



<b>UNIT-9</b>			
<b>Managerial Skills for Entrepreneurs Part 3</b>			
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# UNIT

## 9

### Contents

#### Chapter I

1. Pricing
2. Pricing Policies

#### **The aim of this chapter is to:**

- make you understand pricing and factors affecting pricing.

#### **Objectives:**

On completion of this chapter, you will be able to :

- understand pricing
- learn about factors affecting pricing
- decide on pricing for your product



## 1.1 Pricing

Pricing is one of the important dimensions of the marketing mix. It delivers the value of any product or service in a quantifiable worth based on perceived benefits and cost. Survival of the products and services entails appropriate pricing. For example, if a customer feels that he is not getting his money's worth, the demand for the product may diminish. Moreover, it is very difficult to dictate terms in a buyer's market. Many a time, the price is fixed on the basis of the competitor's price for that product. In the case of an industrial product, the price is based on the difference between demand and supply.

In India, price is often affected by environmental, cultural, and political factors. Moreover, it is affected by the government tax rates such as goods and service tax (GST), thereby making it difficult to maintain a uniform price throughout the country.

How to calculate the price of a readymade shirt?

The method displayed below is generally used to decide on the pricing of a product:

(The pricing of a shirt is given as an example)

1	Direct cost of material (e.g. cloth used for making a shirt)	x
2	Direct cost of labour (sewing charges)	x
3	Direct expenses (electricity charges, thread, buttons, etc.)	x
4	Indirect cost of material (e.g. lubricant for machines)	x
5	Indirect cost of labour (e.g. maintenance charges, Accountant's salary)	x
6	Indirect expenses (office rent - distribution charges)	x

While computing the cost of the product, expenses that are not too apparent should also be considered. Many a time, these expenses, when not considered while pricing a product, lead to a loss. Taxes, handling charges, and packaging charges should be considered too. For seasonal products, the profit ratio may be high during the season when the product is in demand, e.g., kites in Utrayan and crackers in Diwali.

Before deciding on the price, it is advisable to review the following points:

1. Potential demand for the product



2. Time taken to attain the profit level
3. Price in relation to demand (If by reducing the price there is no increase in demand, it means that the demand is inelastic.)
4. The target groups and their purchasing power
5. Promotion policy and expenses incurred for promotion
6. Distribution system and expenses incurred for it
7. The stage of the product life cycle. In case of stiff competition, it will be difficult to increase the price beyond a certain point.

Your pricing policy also depends on your objectives.

You may have to adopt any of the following policies depending upon your objective:

**1. “Return on Investment” pricing:** The price is fixed after taking into consideration the financial aspect. "How much you have spent and how much you want to obtain" is the key factor in deciding the price. This has relation with the sales forecast too.

**2. “Penetrating the Market with a Low Price”:** You select the lowest yet profitable price per unit so that you can sell a maximum number of units. Once your product is in demand or is accepted in the market, you can increase the price of your product.

**3. “Introducing a Product at a Premium” price policy:** When a product is innovative, and when there is no competition, this policy can be applied. You can make an optimum profit. When you face competition later, you can lower the price. For example, one special formula hair shampoo entered the market with this policy.

**4. “Ethical” pricing:** Price is fixed, keeping the welfare of the society in mind. For many life-saving drugs, this particular policy is used. The product is sold at the lowest possible price with a very reasonable margin or no profit. Profit may be earned from other products.

**5. “Full line” pricing:** If you are selling jams, you may be offering various flavours like orange, pineapple, mango, etc. You may earn more profit in one flavour and less on the other. But, you cannot sell only the one that gives you maximum profit, or else a customer may switch over to another brand since he would be able to exercise an option for other flavours.

**6. “Pricing on the Basis of Competition”:** In this case, you follow the leader for fixing the price. "Rasna" is the leader in the area of synthetic sherbets. Pricing of a similar product will have to be decided based on the price of "Rasna."

In India, a uniform price policy has now been accepted by well-known companies in order to avoid unethical competition. One watch company offers watches at the same price throughout the country by adjusting their margin. It has become mandatory for the price to be printed on the product to apprise the customers of the price and prevent middlemen or shopkeepers from charging exorbitantly.



However, in the following four situations, pricing will pose a problem:

1. When you are setting a price for the first time.
2. When price change is required due to certain circumstances.
3. When a competitor changes the price and you are affected by it.
4. When one product has an impact on your other Products, i.e., when you introduce a new range of shoes, you may have to reduce the price of the earlier range of shoes because the earlier range of shoes may take away a chunk of the market meant for the new range of shoes.

Before you fix the price of your product, ask yourself whether you would buy that product at the price you have decided upon if you were a customer.

You must also ascertain:

- the retail prices of competing brands
- the commission offered to traders/distributors/stockists by competitors
- the ex-factory price (including taxes) of the competing brands
- the pricing strategy you want to adopt
- the special features of your product that would not hinder the customers from buying your products if you are charging a far higher price than that of your competitor.

Determination of Price is the critical element of managing startups. Start-up managers are likely to make business decisions based on their previous experience, knowledge, and judgment. As all the business operations in the market are determined through price, hence it is essential to understand the importance of pricing. It discusses the basis of pricing decisions by analyzing the current market needs.

Demand and Supply are two key factors of pricing decisions that determine the equilibrium condition of a firm. The basis for firm equilibrium differs under a different market structures such as perfect competition, monopoly, monopolistic competition, and oligopoly. Hence, the Time component has a great significance in pricing decisions along with two other key elements.

## **1.2 Market Structure**

A market is where buyer and seller trade goods and services in exchange for monetary value. However, the market structure explains the key features inherent in the market. It essentially discusses the number of firms in the market that deals with similar goods and services. Market structure influences the behavior of firms to a great extent. Moreover, it affects the supply of different commodities in the market.

During the high competition, lead companies used to dominate the market, creating a hurdle for the new entrant to the market. Similarly, a monopoly market creates barriers to new entrants, while a perfectly competitive market does not create any barriers to





market entry. Hence firms are more operative in a competitive environment than in a monopoly.

### **Perfect Competition**

A perfectly competitive market is a place where the competition inside the market is at a greater level. In such a situation, buyers and sellers are so abundant and well-educated that the concept of monopoly will not exist. In the perfect competitive market, the price of a particular commodity is beyond the control of individual buyers and sellers.

There exist many firms that focus on a similar product under perfect competition. Additionally, not a single firm has the ability to influence the price of the product, and hence price elasticity of demand for a single firm will be infinite. The following key characteristics of perfect competition are presented below.

1. More number of buyers and sellers.
2. Similar product produced by a firm.
3. No barrier to entry and exit of the firm.
4. No advertisement cost.
5. Consumer has clear knowledge and understanding of the market and its situation
6. No hidden cost.
7. Zero government intervention.
8. Firm earns only normal profit instead of supernormal profit.
9. Each firm is a price taker

## **1.3 Pricing Decisions**

### **Determinants of Price under Perfect Competition**

Market price of a particular product is the equilibrium price between demand and supply of that product in a market period. The market period is defined as a period in which an extreme amount can be supplied to the market based on the existing stock. It is basically a short period; hence more cannot be produced within this short duration to satisfy the increased demand. During this period, firms can sell those products which have already been stored after production. This period varies based on the nature of the product may be an hour, a day, a few days, or even a few weeks.



## **Monopolistic Competition**

Monopolistic competition is a type of market structure in which a large number of independent firms are responsible for supplying slightly differentiated products in view of buyers of the market. Moreover, the products of different firms are of similar kind but not perfect substitutes as the buyers do not consider them identical. This kind of situation generally arises when the same product or commodity is traded under different brand names, where each brand is different from the others.

For example – Pears, Lux, Liril, Dove, etc.

In the above example, each firm/ company product is the sole manufacturer of a particular brand or “product”. It is known as a monopolistic market as far as the particular brand is concerned. Since different brands of similar products are used as close substitutes, a large number of “monopoly” producers of these brands are engaged in a competitive market. A similar kind of market structure, where there is a competitive market among a large number of “monopolists” is called monopolistic competition. In addition to product discrepancy, the other three basic characteristics of monopolistic competition are:

1. Large number of independent firms.
2. Produces differentiated products.
3. Make normal profits in the long run but could make supernormal profits in the short term
4. Firms have price inelastic demand; they are price makers because the good is highly differentiated
5. The relative market shares of all sellers are insignificant and more or less equal. That is, seller-concentration in the market is almost non-existent.
6. No legal or economic barrier for entry or exit.
7. Product differentiation is the only characteristic that distinguishes monopolistic competition from perfect competition.

## **Monopoly**

Monopoly is a type of firm where there is no close substitute for the product, where the manufacturer and seller are a single entity. According to this definition, there must be a single manufacturer or single seller of a product. If many manufacturers are producing a product, then the market will be considered either perfect competition or monopolistic competition, depending upon the type of product that is homogeneous or differentiated.



Similarly, if there are few producers existing in the market, it is known as an oligopoly. The second key condition for monopoly is there should not have any close substitutes for the product. From the above, it follows that for the monopoly market structure, following key things are essential –

1. One and only one firm produces and sells a particular commodity or a service.
2. There are no rivals or direct competitors of the firm.
3. No other seller can enter the market for whatever reasons, legal, technical, or economic.
4. Monopolist is a price maker. He tries to take the best of whatever demand and cost conditions exist without the fear of new firms entering to compete away his profits.

### **Oligopoly**

The oligopolistic market consists of a small number of interdependence firms, yet rivalry among them is intense. These rivalries are different based on the diverse behavior of competitors. Hence, there are different models of oligopolistic behavior; each based on different reaction patterns of rivals.

Besides, Oligopoly is a state of affairs in the market in which only a few firms are competing in the market for a specific commodity. The unique feature of oligopoly market is that neither the theory of monopolistic competition nor the theory of monopoly can explain the behavior of an oligopolistic firm.

