

Financial accounting

Topic 7: working capital

WORKING CAPITAL

"Working Capital is the excess of C.A. over current liabilities."

There are two concepts of working capital viz **quantitative and qualitative**. Some people also define the two concepts as **gross concept and net concept**.

According to quantitative concept, the amount of working capital refers to '**total of current assets**'. Current assets are considered to be gross working capital in this concept.

The qualitative concept gives an idea regarding source of financing capital. According to qualitative concept the amount of working capital refers to "**excess of current assets over current liabilities**."

CURRENT ASSET

Current Assets: An asset is classified as current when:



- It is expected to be realised or intends to be sold or consumed in normal operating cycle of the entity;
- The asset is held primarily for the purpose of trading;
- It is expected to be realised within twelve months after the reporting period;
- It is non-restricted cash or cash equivalent.

Generally current assets of an entity, for the purpose of working capital management can be grouped into the following main heads

- (a) Inventory (raw material, work in process and finished goods)
- (b) Receivables (trade receivables and bills receivables)
- (c) Cash or cash equivalents (short-term marketable securities)
- (d) Prepaid expenses

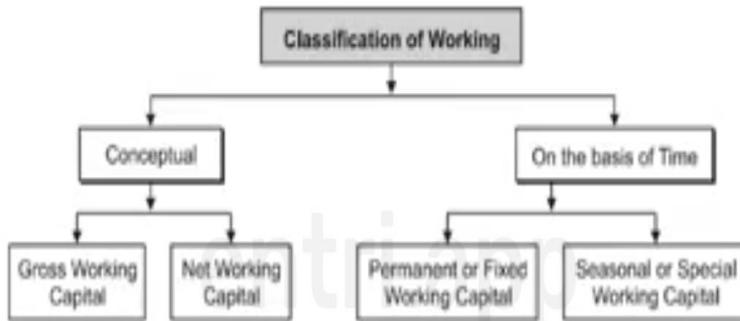
CURRENT LIABILITIES

Current Liabilities: A liability is classified as current when:

- (i) It is expected to be settled in normal operating cycle of the entity.
- (ii) The liability is held primarily for the purpose of trading
- (iii) It is expected to be settled within twelve months after the reporting period

Generally current liabilities of an entity, for the purpose of working capital management can be grouped into the following main heads:

- (a) Payable (trade payables and bills receivables)
- (b) Outstanding payments (wages & salary etc.)



On the basis of Concept or Value:

Working Capital can be defined as Gross Working Capital or **Net Working Capital**.

Gross working capital refers to the firm's investment in current assets.

Net working capital refers to the difference between current assets and current liabilities.



A positive working capital indicates the company's ability to pay its short-term liabilities. On the other hand a negative working capital shows inability of an entity to meet its short term liabilities.

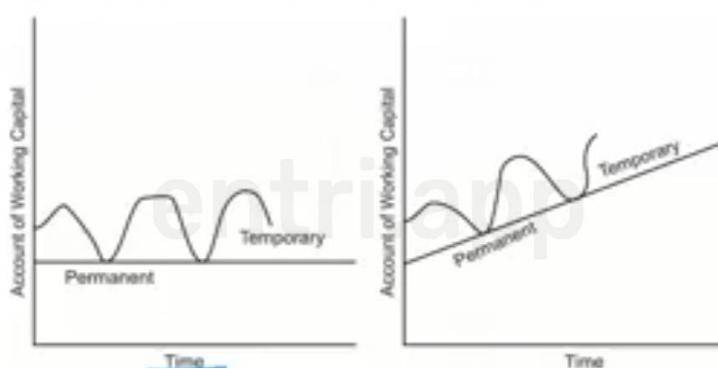
On the basis of Time:

working capital can be divided into two categories viz., Permanent and Fluctuating (temporary).

Permanent working capital refers to the base working capital, which is the minimum level of investment in the current assets that is carried by the entity at all times to carry its day to day activities.

Temporary working capital refers to that part of total working capital, which is required by an entity in addition to the permanent working capital. It is also called variable working capital which is used to finance the short term working capital requirements which arises due to fluctuation in sales volume

The following diagrams shows Permanent and Temporary or Fluctuating or variable working capital:





Both kinds of working capital i.e. permanent and fluctuating (temporary) are necessary to facilitate production and sales through the operating cycle.

