CHAPTER – 1

WORKING CAPITAL MANAGEMENT – INTRODUCTION

1.1 Introduction

In every business an optimum level of Working Capital is to be maintained for the purpose of day to day remittances. Any Business cannot grow in absence of satisfactory working capital level. In case of shortage of working capital the business may suffer scarcity of resources. But it should also be kept in mind that even working capital in excessive quantity, possibly will result into superfluous cost. Therefore, the management of business firm should goal an optimal level of working capital. Working capital should be ample enough to carry out the current liabilities but should not be much more than the genuine requirement. It must be ensured by the firm’s managing people that the return yield through the funds engrossed in structuring working capital is no less than the return earned from other investment alternatives. In the circumstances, when the financial resources are insufficient and as a consequent capital cost is to be enlarged, management of working capital becomes even more crucial and significant due to its profound influence on liquidity and profitability of the business.

The basic objective of Working Capital Management is to avoid over investment or under investment in Current Assets, as both the extremes involve adverse consequences. Over investment in Current Assets may lead to the reduced profitability due to cost of funds. Working capital management is considered to be one of the most important functions of finance, as a very large amount of funds are blocked in current assets in practical circumstances. Unless working capital is managed properly, it may lead to the failure of business. The term ‘Working Capital’ may mean Gross Working Capital or Net Working Capital. Gross Working Capital means Current Assets. Net

The assets which can be converted in the form of cash or used during the course of normal operations within a short span of time say one year, without any reduction in value are referred as current assets. Current assets change the shape very frequently. The current assets ensure smooth and fluent business operations and are considered to be the life-blood of the business. In case of a manufacturing organization, current assets may be found in the form of stocks, receivables, cash and bank balances and sundry loans and advances. The term current liabilities refer to those liabilities which are to be paid off during the course of business, within a short span of time say one year. They are expected to be paid out of current assets or the earnings of the business. Current liabilities consist of sundry creditors, bills payable, bank overdraft or cash credit, outstanding expenses etc.

The objective of Working Capital Management is to ensure Optimum Investment in Current Assets. In other words, Working Capital Management intends to ensure that the investment in Current Assets is reduced to the minimum possible extent. However, the normal operations of the organization should not be affected adversely. If the normal operations of the organization are affected adversely, reducing the investment in Current Assets is fruitless.

Generally, it will not be possible for any organization to operate without the working capital. Let us assume that a manufacturing organization commences its business with a certain amount of cash. This cash will be invested to buy the raw material. The raw material purchased will be processed with the help of various infrastructural facilities like labor, machinery etc. to convert the same in the form of finished products. These finished products will be sold in
the market on credit basis whereby the receivables get created. And when receivables make the payment to the organization, cash is generated again. As such, there is a cycle in which cash available to the organization is converted back in the form of cash. This cycle is referred to as Working Capital Cycle.

In between each of these stages, there is some time gap involved. The entire requirement of working capital arises due to this time gap. As this time gap is unavoidable, requirement of working capital is unavoidable. The finance professional is interested in reducing this time gap to the minimum possible extent in order to manage the working capital properly. Business can survive even if profits are not made but it may not survive without proper liquidity. Hence, in order to retain the liquidity state, all business firms should manage their working capital appropriately.

**Working Capital Management**

Relation between Current assets and current liabilities of a business firm is called management of working capital. “Working capital management is concerned with the problems that arise in attempting to manage the current assets and current liabilities and the inter-relationship that exists between them. There is habitually a distinction made amid the investment decisions concerning current assets and the financing of working capital.”

Two major aspects of management of working capital are:

1. To ascertain the current assets
2. To conclude the method of financing

**1.2 Concept of Working Capital Management**

Working capital management can be conceptualized under two categories:
These concepts are well known as “gross working capital” concept and “net working capital” concept. In quantitative working capital concept, current assets are considered as working capital which is termed as gross working capital too. In qualitative, current assets and current liabilities are taken into account, working capital is defined as excess or deficit of current assets over current liabilities. “Variance of current assets over current liabilities” L.J. Guthmann also described working capital as “the portion of a firm’s current assets which are financed from long–term funds.”

It becomes essential to know and understand the current assets components and current liabilities components to understand working capital management.

**Current assets** – This is imperative to facilitate “Current assets have a short life span. These types of assets are connected in current operation of a business and normally used for short–term operations of the firm. The two important characteristics of these assets are; (i) short life span, and (ii) swift conversion into other form of assets. Cash balance may be held idle for few weeks, account receivable may have a period of 30 to 60 days”

Fitzgerald also described current assets, “cash & other assets which are expected to be converted in to cash in the ordinary course of business within one year or within such longer period as constitutes the normal operating cycle of a business.”

