



## WORKING CAPITAL - A CONCEPTUAL ANALYSIS

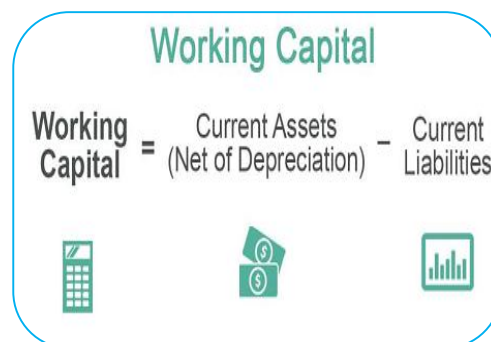
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### ABSTRACT:

*Working Capital is defined varyingly keeping in view the objectives and purposes. To businessmen, working capital comprises current assets of business whereas to the accountant/creditors/investment analysts working capital is understood as the difference of current assets minus current liabilities. This is also called the Net Working Capital. There is operative aspect of working capital i.e. current assets (which is known as 'funds' also) employed in the business process form the gross working capital. Current assets comprise: cash, receivables, inventories, marketable securities held as short-term investment and other items near cash or equivalent to cash. This is also known as going-concern concept of working capital. This paper is a modest attempt to study the conceptual framework of working capital.*



**KEYWORDS:** Current Assets, Current Liabilities, Financial Management, Working Capital.

### INTRODUCTION

On the basis of the above concepts of Gross' and "Net' working capital, it can be classified in two ways. In the first case the classification may be linked with 'Gross' Concept. Such working capital shall be those sums invested in various components of current assets, such as cash, receivables, short-term unexpired costs and inventories. Second classification is based on 'time' element which classifies working capital as "permanent" or "temporary". Permanent working capital is that amount of funds required to produce goods and services necessary to satisfy demand at its lowest point. Such capital possesses the following characteristics viz, it is constantly changing from one asset form to another; and it remains permanently within the process of the business and can be returned back to its owners/suppliers when the business comes to an end. It has another special feature that it increases with the growth of business of the company. On the other hand, temporary working capital do change its form from cash to inventory to

receivables and back to cash with the difference that it is not always gainfully employed. Seasonal business requires more temporary working capital.

Working capital comes into business operation when actual operation takes place. Generally, the requirement of quantum of working capital is determined by the level of production which depends upon the management attitude towards “risk” and the factors which influence the amount of cash, inventories, receivables and other current assets required to support given volume of production. Risk is understood in the sense of the probability of bearing unfavourable results on account of not maintaining sufficient current assets to meet all the financial obligations as they mature and to support the proper level of sales.

A Finance Manager takes three broad decisions in respect of working capital management and they are -

- the level of current assets,
- the structure/composition of current assets and
- the financing of current asset.

While comparing the analysis of the financial statements and the cost per litre, it can be said that Dairy could only achieve economic viability by increasing the sale of milk with proper attention paid to increase its procurement and also minimizing its operational costs. Dairy with too require effective financial management. Despite the factors like procurement, processing and distribution responsible for the better functioning of a dairy unit, its operational efficiency is mostly based on its financial management (Madan Mohan, 1989).

### Concept of Working Capital

Working capital management is a significant in Financial management due to the fact that it plays a pivotal role in keeping the wheels of a business enterprise running. Working capital management is concerned with short-term financial decisions. Shortage of funds for working capital has caused many businesses to fail and in many cases, has retarded their growth. Lack of efficient and effective utilization of working capital leads to earn low rate of return on capital employed or even compels to sustain losses. The need for skilled working capital management has thus become greater in recent years.

A firm invests a part of its permanent capital in fixed assets and keeps a part of it for working capital i.e., for meeting the day today requirements. We will hardly find a firm which does not require any amount of working capital for its normal operations. The requirement of working capital varies from firm to firm depending upon the nature of business, production policy, market conditions, seasonality of operations, conditions of supply etc. Working capital to a company is like the blood to human body. It is the most vital ingredient of a business. Working capital management if carried out effectively, efficiently and consistently, will assure the health of an organization.

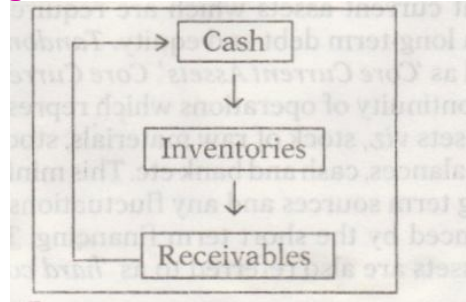
Working capital is defined as the excess of current assets over current liabilities. Current assets are those assets which will be converted into cash within the current accounting period or within the next year as a result of the ordinary operations of the business. They are cash or near cash resources. These include:

- Cash and Bank balances
- Receivables
- Inventory
  - Raw materials, stores and spares
  - Work-in-progress
  - Finished goods
- Prepaid expenses

- Short-term advances
- Temporary investments.

