

## AN STUDY OF ASSET AND LIABILITY MANAGEMENT

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**Abstract:** Asset management is the process of guiding the acquisition, use and disposal of assets to make the most of their service delivery potential and manage the related risks and costs over their entire life. In this project on Management of Assets and Liabilities at COMBINED RESEARCH ORGANIZATION, I have covered all the accounting policies and practices followed by the company for the management of assets and liabilities. This project covers information on the depreciation practices followed at COMBINED RESEARCH ORGANIZATION and the accounting for depreciation. It also covers various different practices of the company relating to the transfer and disposal of assets, impairment of assets, amortization etc. This project also covers the management of fixed assets (tangible and intangible) and current assets. It also describes the Inventory Management policies at COMBINED RESEARCH ORGANIZATION and the need to hold inventory.

### Introduction

It measures how long a firm will be deprived of cash if it increases its investment in resources in order to expand customer sales through Cash Cycle, when compared Operating Cycle with cash cycle it

shows the time elapsing between the purchase of raw materials and the collection of cash for sales.

It includes a review on assessment of working capital administration also covers the policies for the management of Short term and Long term Liabilities at COMBINED RESEARCH ORGANIZATION. Also studied different ratios regarding credit management.

The above data has been collected from the company's website, some financial websites such as studyfinance.com. I took help from previous reports prepared on the same topic and much more information was collected from the continuous interaction with the company employees and the Industry guide.

### Asset- liability management

Asset-liability management (ALM) is the process of planning, organizing, and controlling asset and liability volumes, maturities, rates, and yields in order to minimize interest rate risk and maintain an acceptable profitability level. Simply stated, ALM is another form of planning. It allows managers to be proactive and anticipate change, rather than reactive to unanticipated change.

## DEFINITION

But in the last decade the meaning of ALM has evolved. It is now used in many different ways under different contexts. ALM, which was actually pioneered by financial institutions and banks, are now widely being used in industries too.

The society of Actuaries Task Force on ALM Principles, Canada, offers the following definition for the ALM:

"Asset Liability Management is the on-going process of formulating, implementing, monitoring, and revising strategies related to assets and liabilities in an attempt to achieve financial objectives for a given set of risk tolerances and constraints."

## ASSET-LIABILITY MANAGEMENT APPROACH

ALM in its most apparent sense is based on funds management. Funds management represents the core of sound planning and financial management. Although funding practices, techniques, and norms have been revised substantially in recent years, it is not a new concept. Funds management is the process of managing the spread between interest earned and interest paid while ensuring adequate liquidity. Therefore, funds management has following three components:-

- A. Liquidity Management
- B. Asset Management
- C. Liability Management

## LIQUIDITY MANAGEMENT

In finance, Liquidity management takes one of two forms based on the definition of liquidity. One type of liquidity refers to the ability to trade an asset, such as a stock or bond, at its current price. The other definition of liquidity applies to the large

organizations, such as financial institutions. Investors, lenders, and managers all took to a company's financial statements, using liquidity measurement ratios to evaluate liquidity risk. This is usually done by comparing liquidity assets and short-term liabilities.

## ASSET MANAGEMENT

Asset management, broadly defined, refers to any system that monitors and maintains things of value to an entity or group. It may help both to tangible asset and to intangible asset. It is the systematic process of developing, operating, maintaining, upgrading, and disposing of assets cost-effectively

**LIABILITY MANAGEMENT:** The process by which financial institutions balance outstanding liabilities, such as deposits, CDs, etc., with appropriate liquidity reserves. Lenders use liability management to reduce liability risks and adverse market condition impacts.

## OBJECTIVES OF ASSET-LIABILITY MANAGEMENT

Managing Gaps, The objective is to measure the direction and extent of asset-liability mismatch through the funding or Maturity gap. This aspect of **Asset-Liability Management** stresses the importance of balancing maturities as well as cash-flows or interest rates for a particular set time horizon.

1. Planning to meet the liquidity risk.
2. Arranging maturity pattern of Asset and liabilities.
3. Spread Management/Interest margin
4. Gap management
5. Controlling the rates received and paid.

