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Chapter – 01 Introduction to Cash Management

Certificate in Cash Management

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Chapter - 1 Introduction to Cash Management

Introduction:

Cash is the most important asset in any business, and is the most unproductive asset. The availability of enough cash at any point of time ensures the liquidity of the business, and on the other, it reduces profitability. In this chapter, you will understand about cash inflows and cash outflows management.

Learning Objectives:

On completion of this chapter, you will understand about:

- Cash management
- Objectives of cash management
- Cash management as a part of liquidity management
- Causes of difference between cash and profit
- Motives of holding cash in the business
- Factors affecting cash availability in a business
- Cash flow cycle

1.1 Basics of Cash Management

1.1.1. Origin and History of Cash

All business transactions involve give and take. Earlier, this give and take was settled through commodities. A commodity was exchanged with another. This system of barter had three difficulties: presence of a minimum of two persons who could satisfy each other's need, determination of rate of exchange and problem of exchange of large with smaller commodities. To overcome the difficulties of the barter system, the need for a medium of exchange was felt and commodity as a medium entered the business arena. There was no special commodity, which was chosen for this purpose; it all depended on the factors, like location, community, climate, and economic development of the region. .

The commodity money did not serve the purpose well, because it did not have the basic features of a good medium of exchange, like durability, divisibility and portability. With the progress of civilization and economic development, metal became the medium of exchange, like silver and later on, gold. These metals were weighed to settle the transaction, every time an exchange took place. Later on, to eliminate the difficulty of weighing the metals every time a transaction took place, the metals were cut into pieces of particular weight which led to coinage circulation. It served well as a medium of exchange, but there were problems of debasement and tampering by dishonest persons. In addition, it was troublesome and risky to carry gold or silver coins.

To overcome the problems of commodity money, paper money was discovered. The initial use of paper money was in the form of receipts given by the London goldsmiths for deposit of coins. In the first phase of paper money, these receipts were accepted as a medium of exchange, only if these were convertible into coins of same value. However, with the expansion of business, particularly in the twentieth century, the inconvertible paper money became acceptable as an established medium of exchange. It has now been made a legal tender, as it consists of currency notes issued by the central bank or the government of the country.

Thus, originated money in form of cash, what we are using in the present day world for purchasing goods and availing services. It has all the features of a good medium of exchange that is, durability, divisibility and portability.

1.1.2 Concept of Cash Management

Cash is important for every business organization, and in any business, there can be no cash without its proper management. Every business needs cash to purchase raw materials, goods, to meet the day to day expenses, and for investment purpose. Cash management is both the cause and effect of availability of cash in any business. Thus, cash management is essential for the existence of any business.

Cash of a business can move in two different directions: it can either come in or go out. This is termed as inflow and outflow of cash respectively. Cash Management is an activity, primarily carried out to handle and manage inflows and outflows of cash to:

- Ensure the availability of enough cash to meet the requirements, as and when needed
- Avoid excess availability of cash in the business

The availability of enough cash in the business at every point in time is important to ensure proper liquidity of business, to fulfill the payment requirements and for smooth running of the day to day operations of the business.

Avoiding excess cash at any point in time is important, because there is always a tradeoff between liquidity and profitability.

Any business, which is highly liquid, may be less profitable. This is because, in order to remain liquid, the business may hold excess funds with itself at any point in time, instead of investing the same in some profitable venture. So, holding excess cash always causes a reduction in the profitability of the business. Cash management can also be defined as the strategy, which the business follows to administer its cash and invest the same in profitable ventures.

Thus, cash management is essential in any business, to ensure availability of enough cash at any point of time, and to avoid the excess availability of cash to maintain profitability.

The three types of activities related to inflow and outflow of cash in any business organization are:

1. **Operating Activities:** Activities which are related to the day to day operations of a business. These include: cash on account of salaries, rent, commission, sales and so on.

2. **Investing Activities: A**ctivities which are related to investment of funds in fixed assets of the business itself and securities of the other business ventures. Purchase of investments or fixed assets causes the outflow of the cash and the sale of same will lead to the inflow of cash. Income from investments, like interest received, is also the inflow from investing activity.