**Current liabilities** – Business generates liability for purchasing raw material and other essential things on credit, these are called as creditors or account payable. Until remittances towards creditors are made, it is categorized under liabilities section of balance sheet. Current liabilities are explained as all obligations that are due in near future for payment.
1.3 Working Capital Structure

Various current assets and current liabilities components make up the working capital composition. Each component plays important part in any business firm. If any component of working capital is not adequate, it may bring down efficiency and profitability of the company. Current asset and current liabilities which constitute working capital structure are shown in table 1.1

<table>
<thead>
<tr>
<th>Current Liabilities</th>
<th>Current Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creditors</td>
<td>Inventories</td>
</tr>
<tr>
<td>Bank Overdraft</td>
<td>Cash and Bank Balance</td>
</tr>
<tr>
<td>Bills Payable</td>
<td>Accounts Receivables</td>
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<tr>
<td>Outstanding Expenses</td>
<td>Bills Receivables</td>
</tr>
<tr>
<td>Short-term Loans</td>
<td>Accrued Income</td>
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<tr>
<td>Provision for Taxation</td>
<td>Prepaid Expenses</td>
</tr>
<tr>
<td>Other Current Liabilities</td>
<td>Other Current Assets</td>
</tr>
</tbody>
</table>

1.4 Working Capital Circulation

Current assets along with current liabilities present in all the businesses every time. It’s like stimulating current which flow every time. “Working capital plays pivotal role of heart in any firm as in human body. Working capital resources are created and distributed in the business firm, and if circulation of working capital stops, business tends to get unresponsive.” It is very essential to circulate resources to enable long life and efficient run of any business.

Chart 1.1 depicts cycle of working capital which represents it very apparent so as to the overall cash is gathered primarily through issuance of shares or debentures, borrowings as well as operation. Cash is utilized in the direction of
procuring raw material, fixed assets and paying due amount to creditors. Raw materials then processed; operating expenses are paid that further results in production of finish product up for sale.

**Chart 1.1**

**Working Capital Cycle**

The finished product is sold either for cash or credit. For cash sales, cash is straightforwardly recorded by business while in case of credit sales, collection of cash happened later from the buyers. Cash is generated through operations as well as through fixed assets sale. Certain part of profit used for all kind payment related to business while residual is kept in the business firm. Cycle continues all the way through the life of the firm.
1.5 Importance of Working Capital Management

Fund or cash is required in business for carrying out operations. “Working capital finances can be regarded as ‘life blood’ of a business firm. Business can live with no profit but can’t survive with inadequate working capital. If a business is not yielding gains it can be called as ‘sick’, although without adequate working capital the firm could suffer its economic failure and the survival becomes difficult. Thus, every business firm should make a decision how to arrive at right amount of working capital, to avoid risk of breakdown.”

Working capital management is having immense significance and became prime object to enhance liquidity and profitability of the business. With constant increase in capital costs and scarcity of funds, management of working capital is the most vital subject capturing attention of management. It is found that, “Regular management review is required to maintain suitable level in the diverse working capital accounts.” Success of business mainly depends on appropriate working capital management that is why “working capital management is looked upon as the driving seat of financial manager.” It takes time to enhance profitability and ensuring adequate liquidity simultaneously.

1.6 Working Capital Estimation

Working capital may be estimated by following methods:

• **Proportion of Sales** – This method is the easiest way of deciding the requirement of working capital. Requirement of working capital in this method is determined on forecasting of sales. With the help of historical experience, working capital requirement can be projected. If relationship of working capital and sales is stable, then ratio is taken as a base for deciding the amount of working capital required. This method of estimating working capital is simple, tranquil and helpful in estimating working capital.
• **Operating Cycle** – All business starts with raw material acquisition, machinery and stock at the time of collection of dues. It might be part in these stages:

- Raw material
- Work in Progress
- Finished product
- Receivable

The operating cycle length for the objective of working capital estimation is equivalent to summation of durations of each stage minus credit period permissible by the service or raw material provider.

• **Regression Analysis Method** – This is a statistical technique to forecast requirement of working capital. It aids in projections post setting up the relationship in earlier years between variables such as working capital and sales. Analysis is done through mathematical formulae or through the graphic representations scatter diagram. The bond between variables (working capital and sales) is simple & direct revealing linear relation with different degrees relating linear regression or curvilinear regression and multiple regression situations.

**1.7 Variables Impacting Need of Working Capital**

Various factors influence volume and requirement of working capital. Hence determining working capital does not have a set formula or particular way. The condition and information of company must be analyzed to conclude the requirement of working capital.

Below are the factors which influence requirement of working capital:
**Nature of business** – Some businesses are such that due to their very nature, their requirement of fixed capital is more rather than working capital. These businesses may sell services and not the commodities and that too on cash basis. As such, no funds are blocked in piling the inventories and no funds are blocked in receivables. For example Public utility services like railways, electricity boards, and infrastructure oriented projects etc. Their requirement of working capital is less. Whereas if the organization is a trading organization, the requirement of working capital will be on the higher side, as huge amount of funds get blocked in mainly two types of current assets, stock and receivables.

**Size of the Organization** – If we talk about undersized scale organizations, because of huge overheads total, the necessity of working capital gets really high. It is also influenced by high purchase costs as well as high selling costs. As such, medium sized organizations have an edge over the small scale organizations. However, if the business grows beyond a certain limit, the requirement of working capital may be adversely affected by the increasing size.

**Phase of Trade Cycles** – During the inflationary conditions, the working capital requirement will be on the higher side as the company may like to buy more raw material, may increase the production to take the advantage of favorable market conditions and due to increased sales more funds are blocked in stocks and receivables. During the depression, the requirement of working capital will be on the lower side due to reduced operations but more working capital may be required due to piling up of inventories and due to non-payment of dues by customers in time. As such, in both the extreme situations of trade cycles, requirement of working capital may be high.