DETERMINANTS OF WORKING CAPITAL

- 1. Cash** - Identify the cash balance which allows for the business to meet day-to-day expenses, but reduces cash holding costs.
- 2. Inventory** - Identify the level of inventory which allows for uninterrupted production but reduces the investment in raw materials and hence increases cash flow; the techniques like Just in Time (JIT) and Economic order quantity (EOQ) are used for this.
- 3. Receivables** - Identify the appropriate credit policy, i.e., credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or vice versa). The tools like Discounts and allowances are used for this.
- 4. Short-term Financing Options** - Inventory is ideally financed by credit granted by the supplier; dependent on the cash conversion cycle, it may however, be necessary to utilize a bank loan (or overdraft), or to "convert debtors to cash" through "factoring" in order to finance working capital requirements.
- 5. Nature of Business** - For e.g. in a business of restaurant, most of the sales are in Cash. Therefore, need for working capital is very less.

6. Market and Demand Conditions - For e.g. if an item's demand far exceeds its production, the working capital requirement would be less as investment in finished goods inventory would be very less.

7. Technology and Manufacturing Policies - For e.g. in some businesses the demand for goods is seasonal, in that case a business may follow a policy for steady production through out over the whole year or instead may choose policy of production only during the demand season.

8. Operating Efficiency - A company can reduce the working capital requirement by eliminating waste, improving coordination etc.

9. Price Level Changes - For e.g. rising prices necessitate the use of more funds for maintaining an existing level of activity. For the same level of current assets, higher cash outlays are required. Therefore, the effect of rising prices is that a higher amount of working capital is required.

IMPORTANCE OF WORKING CAPITAL

- **Solvency of the business:** Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.



- **Goodwill:** Sufficient working capital enables a business concern to make prompt payments and hence helps in creating and maintaining goodwill.
- **Easy Loans:** A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and other on easy and favourable terms.
- **Cash discounts:** Adequate working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.
- **Regular supply of raw materials:** Sufficient working capital ensures regular supply of raw materials and continuous production.
- **Regular payment of salaries,** wages and other day-to-day commitments: A company which has ample working capital can make regular payment of salaries, wages and other day to-day commitments which raises the morale of its employees, increases their efficiency, reduces wastages and costs and enhances production and profits.
- **Exploitation of favourable market condition:** Only concern with adequate working capital can exploit favourable market conditions such as purchasing its requirements in bulk when the prices are lower and by holding its inventories for higher prices.
- **Ability to face crisis:** Adequate working capital enables a concern to face business crisis in emergencies such as depression because during such periods, generally, there is much pressure on working capital.



- **Quick and regular return on investments:** Every investor wants a quick and regular return on his investments. Sufficiency of working capital enables a concern to pay quick and regular dividends to its investors as there may not be much pressure to plough back profits.

Optimum Working Capital

Current ratio (current assets/current liabilities) (along with acid test ratio to supplement it) has traditionally been considered the best indicator of the working capital situation.

It is understood that a current ratio of 2 (two) for a manufacturing firm implies that the firm has an optimum amount of working capital. This is supplemented by Acid Test Ratio (Quick assets/Current liabilities) which should be at least 1 (one).

However, it should be remembered that optimum working capital can be determined only with reference to the particular circumstances of a specific situation. Thus, in a company where the inventories are easily saleable and the sundry debtors are as good as liquid cash, the current ratio may be lower than 2 and yet firm may be sound.

Both excessive as well as inadequate working capital positions are dangerous.



RISK OF EXCESSIVE WORKING CAPITAL

- Excessive working capital is a curse for a firm. If among other inventories carry a high amount then it indicates either slow sales turnover of the firm or having obsolete stocks in its inventories.
- Excessive investment in working capital means idle fund.
- An implied cost on the business profitability.
- This is also an indication of managerial inefficiencies.
- The immediate effects may account high cost of inventory storage, higher bad debt and losses.
- Excessive use of working capital points out the weak position of debtors collection, and loose credit policy.
- Excessive use of working capital symbolizes weak working capital management, lower profitability and results into decline in share price of the firm.

RISK OF SHORTFALL OF WORKING CAPITAL

- Lower working capital is an indication of decrease in liquidity position of the firm. Hence, shows short-term solvency under risk.
- Inappropriate policy of working capital management, challenge in production, timely payment to creditors, and overall decline in credit-worthiness are few risks evolved due to deficit in working capital.

- Due to shortage of funds, firm will be unable to purchase stock on time to avail discount.
- The rate of return will also fall down due to shortage of working capital.
- A firm may lose reputation and goodwill
- The morale of employees may get affected due to irregular payment of remuneration.

WORKING CAPITAL MANAGEMENT

Working capital is required for smooth functioning of the business of an entity as lack of this may interrupt the ordinary activities. Hence, the working capital needs adequate attention and efficient management.

The scope of working capital management can be grouped into two broad areas

- (i) Profitability and Liquidity and
- (ii) Investment and Financing Decisions.

WORKING CAPITAL MANAGEMENT

How the Liquidity and Profitability is Connected?