Further, the key characteristics of Oligopoly are briefly explained below –

1. The number of competing firms is small.
2. Each firm has a significant contribution to the total supply.
3. The effect of a change in one firm's price or output upon its rival firms' sales is noticeable and not insignificant.
4. When any firm takes action, its rivals will, in all probability, react to it.
5. The behavior of oligopolistic firms is interdependent and not independent or atomistic, as is the case under perfect or monopolistic competition.
6. The new entry into the market is difficult. It is neither free nor barred.

For Example – Aircraft manufacturing, in some countries: wireless communication, media, and banking.



## SAQ 1.1

1) List the factors affecting Price.

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2) What is the cost incurred for a cup of tea in your house?  
(How would you consider labour charges)

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3) If you are using a vehicle for going to work, what is the travelling cost per kilometer?  
What factors must you consider for calculating this cost?

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4) What is ethical Pricing?

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# UNIT

## 9

### Contents

#### Chapter II

1. Product Types
2. Life Cycle of a Product
3. Developing a New Design

#### **The aim of this chapter is to:**

- help you decide about your product.

#### **Objectives:**

On completion of this chapter, you will be able to :

- decide about your product
- understand about the life cycle of a product
- learn about product design.



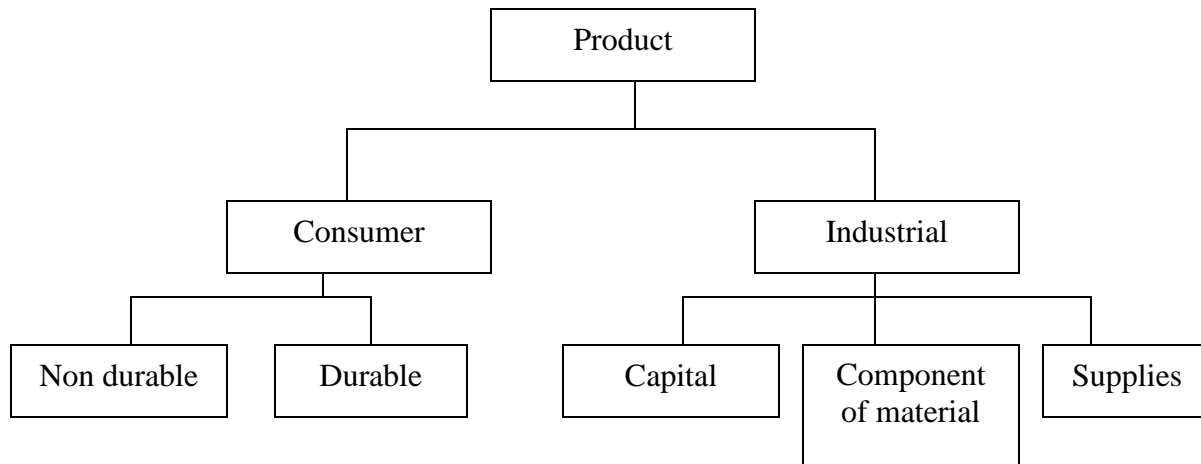
We have previously discussed market surveys and market feasibility. Once you start manufacturing our product, the process of marketing it begins. In order to do it successfully, you have to learn to manage the 4 Ps, viz., Product, Price, Place, and Promotion. In this chapter, we will be discussing product and price.

Once you have decided about the product you will manufacture, you have to make several decisions related to the product.

Let us take the example of procurement of raw materials for the product. You must have a continuous supply of raw materials to manufacture the product. So, you have to make decisions regarding the sources of procurement, the quality of material to be bought in a single batch (order), the price at which it is to be bought, and the mode of payment (cash or credit). If the procurement of raw materials turns out to be costly, then the end product cost would also go up. Many small-scale entrepreneurs face this problem. They can only buy the raw material in a small quantity, and so they have to pay a higher price than those who buy it in bulk especially large industries and multinationals.

## 2.1 Product Type

You have to decide on the category of your product in order to adopt a suitable marketing policy.



### Consumer Products

#### Non-durable

1. A large number of customers.
2. Repeat purchase is frequent.
3. People may buy on an impulse.
4. Unit price is relatively smaller.
5. After-sales service may not be required.
6. Advertisement and promotion aimed at a large target group.
7. Sales force may not be very experienced and trained.



## **Durable**

1. Fairly large number of customers.
2. Repeat purchase is negligible.
3. People may buy based on opinions and study.
4. Unit price is relatively higher.
5. After sales service plays an important role.
6. Advertisement and promotion aimed at defined target group.

Detailed product knowledge is essential for salespeople.

## **Industrial Products**

1. Limited number of customers.
2. Repeat buying depends on the product.
3. Product is purchased after a thorough study of the advantages etc.
4. Price depends upon the type of product.
5. Consistence, quality, and after sales service is essential.
6. Personal contacts and trade magazine advertisements are used for promotion.
7. Product knowledge is a must, and sometimes a salesperson has to work as a guide.  
In the case of technical products, the sales force must possess adequate technical knowledge. You also need different strategies for different marketing types of products. You need to offer variety as far as consumer products are concerned viz., in presentation, flavour, taste (if it is a food item), colour and packing size. Industrial products are mostly homogeneous. You may not have any variety for some industrial products like caustic soda which is used in the soap industry. Sometimes, an industrial product could be custom-made, like special machinery for a particular industry, e.g., a rig tower for O.N.G.C.

In the case of industrial products, you have to take proper care that pricing, quality, and services are maintained, e.g., if the screws manufactured are not in accordance with the specified dimensions, the user would face problems and would never repeat the purchase from you. When industrial products are bought in bulk, even a mere 1% price difference can create problems in the sale of your product, provided all other factors remain in the sale. Industrial buying is based on specific needs, while consumer buying is based mostly on impulse.

## **Capital**

1. Large or medium-scale industry and manufacturing business requires capital items
2. Capital items are very necessary for the functioning of the business and incur huge cost.
3. It has residual value for the company
4. High capital of the company resembles higher revenue.



5. For example, a company's capital involves installing buildings, warehouses, factories, and similarly heavy equipment like a truck or crane that facilitates the production process.

### **Component of Materials**

1. Industrial products components include farm products and natural products.
2. Firm products are produced in ample amount which is perishable in nature.
3. Firm products can be recycled easily hence require rarely marketing.
4. Natural products cannot be recycled or reproduced and found in bulk
5. In natural products high government intervention is there.

### **Supplies**

1. Generally short term in nature
2. Required for day to day operations of the business
3. In addition, business services in terms firm advisory and maintenance from the third party are also considered as industry product of current age.

### **Intermediate Product**

A product that is produced for the synthesis of finished goods is known as an intermediate product. This product is also called intermediate, producer, or semi-finished product. These products are not finished but can be used in the further production process to produce the end product. It can be distinguished into the synthetic intermediate, intermediate compound, or intermediate product based on the nature of starting raw materials and the finished product. In the production process, there may be many different intermediates from the starting of the production to the end finished product. For example, in many chemicals industry, the goods produced are primarily to be used as intermediates in the further production process.

Further, in some instances, it is seen that an intermediate good may become part of a finished product during the production process. Cambridge Dictionary has the following definition of the term:

“Products that are made during a manufacturing process but that are also used in the production of other products. Wood, steel, and sugar are all examples of intermediate products.”

### **Consumer product vs. intermediate product**

The product purchased for own or personal consumption is known as a consumer good. These products are end products or finished products that the consumer can use for self-benefits. When an individual purchases a consumer goods, he neither uses them to make





something else nor sells them. On the contrary, Intermediate goods have not finished their production when somebody or a company buys them.

For example, a product is said to be either an intermediate or consumer good, that depends on who buys it. If an individual buys salt and takes it home for consumption in the household, it is a consumer good. But if a baker buys the same salt to add to their products, it is an intermediate product. It is not the end of the journey for the salt. After adding salt to the bread, the baker then sells that bread.

### **Capital goods vs. intermediate goods**

Although in business, people feel intermediate and capital goods are similar in the production process. However, the two terms are different based on the situation. Typically, a capital good does not alter during the production process. For example, a tea machine is a capital good. It helps in the production of tea for the customer. However, the machine remains intact during the production of tea. Also, the tea machine is not an ingredient in tea. Milk and sugar, on the other hand, are ingredients of tea. They are consumed in the production process. Therefore, we refer to them as intermediate goods.

### **Intermediate goods and GDP**

The Gross domestic product (GDP) is a standard measure of production that equals all the goods and services that a country or region produces during a certain period. While calculating the country's GDP, financial analysts or economists generally exclude the cost of intermediate goods. If the cost of intermediate goods includes in a country's GDP, it would be double the current figure. Hence in GDP calculation economist should count the final product only once. For example, a baker buys salt, adds it to bread, and subsequently sells the bread. In GDP calculation, this situation is considered when the baker sells the bread, not with the value of the salt. Similarly, GDP should not include when the baker buys the salt.