**Trading Terms** – The terms on which the organization makes the purchases and sales affect the requirement of working capital in a big way. If the
purchases are required to be made on cash basis and sales are to be made on credit basis to cope with competition existing in the market, it will result into high requirement of working capital. Whereas, if the purchases can be made on credit basis and sales can be made on cash basis, it will trim down the prerequisite of working capital, as a part of working capital requirement can be financed out of credit offered by the suppliers.

**Length of Production Cycle** – The term production cycle refers to the time duration from the stage raw material is acquired till the stage finished product is manufactured. The principle will be “Longer the duration of production cycle, higher the requirement of working capital.” In some businesses like machine tool industry, the time gap between the acquisitions of raw material till the completion of production is quite high. As such, more amounts are blocked in raw materials or work in progress or finished goods and even in receivables. Requirement of working capital is always very high in this case.

**Profitability** – High profitability reduces the strain on working capital as the profit to the extent they are earned in cash can be used for financing the requirement of working capital. However, the profit which reduces the strain on working capital is the post-tax profit i.e. the profit earned after paying off the tax liability and Post-dividend profit i.e. the profit remaining in the business after paying the dividend on the shares.

**1.8 Control of Working Capital**

Working capital needs used to be met mainly in the form of cash credit facilities and these advances used to be totally security oriented rather than end-use oriented. As such, the units which were able to provide securities to the banks were able to get main chunk of the finances provided by the banks whereas others experienced shortage of inputs, lower capacity utilization, high cost of production and ultimately threat of closure. Reserve Bank of India
attempted to detect weakness in financing of working capital needs through Banks with the purpose of control the working capital finance. Attempts were made through these committees:

(a) Dahejia Committee

(b) Tandon Committee

(c) Chhore Committee

(d) Marathe Committee

(e) Nayak Committee and Vaz Committee

Work of these committees is described as below:

(a) Dahejia Committee

This committee was assigned in October, 1968 to assess the extent credit need of trade and industry are expected to be overstated and how these movement could be assessed.

Committee has found out that it is the tendency of trade to get short term loan from Banks far above growth rate discovered in production for inventory in terms of value. It also found that purchase of long-term asset has been done through short-term bank loan. The reason for this is that generally banks granted working capital finance in the form of cash credit, as it was easy to operate. Banks took into consideration security offered by the client rather than assessing financial position of the borrowers. As such, loan facility given by the banks was not used for short term purposes.

Recommendations: The committee, firstly, recommended that the banks should not only be security oriented, but they should take into consideration
total financial position of the client. Secondly, it recommended that all loan accounts are categorized in two parts:

i) Hard core loan accounts - Represent the least level of raw material, finished product and stores items which is required by any industry to store for keeping definite level of production.

ii) Short-term loan accounts - Elements that makes out the funds for provisional purposes i.e. Short-term increase in inventories, tax, dividend and bonus payments etc.

It also suggested that hard core part in case of sound financial companies must be put on a time loan basis focused to schedule of repayment. In other cases, borrowers should be asked to arrange for long term funds to replace bank borrowings.

In practice, recommendations of the committee had only a marginal effect on the pattern and form of banking.

(b) Tandon Committee

In August 1975, Reserve Bank of India appointed a study group in the supervision of Mr. P. L. Tandon, to make the research and recommendations on the following issues:

i) Can the norms be developed for current assets as well as for debt equity ratio to make sure least reliance on bank finance?

ii) How the amount of bank loans may be concluded?

iii) Can the existing way and method of financing be made further superior?
iv) Can sufficient planning, appraisal and information system be developed to make sure a disciplined loan process to meet up genuine production requirement and its supervision?

The observations and recommendations made by the committee can be considered as below:

(1) Norms: The committee suggested the norms for inventory and accounts receivables for as many as 15 industries excluding heavy engineering industry. These norms suggested, represent maximum level of inventory and accounts receivables in each industry. However if the actual levels are less than the suggested norms, it should be continued.

The norms were suggested in the following forms:

- For Raw Materials: Consumption in months
- For Work in Progress: Cost of production in months
- For Finished Goods: Cost of Sales in months
- For Receivables: Sales in months

It was clarified that the norms suggested cannot be absolute or rigid and the deviations from the norms may be allowed under certain circumstances.

It also concluded that the terms should be reviewed regularly.

It was recommended that trade borrower having a limit of more than Rs. 10 Lacs from the Banks should be subjected to these terms initially and then later on it should be extended even to the small borrower.

(2) Methods of Borrowings: Committee suggested that amount of bank loan shouldn’t be determined by the capability of the borrower to secure banks but
it must be determined to complement the borrower’s resources in carrying a rational level of current assets to meet his requirement of production. For the same purpose, it initiated the concept of gap in working capital i.e. the surplus of current assets over current liabilities other than bank loan. It also recommended progressive methods to determine the maximum permissible limits to be followed by banks to provide credit.

**Method I** - Committee suggested banks should provide loan maximum 75% of gap of working capital, rest 25% should arise from long term funds i.e. own funds and term borrowings.