For uninterrupted and smooth functioning of the day to day business of an entity it is important to maintain liquidity of funds evenly. But over liquidity may create idle fund and that can reduce profitability. Thus, a



trade off between liquidity and profitability is can enhance the profitability without affecting the day today functioning.

This require efficient management of components of working capital.

How??

Inventory			
Volume	Advantage	Disadvantage	Trade-Off
High	Fewer Stock-out	High Cost	Optimum Inventory, EOQ, JIT
Low	Low cost	Stock-out	
Receivables			
Period	Advantage	Disadvantage	Trade-Off
High	Increase in Sales	Bad debt, Low liquidity	Optimum Credit Policy, Factoring
Low	Increase in Cash Sales	Less Sales	
Pre- payment of expenses			
Amount	Advantage	Disadvantage	Trade-Off
High	Low uncertainty, Inflation benefits	Less Liquidity	Cost-benefit analysis required
Low	Liquidity benefits	Uncertainty	



Payables and Expenses			
Amount	Advantage	Disadvantage	Trade-Off
High	Reputation, goodwill	Less Liquidity	Evaluate the credit policy and related cost.
Low	Can be invested in other resources	Low morale, low reputation	

Cash and Cash Equivalents			
Amount	Advantage	Disadvantage	Trade-Off
High	On time payments, Honoured	Opportunity Cost	Proper cash budget and management
Low	Can be invested in other assets	Late payment, dishonour	

WORKING CAPITAL MANAGEMENT

Investment and Financing

Working capital policy is a function of two decisions, first, investment in working capital and the second is financing of the investment. Investment in working capital is concerned with the level of investment in the current assets. It gives the answer of 'How much' fund to be tied in to achieve the objectives.

Financing decision concerned with the arrangement of funds to finance the working capital. It gives the answer 'Where from' fund to be sourced' at lowest cost as possible (i.e. Economy).



Investment of working capital

- (a) Nature of Industry: Construction companies, series etc. requires large investment in working capital due long gestation period.
- (b) Types of products: Consumer durable has large inventory as compared to perishable products.
- (c) Manufacturing Vs Trading Vs Service: A manufacturing entity has to maintain three levels of inventory i.e. raw material, work in-process and finished goods whereas a trading and a service entity has to maintain inventory only in the form of trading stock and consumables respectively.
- (d) Volume of sales: Where the sales are high, there is a possibility of high receivables as well.
- (e) Credit policy: An entity whose credit policy is liberal has not only high level of receivables but requires more capital to fund raw material purchases.

APPROACHES OF WORKING CAPITAL MANAGEMENT

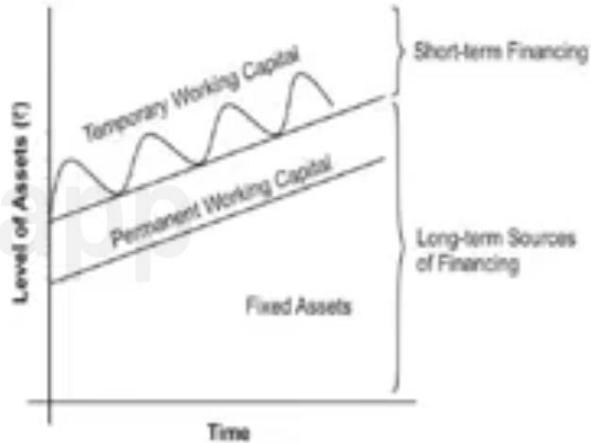
A firm can rise working capital under four approaches, which are

1. Matching Approach or Hedging Approach
2. Conservative Approach
3. Aggressive Approach

4. Zero Working Capital Approach

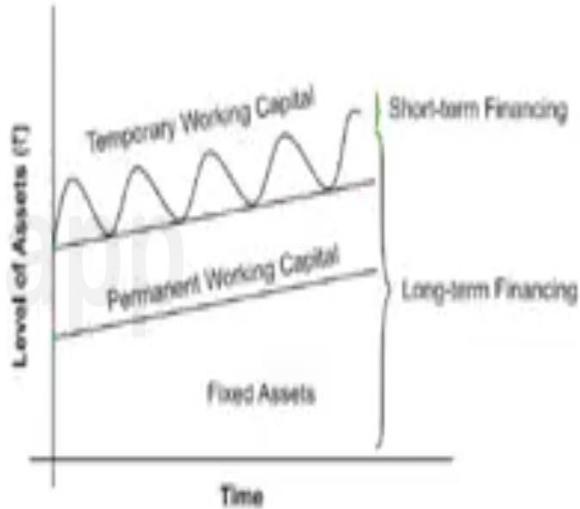
Matching or Hedging Approach

Under this approach a portion of long-term sources of finance is used to fund working capital requirement, a growth in business over the time requires additional investment in fixed assets as well as working capital, the additional raised demand is also met out from long-term sources. The temporary working capital is matched against short-term sources of finance and permanent working capital is arranged from long term source.