3. **Financing Activities:** Financing activities are related to the financing of the business venture. For example, issue of equity shares, and issue of debentures cause the inflow of cash. Redemption of debentures and paying back the term loan causes outflow of cash from the business. Expenses incurred on account of financing activities, like interest and dividend paid, are also categorized under financing activities.

Note: For non-financial business organizations, interest and dividend received investing activities, and interest and dividend paid are financing activities. But for financial business organizations, interest, and dividend paid and received are operating activities only. This is because, receipt and payment of interest and dividend are the day to day operations of the financial business organizations.

1.1.3 Objectives of Cash Management

Cash Management in any business is carried out with the following objectives, to:

1. Ensure proper availability of cash to meet the payment requirements
2. Have enough cash to purchase raw material and goods and to avail services, when required
3. Properly manage the tradeoff between liquidity and profitability of the business
4. Properly handle the inflows and outflows of cash in and from the business at any given point of time

1.1.4 Miller-Orr Model

In order to manage its cash balance, the company can have a mathematical model. Miller-Orr Model is one such model. This model helps the company to meet its cash requirements at the lowest possible cost by placing upper and lower limits on cash balances. The operation of the model is as follows:

(i) A company should have its desired cash level, an upper limit and lower limit on cash balances.
(ii) When the cash balance reaches the upper limit, it means that the company has too much cash. It then should use its cash to buy marketable securities in order to bring the cash balance back to its desired cash level.
(iii) When the cash balance hits the lower limit, the company lacks cash. It then sells its securities in order to bring the cash balance back to its desired cash level.
(iv) If the cash balance lies between the upper and lower limits, there will be no transaction in securities.

1.1.5. The need for Cash Management

Reduction of the amount of free cash which is being held by the firm is the main aim of Cash Management. This tends to enhance the firm's profitability, as idle cash reduces and cash for investment increases. However, while efficient cash management reduces free cash flows, it does not reduce overall business activities or enhance the risk structure of the firm regarding its financial obligations.

Hence, to meet all these obligations, the firm needs cash. Adding to the expenses, it is important for the firm to have certain amount of cash in hand in order to meet the contingent payments. Also, Cash at hand also helps in availing trade and cash discounts from vendors, which results in the reduction of the cost of inputs. Trade discounts can be availed on the bulk purchases whereas cash discounts can be availed on the immediate cash payments to suppliers. To get a benefit from these kind of discounts, "ready" cash should be available by the firm. The advantage of having ready cash balance by the firm is that, it can meet emergencies such as strikes, fires and breakdown of machinery.

Firms that avail cash discount can account for the benefit arising from the discount. For this the firm determines the cost to the firm if the discount is not availed. If the firm does not avail such discounts, it bears a cost, the cost of avoiding cash discount being offered by supplier.

This cost can be calculated by the formula:

$$\text{Cost} = \frac{\text{Discount \%}}{(100 - \text{Discount \%})} \times \frac{360}{\text{Actual payment period} - \text{Discount period}}$$

EXAMPLE

The terms of credit policy of two suppliers are as follows:

a. 2/10 net 30 and actual payment by the firm takes place on 98th day of purchase.

b. 3/10 net 60 and actual payment by the firm takes place on 90th day of purchase.

Determine the cost of not taking discount under the two credit terms of the suppliers (a) and (b).

Solution:

$$\text{Cost} = \frac{\text{Discount \%}}{(100 - \text{Discount \%})} \times \frac{360}{\text{Actual payment period} - \text{Discount period}}$$

$$\text{(a) Cost} = \frac{0.02}{(1-0.02)} \times \frac{360}{98-10} = 8.34\%$$

$$\text{(b) Cost} = \frac{0.03}{(1-0.03)} \times \frac{360}{80} = 18.81\%$$

1.2 Cash Management as a part of Liquidity Management

Liquidity: Liquidity is the ability of the business to pay its current liabilities out of its current assets, as and when they arise. This can also be termed as short term solvency of the business.

Management of Liquidity: Liquidity management refers to the management of current assets and current liabilities to ensure and sustain the ability of the business to meet its current liabilities, using current assets, as and when they arise.