**Method II** - Committee in this method recommended that the borrowers should get finance equal to 25% of current assets through long term funds and remaining amount should be financed by banks.

**Method III** – In this method, committee established the core current assets concept to point out permanent proportion of current assets and suggested the borrowers should finance entire requirement of core current assets and 25% of remaining current assets through long term funds and banks might provide the remaining amount.

It can be observed from above that the gradual implementation of these methods will reduce the dependence of borrowers on bank finance and improve their current ratio. The committee suggested that the borrowers should be gradually subjected to these methods of borrowings from first to third.

However, if the borrower is already in second or third method of lending, he should not be allowed to slip back to first or second method of lending respectively.
It was further suggested that if the definite bank borrowings are more than the upper limit of allowable bank borrowings, the excess is ought to be converted into a term loan to be amortized above a suitable stage depending upon the cash generating capacity.

(3) Style of Lending: The committee suggested changes in the manner of financing the borrower. It suggested that the cash credit limit should be bifurcated into two components i.e. Minimum level of borrowing required throughout the year should be financed by way of a term loan and the demand cash credit to take care for fluctuating requirements. It was suggested that both these limits should be reviewed annually and that the term loan component should bear a slightly lower rate of interest so that the borrower will be motivated to use the least amount of demand cash credit. The committee also suggested that within overall eligibilities, a part of the limits may be in the form of bill limits (to finance the receivables) rather than in the form of cash credit.

(4) Credit Information Systems: In order to ensure the receipt of operational data from the borrowers to exercise control over their operations properly, the committee recommended the submission of a quarterly reporting system, based on actual as well as estimations, so that the requirements of working capital possibly will be estimated depending on the production needs. As such, borrowers enjoy total credit limits aggregating Rs. 1 Crore and above were required to submit certain statements in addition to monthly stock statements and projected balance sheet and profit and loss account at the end of the financial year. The working capital limits sanctioned were to be reviewed on annual basis. Within the overall permissible level of borrowing, the day to day operations were to be regulated on the basis of drawing power.

(5) Follow up, Supervision and Control: In order to assure that the assumptions made while estimating the working capital needs still hold good
and that the funds are being utilized for the intended purpose only, it was suggested that there should be a proper system of supervision and control. Variations between the projected figures and actual may be permitted to the extent of 10%, but variations beyond that level will require prior approval. After the end of the year, credit analysis should be done in respect of new advances when the banks should re-examine terms and conditions and should make necessary changes. For the purpose of proper control, it suggested the system of borrower classification in each bank within a credit rating scale.

(6) Norms for Capital Structure: As regards the capital structure or debt equity ratio, the committee did not suggest any specific norms. It opined that debt equity relationship is a relative concept and depends on several factors. Instead of suggesting any rigid norms for debt equity ratio, the committee opined that if the trend of debt equity ratio is worse than the medians, the banker should persuade the borrowers to strengthen the equity base as early as possible.

Action Taken by RBI

According to the notification of RBI dated 21st August, 1975, Reserve Bank of India acknowledged many recommendations suggested by the committee.

(1) Norms for Inventories and Receivables: Norms suggested by the committee were accepted and banks were instructed to apply them in case of existing and new borrowers. If the levels of inventories and receivables are found to be excessive than the suggested norms, the matters should be discussed with the borrower. If excessive levels continue without justification, after giving reasonable notice to the borrowers, banks may charge excess interest on that portion which is considered as excessive.

(2) Coverage: Initially, all the industrial borrowers (including small scale industries) having aggregate banking limits of more than Rs. 10/- Lacs should be covered, but it should be extended to all borrowers progressively.
(3) Methods of Borrowing: RBI instructed the banks that all the covered borrowers must be positioned in method I the same as recommended as a result of the committee discussion. However; all those borrowers who are already complying with requirements of Method II should not slip back to Method I. As far as Method III is concerned, RBI has not taken any view. However, in case of the borrowers already in Method TI, matter of application of Method III may be decided on case to case basis.

(4) Style of Credit: As suggested by the committee, instead of granting entire facility by way of cash credit, banks may differentiate the limit as (i) Term loan to take care of permanent requirement and (ii) fluctuating cash credit. Within the overall limits, bill limits may also be considered.

(5) Information system: Suggestions made by the committee regarding the information system were accepted by RBI and were made applicable to all the borrowers having the overall banking limits of more than Rs. 1 crore.

(c) Chhore Committee:

In April 1979, Reserve Bank of India appointed a study group under the chairmanship of Mr. K.B. Chhore for the purpose, of evaluating mainly the loan granting procedure management strategy of banks.

The annotations as well as the recommendations made by the committee can be discussed as below:

(1) An increasing functionality of short-term cash credits as well as financing of bills has been recommended by the committee. Restricting the role of cash credit limits was also recommended by the committee.

(2) The committee recommended that the borrowers are supposed to require and improve their own involvement in the working capital. In isolation, they
must fall under Second Method of lending as being suggested by Tandon Committee. In case the real borrowings are in greater than maximum allowable borrowings as described by Method II, the surplus portion is to be reassigned under Working Capital Term Loan (WCTL) and the borrower should repay it by half annually installments within a tenure of maximum 5 years. Interest on WCTL should usually be higher than of interest on cash credit facility.

