

WORKING CAPITAL MANAGEMENT OF M/S LARSEN & TOUBRO LTD - AN EXTENSIVE STUDY.

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1. Introduction:

1.1 Hypothetical Background

1.1.1 Working Capital and its Nature

The term Working capital is commonly used for the capital required in day to day operations, such as for purchasing raw material, for meeting day to day expenditure. Working capital refers to the circulating capital required to meet the day to day operations of the business firm. Working capital is defined as excess of current assets over current liabilities. But as per accounting technology, it is the difference between the inflow and outflow of funds. In the Annual survey of Industries (1961), working capital is defined to include “stock of materials, fuels, semi finished goods including work in progress and finished goods and by products; cash in hand and bank and the sum of sundry creditors represented by (a) outstanding rent, wages, salaries, interest and dividend; (b) purchase of goods and services; (c) short term loan and advances”.

Working capital has been described as the “life blood of any business which is apt because it constitutes a cyclical flowing stream through the business. Working capital management is concerned with the problems that arise in attempting to manage the current assets, current liabilities and the inter-relationship, that exist between them.

1.1.2 Types of Working capital

Working capital may be classified based on time and concept. The details are as follows:

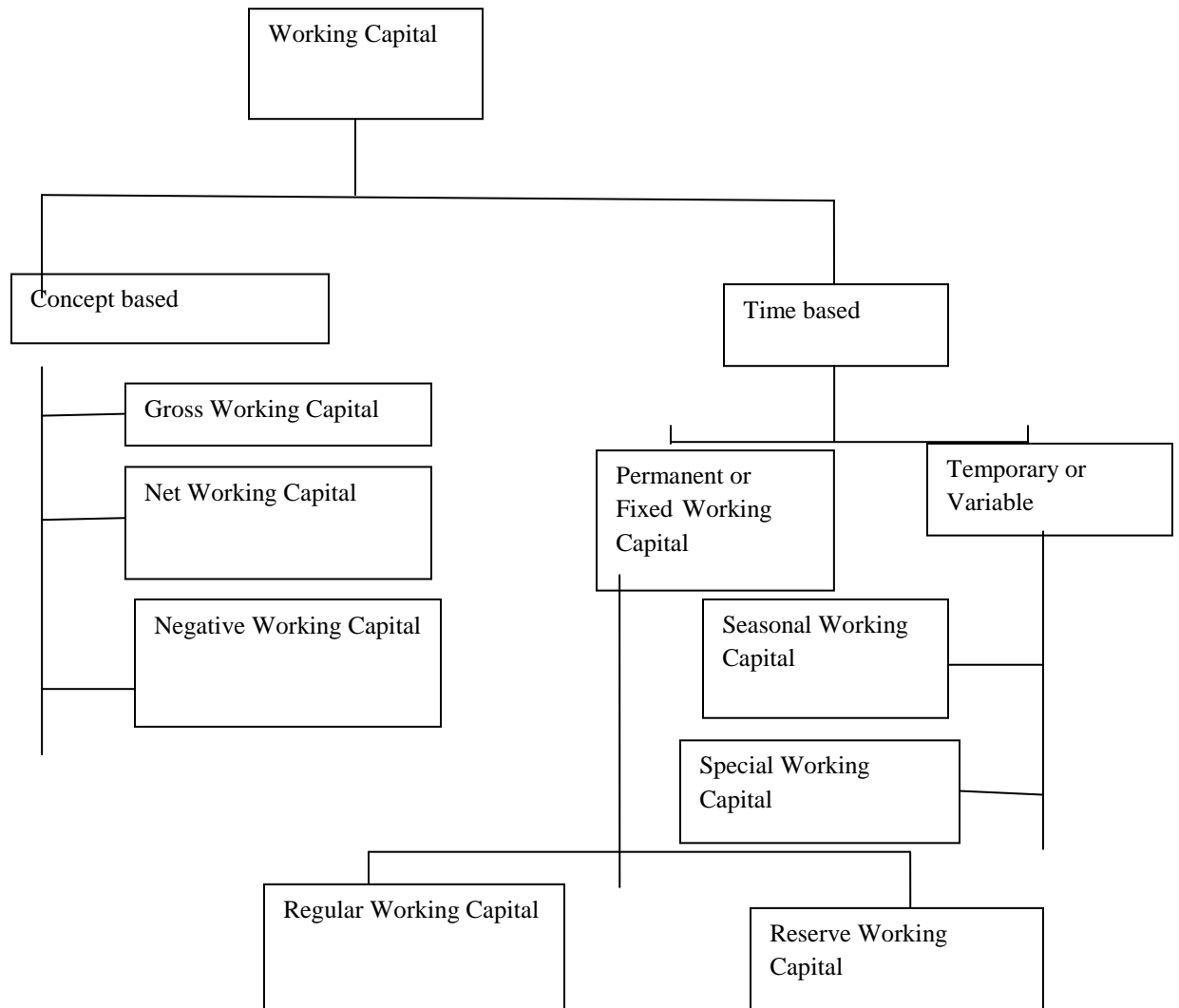


Fig – 1.1.2(a): Types of Working Capital

Based on concepts of Working Capital are of two types:

Gross Working Capital also referred to as total current assets of the business.

On the other hand Net Working Capital referred to as current assets minus current liabilities. This can be alternatively defined as that portion of the current assets which is financed with long term funds. The term Net Working Capital indicates liquid position of the organization.

Negative Working Capital refers the situation when the current assets are below the current liabilities. This situation of the business is the critical or crisis situation.

Based on time Working Capital is classifying as –

Permanent Working Capital refers to that minimum amount of investment required to carry out the minimum level of business activities. Tandon committee has referred to this type of working capital as “core current assets”. Permanent working capital is permanently needed to the business and therefore it should be financed out of long term funds.

Temporary working capital refers to the amount of working capital above the permanent working capital. This portion of working capital is required to meet the functions in demand consequent upon changes in production and sales as a result of seasonal changes. This type of working capital is also known as variable working capital.

Seasonal or cyclical working capital requirement is considered as variable working capital. Temporary working capital is financed by short term sources of fund such as bank credit. The graphical presentation of changes of working capital requirement in different situations is as follows:

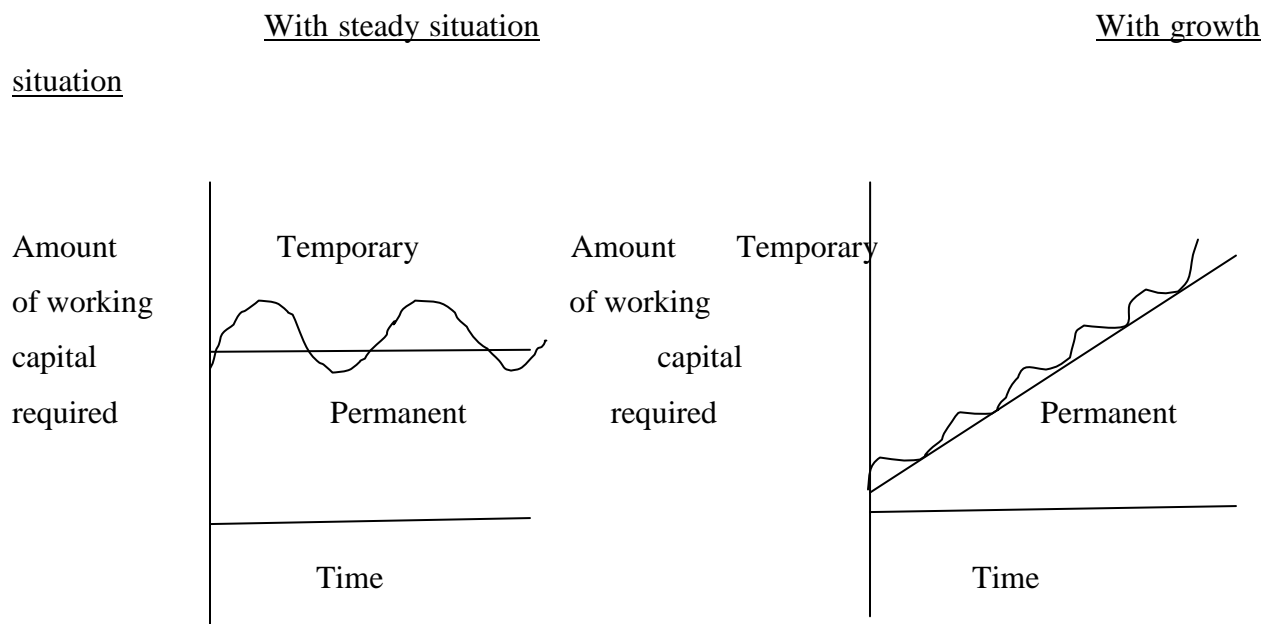


Fig – 1.1.2(b): Changes of working capital requirement in different situations

1.1.3 Importance of Working Capital

The primary objective of any business is to make profit. This should be done by buying and selling transactions. In order to fulfill this objective, it is necessary to produce goods or providing necessary services. Working capital is required for that. Moreover, sales do not convert into cash instantly. For this, a large amount of capital is blocked in different phases of production, which is inevitable to the firm.

A firm may avail of the opportunities available in the market if it has sufficient working capital. For example, bulk purchase of goods at lower prices or at a discounted price, timely payment of tax to the government. It is not possible for a firm to acquire modern machinery and equipments which are vital for the survival of the business without sufficient working capital. Unforeseen contingency may also be made in the presence of sufficient working capital. At the time of depression, a huge amount of working capital is required to meet the challenge.

1.1.4 Working Capital cycle

Working capital is needed till a firm gets liquid cash on sale of finished products. This depends on two factors:

Manufacturing cycle – time required for converting raw materials into finished products.

Credit policy – credit period given to customers and credit period allowed by creditors. The sum total of these times is called an “Operating cycle”. It includes the following steps:

- Conversion of cash into raw materials
- Conversion of raw materials into work-in-progress
- Conversion of work –in-progress into finished products.
- Time for sale of finished products – cash & credit
- Time for realization from debtors in case of credit sale.
- Credit period allowed by creditors for credit purchase of raw materials, inventory and creditors for wages and overheads.

The chart of working capital cycle is as follows:

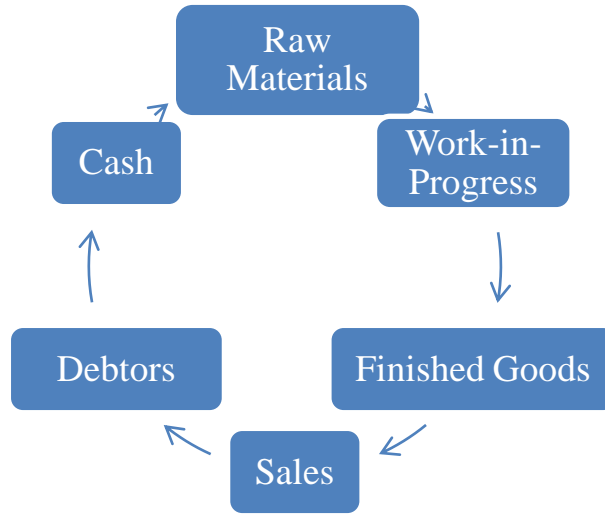


Fig – 1.1.4(a): Working capital cycle

In case of trading concerns, the operating cycle will be as follows:

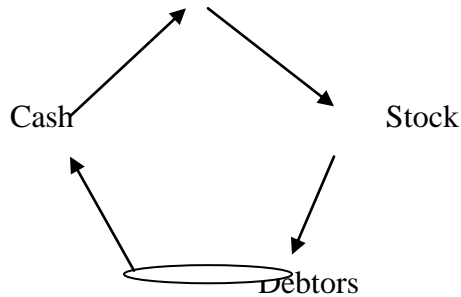


Fig – 1.1.4(b): Working capital cycle for trading concern

In case of financial concerns, the operating cycle will be as follows:

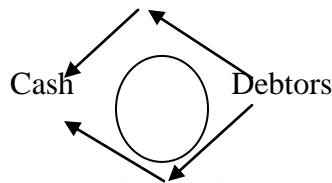


Fig – 1.1.4(c): Working capital cycle for financial concern

1.1.5 Factors determining Working Capital requirement

There are some factors which influence the working capital requirement of projects. These are as follows:

Internal Factors-

- Nature of the business
- Size of the business
- Production cycle
- Firm's policies
- Growth and expansion of business
- Turnover in inventories
- Turnover of receivables
- Profit margin and dividend policies
- Operating efficiency of the firm
- Co-coordinating activities of the firm

External Factors –

- Business fluctuations
- Changes in technology
- Import policy
- Taxation policy
- Infrastructural facilities

1.1.6 **Most favorable level of Working Capital**

Working capital management decision involves relating to current assets and financing of current assets. Current assets may be financed either from short term sources or long term sources. The finance manager has to mix funds collected from short term sources and long term sources. Thus the working capital financing should not result in either idle or shortage of cash funds.

In working capital financing the manager has to take decisions of mixing the two components i.e. long term component of debt and short term component of debt. The financing of working capital are divided into three categories:

- Conservative policy refers that the manager depends more on long term funds.
- Aggressive policy refers the managers depends more on short term funds.

- Moderate policy refers the managers depends moderate on both long term funds and short term funds.

The question is how the manger mixes these two funds while financing required working capital. This approach is known is 'matching approach'. The firm reaches the optimal level of working capital by their experience and scientific approach. The ratio of current assets to fixed assets helps in measuring the performance of working capital management. Every firm wants to maintain the balance of their current assets and make it optimum.

1.1.7 **Liquidity vs. Profitability**

Liquidity is a precondition to ensure that firms are able to meet its short-term obligations. The 'liquidity position' in a company is measured based on the 'current ratio' and the 'quick ratio'. The current ratio establishes the relationship between current assets and current liabilities. Normally, a high current ratio is considered to be an indicator of the firm's ability to promptly meet its short term liabilities. The quick ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value.

Profitability is a measure of the amount by which a company's revenues exceeds its relevant expenses. Profitability ratios are used to evaluate the management's ability to create earnings from revenue-generating bases within the organization.

The 'profitability position' of a company is measured using the 'gross profit margin' and the 'net profit margin'. Profitability means –

$$\frac{\text{Profit}}{\text{Fixed Assets} + \text{Working Capital}}$$

The gross profit margin is an indicator of the profit a business makes on its cost of sales, or cost of goods sold. It is the profit earned before any administration costs; selling costs and so on are removed. The net profit margin is an indicator of the amount of net profit per rupee of turnover a business has earned. That is, after taking account of the cost of sales, the administration costs, the selling and distributions costs and all other costs, the net profit is the profit that is left, out of which the company will have to pay interest, tax, dividends and so on. Return on Capital Employed (ROCE) is used to measure the profitability of the firm.

There is a relationship between liquidity and profitability. There may be positive and also negative relationship between the two. Negative relationship is not expected at all. If a firm maintains large amount of current assets its profitability will be affected though it protects liquidity. If a firm maintains low current assets, its liquidity is of course weak but the firm's profitability will be very high. So, a firm has to maintain the balance between liquidity and profitability while conducting day to day operations. The relationship between profitability and liquidity are depicted in the below diagram:

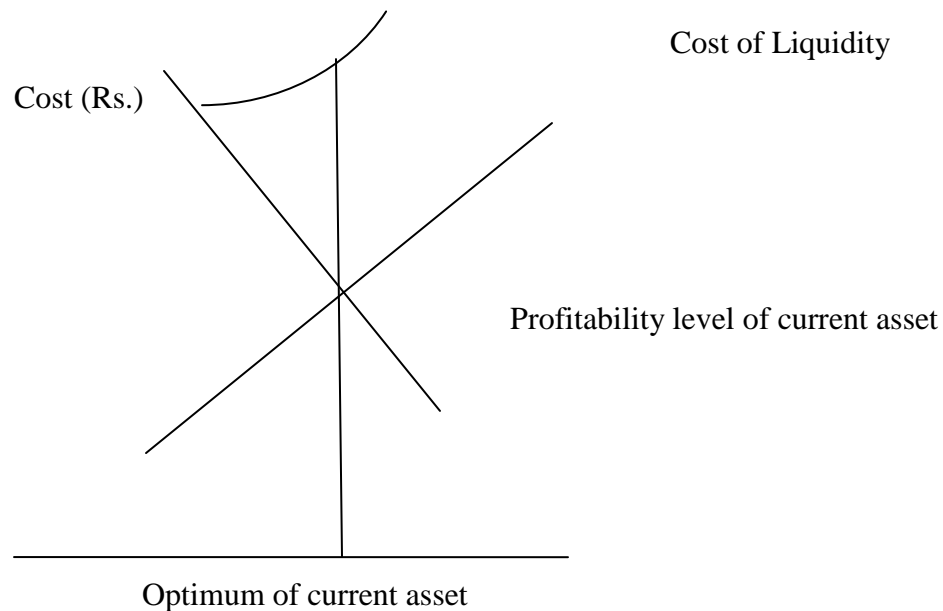


Fig – 1.1.7: Liquidity vs. Profitability

1.2 Industry Profile

The **Technology, Engineering, Construction & Manufacturing industry** of India is an important indicator of the development as it creates investment opportunities across various related sectors. The industry is fragmented with the handful of major companies involved in the various activities across all segments, medium sized companies specializing in niche activities.

1.3 Company profile

Larsen & Toubro Limited (L&T) is a technology, engineering, construction and manufacturing company. It is one of the largest and most respected companies in India's private

sector. More than seven decades of a strong, customer-focused approach and the continuous quest for world-class quality have enabled it to attain and sustain leadership in all its major lines of business. L&T has an international presence, with a global spread of offices. A thrust on international business has seen overseas earnings grow significantly. It continues to grow its global footprint, with offices and manufacturing facilities in multiple countries.

2. Research Methodology:

2.1 Research Problem

There are so many studies in the area of Working Capital Management in a Technology, Engineering, and Construction & Manufacturing industry. It has been observed that most of the studies have focused on project cash flow forecasting. Here emphasis is given to determine the minimum working capital requirement, analysis in trend in working capital over the years and also the relationship between liquidity and profitability in the Indian Technology, Engineering, and Construction & Manufacturing industry.

2.2. Why is this problem significant?

The main objective of the present study is to examine and evaluate the working capital performance of M/s L&T Ltd. under this study. To attempt this main objective, the following incidental objectives are sought to be achieved –

- i) To examine the trends in working capital performance.
- ii) To examine the working capital performance on the basis of some important ratio.
- iii) To study of ratio analysis in quick, inventory, debtors & creditors
- iv) To examine the profitability performance on the basis of Return on Capital Employed (ROCE).
- v) To examine the relationship between liquidity and profitability.
- vi) To offer some suggestion for improvement in the management of working capital.

2.3. Research Methodology

The methodologies to be adopted in the study are as follows –

- a) **Sample Selection** – The proposed study will be carried out by selecting Larsen & Toubro Ltd.
- b) **Nature of the Data Requirement** – To complete the study, secondary data are required.
- c) **Sources of Data** – The data required to carry out the study will be collected from the published Annual Reports of the Company.
- d) **Data collection Procedure** – The data required for the study will be collected directly from the Head Office or Regional Office (Kolkata) of the selected company.
- e) **Study Period** – The proposed study will be carried out during the year end 31st March, 2009 to the year ended 31st March, 2017 i.e., the span of 9 years.