Figure 1 illustrates the various aspect of liquidity management:

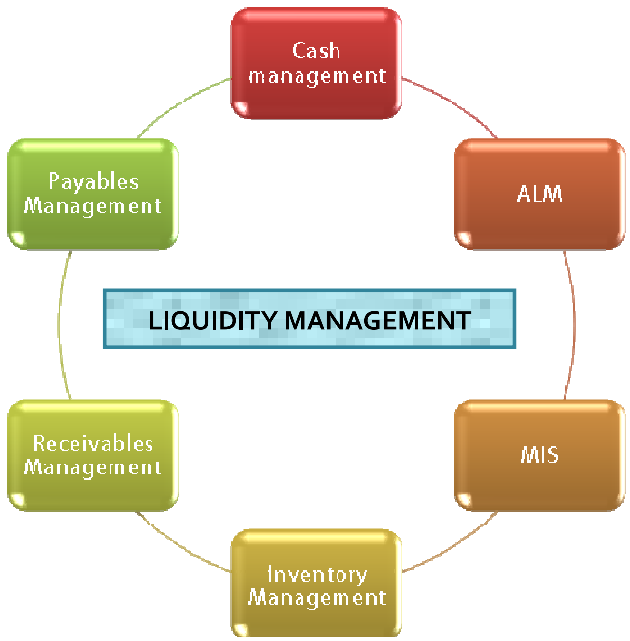


Figure 1 Aspects of Liquidity Management

1. **Cash Management:** Cash management is the activity in a business organization, through which, availability of cash is managed to ensure enough availability of cash for meeting the requirements and to avoid excess availability of cash, lest the investment opportunities be lost. This is the most important aspect of liquidity management.

2. **Asset Liability Management: A**sset-Liability Management can be termed as a risk management technique designed to earn adequate return while maintaining a comfortable surplus of assets beyond liabilities. It can be categorized into:

   Finance and Investment Terms: Asset Liability Management means balancing of the individual's level of debt with the amount of assets. For example, if someone plans to buy a new house, the person will have to decide whether to pay cash, thus lowering assets, or to take a loan, thereby increasing debts (or liabilities). Such decisions are based on interest rates, on earning power, and on the comfort level with debt. Financial institutions carry out asset liability management when they match the maturity of their deposits with the length of their loan commitments to keep from being adversely affected by rapid changes in interest rates.

Banking Terms: ALM helps the bank's management to maintain a proper mix of both loans and deposits consistently for long term growth and risk management. Usually, banks have an assumption that the financial risk in making loans with the interest rate is different from the rates paid on their deposits. Deposits have shorter maturities as compared to loans. Also deposits adjust to current market rates faster. It results in the mismatch in the balance sheet between assets (loans) and liabilities (deposits).

The function of Asset Liability Management is to measure and control three levels of financial risk:

- Interest rate risk (the pricing difference between loans and deposits),
- Credit risk (the probability of default)
- Liquidity risk (occurring when loans and deposits have different maturities).

3. **Management Information System as a Strategic Function:** A Management Information System (MIS) is a system or process that provides information that is necessary to manage an organization effectively. The information generated by MIS is essential for making business decisions. Therefore, MIS is also a strategic function for proper management of liquidity.

4. **Inventory Management:** Inventory is a very important aspect for the proper management of liquidity in a company, because major part of the current assets comprises inventories. So, if the inventories are purchased in bulk and are not sold at a proper pace, the funds are unnecessarily blocked in the stock, which adversely affects the liquidity position of the company.