The value represented by these assets circulates among several items. Cash is used to buy raw-materials, to pay wages and to meet other manufacturing expenses. Finished goods are produced. These are held as inventories. When these are sold, accounts receivables are created. The collection of accounts receivable brings cash into the firm. The cycle starts again. This is shown in Figure 1.

**Figure 1: Circulation of Current Assets**



There is no set of universally applicable rules to ascertain working capital needs of a business organization. The factors which influence the need level of working capital are discussed below:

- **Nature of business:** If we look at the Balance sheet of any trading organization, we find major part of the resources is deployed on current assets, particularly stock-in-trade. Whereas in case of a transport organization major part of funds would be locked up in fixed assets like motor vehicles, spares and work shed etc. and the working capital component would be negligible. The service organizations or public utilities need lesser working capital than trading and financial organizations. Therefore, the requirement of working capital depends upon the nature of business carried by the organization.
- **Manufacturing cycle:** Time span required for conversion of raw materials into finished goods is a block period. The period in reality extends a little before and after the work-in-progress. This cycle determines the need of working capital.
- **Business cycle fluctuation:** This is another factor which determines the need level. Barring exceptional cases, there are variations in the demand for goods/services handled by any organisation. Economic boom or recession etc., have their influence on the transactions and consequently on the quantum of working capital required.
- **Seasonal variations:** Variation apart, seasonality factor creates production or even storage problem. Muster and many other oil seeds are Rabi crops. These are to be purchased in a season to ensure continuous operation of oil plant. Further there are woollen garments which have demand during winter only. But manufacturing operation has to be conducted during the whole year resulting in working capital blockage during off season.
- **Scale of operations:** Operational level determines working capital demand during a given period. Higher the scale, higher will be the need for working capital. However, pace of sales turnover (Quick or slow) is another factor. Quick turnover calls for lesser investment in inventory while low turnover rate necessitates larger investment.
- **Credit policy:** Credit Policy Of the business organisation includes to whom, when and to what extent credit may be allowed; Amount of money locked up in account receivables has its impact on working capital. In good many cases, account receivables are sterile and sticky and thereby they have forfeited the right to be classified as current assets. In view of such situation in ascertaining quick ratio instead

of deducting stock-in-trade we find it worthwhile to deduct sundry debtors. The other component is credit policy of the suppliers, their terms and conditions of credit. Trade credit has its historical presence in the trading world. Availability of normal credit supplies as well as trade credit facilitate working capital supply and reduce the need for bank finance.

- **Accessibility to credit:** Creditworthiness is the precondition for assured accessibility to credit. Accessibility in banks depends on the flow of credit i.e., the level of working capital.
- **Growth and diversification of business:** Growth and diversification of business call for larger volume of working fund. The need for increased working capital does not follow, the growth of business operations but precedes it. Working capital need is in fact assessed in advance in reference to the business plan.
- **Supply situation:** In easy and stable supply situation, no contingency plan is necessary and precautionary steps in inventory investment can be avoided. But in case of supply uncertainties, lead time may be longer necessitating larger basic inventory, higher carrying cost and working capital need for the purpose. No aggressive approach can gain foothold in such situation.
- **Environment factors:** Political stability in its wake brings in stability in money market and trading world. Things mostly go smooth. Risk ventures are possible with enhanced need for working capital finance. Similarly availability of local infrastructural facilities-road, transport, storage and market etc., influence business and working capital need as well.

### Nature and Types of Working Capital

Working capital is the life blood of any business, without which the fixed assets are inoperative. Working capital circulates in the business, and the current assets change from one form to the other. Cash is used for procurement of raw materials and stores items and for payment of operating expenses, then converted into work-in-progress, then to finished goods. When the finished goods are sold on credit terms receivables balances will be formed. When the receivables are collected, it is again converted into cash. The need for working capital arises because of time gap between production of goods and their actual realisation after sales. This time gap is called technically called as 'operating cycle' or 'working capital cycle'. The operating cycle of a company consists of time period between the procurement of inventory and the collection of cash from receivables. The operating cycle is the length of time between the company's outlay on raw materials, wages and other expenses and inflow of cash from sale of goods. Operating cycle is an important concept in management of cash and management of working capital. The operating cycle reveals the time that elapses between outlay of cash and inflow of cash. Quicker the operating cycle less amount of investment in working capital is needed and it improves the profitability. The duration of the operating cycle depends on the nature of industry and the efficiency in working capital management.