## NEED OF ASSET-LIABILITY MANAGEMENT

Nowadays, Because of the uncertainty and risk that exist due to the integrating financial market and technological innovations, investors often wonder how to invest their assets over time to achieve satisfactory returns subject to uncertainties, various constraints, and liability commitments. Moreover, they speculate how to develop long term strategies to hedge the uncertainties and how to eventually combine investment decisions of asset and liability in order to maximize their wealth. Asset liability management is the domain that provides answers to all these questions and problems. More specifically, asset liability management is an important dimension of risk management, where the exposure to various risks is minimized while maintaining the appropriate combination of asset and liability, in order to satisfy the goals of the firm or the financial institution.

### ASSET-LIABILITY MANAGEMENT TOOLS

- Cash flow analysis
- Financial statistics
- Duration
- Convexity
- Valuing embedded liability options
- Asset liability efficient frontier analysis
- Benchmark Portfolios
- Replicating Portfolios

### TECHNIQUES OF ASSET-LIABILITY MANAGEMENT

- a. Futures
- b. Options
- c. swaps

### OBJECTIVES OF THE STUDY

The study examines the direction of change in the performance, improvement, deterioration or consistency over the years qualitatively. It would also analyse the status of the firm and its prospects

for the future throwing light on the following points,

1. To study about the different types of fixed assets, current assets, intangible and its management policies of the company.
2. To study about the different types of accounting policies applied by the company.
3. To study about the policies for depreciation, amortization, impairment, transfer and disposal regarding different class of assets.
4. To study the policies for inventory control.
5. To analyze the credit periods and key ratios associated with receivables management.

### SCOPE OF THE STUDY

Scope of the study is limited to the extent of place, time and the information collected during the project work period.

- 1.The analysis of Asset-Liability Management is limited to that specific company.
- Concepts of Asset Liability management.
- Analysis of Asset Liability management.
- Research and finding of analysis.
- Study is confined in Bangalore only.

### RESEARCH METHODOLOGY

The procedure adopted for conducting the research requires a lot of attention as it has direct bearing on accuracy, reliability and accuracy of results obtained. It is due to this reason that the research methodology, which we used at the time of conducting the research, needs to be elaborated upon. Research Methodology is a way to

systematically study and solve the research problems.

**“Problem well defined is problem half solved.”**

Basically, a statement of problem refers to some difficulty, which researcher experiences in the context of either a theoretical or practical situation and wants to obtain the solution for the same.

**Wants and Needs for Working Capital Management**

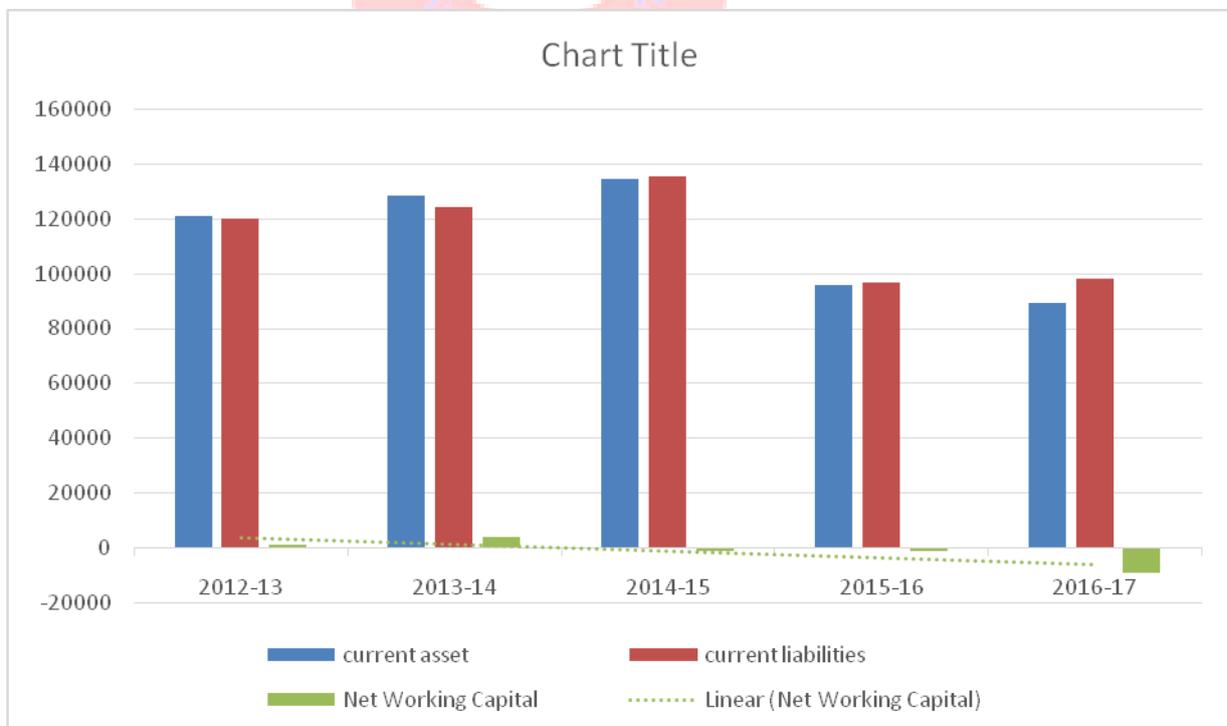
The wants for working capital for day to day production performance cannot be over emphasized. Every business needs some amount arises in day to day expenses. The point in time gap between manufacture and recognition of cash form of sales.