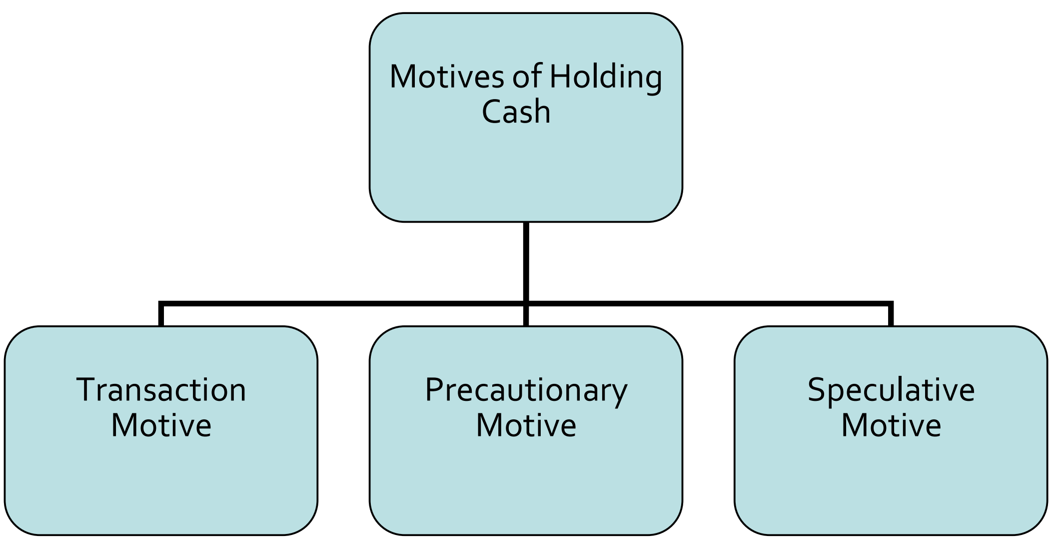
5. **Receivables Management:** Receivables need utmost attention to be managed. These assets play a crucial role in liquidity management of the company. If the company does not collect the amount from the debtors as per the planned schedule, it compromises on its liquidity, as the blockage of funds in receivables leads to the risk of loss of short term solvency that is, liquidity. Therefore, management of receivables is crucial for good liquidity management in any organization.

6. **Payables Management:** Payables of a company include trade creditors and bills payable. Creditors or payables are accounts, which decide, if a company is able to meet its short term obligations or not, as these only constitute a major part of the current liabilities. Therefore, timely payment to creditors is essential to maintain the liquidity in a company. But, if the payments are made to the creditors too quickly, the company may have to compromise on profitability. Hence, a proper management of payables is required to ensure a balance between liquidity and profitability of the company. Thus, payables management is also a very important aspect of liquidity management of any business organization.

1.3 Importance of Cash in a Business

1.3.1 Motives for Holding Cash

There are three motives for holding cash in a business:



- Transaction Motive: Transaction is a media, through which, a business activity is conducted. A transaction causes change in the profit/loss or the financial position of the business. Transaction motive refers to the requirement of cash for conducting day-to-day business activities. The business enters into a wide variety of transactions, and cash being the legal tender, these are settled through cash. Thus, cash is required for transaction purposes.

- Precautionary Motive: Transaction motive takes care of the normal routine function only, but a business also requires cash for a precautionary motive. Business has to protect itself against contingencies, which may arise in the future, by holding additional cash in hand. This is known as precautionary motive. Such a cash balance provides support to meet unexpected cash demand. Some of the events warranting additional cash can arise owing to the cancellation of an order; lock out, strikes, levy of or increase in duty or cess on raw materials and many more.

- Speculative Motive: Speculative motive is to take advantage of temporary opportunities, which may unexpectedly surface in the future. Cash, therefore, is retained in the business in addition to transaction and precautionary motives for speculative purposes. Cash held for speculative motive, is mainly for investment purposes to earn capital gains.

1.3.2 Factors Influencing Cash Availability in a Business

Cash flows in a business are influenced by a number of factors, which can be divided into two broad categories:

- Internal Factors
- External Factors

Internal Factors: Internal factors are factors, which are particularly related to the business concern and are under direct control of it. Some internal factors are:

- Operating Policies: Policies of the business to carry out its operating activities, affect the cash flows and availability of cash in the business to a significant extent. Operating activities of a business concern are the activities, which are related to its day-to-day operations. For example, salaries paid to employees form a major part of the operating expenses and the level of salaries affect the cash position of the business to a significant extent.

- Fixed Assets: Fixed assets are the long term properties of the business, which are not bought and sold in the normal course of the business. Purchase of these assets is of the capital nature in itself, because it creates assets, which are useful for more than one accounting year. Investment in fixed assets, normally, involves a huge cash outflow. Thus, policy of the business regarding the fixed asset is also an important factor to determine the level of cash in the business.