(3) The committee has suggested that the efforts should be made to inculcate further discipline as well as planning awareness among the borrowers; their requirement should be fulfilled on the basis of periodical projections deposited by them. Surplus or under employment beyond acceptable limit of 10% which is to be treated as irregularity and combined action must be taken.

(4) The committee has recommended that the banks must appraise and also decide different limits for regular non-peak levels and peak levels too. It must be preceded in reference to all borrowers availing the banking credit limit of greater than Rs. 10 Lacs.

(5) The committee suggested that the borrowers must be dispirited from impending the banks recurrently for ad hoc as well as temporary limits in overindulgence of limits to meet up unforeseen contingencies. Requests for such limits should be considered very carefully and should be sanctioned in the form of demand loans or non-operating cash credit limits. Additional interest of 1% p.a. should be charged for such limits.

(d) Marathe Committee

In 1982, Reserve Bank of India appointed a study group known as Marathe Committee to review the Credit Authorization Scheme (CAS) which was in existence since 1965. Under CAS, the banks were required to take the prior approval of RBI for sanctioning the working capital limits to the borrowers.
As per Marathe Committee recommendations, in the year 1988, CAS was replaced by Credit Monitoring Arrangement (CMA) according to which the banks were supposed to report to RBI, sanctions or renewals of the credit limits beyond the prescribed amounts for the post-sanction scrutiny.

(e) Nayak Committee and Vaz Committee:

Recently, RBI has accepted the recommendations made by Nayak Committee. This was with the intention to recognize the contribution made by the SSI Sector to the economy.

According to Nayak Committee recommendations, for evaluating working capital necessities of village industries, small scale industries and new SSI units having the overall fund based working capital limits up to Rs. 50 Lacs, the norms for inventory and receivables as suggested by Tandon Committee will not apply. The working capital need of these units may be measured to be 25% of their anticipated turnover (for both new as well as existing units); out of which 20% is believed to be initiated by the units like their margin money requirements and remaining 80% can be financed by the bank. In other words, there are 4 working capital cycles assumed in every year.

Vaz Committee has comprehended the suggestions given by Nayak Committee to each and every business organizations. It was also acknowledged by Reserve Bank of India.

As a result of Nayak Committee and Vaz Committee recommendations, projected turnover of the borrowers is the basis for evaluating the working capital requirement. Out of the projected turnover, 5% is supposed to be introduced by the borrower in the form of own contribution and remaining 20% can be financed by the bank. The requirement of working capital has nothing to do with the level of current assets and current liabilities, which was the basis of Tandon Committee and Chhore Committee recommendations.
Evaluation of working capital requirements by the banks relaxed with the intention to give greater autonomy to the banks while evaluating working capital requirement, RBI has officially withdrawn the concept of MBPF with effect from 15th April, 1997. As a result, now the banks are free to have their own methods for evaluating the working capital requirement of the borrowers.

1.9 Source of Working Capital

Source of working capital is very important as it’s important to keep business liquid as well as stress free from financial burden. Basic current assets requirement must be met with long term sources and current assets which are required for circulation should be met with short term sources. It benefits business by keeping cost of capital low and increases return on investment. There are two kinds of working capital involved in any business:

a) Fixed or Permanent Working Capital
b) Variable or Temporary Working Capital

Fixed Working Capital is the minimum working capital required to be maintained in the business on permanent or uninterrupted basis. The requirement for this type of working is unaffected due to the changes in the level of activity. The relationship between fixed and variable working capital can be shown with the help of the following diagram.

**Chart 1.2**

Fixed and Variable Working Capital
Variable working capital is the working capital required over and above the fixed or permanent working capital and changes with the fluctuations in the level of activity as a result of changes in production and sales.

The basic principle of finance states that the permanent requirement of working capital should be financed out of long term or permanent sources i.e. own generation of funds, cash profits, shares or debentures etc.

For financing temporary requirement of working capital, the organization can go for various sources which can be discussed as below:

a. Spontaneous Sources

b. Inter-Corporate Deposits

c. Commercial Papers

d. Banks

The selection of source is very important as it determines the level of liquidity and flexibility in any business firm.

a. Spontaneous Sources

Spontaneous Sources for financing the working capital requirement arise during the course of normal business operations. During the course of business operations, the company may be able to buy certain goods or services for which the payment is to be made after a certain time gap. As such, the company is able to buy goods or services without making payment for the same. These spontaneous sources are unsecured in nature and vary with the level of sales. These spontaneous sources do not have any explicit cost attached to the same. They are generally known as ‘Current Liabilities.’
Following forms of current liabilities may be used as spontaneous sources for financing the working capital requirement.

1. Trade Credit:

If the company buys the raw material from the suppliers on credit basis, it gets the raw material for utilization immediately with the facility to make the payment at a delayed time. By accepting the delayed payment, the suppliers of raw material finance the requirement of working capital. For using this source, certain factors may play an important role:

- Trends in the industry
- Liquidity position of the company
- Earnings of the company over a period of time
- Record of payment by the company to the suppliers
- Relationship of the company with the suppliers.