The significant needs of working capital are as follows:

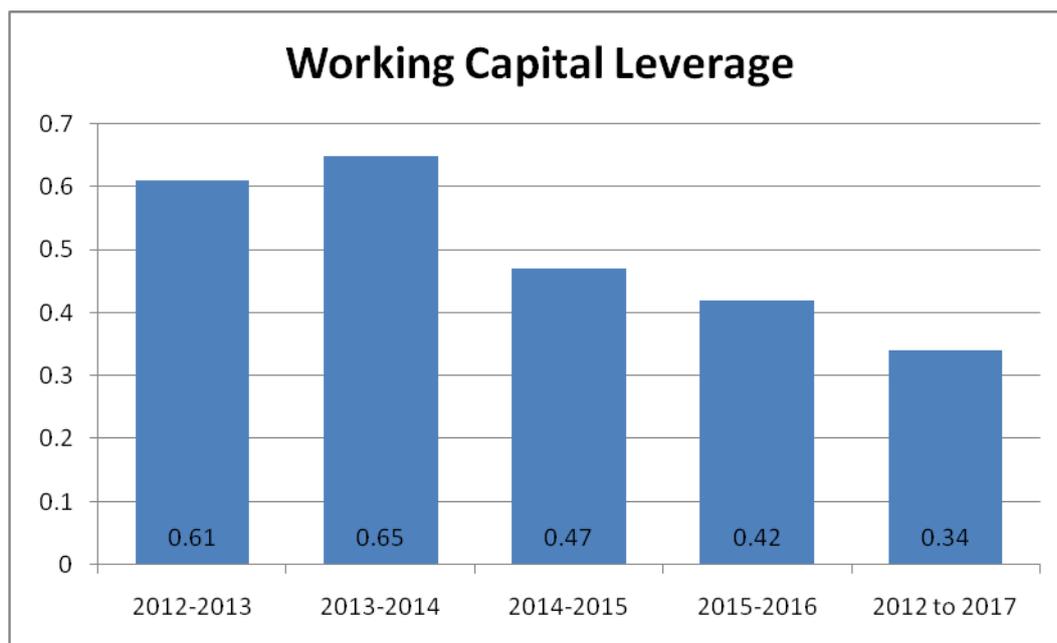
- To pay wages and salary.

- It helps to purchase raw materials, components and spares.
- It helps for business daily expense and operating costs such as internal office expenses etc..
- It also should assemble the selling cost such as packaging, outdoor and indoor advertising etc.,
- It provides instalment basis to the customer.
- Gross working Capital (GWC) =total current assets

Net working Capital (NWC) =Current assets- Current liabilities



**Bar Graph showing Working Capital including Current Assets and Liabilities Working Capital leverage**



#### OPERATING CYCLE AND CASH CYCLE

The investment in working capital is influenced by the following events in the operating cycle of the firm:

Purchase of raw materials

- Payment for raw materials
- Manufacturing of goods
- Sale of finished goods
- Collection of cash from Sales

Year	Raw Material conversion period	Work in progress Inventory	Finished Goods conversion period	Inventory Period
2012-13	28.89	8.77	26.45	64.11
2013-14	26.59	8.36	25.14	60.09
2014-15	30.61	8.38	33.4	72.39
2015-16	18.09	6.60	22.7	47.39
2016-17	20.25	5.00	31.52	56.77