- Management of Receivables: No business can survive without extending credit to its customers or selling them goods on credit. Credit policy, adopted by the business, has a significant impact on the cash flows of the business. For example, if the policy of the business is to sell goods on credit with short credit period, availability of cash in the business may increase or may be greater than what it would have been, if the credit period was long.

- Inventory Management: Inventory is the stock of goods to be sold and to be used in the production of finished goods, held by the business. Mainly, this is of three types: inventory of raw material, work in progress and finished goods. Other than these, inventory may also include the stock of supplies, lubricants and so on, which are to be used in the manufacturing process. Inventory management of the business is very crucial to the cash availability, as it contains three types of costs: cost of material, ordering cost and carrying cost. If the business has a policy of ordering in bulk, the ordering cost will reduce (in some cases, the cost of material may also reduce), but the carrying cost will be high. On the contrary, if the business orders in the small quantities, its carrying cost will be less, but the ordering cost will be high. Thus, the policy of the business regarding inventory management is of utmost importance for the availability of cash in the business.

- Payment Policy: Payment policy of the business is the policy for the payment to the creditors. It includes the credit period allowed by the creditors and the cash discount offered by them. If the creditors are being paid at regular time intervals, cash availability may be less. If the business is efficient in exploiting the opportunity of utilizing the funds of the creditors/suppliers for a longer period; it may help in increasing the cash availability in a business. Availing cash discounts by making quick payments to the suppliers is also helpful in increasing the cash availability ultimately.

- Financing Decisions: Financing decisions are the decisions, regarding financing the business. It includes the issue of equity shares and debentures, redemption of the securities issued, payment of dividend and interest, and many more. It causes a change in the cash position of the business as these activities involve either inflow or outflow of cash. Thus, availability of cash in the business depends upon its financing decision also.

External Factors: External factors are those factors, which are relevant to the overall economy and/or to a particular industry. Unlike internal factors, these factors are not under the control of a particular business concern. Some of these are:

- **Monetary and Fiscal Factors**: Monetary factors have a significant impact on the cash availability in business concerns. For example, during the period of inflation, the economy is booming and people have money to spend. Thus, the demand increases and cash inflows of business concerns also increase. On the contrary, during the period of deflation, there is low level of demand in the economy and the cash inflows of the business also decrease. Fiscal factors, like corporate taxes have a direct bearing on the availability of cash in the business. If the rate of tax is high, the business will have less disposable cash and vice-versa.

- **Factors Relevant to an Industry**: These factors are unique to a particular industry. For example, volatility of the product, and type of activity. Industries which deal in highly volatile products, like newspapers have little time to regulate the cash movement, if things begin to move adversely. Consultancy firms have low overhead cost and receive a good part of revenue before initiation of the activity. So, they do not, normally, face cash crunch.

1.3.3. Can Profit be considered as Cash?

An important question, which arises in mind, is whether profit is same as cash? At the first instance, it seems that the answer is 'Yes', because whatever a business earns, should be equal to cash inflow and whatever expenses the business incurs, should be equal to cash outflows. Therefore, net profit at any point of time will be equal to net cash flows at that point of time. But, actually this is not true. On analyzing the situation logically, the answer is 'No'. Cash is different from the profit earned by the business. This is because, there are some transactions in the business, which are recognized for the purpose of calculating cash balance, but not for the calculation of profit of the business. And there are also some transactions, which are recognized for the purpose of calculation of the profit, but not for the calculation of cash balance. All these transactions make the profit of the business different from cash balance. These transactions have been explained next in detail.

- Depreciation: Depreciation is the continuous decrease in the value of fixed assets over time due to its normal usage. Depreciation, in any business, reduces the profits of the business, but it is a non cash expense, and consequently, does not affect the cash position of the business.

- Credit Purchases: Credit purchases are goods or raw material, purchased on credit from suppliers. This transaction affects the profit position of the business, but not the cash position. Thus, credit purchases are also a reason of difference between the cash and profit of the business.

- Credit Sales: Credit sales are goods sold on credit to customers. This transaction increases the profit of the business, but does not cause the cash inflow in the business. So, this is also a reason for the difference between the cash and profit of the business.