2. Outstanding Expenses

All the services enjoyed by the company are not required to be paid for immediately. They are paid for after a certain time gap. As such, the company is able to get the benefit of these services without paying for the same immediately, thus getting the finance for working capital purposes. These are called ‘outstanding expenses’. This may apply to salaries, wages, telephone expenses, electricity expenses, water charges etc.

b. Inter-Corporate Deposits (ICD)

Inter-corporate Deposits indicate the amount of funds borrowed by one company from another company, usually both the companies being under the
same management but not necessarily so. Point to be noted here is that ICDs are not considered to be deposits as stated by the provisions of Section 58-A of the Companies Act, 1956 and in isolation the set of laws pertinent to the public deposits does not affect the ICD’s.

Inter-corporate Deposits as a source for financing the working capital requirement has the following characteristic features.

- ICD is for a very short period of time, i.e. three months or six months.
- ICD is an unsecured source for raising the funds required for working capital purposes.
- ICD as a source is not regulated by any law. As such, the rate of interest, period of ICD etc. can be decided by the company on its own.
- ICD is a relationship based borrowing made by the company.

c. Commercial Papers

In the earlier period, Commercial Papers (CPs) have turned one of the most excellent mode for financing the working capital obligations of the companies. The companies demanding to raise the funds through issue of Commercial Papers are being regulated by guiding principles for issue of Commercial Papers issued by RBI on 10th October year 2000. These guiding principles apply to the companies those are making efforts to increase the funds by issuing the CPs. According to, these guidelines, a company means a company as described in Section 45-I (aa) of Reserve Bank of India Act, 1934. Section 45-1(aa) of Reserve Bank Act, 1934 defines a company as the company as defined in section 3 of the Companies Act, 1956.

d. Banks

The scenario of India is structured in a way where, banks play exceedingly significant role in financing the working capital requirement of a business
firm. Banks are considered as a foundation for financing the working capital requirement of the organizations on the basis of below mentioned points:

- What should be the amount of assistance?
- b. What should be the form in which working capital assistance is extended?
- c. What security should be obtained for working capital assistance?
- d. What are the various applicable regulations to be considered by the banks while extending the working capital assistance?

**Quantum of Assistance**

A business firm is firstly mandated to measure and calculate its requirement of working capital appropriately in order to acquire the bank credit for financing the working capital requirements. And for estimating the working capital requirement optimally, the business firm should primarily estimate the current assets and current liabilities level, because working capital is the difference between the amount of current assets and of current liabilities. To calculate the values of optimum working capital, techniques like ratio analysis, trend analysis etc. could be implemented on data of the company. The accuracy level of estimating the current assets as well as current liabilities decide the accuracy of evaluating the requirement of working capital level. Then, the business firm would have to move towards the bank along with the essential sustaining financial data. On the basis of the anticipated figures submitted by the concern, the bank decides the quantum of assistance level which is to be unmitigated. The bank prescribes the margin money required at the time of extending the working capital assistance. The margin money specification is fixed by the banks in accordance to make sure the borrowing company’s individual stake in the business in addition to provide the safeguard against the probable diminution in the value of security presented to the bank. The fraction of margin money specification might depend in the lead of credit
reputation of the borrowing firm, variations in the price of the security moreover, the time to time directives of RBI. The common principle validated will be, “more dicer the nature of security, higher will be the margin money stipulations.”

Assistance structure:

The bank will be able to disburse the amount in one of the subsequent forms, after deciding the amount of total assistance that can be extended for the business firm:

a. Non-Fund Based Lending

Considering Non-Fund Based Lending, the lending bank does not entrust any substantial outflow of funds. Therefore, the funds arrangement of the lending bank remains integral. The Non-Fund Based Lending could be done by the banks through these two ways:

i. Bank Guarantees:

The bank guarantees mechanism is described below:

Suppose Company A is the selling company and Company B is the purchasing company. Company A does not know Company B and as such is concerned whether Company B will make the payment or not. In such circumstances, D who is the Bank of Company B, opens the Bank Guarantee in favor of Company A in which it undertakes to make the payment to Company A, if Company B fails to honor its commitment to make the payment in future. As such, interests of Company A are protected as it is assured to get the payment, either from Company B or from its Bank D. As such, Bank Guarantee is the mode which will be found typically in the seller’s market. As far as Banks is concerned, while issuing the guarantee in favor of Company A, it does not
commit any outflow of funds. As such, it is a Non-Fund Based Lending for Bank D. If on due date, Bank D is required to make the payment to Company A due to failure on account of Company B to make the payment, this Non-Fund Based Lending becomes the Fund based Lending for Bank D which can be recovered by Bank D from Company B. For issuing the Bank Guarantee, Bank D charges the Bank Guarantee Commission to Company B which gets decided on the basis of two factors i.e. what is the amount of Bank Guarantee and what the period of validity of Bank Guarantee is. In case of this conventional form of Bank Guarantee, both Company A as well as Company B gets benefited. Company A is benefited as it is assured to get the payment. Company B is benefited, as it is able to make the credit purchases from Company A without knowing Company A. As such, Bank Guarantee transactions will be applicable in case of credit transactions.