3. Tools to be used for data analysis:

After collection of required data it will be suitably rearranged, classified and tabulated as per necessity of the study. Several tools require are as follows:

- a) Chi-square test will be used to statistically examine whether there are significant differences between actual and estimated values in working capital.
- b) Ratio analysis will be applied for examining the working capital and profitability performance of the selected company.
- c) To measure the relationship between liquidity and profitability, Spearman's Rank Correlation coefficient will be used.
- d) Apart from the above, simple statistical measures like mean, standard deviation and coefficient of variation will also be used in the study.

4. Expected result of the study:

- i) The company that has been selected in the study is profit making units for the last 10 years. Thus, the study is expected to serve as a benchmark with respect to working capital management.
- ii) The study is expected to offer some conclusive suggestion for better management of working capital as a step for evaluating the efficiency and effectiveness of working capital management.

5. Literature Review

The famous studies that have been carried out on Working Capital Management in Technology, Engineering, and Construction & Manufacturing industry are briefly and chronologically presented below:

Dr. Hiren Maniar, establish the relationship among the factors responsible for LWC requirements and presents a simple model that could be used as a guide to estimate the LWC for Infrastructure projects in India.

Verma (1989) examined working capital management in TISCO, SAIL and IISCO during the period from 1978-79 to 1985-86 by using the financial tools and statistical techniques. The study revealed that TISCO had better working capital management in comparison to SAIL and IISCO. Results also revealed that all the three firms under study had made excessive use of bank borrowings to finance the working capital requirements.

Shin and Soenen (1998) investigated the relation between the firm's net trade cycle and its profitability by using correlation and regression analysis. They used a composite sample of 58985 firms covering the period from 1975-1994. The researchers found that there is a strong negative relation between the length of the firm's net-trade cycle and its profitability. They also found that shorter net-trade cycles are associated with higher risk-adjusted stock returns.

Pandey and Upadhyay (2007) had undertaken the study to evaluate the efficiency of management of working capital in Bokaro Steel Plant during the period from 1999 to 2005. Results show that position of payment of liability was satisfactory but the management of inventory and receivable was good.

Dr. (Mrs.) Asha Sharma, Assistant Professor, Department of Commerce, MPGMJNVU, Jodhpur (2013) analyzed the liquidity, efficiency and profitability relationship of steel industry in India. Some of the important ratios were used to measure the financial performance of these companies. Based on the above analysis the significant positive relationship is found between two variables.

6. Work done:-

For doing this research work I have done the following:

- Visit the company Regional office at Kolkata many times.
- Self met the person involved in the field of Finance, Accounts & Planning of the company.
- Collected the Annual Reports for last 09 years of the company
- For doing the project work, visited also the various project sites.

7. References:

7.1 Books:

- a) **Rakshit, P. (2003):** Financial Management –Simplified, Elegant Publication, Kolkata, pp10-22.
- b) **Shin, H. H. and Soenen, L. (1998),** “Efficiency of Working Capital Management and Corporate Profitability”, Financial Practice and Education, Fall /Winter, 37-45
- c) **Agarwal, D. R. (2003):** Business Statistics, Vrinda Publications (P) Ltd, pp 103-115.
- d) **V.K.Saxena & C.D.Vashist(2007) :** Advanced Cost & Management accounting

7.2 Journals:

- a) **Working Capital and the Construction Industry**, Fred Shelton, Jr., CPA, MBA, CVA
- a) **Nimalathasan, B., (2010),** “Working Capital management and its impact on profitability: A study of selected listed manufacturing companies in Sri Lanka”, Information Management, Manager, no. 12, 2010, pp 76 – 84.

7.3 Online Sources:

- Annual Report of The company
- www.larsentoubro.com