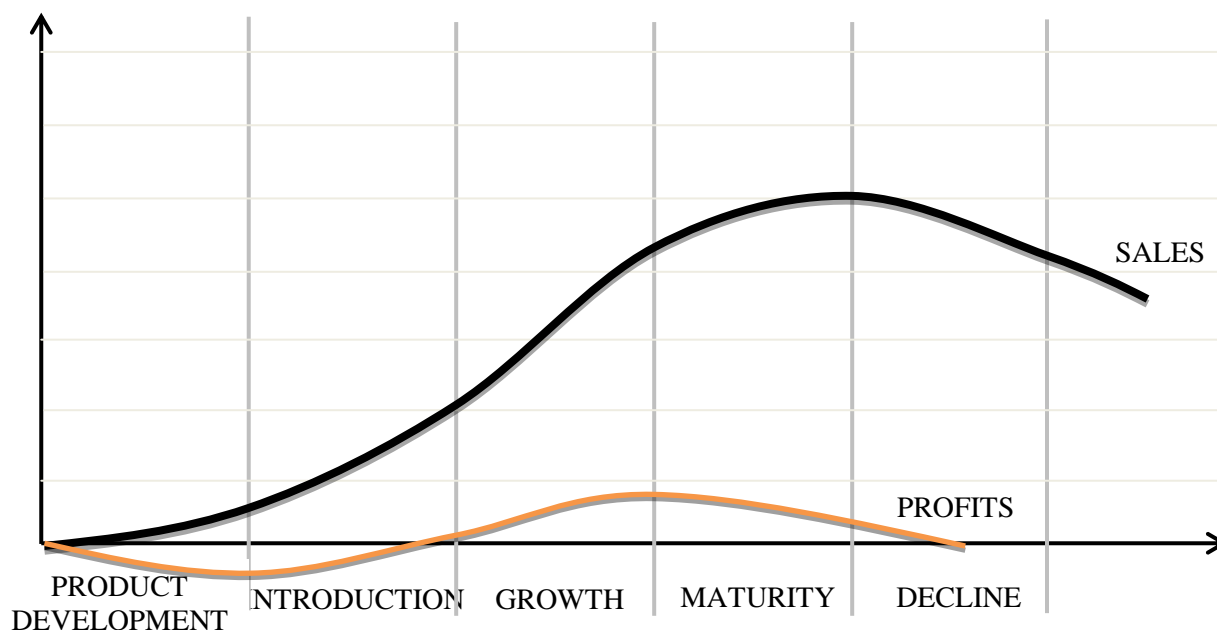
## **2.2 Life Cycle of a Product**

Every product has a limited life cycle. In the initial stage, it might be a slow moving product in the market. Once people learn about its benefits, the product begins to move fast. The demand at this stage could be at its peak. If the product is easy to imitate, new competitors enter the market, and the product begins to lose the lion's share it may have held in the market. Some products also pass through a stage of obsolescence, e.g., the mechanical watches of yesteryears are obsolete because of the introduction of quartz and digital smart watches. As mentioned earlier, to select the right product in the market, you have to consider technological changes very seriously. Many a time, when the product is a fast-moving one in the marketplace, the manufacturer tends to think that he will continue to enjoy the success forever. This ought to be construed as short-sighted vision or a case of overconfidence. Plastic buckets have taken the place of galvanized buckets similarly, researchers are trying to overcome plastic through other materials like bamboo materials. iPod, smart mobiles have taken the place of tape recorders, record - players.

Pen drives and other storage devices have taken over video CDs and tapes. So you must endeavor to know the life cycle of the product. Today, if someone wants to start a new venture in manufacturing mechanical calculators, he may not find any buyers because many advanced calculators are already available in the market.

Each and every product, when launched in the market, must undergo a series of phases during its lifetime. These phases include introduction, growth, maturity, and lastly, the decline phase. These phases are altogether chronologically referred to as the product life cycle (PLC).

The PLC structure of any goods or services is closely associated with the market environment dynamics, which, in turn, impacts the product mix and strategies for marketing. The four phases of PLC are explained below. A pictorial presentation is presented below.



### **Product Development**

Product development phase is the preliminary stage after which product life cycle phase initiates. The key focus during this phase is to make in-depth analysis of market and competitor. The success and failure of any product depends on this phase hence it is known as back bone for product life cycle. This phase highlights the potential growth of the product and examines the business model for validation of the product development. After this step it initiates the introduction phase of the product life cycle.

### **Introduction Stage**

Introduction is the first stage of the product life cycle, where the company tries to create awareness of the product in the market. Additionally, it creates a suitable market for the product promotion and launches the product into the market. As it is the beginning of any



product life cycle, hence the size of the market is small; generate fewer sales but potential for growth will be very high. On the other hand, the additional cost involved like research and development, consumer testing, and initial marketing will be very high, especially if it is a competitive market.

For the introduction of the product to the consumers business can follow two different strategies such as penetration or skimming strategy. In skimming strategy, prices of the product usually set very high initially further it lowered over time. This strategy best if there are fewer competitors in the market for the product. It incurs high profits but having a great deal of risk. If customer doesn't wish to pay high prices of the product, the company may lose its sales.

Similarly, in penetration strategy prices of the product are set very low initially but gradually it increases with the demand. This strategy is best if many competitors are present in the market those have control over majority of the market. Profits are not a concern under this strategy. The most important thing is to get your product known and worry about making money at a later time.

### **Growth Stage**

The growth stage of any product life cycle makes the product grow through increasing in sales and profits. During this stage a company used to spent more money on advertising and sales promotion. This advertisement involves encouraging the target audience and existing customer about the benefits of product. The medium of advertisement differs based on nature of the product, industry and desired budget. Through this phase, company can gain benefits through the economies of scale of the production process; similarly, the profit margins, as well as the overall amount of profit, will increase. In this stage company build brand preference and increase market share.

A company can make use of recent trend of advertising like social media advertising mediums such as Facebook, Twitter, and YouTube. Similarly, other digital media channels may be useful including online blogs and online newspapers to promote the product. Some traditional advertising options are also available for promotion of the product such as TV, radio, commercials, magazine and newspaper ads. The digital advertising options are more cost effective, cheaper and it has potential to get more customer reach compared to the other traditional options. The advertisement through customer word-of-mouth is one of the cheapest and fast spreading advertising option that create awareness of the product by gaining trust of the consumer.

Advertisement is the key strategy for this stage through which sales of the product can be increased. After the prolonged period of this increasing sale at one point stabilization of the sales will be attained where no further increase in sale will be noticed. Once the product reaches to this point you will reach the Maturity stage of the product.



## **Maturity Stage**

In Product Life Cycle most important phase is the third stage i.e. the maturity stage. Once the product completes the two preliminary stages, i.e. Introduction and Growth stages then it is likely to enter into the Maturity stage. During this stage, the market share of the product is already established and the company aims to maintain the same position in the market for the long term. This is probably the most challenging time because at one point the sale is going to stabilize. The utmost care need to be undertake as during this stage a company sales grow at very fast.

The key way to overcome from this stage is advance and modifying the products based on the competitors and the current market need. If the sales figure of the product start showing stabilizes, then the company should look into the product modification or new product development. Additionally, the company should analyze the product and sales performance, to be able to incorporate new features into it and make the company ready for the competitive market. If the product fails to continue in this stage then the product most likely to reach the decline stage.

## **Decline Stage**

The stage at which sales of the product will be in decreasing trend and it begins to fall is known as decline stage. This shrinkage in demand is exhibited due to various factors such as saturated market or changing consumer need. In order to overcome such situation, the manufacturers need to either reduce the cost or customize the product based on current market demand or better quit from the market to avoid loss. Generally in both the maturity and decline stage the firm would revive the product development cycle, to endure the realization of the product. Few firms choose to take away the product completely from the market mix due to the downturn.

### **2.3 How to delay product obsolescence**

A successful marketer will try to keep his product in the market as long as possible so that he can maximise his profit and delay the product from reaching the saturation point. The following steps must be taken for this:

1. Getting new customers: Try to introduce new market segments for marketing your product, e.g., chocolate companies try to sell chocolates to both young and old.
2. Encouraging frequent use of the product: A toothpaste company may recommend brushing of teeth twice daily rather than once. A certain TV company is promoting its 14" TV as a "personal TV" in addition to the existing one.
3. Finding innovative usage for an existing product: Advertisements of Fevicol reveals use of the Fevicol for different purposes and the company has added on to its market. A certain white cement company has recommended the use of white cement as final plaster for the exterior of a house in order to save money on cement base colour which is applied on a green cement plaster. This also helped to promote usage of white cement.



It is equally important that you take the various steps in time or else technological changes could hinder sale of your product. A market leader of a certain product may not remain a market leader if he does not take steps to maintain his No. 1 position. Lambretta, a scooter manufactured with Italian technology was very popular in India but these scooters have been replaced by scooters with Japanese technology. Liquid shoe polish is now usurping the market share of traditional shoe polish.

## 2.4 Developing a New Product

1. You must try to find out what people need and design a product to satisfy that need.
2. Think of the pros and cons of the particular product.
3. Think of reasons why the customers would resist this product. Then decide what you ought to do and how to solve the problem.
4. Think of ways to improve that product. You can have a brainstorming (gather varied ideas and discuss them with your friends and acquaintances) session for the purpose.
5. Ensure that your product is the latest as far as technology is concerned.
6. Plan an economical production system.
7. Plan its packing, brand name, price, and other related matters.
8. Give a serious thought to who your competitors could be and how you would handle them.

Effectively plan your marketing system. For introducing your product in the market, you should know about its type

### Brand Name

Your company's or product's brand name plays a pivotal role. Once people accept your brand name, you have less problems of competition. If a customer asks for a toilet soap, the shopkeeper can give him any soap and generally gives one from which he gets maximum profit. But, when a buyer asks for "Dove", the shopkeeper has to give him "Dove" and not any other soap of his own choice. Here are a few tips about selecting a brand name which must be:

1. easy to recall (e.g. SONY, TOYOTA, KODAK, MARUTI)
2. easy to pronounce (e.g. NIKE, UBER, GODADDY, FACEBOOK, LUX)
3. if possible, related with the product (e.g. Fanta name came from word Fantasies, Nike the word came from ancient Greek meaning goddess of victory that appeals to athletes, Lux means brightness and Lifebouy means safety - device).

So, you should aim at making your brand name popular. For expensive and bulky industrial products, a brand name may not be as important as it is for a consumer product but even then it definitely has some impact.



A satisfied customer will always recommend other prospective buyers a brand name rather than the product. e.g. "Buy Sony LED TV. don't buy any other". "Buy `DOVE", "Buy FEVICOL", "Maggi is good", "Apple laptop is the best", etc.

## SAQ 2.1

1. What are the important features of your product?

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2. What improvements can be made in your product?

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3. Explain the intermediate good and its importance?

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4. Take an example of any start-up discuss its product life cycle ?

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# UNIT

## 9

### Contents

#### Chapter III

1. Channels of Distribution
2. Expenditure for Establishing a Distribution System

#### The aim of this chapter is to:

- introduce you to physical distribution of your product and management of physical distribution.

#### Objectives:

On completing this chapter you will be able to understand what is meant by:

- distribution channels and methods
- physical distribution of a product
- cost of distribution.