In some cases, interests of purchasing company are also to be protected. Suppose that Company A which manufactures capital goods takes some advance from the purchasing Company B. If Company A fails to fulfill its part of the contract to supply the capital goods to Company B, there needs to be some protection available to Company B. In such circumstances, Bank C which is the banker of Company A opens a Bank Guarantee in favor of Company B in which it undertakes that if Company A fails to fulfill its part of the contract; it will reimburse any losses incurred by Company B due to this non-fulfillment of contractual obligations. Such Bank Guarantee is technically referred to as Performance Bank Guarantee and is ideally found in the buyer’s market.

ii. Letter of Credit

The non-fund based lending by the way of Letter of Credit (LC) is incredibly found in the international business regularly. Under this, the exporter and importer are anonymous with each other. Due to this reason, the exporter
remains in dilemma about getting the disbursement from the importer at the same time, the importer gets worried about whether he will get a hold of goods or not. In order to solve this problem, the importer applies to his bank in his own country to release a letter of credit in name of the exporter whereby, the importer’s bank assures to pay the exporter or allow the bills or drafts drawn by the exporter on the exporter gratifying the provisions and stipulations specified in the letter of credit.

Fund based lending

In the matter of Fund Based Lending, the lending bank supports the substantial outflow of funds. The funds position of the lending bank gets pretentious because of this reason. The Fund Based Lending is done by the banks using the following methods:

(1) Loan: Disbursement of the total amount of assistance is made at one time simply under this case, either in cash or through transfer in company’s account. It is a solitary proceed. The loan might be reimbursed in installments, and the interest would be charged on outstanding amount.

(2) Overdraft: In this scenario, the firm is permitted to withdraw in surfeit of the balance remaining in its Bank account. Though, a fixed limit is specified by the Bank ahead of which the firm is not able to overdraw from the account. Conceding of the assistance by the way of overdraft presupposes the opening of a prescribed current bank account. Officially, overdraft is an on demand assistance granted by the bank that means the bank can ask over the settlement at any moment of time. Overdraft is facilitated by the bank for a very short duration of time, at the end of which the business firm is thought to pay back the amount. Interest gets due on the actual amount drawn and is estimated on daily product basis.
(3) Cash Credit: Actually, the proceedings in cash credit facility are same as in those of bank overdraft facility other than the fact that the firm does not require to open a formal current account. In this case as well a fixed perimeter is stipulated beyond which the firm cannot withdraw the amount. Legally, cash credit is too a demand facility, but in real, it is on incessant basis. Under cash credit also, the interest is allocated on the actual amount drawn and is deliberated on daily product basis.

(4) Bills Purchased/Discounted: This form of assistance is comparatively of recent origin. This facility enables the company to get the immediate payment against the credit bills/invoices raised by the company. The bank holds the bills as a security till the payment is made by the customer. The entire amount of bill is not paid to the company. The company gets only the present worth of the amount of the bill, the difference between the face value of the bill and the amount of assistance being in the form of discount charges. However, on maturity, the bank collects the full amount of bill from the customer. While granting this facility to the company, the bank inevitably satisfies itself about the credit worthiness of the customer and the genuineness of the bill. A fixed perimeter is specified in case of the company, further than which the bills are not purchased or discounted by the bank.

(5) Working Capital Term Loans: In accordance to match up the working capital requirement of the business firm, banks possibly will grant the working capital term loans for a time period of 3 years to 7 years, payable both in yearly installments or half yearly installments.

(6) Packing Credit: This kind of assistance can be granted by the bank on the way to take concern of particular requirement of the company at the time it avails any export order. To facilitate the company in buying or manufacturing the goods to be exported, packing credit facility is given by the bank. In case the company holds a confirmed export order given by the international buyer
or an irretrievable letter of credit in the favor of company, the company can approach the bank to avail packing credit assistance.

c. Security for Assistance:

The bank may possibly be able to give the assistance in either of the modes as mentioned above. However, no assistance would be accessible until the company presents any kind of security out of these:

1) Hypothecation: Under this mode of security, the bank extends the assistance to the company against the security of movable property, usually inventories. Under this mode of security neither the property nor the possession of the goods hypothecated is transferred to the bank. But the bank has the right to sell the goods hypothecated to realize the outstanding amount of assistance granted by it to the company.

2) Pledge: Under this mode of security, the bank extends the assistance to the company against the security of movable property, usually inventories. But unlike in case of hypothecation, possession of the goods is with the Bank and the goods pledged are in the custody of the bank. As such, it is the duty of the bank to take care of the goods in its custody. In case of default on the part of company to repay the amount of assistance, the bank has the right to sell the goods to realize the outstanding amount of assistance.

3) Lien: Under this mode of security, the bank has a right to retain the goods belonging to the company until the debt due to the bank is paid.

4) Mortgage: This mode of security pertains to immovable properties like land and buildings. It indicates transfer of legal interest in a specific immovable property as security for the payment of debt. Under this mode, the possession of the property remains with the borrower while the bank gets full legal title there, subject to borrower’s right, to repay the debt. The party who transfers
the interest (i.e. the company) is called mortgager and the party in whose favor the interest is so transferred (i.e. the bank) is called mortgagee.

