Year	Net Sales	Current Asset	Ratio
2020-2021	185.23	144.03	1.29
2021-2022	197.37	186.66	1.06
2022-2023	173.38	205.99	0.84
2023-2024	136.26	207.25	0.66
2024-2025	136.13	220.17	0.62

Interpretation

The above table shows that the current assets turnover ratio was 1.29 in the year 2020–2021, and it decreased to 1.06 in the year 2021–2022. It further decreased to 0.84 in the year 2022–2023, and it declined to 0.66 in the year 2023–2024. Finally, it reduced to 0.62 in the year 2024–2025, indicating a continuous declining trend in the current assets turnover ratio over the study period, which shows a reduction in the efficiency of the company in utilizing current assets to generate sales.

IV. SUGGESTIONS

- The company must have a current ratio which is within optimum current assets and current liabilities to guarantee a stable current ratio and enhance short term solvency.
- The company ought to enhance its liquid asset status by enhancing its cash management and cutting reliance on inventory to service its short term liabilities.
- The company should raise its cash and bank balances to be in a more favorable absolute liquidity position and be in a position of managing the immediate liabilities.
- The company ought to embrace effective inventory control methods to prevent overstocking and understocking, thus enhancing inventory turnover performance.
- The company needs to improve its credit policy and collection effectiveness to ensure it has a stable debtors turnover ratio and minimise bad debts.
- The company should stabilize the inventory holding period to match production and sales so that they have a better control of the inventory movement.
- The company needs to enhance its receivables collection to shorten the average collection period and have more cash coming in.
- The company needs to use its working capital wiser by balancing its sales growth with investment in its current assets in order to enhance the turnover ratio.

V. CONCLUSION

The study found that liquidity position showed slight fluctuations but remained stable with gradual improvement in some periods, while efficiency ratios like inventory and working capital turnover showed inconsistent trends. It revealed that Larsen & Toubro Water and Effluent Treatment division faced delays in collecting receivables, as seen in the increasing debtor collection period and declining debtors turnover ratio. It concluded that even though the company maintained a reasonable liquidity position, the efficiency in managing current assets and converting them into sales has reduced over time. It also indicated that inventory management was unstable with frequent ups and downs in turnover and holding period. It suggested that the company should focus on improving receivable collection, better utilization of current assets, and maintaining a balanced level of working capital. It is also identified that the company should also work on the optimization of its working capital cycle through the improvement of inventory management, enhancement of receivables management, and maintaining the sufficient level of liquid assets. Financial management in a strategic approach to short term finances will lead to increased profitability and less financial risk. The company will be able to attain sustainable growth and operational efficiencies in the long-term by the proper balance of liquidity and profitability.

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