Comservation Approach

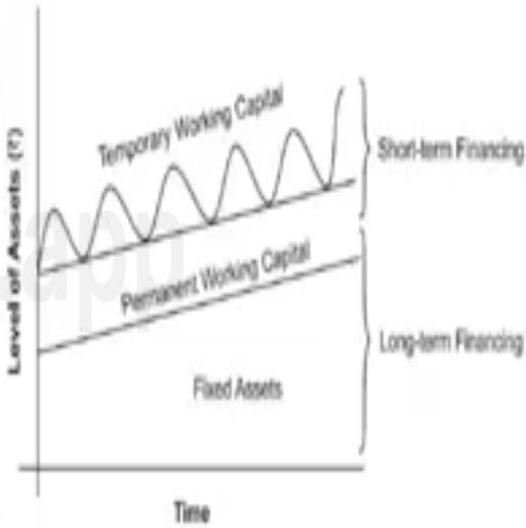
Under this approach firms behave like risk averse, therefore, a portion of temporary working capital is also financed through long-term funds. This policy is applicable either in case of new firms, or where huge amount of working capital is required or gestations period are long





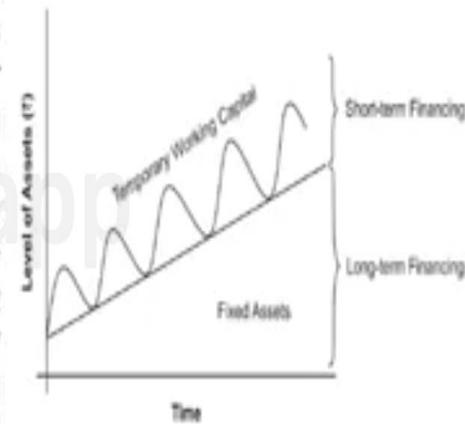
Aggressive Approach

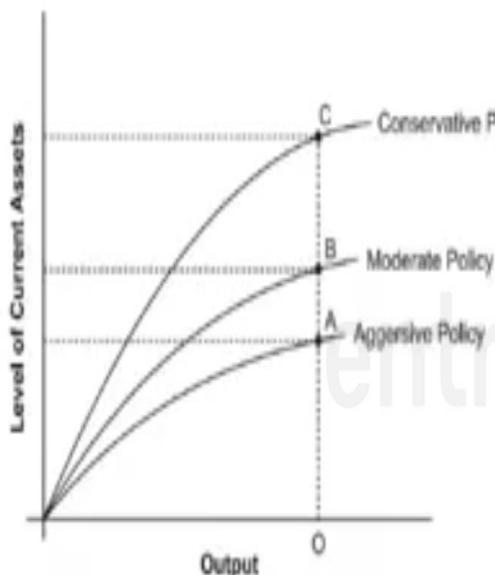
Under this approach firms use short-term source of financing even in permanent working capital. This approach is applicable where the recovery from creditors is quick and fast, especially in case where goods are sold on cash basis only, e.g., Restaurants may follow such type of working capital approach, but it does not suit to a fast heavy industries



Zero working capital Approach

Under this approach, firms do not finance their working capital from long-term funds, in fact there is no permanent working capital under such cases. The temporary working capital is funded from short-term source of finance. This approach is applicable to service industries, where there is a remote need of working capital, e.g., transportation industry has very less investment in working capital, but huge investment in fixed assets. Their business runs on cash basis, in most of cases.





A firm can adopt different working capital approaches to fund their assets.

As shown in the figure under conservative approach the level of working capital tends more at a particular output level. At the same time aggressive policy has lesser amount of working capital.

So a Moderate policy can be adopted in between Conservative and aggressive policy

OPERATING OR WORKING CAPITAL CYCLE

A useful tool for managing working capital is the operating cycle.

The operating cycle analyzes the accounts receivable, inventory and accounts payable cycles in terms of number of days. For example:

- Accounts receivables are analyzed by the average number of days it takes to collect an account.
- Inventory is analyzed by the average number of days it takes to turn over the sale of a product (from the point it comes in the store to the point it is converted to cash or an account receivable).
- Accounts payables are analyzed by the average number of days it takes to pay a supplier invoice.

Working Capital cycle indicates the length of time between a company's paying for materials, entering into stock and receiving the cash from sales of finished goods. It can be determined by adding the number of days required for each stage in the cycle.

$$\text{Operating Cycle} = R + W + F + D - C$$

R = Raw material storage period

W = Work-in-progress holding period

F = Finished goods storage period

D = Receivables (Debtors) collection period.

C = Credit period allowed by suppliers (Creditors).