1.10 Study and Methodology

Success or failures of any business rely on kind of administration is happening with working capital. Proper management of working capital gives an edge to business and helps it attain efficiency. Shortage of working capital is key reason of failures of many business firms. However, mismanagement of working capital resources can also be prime reason of business success or failure. “Inadequacy of working capital is a symptom, and sometimes an excuse of business failure.” The appropriate working capital management is sufficient amount of working capital along with proper management of each component of working capital.

Methodology – Several cement companies are present in Rajasthan. Final chosen companies are decided basis core cement business and size of cement operations. Annual reports for financial data of these companies accumulated from the official website of each selected cement companies. Some statistical techniques and computer software have been used to analyze the collected data. The analysis, findings, conclusion, recommendations and suggestions have been offered in the study.

Analysis of methods – Many reasons make it necessary to analyze position of working capital in a business firm. It facilitates management to recognize trends and adopt remedial steps if required. It also helps to record the changes business has taken and its impact to use it as future tool for improvement. Two major tools to analyze and determine position of working capital of a business are:

1. Ratio Analysis – This technique provides analysis of each and every component of working capital. Every aspect of working capital can be
captured in this method. Ratio of one component to another component is computed and results are extracted with comparison against standards. This technique also helps to understand whether the working capital components are adequate or short or excessive as per the requirement.

2. Funds Flow Analysis – This analysis helps to examine change in working capital and its components. Difference of current assets and current liabilities at the start the financial year with current assets and current liabilities at the end of the financial year, it exhibits change in every current assets and current liabilities. However, it doesn’t conclude on whether right set of working capital is employed and how is it used to take corrective steps to improve liquidity and profitability.

1.1 Purpose and Scope of Study

The current study “Working Capital Management in Cement companies of Rajasthan” examines the effectiveness of management of working capital components i.e. cash & bank balance, inventory, receivables and current liabilities components. Study tries to verify the usefulness and efficiency of managing all segments of working capital. Net working capital model is considered in the study, current assets components and current liabilities components and its management is also appraised.

The way current assets as well as current liabilities are organized; it determines the extent of accomplishment or collapse of a business firm. Management of working capital involves the administration of components of current assets and current liabilities.

Therefore, the firm needs to optimize use of existing resources by efficient management of components of current assets and current liabilities. It enables business to increase in profitability and it will be capable to pay its obligation promptly.
1.11.1 Hypotheses of the study

The study is pursued to check the hypotheses with reference to Cement companies of Rajasthan:

H01 There is no significant relationship between working capital management & profitability of the cement manufacturing units under the research study.

H02 The working capital management of the selected cement manufacturing units under study is not satisfactory.

H03 The level of inventory, cash and bank balance as well as performance of receivable management is not satisfactory.

1.11.2 Objectives of the study

The primary objective of current study is to assess and examine the management of working capital in top cement industries in Rajasthan, inspect the inventory levels, cash balances, liquidity and debtor’s management. It will also find the relationship exist between Working Capital and Profitability.

The aim of the study is to evaluate numerous concepts of management of working capital and capture the feasibility of the concept of working capital with aspiration to improve control and planning of working capital. Problems of management of working capital include determining of optimum level of amount required in every component of current assets i.e. receivables, inventory, cash & bank and other short-term investment. Fundamental focus in management of working capital should be to make optimum use of firm's investment. Crisis of working capital is major factor accountable for low profitability in all type of business. Better control and planning of management of working capital or appropriate utilization of quantity of
working capital enhances the ability to earn profit subject to existence of margins.

The study is commenced to accomplish the objectives with respect to management of working capital in Cement companies of Rajasthan:

1) To study and appraise management of working capital of selected cement companies
2) To assess inventory level, cash & bank and performance of receivable management
3) To compare selected cement units regarding working capital management
4) Recommend basis conclusions in the working capital management in Cement companies of Rajasthan
5) To distinguish impact of working capital on profitability of cement companies

1.1.3 Selection of Companies

In present study, shortlisted cement companies are:

1. ACC
2. Ambuja Cement
3. Shree Cement
4. India Cement
5. Ultratech Cement
The companies are selected basis size and capital employed also these companies core business should also be related to cement. Comparative study is done through pragmatic methods.

The information related to working capital management of cement companies have been gathered from the annual reports published of the companies from year 2011 to year 2015. Annual reports are directly collected from company official website and national stock exchange. With the information collected, various ratios components are calculated and interpretations are made through various statistical models analysis of variance (ANOVA), F-test etc. Conclusions and findings have been presented along with suggestions to enhance the effectiveness of working capital management.

Various accounting and statistical techniques have been used in the course of analysis in the study.

**Ratio Analysis:** Rationale of this technique is divided into composition analysis, efficiency analysis and size analysis. A variety of ratios calculated to evaluate the composition, size and circulation of components of working capital.

**ANOVA:** This test the means and variance of means of variables and gives value of F to conclude hypothesis. In case of derived value of ANOVA exceeds the F critical value at 0.05, it suggests that the variances are significant at 5 percent level.

**Trend Analysis:** To calculate the change in comparative proportion of all working capital elements, trends are drawn and concluded with suggestions. This helps to study comparisons among companies and highlight the best managed company among selected companies.