In this chapter we shall discuss about the place or physical distribution.



While distributing a product so that it can reach the maximum number of potential buyers, you have to consider three major aspects:

1. Channels of Distribution (e.g. Agents, wholesalers or retailers)
2. Factors influencing the distribution channel selected
3. Cost of physical distribution.

### 3.1 Channels of Distribution

In marketing, distribution channel indicate the available direction or paths through which a company function the goods and services flow, that is flow of the materials from producers to retailer, and from retailer to consumers. Hence the distribution channel is defined as the set of interdependent marketing agents dealing with trading activities that is flow of goods or services from one agent to another, from the producer to the retailer and from the retailer to the ultimate consumer.

The prime of object of every production firm is to identify the consumer who will consume the product. Without the consumer demand a firm will not sustain in long run. Further, how to transport the product till the consumer is another key element for the firm. Hence, the movement of goods and services from the manufacturer to the final consumer is a key function of the business. The producer is having obligation to make the goods and services available to the consumer at right time, at right place, at right price, and of right quantity. The process of channelizing the goods and services available from the manufacturer to the ultimate consumer is known as distribution channel.

Basically firm keeps number of alternative channels in their mind so that they can assess based on the requirements of the firm and product. The length of these channels varies on number of middlemen involved in the complete process. Some instances the length of channel is short as from the producers the product or service flow directly to the customers. Whereas in other channels there could be so many mediums or intermediaries hence in that case distribution channel are long one. Therefore distribution channel is short in case of direct transaction from the manufacturer to the consumer, or it may include several intermediaries in between along with the complete process of distribution. These intermediaries as follows –

1. Wholesalers
2. Distributors
3. Agents and
4. Retailers





The following are the few examples of channels of distribution -

- a) Manufacturer and Consumer: Vacuum cleaner is sold directly to customer. Tailor made big machine is sold to a customer.
- b) Manufacturer - Retailer - Consumer: e.g. Selling washing machines or Television
- c) Manufacturer - Wholesaler - Retailer - Consumer: e.g. Soaps, toothpaste's are sold through this channel.
- d) Manufacturer - Agent (Sole Distributor), Wholesaler - Retailer - Consumer: Many food products, cloth, etc. are sold through such a channel.

Even though prices may be a little steep in case of some products due to the fact that these pass through several channels of distribution, yet it is impossible to sell without any channel in such a large, densely populated country like India.

The main function of wholesalers is to provide goods to retailers whatever be their line of work. Either retailers come to them to buy the goods or they go to the retailers to sell their goods. Sometimes a wholesaler is also called "a stockist". The sole distributor has a monopoly over the product. The franchisee however is given a manufacturing and marketing licence from the original manufacturer, e.g. Coca-cola or Pepsi in India market.

There may be different kinds of retail outlets like general stores, specialty stores department stores or supermarket. Mail order for retailing is also becoming very popular. The Reader's Digest Books are sold by mail order. Vending machines have very limited usage in India, though Coke, Pepsi, etc. are sold in some cities through vending machines (you insert a coin, press the button and you get the product).

For selecting the right channel you should consider the following:

1. The kind of market coverage that is needed. (e.g. for soaps you require a wide network while for expensive shoes you need a limited network.)
2. The kind of control you desire, shorter the chain, better would be the control.
3. Economical distribution systems with the maximum market reach.
4. Types of product: For low priced, common consumer products like soaps, washing powders, etc. the distribution channels are many. But for bulky products, technical products or perishable products like fruit etc. the chain is fairly short. When the product begins to be well accepted in the market, the chain grows longer. When the product is new or has not established itself in the market stockiest and retailers are not too keen to stock it. Therefore, a manufacturer may have to have no option but to utilise a short chain. In such a case consumers using



various strategies are to be deployed to make the product popular and acceptable to the customers. This would lead to retailers stocking the product.

Retailers often play a great role in making your product popular. Therefore, you should always try to win their confidence. Continual exposure through a number of retail outlets is essential for all consumer products. But for durables only limited outlet are required. For high priced monopoly products, you may be able to utilise the shortest chain.

### **3.2 Expenditure Incurred for Establishing a Distribution System**

As far as the expenditure for establishing a distribution system is concerned you have to consider the following aspects:

- (i) Trade discount
- (ii) Packing costs
- (iii) Inventory costs (interest counted on goods lying in warehouse)
- (iv) Warehousing costs
- (v) Transportation costs
- (vi) Insurance costs
- (vii) Cost of finance (The interest on funds used for the above expenses)

If the distribution system covers the entire market and is economical, you should not have any problem in reaching out to the end user of your product.

#### **SAQ 3.1**

1. What are the intermediaries of distribution channel?

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2. Define channel of distribution of any electronic goods?

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3. Do service industry having distribution channel? Explain with example

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4. What are the costs involved in establishing the distribution system?

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# UNIT

## 9

### Contents

#### Chapter IV

1. Promotion
2. Advertising

#### **The aim of this chapter is to:**

- make you learn to promote and create demand for your product

#### **Objectives:**

On completion of this chapter, you will be able to:

- promote your product
- ensure demand for your product
- advertise and publicise your product



## 4.1 Promotion

Those days when India was in the production age, have already gone. Products then were limited and demand therefore was naturally more than the supply (there being limited competition). So there was no requirement for promotional efforts in order to sell a product. People had to wait for a scooter for years, or they had to pay a higher price. It was the sellers' market then. This is no longer holds true for most of the products. It is buyers' market now. Public relations, image building, advertising and promotion have become a necessity.

Awareness of your product must be created in the customers through right communication. For an entrepreneur with limited funds, it is difficult to take recourse to expensive communication medium like TV or national coverage in any newspaper ads. But without this, it is also difficult to sell a product. Therefore you must strive to develop an economical yet effective communication system.

There are different ways of communication such as advertising, publicity, personal selling and other sales promotion methods.

## 4.2 Advertising

For optimum results, you should keep the following aspects in mind:

- (1) Selection of media (Newspaper - Radio - TV – Social Media – Digital Media, etc.)
- (2) Frequency of advertisements
- (3) Budget for advertisements
- (4) Copy for your advertisements depending on the medium used
- (5) The target group
- (6) Competitor's advertisements
- (7) Time span of a particular advertisement.

While dealing with press advertisements, you should take care that the Copy' is able to highlight the USP or unique selling proposition of your product. An advertisement has three major elements:

- (1) A strong headline to attract potential buyers.
- (2) An attractive visualization of the product or its usage.
- (3) An effective message to create the desire for purchase in a person.

If you advertise only occasionally, you would not get the desired results. You have to remind the customers about your product over and over again. When they read an advertisement, often the product gets registered in their mind and they are tempted to buy it. Many processed food products have achieved success because of effective advertisements. But, you have to take care about every word in your advertisement. One wrong word can result in not being able to access the desired market share of your



product e.g. if you want to market flavoured milk and use the words 'new flavours of milk for children' in your advertisement, the market will be limited to children only. When you advertise a product in the magazines, you should be aware about the reader group. It would be inappropriate to advertise about office equipment in film magazines. You cannot advertise for cigars in a childrens' magazine. You should also be careful not to hurt the feelings and sentiments of any particular group of the society, or else you may get entangled into legal problems.

In the case of TV advertisement you should have an interesting and effective story line. In a very short span of time you have to create an impact for your product. Time selection for insertion of your advertisement is also very important. An advertisement in a popular TV serial would have more impact than an advertisement before a documentary.

Cable operators are also extending the facility for inserting advertisements for products in the particular area of the city or towns they are operating. You should monitor that your advertisement is not lost among many other such advertisements.

### **4.3 Mediums of Advertising**

#### **1. Advertising on Radio**

You have to decide about the target group you want to reach out to. Products related to women, if advertised in the morning transmission may not have the impact you desire because most women are busy with house work in the mornings.

To put it briefly, you must deliberate on the pros and cons of the medium you have chosen to advertise your product and then plan accordingly. An advertisement may induce a customer to buy the product once, but a repeat purchase would depend on the quality of the product.

You must have noticed advertisements with copy like "New Formula, Improved Formula, Special Formula" etc. This is primarily to woo the lost customers back. Some of them may try the product again and like it.

When you advertise, no matter what medium you choose, the message that you create must ensure product recall. If there is no brand recall, the market reach is bound to diminish. You must also keep in mind that you should control your advertisement budget. If it goes beyond your control, the cost of your product is bound to go up and you may face problems trying to make a profit.

#### **2. Advertising on Social Media**

The introduction of digitalization, internet and social media has altered the concept of advertisement based on consumer demand. This advertising offers tremendous uplift to the business with better brand awareness and increased sales at lesser cost. In addition it can create better customer reach to the targeted audience at lesser time. Looking into the



current demand there have been introducing different other marketing such as Search Engine Optimization (SEO), Pay Per Click (PPC), Content Marketing, Email Marketing, E-Commerce, Mobile marketing and many others. However, it has significant challenges in terms of negative electronic word-of-mouth as well as intrusive and irritating online brand presence.

### **3. Promotion**

Product promotion is also very important in order to sell it. There are various methods for doing so. Your imagination can play a great role in promotion.

### **4. Display**

Retailers should be induced to display the product prominently by offering them special incentives. You must have seen `Nescafe' or `Nutramul' bottles creatively arranged in most of the stores in your town or city. Is it not eye catching?

### **5. Demonstration**

If you give live demonstration of a product, a customer gets to know it is quality and usage. e.g., demonstration of a particular brand of vacuum cleaner is given at the customer's home

### **6. Competition for end user**

Consumers can be tempted to participate in a slogan competition or a puzzle solving competition by offering fabulous prizes. This is another method of popularising a product.

### **7. Special gift scheme**

"Buy three packs and get one steel glass free", "Special discount", "Special gift on returning 10 wrappers of chocolates". These schemes tempt the customer to buy a product or even buy it in bulk. Apart from boosting sales, accumulated stocks can also be cleared through such schemes. You can even offer special schemes to motivate middleman or traders too so that they push the product in the market, e.g. "Ticket to Nepal on 1000 TVs sold during the year".