**Accounts receivable period**= (Debtors / Annual sales)\*360

Year	Debtors	Sales	Days in Year	Account Receivable Period
2012-13	9725.47	398476.6	<b>*360</b>	8.79 days
2013-14	11254.78	447096.4	<b>*360</b>	9.1 days
2014-15	11023.1	473210.09	<b>*360</b>	8.39 days
2015-16	6758.17	437526.13	<b>*360</b>	5.56 days
2016-17	8026.44	350603.09	<b>*360</b>	8.24 days

**Operating Cycle**

= Inventory period + Accounts receivable period

Year	Inventory Period	Account Receivable Period	Operating Cycle
2012-13	64.11	8.79	72.9
2013-14	60.09	9.91	70
2014-15	72.39	8.39	80.78
2015-16	47.39	5.56	52.95
2016-17	56.77	8.24	65.01

It is a ratio which clearly indicates the average time taken to collect or recover cash from debtors. In other words, a reducing period of time is an indicator of increasing efficiency. It enables the enterprise to compare the real collection period with the granted/theoretical credit period.

No of months or days in a year

$$\text{Debtors Collection Period} = \frac{\text{No of months or days in a year}}{\text{Debtor Turnover Ratio}}$$

$$\text{Debtors Turnover Ratio} = \frac{\text{Total sales}}{\text{Debtors}}$$

Debtors

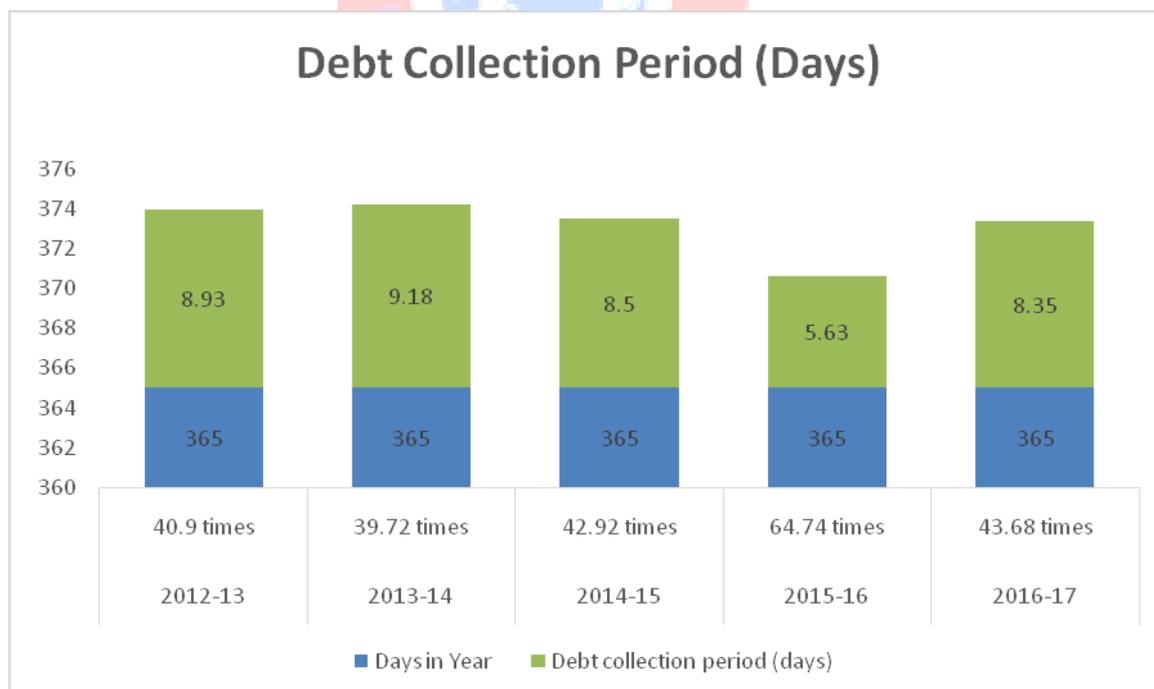
**Table Showing Debt Collection Period**

Year	Debtors Turnover Ratio	Days in Year	Debt collection period (days)
2012-13	40.9 times	365	8.93
2013-14	39.72 times	365	9.18
2014-15	42.92 times	365	8.5
2015-16	64.74 times	365	5.63
2016-17	43.68 times	365	8.35



**Debt  
Period**

**Collection**



**Graph showing Debt Collection Period**

**Interpretation**

From the above graph, in the year 2017-2016 the debt collection period shows a maximum of 9 odd days, when compared to 2016-2015 and 2015-2014 as 6 days and 8 days respectively. It indicates that the company is able to

manage its debt collections at the more day in 2014 and 2013. In the year 2013-2012 the debt collection period increased to 9 days as it effect on the working capital position of the company.