- Prepaid Expenses: Prepaid expenses refer to the amount of expenses, which have been paid in advance, that is before the due date. These expenses cause a reduction in the cash balance of the business, but do not cause a reduction in the profit, and thus cause a difference between the cash and profits of the business.

- Pre-received Incomes: Pre-received incomes are the incomes, which have been received in advance by the business. These incomes cause an increase in the cash balance of the business, but do not cause a corresponding increase in the profits. Thus, such incomes cause a difference between the cash and profit position of the business.

- Outstanding Expenses: Outstanding expenses are the expenses, which have not been paid, even after the due date. Due to outstanding expenses, there is no effect on cash balance, but these certainly cause a reduction in the profits of the business.

- Accrued Incomes: Accrued incomes are those incomes, which have been due, but are not received by the business. Such incomes add to the profit of the business, but do not affect the cash position.

- Sale and Purchase of Fixed Assets by Cash: Sale and purchase of fixed assets of business by cash causes a change in the cash position of the business by the amount of sale or purchase price of the asset, but it affects the profits of the business only by the amount of profit/loss on the sale of the asset.

- Accounting Amortization: Sometimes, some costs are to be amortized over time, due to statutory requirements, like preliminary expenses. Such transactions affect the profits of the business proportionately over the years, but the cash flows are affected by the total amount of the cost initially, when the amount is paid.

1.4 Cash Flow Cycle

Cash flow cycle is the cycle, showing inflows and outflows of cash in a business organization. It can be of following types:

- Short Term Operating Cash Flow Cycle
- Long Term Cash Flow Cycle

o **Short Term Operating Cash Flow Cycle**: The short term operating cash flow cycle is the process depicting the flow of cash, starting from cash in hand in a business, passing through the purchases, production and sales and ending up with cash. The figure next depicts the short term operating cash flow cycle.

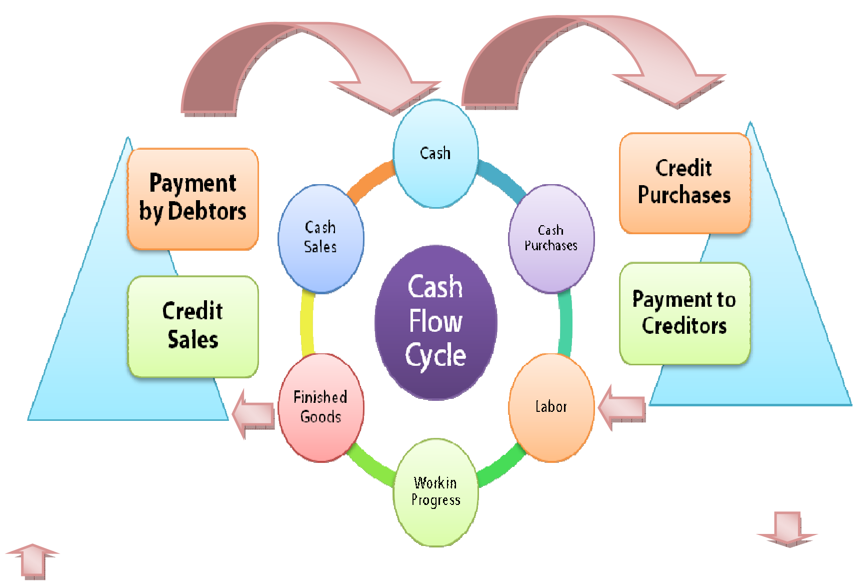


Figure 2: Short Term Operating Cash Flow Cycle

The cash flow cycle starts with the cash in hand in the business. Raw material is purchased from suppliers either by cash or on credit. When raw material is purchased by cash, the amount is paid on the spot to the suppliers. When these are purchased on credit, payment is made to the suppliers on a later date. Raw material is then processed by the labor and converted into work in progress. The work in progress is processed further and converted into finished goods. Goods are sold to the customers. When sales are made on cash, the amount is received on the spot, and when the sales are made on credit, debtors make the payment on a later date. In both the cases, either the sales or purchases are made on either cash or credit, the cash, which was initially lying with the business, is again restored with the business only (often the amount restored is higher, as the profit is also included in the amount of sales).