### **8. Publicity**

Publicity is a non-personal promotion of goods or services, its indirect advertising news about a product or service is `planted' in any communication medium, e.g. A special medicine has been developed to cure a certain disease. The publicity may be through Press, Radio, TV, Demonstration, Sponsorship Schemes, Educational activities like dental care information in schools by a toothpaste company, exhibitions, discussions,



information service or posters, and company literature. Today sports programmes are also sponsored on TV for publicity.

### SAQ 4.1

1. What is the difference between advertising and publicity ?

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2) What is meant by display ?

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3) What is the best medium for advertisement of your product ?

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4) Discuss the benefits and drawbacks of social media marketing?

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# UNIT

## 9

### Contents

#### Chapter V

1. Selling
2. How to Handle Competition
3. Objections and How to Handle Them
4. Closing a Sale
5. Dos and Donts of Selling

#### The aim of this chapter is to:

- introduce you to selling and art of selling

#### Objectives:

On completion of this chapter, you will be able to :

- art of selling
- dos and donts of selling
- how to handle objections
- how to close a sale



The rapid growth of e-commerce has altered the concept of physical selling into online selling. Present days consumers prefer online medium for any kind of goods starting from necessary goods to luxury items. The organizations like Flipkart, Amazon, etc started their e-commerce website to provide third party selling facilities to the consumer. This model becomes so popular in current market other organizations started selling food items as a third party supplier to the various restaurants for example swiggy and zomato etc. This e-commerce business also facilitates the pandemic outbreak like COVID 19.

Regarding physical sales, it is better to have one good salesman rather than a group of bad salesmen. Your salesman should possess adequate knowledge about your product and related products besides other aspects in connection with them. He should not hesitate to contact a prospect again and again till the prospect buys the products. He must also know the importance of after-sales service. He should regularly report to you so that you can have control over the selling activity. He must be loyal to your company and products. A good salesman never blames buyers for his own failure. He accepts his failure. Your salesman must take care of his health and be smartly groomed. Style, manners and communication skills are some of the important qualities that every salesman must possess. You may be a very good person, but if your salesman is not a balanced and controlled person, your company will have a bad image because he comes in direct contact with customers as your representative. You must be careful while selecting a salesman or a marketing man or a public relation officer for your organisation since he/she can make or destroy the image of your company.

## 5.1 Selling

A person who wants to make business should have basic understanding about selling function. It is a function of marketing where seller takes a major role in understanding the customer needs to influence specific purchase decision through planned or personalized communication. Additionally, it adds utility to the product simultaneously helps customers in determining their need that in turn create more future business opportunities. Direct selling is both an art and a science. If you have a smart, result oriented salesman, you are going to win the competition. Direct selling can be done in three forms:

1. Your salesman can contact the direct users.
2. He can contact the influence.
3. He can contact the distributors and retailers.

**The Influencer:** A doctor may not buy your product but he can certainly recommend your product to his patients. The salesman educates the doctor about the product, who in turn prescribes the product to his patients if he is satisfied with the product. In the same way a teacher may be contacted to refer books to his students.

**The Middleman:** A salesman has to convince a middleman to maintain enough stock. He also has to keep cordial relations with the middleman. When your product is in short



supply, the salesman who doesn't keep good relations, gets a big problem when the supply of that product is more.

**Direct Selling:** When the salesman contacts the end user, the user is generally interested in being able to obtain maximum satisfaction from the product, at the lowest price possible. The sales story should be customer oriented rather than product oriented. Many a time, a customer is not interested in what the product is but in what the product does or give to him.

## 5.2 E-Commerce

Electronic commerce (E-Commerce) is one of the recent trends of trading service that become popular due to wide use of internet. Further to make it more customers friendly many other technologies have introduced such as mobile commerce, Internet market, Facebook commerce, online transaction processing and many others. These technological advancement uses world wide web and other electronic intermediate as the base for these business life cycle.

Typically E-commerce businesses follow some of the following key concepts

- Website for E-shopping for the direct retail consumer.
- Providing third party assistance through online Business to Customer or Customer to Customer sales.
- Assisting online trading of Business to Business sales.
- Gathering customer demographics through social media and any other online media.
- Helping in new-product/ service development
- Marketing to the prospective customer through E-mail or chat.

## 5.3 Product Needs

- Comfort (e.g. Sofaset - Cotton clothes)
- Status (Car - A.C. - Membership in well-known club)
- Safety (Torch - Electric shock guard)
- Health (Every one wants to keep a healthy body. Vita Tabs- Health too fit.)
- Economy (Tube light - Refill pack)
- Desire (Toy for showing love to child)
- Cosmetics (To look beautiful)

A salesman should be able to judge or gauge the particular need of a customer and must stress on the benefits to be derived from the product. If a person buys an expensive product merely to gain status, it is futile telling him that the product is economical. It might hurt his ego and he may not buy it.



A salesman must understand the psychology of a customer and handle his objections without hurting his feelings.

Your salesman should be an effective conversationalist, active, co-operative and a good listener. He must know how to sell the product without allowing a customer to know that he is being sold a product. A customer should feel that he is buying a product on his own.

### **Sales Story:**

1. Plan your sales story
2. It should be flexible according to the requirement of the situation
3. Use right examples in sales story
4. Use right words
5. See that someone's feelings are not hurt
6. Take care of buying motives in a sales story
7. A sales story should be customer oriented
8. Make a story personalised understanding the need of a customer
9. Use C A S H E D Formula, try to sell benefit
10. Take care of voice and intonation

## **5.4 How to handle competition**

1. Take care of direct and indirect competition
2. Never speak ill of your competitor
3. Recognise the positive aspects of your competitors' products and counterbalance by providing the supremacy of your products
4. Emphasize on the most important and effective features of your product
5. Don't go on using competitor's brand name (it is illegal to do it in the first place).

## **Objections and How to Handle Them**

An objection is the real reason the prospect has not said "Yes" to one of the five buying decisions. The objection signifies interest because it is valid and true, it must be handled to the prospect's satisfaction before he will buy.

### **Excuse Versus Objections**

#### **What is an excuse?**

An excuse is an insincere resistance offered by a prospect; it is not the real obstacle to his buying. Sometimes it is an attempt to dismiss the salesman. Sometimes it is rationalizing his resistance to buy, as for example, when he hates



to admit that he usually buys a product of a lower price-line, or that he does not have the authority needed to buy, or that he has no money with him.

### **Immediate Handling**

1. **Direct Answer:** For some salesmen, for some prospects, for some objections direct answer is the proper method of handling.
2. **Indirect Answer:** This method of handling objections is probably the most widely recommended the most widely used, and the most effective. It is versatile, flexible and safe. The indirect answer for the salesman could be to agree with the objection with such remark as "That's true" or "Yes" and second is to follow up with "but" or "however" as a point of departure into a different area for consideration, an area that leads right back to the salesman's selling story

Some techniques for handling opposition:

- fail to hear
- compare products
- give a case history
- demonstrate or give a trial
- guarantee
- ask questions
- show what delay costs
- admit and counterbalance
- hear the prospect out
- admit ignorance

## **5.5 Closing a Sale**

What does it mean?

When a salesman closes a sale, he succeeds in his original undertaking. The buyer's agreement to purchase from the salesman is proof of the salesman's success. The number of profitable sales made and not the amount of duty and preparation, the number of calls made, hours worked, buyers seen and stories told, is the acid test of the salesman. Anyone can dispose of merchandise by cutting prices or giving concessions. Persons who close sales profitably are salesmen, those who do not are merely talkers.

How to close a sale:

- closing on a choice
- disposing of the single obstacle
- reviewing the five decisions (N-P-S-T-P)
- summarising the benefits
- using emotion
- showing fear e.g. this is the last piece



- the direct appeal
- the special concession

### **Dos**

- Do display a friendly manner at the close, even though there is disagreement. This helps to avoid arguments.
- Do be sure to have all materials and equipment that will be needed. Misplaced order blanks, obsolete price lists, and dry fountain pens can lose sales.
- Do realize that begging for a sale makes you and your offer look bad; it also disgusts the prospect.
- Do ask the prospect to "OK" or approve the order rather than sign it.
- Do make buying as easy and painless as possible.
- Do try for privacy at the close. Telephone calls and third parties distract.
- Do study each prospect like a bowler in cricket studies each batsman. Then bowl to his weakness.
- Do lead the prospect to think of himself as the owner of the product from the very beginning of the interview.
- Do put the order book and pen in sight at a convenient spot long before attempting a close.

### **Don'ts**

- Don't let the prospect know how much the sale would mean to you.
- Don't be apologetic, particularly while quoting the price.
- Don't make written or even oral promises unless authorized to do so.
- Don't make a ceremony out of closing lest the prospect gets scared off.
- Don't give the prospect an excuse or an opportunity to buck away from the purchase.
- Don't ever question the prospect's buying decision in such a way that he can answer with a "no", for that closes the door.
- Don't make it difficult for the prospect to complete his purchase quickly if he wants to do so.



- Don't let the prospect miss seeing that you expect him to buy.
- Don't make it easier for the prospect to refuse than to buy.

### SAQ 5.1

1. What is the difference between service selling and creative selling?


2. What are the qualities required in a salesman?


3) What factors should be considered in planning a sales story?








# UNIT

## 9

### Contents

#### Chapter VI

1. Practical Hints for better Business
2. Small Scale Business
3. Marketing for Small Business
4. Marketing Rural Products in Urban Areas
5. Effective Marketing Management

#### The aim of this chapter is to:

- make you aware of importance of location for setting up your business and strategies for marketing your product.

#### Objectives:

On completion of this chapter, you will be able to understand:

- the importance of location for setting a business
- how to market your product
- how to sell rural products in urban areas.



## 6.1 Practical Hints for Better Business

In this chapter we shall discuss some crucial aspects related to both urban and rural marketing. In India, the rural market is equally important as far as consumer products and economical durable products are concerned. Electrification of villages has also helped many products in the rural market. In the rural areas in India, money comes from three sources:

- (1) Farming and other village business activities.
- (2) Family members staying abroad.
- (3) Family members staying in city.