### Gross and Net Working Capital

Generally the working capital has its significance in two perspectives. These are gross working capital and net working capital is called 'balance sheet approach' of working capital. The term 'gross working capital' refers to the firm's investment in current assets. According to this concept working capital refers to a firm's investment in current assets. The amount of current liabilities is not deducted from the total of current assets. The concept of gross working capital is advocated for the following reasons:

- Profits of the firm are earned by making investment of its funds in fixed and current assets. This suggests the part of the earning relate to investment in current assets. Therefore, aggregate of current assets should be taken to mean the working capital.
- The management is more concerned with the total current assets as they constitute the total funds available for operating purposes than with the sources from which the funds come.

- An increase in the overall investment in the enterprise also brings an increase in the working capital.  
The term 'net working capital' refers to the excess of current assets over current liabilities. It refers to the difference between current assets and current liabilities. The net working capital is a qualitative concept which indicates the liquidity position of a firm and the extent to which working capital needs may be financed by permanent source of funds. The concept looks into the angle of judicious mix of long-term and short-term funds for financing current assets. A portion of net working capital should be financed with permanent sources of funds. The gross and net working capital are ascertained as shown below:

	(Rs.)	
<b>Current assets:</b>		
Raw material stock		xxx
Work-in-process stock		xxx
Finished goods stock	xxx	
Sundry debtors		xxx
Bills receivable		xxx
Short-term investments		xxx
Cash and bank balances		xxx
		.....
<b>Gross working capital</b>		xxx
<b>Less; Current liabilities:</b>		
Creditors for materials	xxx	
Creditors for expenses	xxx	
Bills payable	xxx	
Tax liability	xxx	
Short-term loans	xxx	xxx
	....	.....
Net working capital		xxx

### Permanent and Temporary Working Capital

Considering time as the basis of classification, there are two types of working capital viz., 'permanent' and 'temporary'. The magnitude of investment in working capital may increase or decrease over a period of time according to the level of production. But, there is a need for minimum level of working capital to carry its business irrespective of change in level of sales or production. Such minimum level of working capital is called 'permanent working capital' or 'fixed working capital'. It is the irreducible minimum amount necessary for maintaining the circulation of current assets. The minimum level of investment in current assets is permanently locked-up in business and it is also referred to as 'regular working capital'. It represents the assets required on continuing basis over the entire year. The permanent component current assets which are required throughout the year will generally be financed from long-term debt and equity. Tandon committee has referred to this type of working capital as 'core current assets'. Core current assets are those required by the firm to ensure the continuity of operations which represents the minimum levels of various items of current assets viz, stock of raw materials, stock of work-in-process, stock of finished goods, debtors balances, cash and bank etc. This minimum level of current

assets will be financed by the long-term sources and any fluctuations over the minimum level of current assets will be financed by the short-term financing.

**Temporary Working Capital** is also called as 'fluctuating working capital'. It depends upon the changes in production and sales, over and above the permanent working capital. It is the extra working capital needed to support the changing business activities. It represents additional assets required at different items during the operation of the year. A firm will finance its seasonal and current fluctuations in business operations through short-term debt financing. For example, in peak seasons, more raw materials to be purchased, more manufacturing expenses to be incurred, more funds will be locked in debtors balances etc. In such times excess requirement of working capital would be financed from short-term financing sources.

### Importance of Working Capital

In the past, a lot of research has been conducted to investigate the relationship between working capital management and profitability of the firm in different environments. Shin and Soenen (1998) used a sample of 58,985 firms' years covering the period 1975-1994 in order to investigate the relationship between net-trade cycle, which was used as a measure of working capital management efficiency and corporate profitability. He observed a strong negative, relationship between the length of net-trade cycle and its profitability. Deloof (2003) made an investigation for the relationship between working capital management and corporate profitability. He used a sample of 1009 large Belgium non-financial firms for the period from 1992 to 1996. The results showed a negative relationship between gross operating income, a measure of corporate profitability, and cash conversion cycle, as well as day's account receivable and inventories. Lazaridis and Tryfonidis (2006)'also investigated the relationship between working capital management and corporate profitability for the firms listed in the Athens Stock Exchange for a sample of 131 listed companies. Researchers used the company financials from 2001-2004 for the study. The results of the study of regression analysis showed that there was a statistically significant relationship between gross operating profit, a measure of profitability and the cash conversion cycle. He suggested that by optimizing the cash conversion cycle, the managers could create value for the shareholders.