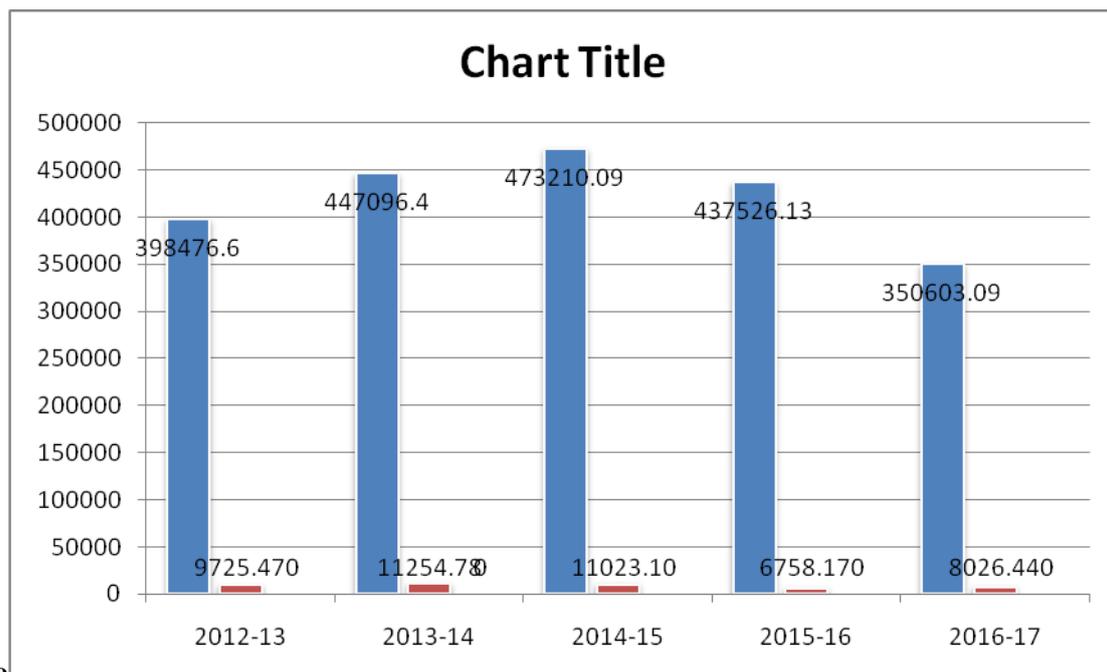
**Debtors Turnover Ratio**

Debtors Turnover Ratio is to establish the relationship between credit sales and trade debtors. In other words, it indicates the velocity of debts collection of the firm in a year. This ratio is calculated as follows: -

**Table Showing Debtors Turnover Ratio**

Year	Sales	Debtors	Debtors Turnover Ratio
2012-13	398476.6	9725.47	40.9 times
2013-14	447096.4	11254.78	39.72 times
2014-15	473210.09	11023.1	42.92 times
2015-16	437526.13	6758.17	64.74 times
2016-17	350603.09	8026.44	43.68 times

**Debtors Turnover**



Ratio

**Interpretation**

Debtors Turnover Ratio is determined by dividing Net Credit Sales by average Trade Debtors outstanding during the year. The analysis of the Debtors turnover ratio supplements the information regarding the liquidity of one item of current assets of the firm. The ratio measures how rapidly debts are collected. A high ratio is indicative of shorter time lag between credit sales and cash collection. A low ratio shows that debts are collected rapidly. In the year 2013-2014, the debtors’ turnover ratio is much lesser when compared to 2012-2013, 2014-2015, 2015-16 and 2016-17. It means initially there existed a longer time between credit sales and cash collection but since the year 2013-2014, a low ratio is seen which means that the company finds it difficult to collect the debts rapidly.

**Conclusion**

Accounting policies play a decisive role in the stand that the organization takes for any financial situation. Therefore any deficiencies existing in the same should be removed in

order to deliver a clear picture to the stakeholders. Combined research organisation should improve its Accounting Policies with respect to statement of valuation of fixed assets. It must disclose the procedure undertaken to reach the value of fixed asset in the statements of final accounts. It should also find an alternative way of appropriating foreign exchange gains/ losses while acquisition of an asset, in the books of accounts.

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