In a village today, TV, ceiling fan, tape recorder or refrigerator is a very common sight. And food items like biscuits, maggi noodles, bread, butter are also common. TV has brought city life and village life close. Many companies are concentrating on marketing in rural areas in earnest. You simply cannot ignore the rural market now.

Before you market your products in the rural areas, you must keep the following in mind:

1. Study the rural market well. Study its purchasing power and sources of purchasing power.
2. Study the location of that village. If it is nearer a city, you will find that it is considerably influenced by the urban way of life. It might almost be a suburb of the city.
3. Use the local language to penetrate the market. Advertisement in English may not be much use.
4. Identify the influential person in that area. Villagers almost always follow a leader. A "sarpanch", a "gram sevak", the principal of the local school or a doctor may have influence over the local people.
5. Take maximum advantage of the gram-mela (fair) and other social functions.
6. Brand loyalty, in some cases, is very strong among rural people. A particular brand of fertilizer sold in one area may not have a much market share in another area as the farmers of that area would be loyal to another brand.
7. It has also been observed that sometimes people from village areas may select economical substitutes with packing or brand name similar to some established brands; while people or rich village areas (e.g. Charotar area of Gujarat, certain parts of Kerala, Punjab, etc.) cater to popular and established brand names with higher prices.



8. While promoting your product in the rural areas, you may have to advertise your product through leaflets, wall paintings, hoardings and special promotional programmes like free film shows or plays while demonstrating your product.
9. A product in urban area may not have a status value while in a village the same product would be purchased for status value. e.g. Fan, Tape recorder, etc.
10. In case of consumer durables, mobile-van service may be very helpful to develop market in rural areas away from the city (e.g. diesel pumps, generator sets, machines and equipment related to farming).
11. Schemes which offer free gift along with the products have more impact in the rural areas than in the urban areas.
12. A middleman in a village, generally, has an influence over the market and therefore, you must strive to gain his acceptance of the product.

## **6.2 Small Scale Business**

We shall now discuss some of the important factors which a small businessman or an entrepreneur having a small scale business should keep in mind.

### **Location of your Business**

Location plays a great role in the development of your business. If your shop is easily accessible to the customers, you will definitely be able to achieve better market. Sometimes a shop in the corner of an alley may not have as much business as the shop on the main road unless the shop stocks some monopoly items.

#### **Select a profitable location:**

1. Customers must have an easy access to your place.
2. Proper parking facility should be available. In many cities shops lose their business due to inadequate parking facility.
3. Customers should feel comfortable in your place.
4. Adequate lighting and ventilation should be taken care of in the shop.
5. If your shop has a wide frontage, it can attract more customers. Since this creates an impression of a big shop.
6. Visualise the future position of your location. Think of what the situation of your location would be, say after 10 years.
7. Your neighbourhood sometimes has a great impact on your market. The image of your neighbourhood will be the image of your business.
8. Sometimes you may get more business if you are situated in the proximity of your competitors, because wholesale buying or bulk buying is done at the central market. e.g. hardware, building materials etc.



9. For certain products location in residential areas should be selected. e.g. dairy products, provisions, food products.
10. For certain businesses, you require related business firms nearby, e.g. a tailoring shop in a cloth market.

**Need for good human relations:** You might have observed in your town/city that even shops situated in the same area and selling the same line of products do not have the same flow of customers. Some shops may have more customers while the others may have far less. There may be several reasons for this but the main reason is cordial relationship and service. The owner, sitting in his own office, not keeping human touch with his customers, does not do good for his business. Poor salesmanship or poor public relations can harm your business despite all marketing efforts and effective advertisements. Many a times your salesman represents your organisation. He can either develop and promote relations or mar them. Very often customers are lost because of bad behaviour or improper communication of a salesman. A lost customer is not regained easily.

Therefore, it is essential that along with negotiation and sales skills, your salesman is also aware of the impact of establishing and maintaining basic relations.

In order to succeed in your business :

- Be in touch with customers directly or indirectly.
- Give a patient hearing to their problems and try to solve them.
- If you can help or assist your customers in any order, do so.
- If your salesman is at fault, do not try to protect him at the cost of a customer. Make him admit his mistake.
- Avoid arguments with your customers.
- Learn the art of communication and public speaking.
- Obtain feedback from your customers about your service and product. If you receive any negative feedback, find the cause and work upon it in order to improve it.
- If the feedback is positive, ensure that it is maintained so in future too. Do not ever be overconfident.
- Meeting your customer will help in improving your service as well as product.
- Remember that even if one unsatisfied customer tells ten other people about his grievances, it will have a negative impact on your image.

### **6.3 Marketing for Small Business**

If your business turnover is small, you cannot afford to use any media for advertisements as it is costly. Nor can you derive benefits from other expensive promotional programs. In this case, you may have to market your products yourself. A small scale businessman is often busy with his production and financial problems and he does not have time to concentrate on marketing. He depends on relationships in order to get business or occasionally contacts prospective customers or even hires untrained personnel for



marketing his product. In such circumstances, he cannot expand his business unless his is a monopoly item or, if he has very strong social contacts or, if he is an influential person.

It is very important for a small scale entrepreneur or a small business owner to concentrate equally on marketing as well as production and finance. But his limitation be shortage of time. Unfortunately, in India, a small scale entrepreneur has to spend more time on daily routine work and dealing with government agencies and so he has a very limited time to take care of marketing activities. Not only that, he does not bother to have a sales staff. Many small scale entrepreneurs appoint a 'handy-man' rather than a 'salesman'. This man contacts known customers, gives them the company's terms and collects orders, if any. If he does not receive an order, he asks the customer for another appointment. A salesman should create sales. e.g. A man has come to buy a shirt in one store, he gives his choice to the person attending him. That person shows him the shirt, tells the price and the customer buys it if his need is satisfied. This is servicing selling.

A creative salesman will show the customer other items also like socks, ties, etc. He will persuade the customer to buy the shirt and something extra. The customer agrees to buy. Here is extra selling because of the salesman's effort. This is creative selling.

Many small business owners fail to understand the importance of creative selling and hence their business is limited.

Let us now examine some economical methods of marketing for a mall-business-owner or a small scale entrepreneur.

1. Employ some good salesmen.
2. Use local media like the local cable network, leaflets, local newspapers, for advertisement.
3. Try to establish your market through word of mouth publicity. One satisfied customer will help to bring in other customers.
4. Identify person who can influence others in a given area and try to make them your customers. e.g. a well known lawyer, a doctor, a businessman or a well known industrialist for industrial products.
5. Be a member of the local social as well as trade organisations and get to be known in your community so that people may gain confidence in you and your business.
6. Take maximum advantage of local fairs, exhibitions and business functions.
7. If your product is durable or semi-durable, e.g., electric iron, food processor, etc. you can even opt for group selling e.g. members of co-operative may buy in bulk to distribute as a gift to their members.



8. You can work on a franchise basis for a known brand of product or take help of marketing organisations in selling goods under their brand name.
9. Door to door selling, giving demonstrations is comparatively economical.
10. You have to take care of distributors/stockiests/retailers. If they too can earn from your product they would be willing to sell it.
11. If it is a products for children like bubble gum, you can make it popular among children by giving them free samples. You can also distribute samples in schools.
12. For industrial products, personal contacts, demonstrations, samples and test - use can be useful.
13. For technical products, you have to establish and maintain contacts with advisers, consultants and technical staff. (e.g. computers, electronic equipment).

## **6.4 Marketing Products in Urban Areas**

Rural products can have two markets.

- (1) Rural Market
- (2) Urban Market

The rural product to be sold in urban areas has to be sold the urban way and not the rural way, otherwise it can fail in getting a market.

Following measures can help to market rural product in urban area.

1. Attractive packaging is required (for consumer items).
2. Better finishing is required (e.g. arts and crafts e.g. vase, statue etc.).
3. If possible, a brand name should be given (e.g. Lijjat Papad) - A Co-operative movement can be very helpful.
4. Products like toys should have anti-toxic colours, which do not run and rounded corners for safety.
5. Art and craft products like statues, frames, vases, etc. are priced differently by different producers or different middlemen. This confuses the customers and sometimes they give up the idea of buying.
6. For rural products, after sales service is mostly not made available. But for products like furniture, frames, aftersales service may be necessary.
7. Appropriate advertising should be done in urban areas for rural products (e.g. Handloom cloth has got market in city)
8. Exhibitions in urban area can help in obtaining very good market (e.g. furniture from UP villages sold in various cities.)
9. More selling centers should be developed in urban areas.



- Craftsmen operating in villages should be brought to the cities to rule then understand the requirement of the urban market and modify their other items in order to meet the requirements.

## 6.5 Effective Marketing Management

Effective management of marketing involves the following 6 Ms. i.e., Man, Money, Machine, Material, Market and Motion.

Man	You should have the right person for the right job. An introvert person may not prove to be effective in selling a product. You should also know how to delegate work and supervise it. Proper reporting system should be developed to keep you informed about the marketing activity.
Money	Money is the centre point of business. If one does not want to earn money, there is no need for marketing activities. You should be aware of where money comes from the where it goes and must control non-productive expenses.
Machine	To ensure quality product and in a viable quantity, suitable machinery has to be acquired and properly maintained thereafter. You must also be aware of obsolescence and make necessary technology changes when required.
Material	If raw material is of poor quality, the end product will be poor. If the raw material is costly, the end product will also be costly. A product may be good but if its packaging material is of inferior quality there may be a high percentage of rejection. If packaging materials is very costly your cost and price would go up, a competitor may have an advantage over you.
Market	You must identify your market segment and should try to match your product with the needs of your target audience.
Motion	You must be aware of the movement of your sales force and your products. You must know the movement of your advertising and promotion programmes.

To sum it, marketing is both challenging and an interesting activity. Anybody can produce a product but there is no guarantee that he can sell it, because buying depends on some other person. He has to accept the product. He should use it and be satisfied with it. If he rejects the product for any reason even the best production can turn out to be a failure.