Zariyawati et al. (2009) investigated the relationship between working capital management and profitability of the firm. The researchers used the cash conversion cycle as a measure of working capital management. This study has used a panel data of 1628 firms' years for a period of 1996 to 2006. The coefficient results of pooled OLS regression analysis provide a strong negative significant relationship between cash conversion cycle and profitability of the firms. It is revealed that by reducing the conversion cycle, a firm's profitability can be increased. Raheman and Nasr (2007)<sup>6</sup> also investigated the relationship between cash conversion cycle, and its components by taking a sample of 94 firms listed on the Karachi Stock Exchange for a period of six years from 1999- 2004. He investigated that cash conversion cycle is negatively related to net operating profit, which is a measure of profitability. Similar relationship was observed for the collection period, inventory turnover in days, and average payment period.

Lyroutdi and Lazaridis (2000) considered cash conversion cycle as a measure of the liquidity for the firms in the Greek food industry. They examined the relationship of a cash conversion cycle with current and quick ratio. The researchers examined the implications of the cash conversion cycle in terms of profitability, indebtedness and firm size. The outcome of the study was a significant positive relationship between the cash conversion cycle, and the traditional liquidity measures of current and quick ratios. Wang (2002) made a study for the firms in Japan and Taiwan to find a relationship between liquidity management and operating performance. He also investigated the relationship between liquidity management and corporate value of firms. The empirical findings for both countries show a negative relationship between CCC and ROA, and CCC and ROE. These results were in line with Jose et al. (1996) and

Shin and Soenen (1998) that lower cash conversion cycle corresponds with better operating performance. Further, in case of both countries, it was investigated that aggressive liquidity management is associated with higher corporate value. Eljelly (2004)<sup>7</sup> empirically investigated the relationship between profitability and liquidity for sample firms in Saudi Arabia. The researcher took cash gap and current ratio as a measure of liquidity. Using correlation and regression analysis, a negative relationship was investigated between liquidity and profitability, where current ratio was taken as a measure of liquidity. At the company level, it was observed that the cash gap (cash conversion cycle) is more important as a measure of liquidity than the current ratio as a measure of liquidity that affects profitability. At the industry level, it was observed that size has a significant effect on profitability.

The roots of the problems of all underperforming enterprises are traced in the working capital management and investments. Working capital is the fund which finances the finding of the day-to-day running of a business. Working Capital levels tend to fluctuate with the level of activity, and short-term performance of the industry. The Working Capital requirements are not just bank balances, they are composed of investments in stocks, debtors and creditors. Measures of efficiency of working capital involves careful timing for when you pay supplies, and collect from your customers. A close working on credit terms can significantly affect the working capital (singh,2012).

### Management of Working Capital

In general, the following cases are seen in inefficient management of working capital:

- Excessive carriage of inventory over the normal levels required for the business will result in more balance in trade creditors accounts. More creditors balances will cause strain on the management in management of cash.
- Working capital problems will arise when there is a slow-down in the collection of debtors.
- Sometimes, capital goods will be purchased from the funds available for working capital. This will result in shortage of working capital and its impact is on operations of the company.
- Unplanned production schedules will cause excessive stocks of finished goods or failures in meeting despatch schedules.
- More funds kept in the form of cash will not generate any profit for the business.
- Inefficiency in using potential trade credit require more funds for financing working capital.
- Overtrading will cause shortage of working capital and its ultimate effect is on the operations of the company.
- Dependence on short-term sources for financing permanent working capital causes lesser profitability and will increase strain on the management in managing working capital.
- Inefficiency in cash management cause embezzlement of cash.
- Inability to get working capital limits will cause serious concern to the company and, sometimes, may turnout to be sick.

### CONCLUSION

Working Capital refers to a firm's investment in short- term assets. It refers to all aspects of current assets and current liabilities. Efficient working capital needed to balance liquidity and profitability and to maintain sufficient liquid assets to provide funds to pay off obligations as when they arise, without loss goodwill and affecting the day to day operation of business, Working capital management studies the ways to optimise investment in current assets, to improve return on capital employed. The basic principle of

working capital management is that, the permanent currents to be financed from long-term sources and temporary fluctuations in current assets to be financed by raising short-term funds.

The Total of current assets is called 'gross working capita' and from it, if the current liabilities are reduced, it is called 'net working capital'. The position of current liabilities exceeding the current assets is called 'negative working capital', such situation is disastrous and can also lead closure of business. The operating cycle is the length of time between the company's outlay on raw materials, wages and expenses and inflow of cash from sale of goods. The quicker operating cycle leads to increase in profitability of the firm. The need level of working capital depends on factors like, nature of business, manufacturing cycle, scale of operations, credit policy, creditworthiness, business standing, inflationary conditions, growth of business etc.

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