- **Long Term Cash Flow Cycle:** Long term cash flow cycle illustrates all the sources and applications of cash in the long term in a business organization. Following figure is depicting the same:

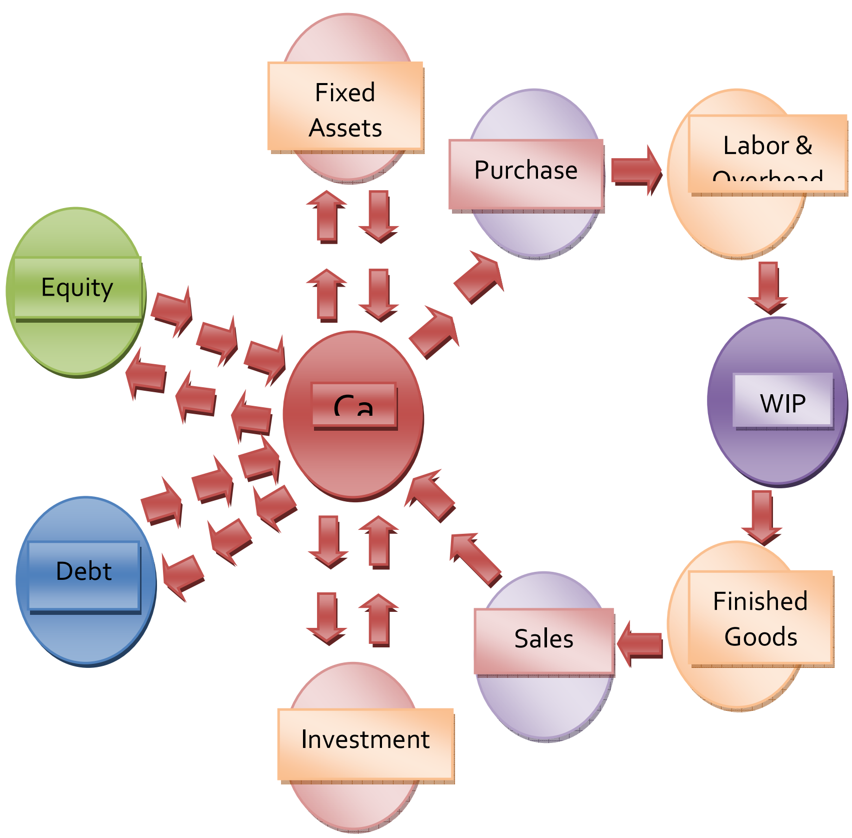


Figure 3: Long Term Cash Flow Cycle

Figure 3 illustrates the cash inflow and outflows from the operating, investing and financing activities. In operating activities, cash is spent on purchases and the production process, and thus, the raw material is converted into finished goods, which are sold to the customers and cash is received. In investing activities, cash is spent on the purchase of fixed assets and investments, and is restored by selling fixed assets and investments. In financing activities, cash is received by issuing equity and debt, which is spent on the redemption of the same. Thus, long term cash flow cycle focuses on the short and long term sources and applications of cash in a business organization.

Summary

- In ancient times, there were no currency notes. Barter system of exchange was prevalent, wherein commodities were exchanged for commodities.

- After the Barter system, commodity money came into existence.

- With the advancement in economic development, metal became the medium of exchange. Gold and silver were the main metals, which were used for this purpose.

- After commodity money, paper money came into existence.

- Cash Management is an activity, primarily carried out to handle and manage the inflows and outflows of cash to ensure the availability of enough cash to meet the requirements, when needed, and at the same time, to avoid excess availability of cash in the business.

- The three types of activities related to cash flows are operating, investing and financing activities.

- Profit cannot be considered as cash, as there are some transactions in the business, which do not affect the cash flows, but do affect the profit position of the business and vice versa.

- Cash is held in the business with transaction, precautionary and speculative motives.

- Factors influencing cash availability in the business may be of two types: internal and external.

- Internal factors include operating policies, fixed assets, receivables management, inventory management, payment policy and financing decision.

- External factors include monetary and fiscal factors and factors related to a particular industry.

- Cash flow cycle is the cycle, showing inflows and outflows of cash in a business organization.

- Cash flow cycle can be of two types: Short term operating cash flow cycle and long term cash flow cycle.