# UNIT

## 9

### Contents

#### Chapter VII

1. What is Financial Management
2. What is Financial Planning
3. What is Financial Control
4. Financial Functions of a Manager
  - Manager and Routine
5. Job Demand of a Finance Manager
  - Raising of Funds
  - Allocation of Funds
  - Profit Planning

#### The aim of this chapter is to:

- introduce you to the term financial management
- show you the extent and the scope of financial management
- acquaint you with the dynamic role of a finance manager
- make you appreciate the job demands of a finance manager

#### Objectives:

On completion of this chapter, you will be able to:

- appreciate the need of a structural management of finance
- become aware of what may be the utility of a professional manager
- play an effective supervisory role of a finance manager in your own business





## **7.1 What is Financial Management?**

Financial management means planning and controlling of the financial resources of the business with an objective of maximising its wealth.

Financial Resources are of two kinds: Own Capital and Borrowed Capital

Own capital is the amount that you as an entrepreneur would invest in your business for buying machine, raw material, paying taxes and meeting administrative expenses. You should be able to invest as much money as would be required to meet all these costs of running your business. Therefore, you will also need to borrow money from outsiders. These outsiders may be banks, institutions or individuals who find it profitable for them to lend you money. These sources are called 'Borrowed Capital.'

In order to establish and run your business, therefore, you will need both kinds of capital. Usually, your own capital forms a smaller portion of the total investment required and borrowed capital, a larger portion.

## **7.2 What is Financial Planning?**

Financial planning means deciding on the question as to how much you will be in a position to invest an own capital and how much you will be in a position to borrow from outside source. Normally, you will play your cards in such a manner that you will invest as little as possible and burrow as much as you can of the total funds required. But the banks and institutions who lend you the money think otherwise. That means they will demand a greater investment from you as your capital as a motivation for them to lend to you. Financial planning will then be to stick a balance between the two extreme views, yours and your banker's.

The second aspect of financial planning is taking decision regarding the types of assets in which to invest the financial resources and the extent to which you will so invest in those assets. In other words, you may decide to spend a larger portion of available resources in plant & machinery than what the other entrepreneurs in the same business may be doing or you may invest less in these assets but would rather obtain some of the machinery on a lease basis. This and such other question will involve a good deal of careful allocation of available resources.

Resources are always scarce but wants are always unlimited. Financial planning means a wise employment of limited resources to meet unlimited demands.

## **7.3 What is Financial Control?**

The control activity comes after planning is done. Control involves any post investment follow up. This means that after you have acquired, say, plant and machinery at a cost according to plan, you will also constantly keep looking at the extent of use which that



machine is being put to. You will do so because your objective would be to extract as much benefit out of the investment made in any asset, as possible.

As the business keeps running, you will be constantly investing resources in purchasing raw material and other production factors. You have planned the amount of resources necessary for these costs earlier. Control means keeping a constant vigil over the spending in these areas and also determining at every stage whether the original plan should be altered periodically depending on the market circumstances which keep changing; that is, asking yourself constantly questions such as, "As Am I paying the right price for the raw material considering today's market price, even though I may have budgeted for these costs in my plan earlier?"

## 7.4. Finance Functions of a Manager

Finance management comprises broadly two functions:

### Managerial and Routine

Managerial finance functions are concerned with investment decisions and decisions regarding raising of resources. For example, decision on whether I should add a new product to my line of manufacturing; if so, when should I do so, now or later? Or, should I approach the bank for an increase in my loan to finance larger production or should I invest my own money for it!

You will observe that such decisions are taken infrequently, may be, once in a year or even twice. You will also see that answers to such questions require skillful planning, control and a constant and keen perception of the market.

Routine finance functions concern activities of a day to day nature. For example, ensuring that your cash box position is sound on the date on which you are obliged to pay salaries and wages, ensuring that your conduct of overdraft account with the bank is entirely satisfactory to the banker and so on.

In other words, management of your day to day assets in the store room and on the factory shop and managing your obligations to the suppliers, employees and tax department of the government come under the purview of routine finance functions.

### SAQ 7.1

Define financial management ?

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## **7.6 Raising of funds**

Raising of funds involves negotiations with banks and financial institutions for loans. Loans may be for two purposes, namely, for acquisition of long-term assets, such as plant, machinery, land and building or loans for day to day expenses, viz., buying raw materials, paying wages to workers, paying for facilities like power, fuel etc., paying taxes and spending on sales promotion. These costs constitute what is called working capital.

The fundamental qualification for you as a finance manager to do your job effectively is knowledge of the banking system in granting loans. The finance manager should know what a term loan is meant for, what its repayment period will be, what its interest liability will be and what kind of securities does the bank demand.

Similarly, you are also required to know what is meant by working capital from the bank's point of view, what systems banks adopt in determining the level of working capital in your business, what kind of loans are available for financing of working capital-against stocks, against bills and so on and what will be the interest rate and security demanded.

You as a finance manager must also be keenly familiar with the finance markets, competition among banks as regards prime lending rates, varying terms and conditions of lending adopted by different banks and so on. On the basis of such knowledge, you should be in a good position to negotiate with your bankers as regards the type of loan, the extent of loan and the terms of sanction, all in a manner favouring your business.

### **Allocation of funds**

After you have raised funds from banks and institutions, your next important job would be to use these funds wisely. Many a modern entrepreneur has failed at some point of time or the other in his business more on account of unwise decisions about investment of funds than his inability to raise funds.

It is therefore, fundamentally necessary for you as an entrepreneur to know that wisdom in using available funds in your business is based on the following four questions:

- 1) How much should my business have?
- 2) In what form should I hold my assets?
- 3) How should I raise additional funds at short notice?
- 4) How fast should I go?

As you saw earlier, these questions broadly relate to investment decisions, financing decisions and controlling decisions.

You will also see that these questions, in today's context, demand a knowledge of the size the technology of the enterprise besides knowledge relating to raising and spending of



money. This new approach expected of a finance manager today broadens his job profile so as to include in it the job of profit planning for the business also.

### **Profit Planning**

The term 'profit-planning' refer to operating in the area of pricing, costs, volume of output in the selection of product line. Profit-planning is, therefore, a prerequisite for investment and financing decision.

### **SAQ 7.2**

1. What are the functions of a finance manager to day?


2. Explain why allocation of funds is a critical function of a finance manager. Compare your answer with that you have read in the study material.





## **7.7 Scope of Financial Management in the Management of Business**

Running of any business enterprise involves three important activities. They are, managing finance, managing production and managing marketing. At the basis of production is finance. The result of marketing again finance. Therefore, financial management is the primary function of an entrepreneur in any business adventure. When you start a new business, your first concern will be whether, as an inexperienced person, will be able to manage it effectively.

Business management is effective or ineffective depending on how well or how badly the finances or financial aspects of a business are managed. In other words, the basis of business management is finance management. Because, the success of a business is always measured in terms of maximization of its wealth.

### **Areas of Financial Management**

Finance is required first of all for acquiring operating assets.

They are, machinery, office, factory, furniture and sometimes, vehicles. The finance management function comprises raising money adequately for acquiring them. This means that you as an entrepreneur have to identify how much money you are able to pitch in first as your own capital for acquiring these assets and how much and from where you would be able to raise the remaining needs of finance. Finance invested to acquire assets is called "capital expenditure". Besides own capital, the two usual sources of funds for this purpose are borrowing from financial institutions, loans from friends and relatives.

## **7.8 Working Capital Management**

When you become a manufacturer of products, you will visualize your operating cycle to determine process period on one hand and waiting time for collecting your bills from customers on the other.

The operating cycle commences from storing raw materials, processing it on the shop floor, holding finished products in store and selling them on credit. At each stage of this cycle, funds are blocked. Finance function therefore, continuously involves estimating the levels of costs incurred during process time and planning period of credit that may be offered to the customers who buy your product.





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2. What are the operating assets in a manufacturing firm ?

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## 7.10 Business Evaluation Under Financial Management

Financial Management revolves around three factors:

1. Return on Investment
2. Degree of liquidity maintained through Short Term Investments
3. Risk factor in financial investment

We shall now see what each one of these means and also how each one is related to the other.

### 1. Return on Investment: (ROI)

When you invest funds in acquiring operating assets, namely machinery, factory, office furniture, you are partly investing your own money called 'CAPITAL', and you are also borrowing from banks or financial institutions. These sources are called Long Term Funds. They are so called because the assets formed out of them remain with the business permanently as long as the business is alive. Individual items of these assets may be replaced from time to time on account of wear and tear or obsolescence. The nature of the assets, nevertheless, remains permanent.

You have, therefore, to be very careful in deciding on the amount of Long Term Funds that you would invest in your business. Your decision will then depend upon the return that you earn out of such funds.





The standard return that you will keep in mind while evaluating the amount of long term investment may be either one of the following:

- I. The return that you expect should be atleast equal to, if not higher, than the prevailing rate of interest which a bank would have offered you had you invested the same amount in it instead of in the business.
- II. The rate of return which you would otherwise have got on the same amount of you had invested it in some project other than your own business.

## **2. Degree of Liquidity**

Your purpose of investing in working capital of the business is to meet the demands made on your from your supplier, employees or government departments like tax authorities, without having to borrow further from outside source or through losing your operating assets. This is called 'State of Liquidity'.

Liquidity therefore means, a condition which you always maintain where your total current assets, namely, cash, bills receivable from customers and materials and goods used in production, exceed the total of all obligations of your suppliers, tax dues and short term loans.

The amount of your investment in working capital directly determines the degree of your liquidity. This means that the higher you invest in acquiring current assets, the better you are able to pay of current demands.

At the same time, you have to consider the disadvantage of over-carrying of current assets. Investment in current assets has a cost attached to it, namely, the interest that you will pay to the bank which has granted you the cash credit facility. In today's context, this cost is quite significantly high.

It, therefore, becomes necessary for you to trade off the cost of and benefit from the investment that you will decide to make in working capital.

## **3. Risk Factor in Investment**

You have now seen that in the running of any business, investment in both long term and short term funds is inescapable. You have also learnt that investment of either kind bears a cost. Therefore, one would naturally desire to keep the level of one's investment to the lowest possible amount. If one does so, one may take the risk element also. The risk become necessary too suddenly. Such a risk may lead to stoppage of production for want of the right kind of operating assets or stoppage of production for want of the right kind of material or for want of both. Stoppage of production will lead to depletion of cash, may be completely, after a time. (This kind of risk may lead to what is called 'Insolvency') NP.



Insolvency is the state in which the business firm itself is unable to meet current obligations towards outsiders out of its own resources available for the time being. A careful businessman should therefore evaluate his investment needs not only from the viewpoint of the return expected thereon but the degree of risk that the business might face owing to inadequate resources.

Stated differently, a careful businessman will always reach a trade off between the risk involved in inadequate resources and loss of return involved in over-investment



# UNIT

## 9

### Contents

#### Chapter VIII

1. The role of An Accountants
2. The Decision Makers
3. Types of Accounting
4. The Accountancy profession

#### The aim of this chapter is to:

- introduce you to the role played by the accountant in small business enterprises
- acquaint you with different types of accountants
- enable you to appreciate the salient features of different types of business organisations

#### Objectives:

On completion of this chapter, you will be able to :

- appreciate the need of proper accounting in your business
- select a suitable framework for your business
- know the specific areas in which you should take decisions based on accounting information



## **8.1 Accounting Environment**

Although accounting is the work of accountants, an ever increasing number and range of non-accountants need to understand what accountants actually do and, more importantly, the contribute their work makes to business success.

The purpose here is to look at the nature of accounting and to examine some of the uses of accounting information. We will also outline some of the main users of this information any why such users may require data which can only be provided by accountants.

All business organisations have, ultimately, one thing in common and that is survival. To survive, you must make money (you have to do many other things besides, but if you do not make money then you can do nothing else-for then you are out of business), and to make money, decisions have to be made. Decisions could be made in a vacuum, based on no information, but if that was the case then there would be no way of ensuring that the decision was the best that could have been made. Information is needed in businesses to help in the decision-making process.

## **8.2 The Role of an Accountant**

An accountant provides information-that is why he/she is paid so much. Not only does he provide information on which decisions can be based but he also provides information on the financial consequences of the possible outcomes of decisions, thus giving a choice of decisions which could be made. Finally an accountant provides information on the financial consequences of the decisions which have been actually made.

Accounting can be seen as an information system in its own right. Financial information flows through business organisations and is amassed by those organisations. The role of accounting is to collect that information, organize it in some meaningful way, and then distribute it to those who will make use of it in the decision-making process.

Thus, the accountant will provide financial information on which decisions can be based. Those decisions will result in actions which will produce results, and those results are then again collected and analysed by accountant. The results of that analysis are then passed on to the decision maker so that he can make more decisions, and so on. It is a continuous cycle.

## **8.3 The Decision Makers**

The decision maker referred to on the previous page need not just be the management of a company but will include everyone who has an interest in how well a company is doing. Different people will be interested in different aspects of the company's performance and will have different decisions to make about the company. Ideally, accountants would be able to supply the appropriate information for all decision makers. Some of these decision makers include the following:



## **Owners and Investors**

Owners of businesses, which you will become, invest their money (capital) and expect, in so doing to make more money. Apart from the smallest business, investors do not actively manage the business and, consequently, are not in a position to ensure that their money is being put to the best possible use.

Owners or you, therefore, normally have two distinct information requirements:

1. What profits are we earnings?
2. Is our money being used and properly managed?

Based on the answers to these questions, you can then make informative decisions about whether or not the level of profit is satisfactory to you, whether your personnel are acting properly and, if not, what you should do about the situation.

## **Potential Investors**

Such people are in a similar position as existing investors in that they would also want information about the ability of a business to earn profits for them and thus to make good use of their money. They would want such information so that they can make the best choice of investment - they can compare different companies and select, for them, the best.

There is a difference between the information needs of potential and existing investors, but the type of information is similar. The difference concerns the time covered by that information. Existing investors are concerned about how much the profit has been and is being earned, whereas potential investors will want to know how much will be earned.

You must note, however, that existing investors will also want to know about the future (is it worthwhile keeping our money in the firm?), and potential investors will also want to know about past results (if only to use as an indicator for the future). It is a question of emphasis.

## **Management**

If you are to manage the business effectively you must have the necessary information on which to base your decisions. You will also have to have information if you are to measure your performance and to control your business.

You, therefore, will need a wide variety of financial information simply because your needs are so diverse. To put it briefly, your information needs are those which will answer the following questions.

1. How well have I performed in the past?
2. What is my current level of performance?



3. What are my future plans?
4. Am I properly controlling the business?

In addition, you will need information to help make business decisions. Since there could be an almost endless list of possible management decisions that could arise, the following must be seen as only a very restricted list of questions which are required by you as the owner of a business:

1. Should I increase my prices? If so, what will be the effect on profits, particularly since some customers may be lost?
2. Should I replace an old machine, or keep on repairing the old one?
3. Should I give credit to my customers? If so, how much and for how long?
4. Should I expand? If so, how, where, at what cost, and with what results?

To make sensible decisions about these and all the other management problems, you need information, and it is the accountant who is expected to supply that information.

## **Lenders**

People who lend money are not particularly interested in how much profits you earn, or can earn, since they will not be sharing in those profits. Nor are they necessarily concerned about whether or not you are making the most efficient use possible of your financial resources.

Lenders will only lend money after carefully considering the following questions:

1. Will our loan be repaid on the due date?
2. Will we receive our interest when it is due?

The information needs of lenders are, therefore, concerned with the security that you can offer and with your ability to pay a particular cost—their interest.

## **Creditors**

Creditors are people who are owed money by your business. They normally consist mostly of suppliers who have supplied goods on credit and are willing to wait a month or so before being paid.

Their information needs are similar to those of lenders in that they want to know if your business will survive in the near future and pay them the money that is owed. They will not be concerned with your profits or long-term viability, only whether or not you will have sufficient cash to pay their bills over the next few months.





2. Who are the main users of accounting information? What information do they require and why?


The purpose of knowing answers to these questions will be to take decisions on whether:

- a) A price increase is warranted? If so, what will be extent of loss of existing customers?
- b) An old machine should be replaced, or will it continue to perform well if repairs are made?
- c) An increase or decrease in credit to customers suggested?
- d) To expand business? If so, how, where, at what cost, and with what results?

## 8.4 Types of Accounting

Considering the various kinds of information which different decision-makers require, it becomes obvious that an accountant is asked to present different types of accounting data. For example, the Income-tax department wants to know how much was earned last year, potential investor may want to know how much will be earned in coming years, an entrepreneur wants information which will help him choose the correct option, and so on. This leads to the possible conclusion that 'accounting' is a generic term which describes different tasks which, although they may have money as their central theme, and substantially different. There are in fact, different types of 'accountant' as there are different types of 'engineer'.

The accounting profession has become very specialized, but there are two main streams:

- Financial Accounting
- Management Accounting





## **Financial Accounting**

Financial accounting is concerned with supply of financial information about the past. Financial accountants collect information about expenditure and income as they occur and then collect those data and present them to show what has happened in the past (usually over the past year) and what the current position is.

Financial accountants prepare profit and loss accounts and balance sheets. They are also concerned with anything to do with such data. Thus, auditors are also financial accountants since their task is to verify the presented information.

## **Management Accounting**

Financial accountants normally provide information to the owners and to third parties. Management accountants, however, are concerned with the effective internal financial management of the business.

It is the management accountant in a business who provides the management or the owner with information on which to base managerial decisions. He assists on planning the future of the company, in determining costs, and in the internal analysis of performance.

## **8.5 The Accountancy Profession**

In India anybody can call himself, or herself, an accountant since there is no legal restriction on the use of the that word. Indeed, there are many very able people working in business as accountants who have never sat, far less passed, an accounting examination. However, most accountants are qualified.

As mentioned earlier, the work of an accountant is very varied and this is reflected in the organization of the qualified profession. There are two accountancy bodies, each producing highly qualified accountants with differing specialisation:

- (a) Institute of Chartered Accountants
- (b) Institute of Cost and Management Accountants

The members of the first body specialize in drawing up and maintenance of books of accounts. They also therefore draw the business results periodically in the form of profit and loss statement and balance sheet. A chartered accountant's further job will to be compute tax liabilities for a business enterprise. The cost and management accountant's profession is to work out costs incurred by a business in production, administration and sales, control costs through developing suitable information systems and manage pricing problems for maximising profits.

**SAQ 8.2**



What type of accountant would be most suitable for the following tasks?

- a) Establishing the cost of making a product
  - b) Calculating tax liability of a business
  - c) Auditing annual accounts of a business
  - d) Preparing budget of a business for the next year
  - e) Producing annual accounts of a business
  - f) Measuring managerial performance
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## 8.6 Accounting and Engineering-The Link

The cost accountants and the production people obviously must work together in dealing with day-to-day problems in an engineering or manufacturing enterprise. Engineers provide estimates on new capital expenditure proposals associated with the plant. They often make valuation of machinery and equipment and the figures in their reports are frequently used in the accounting records.

There is a need for accountants and engineers to know more about each other's functions and problems since this must necessarily result in more efficiency in the factory and better managerial decisions.

## 8.7 Basic Books of Accounts

As a business grows more and more complex, both in terms of nature and volume, there may arise a need to open up larger and larger number of books of accounts. The number of books may increase in order to record every accounting transaction more and more analytically.

You as an entrepreneur, may not find it either necessary or feasible to maintain a large number of account books. After all, your objective is and should be to keep on doing business, that is, concentrate your energies and time on identifying products, producing them, selling them and collecting payments from customers. Bookkeeping should not be your main objective by itself.

You should however know what is the minimum number of books of accounts that you should maintain and for what kinds of transactions.

### The Journal

The first of the series of books to be kept by an entrepreneur is called the 'Journal'. The 'Journal' means a register in which every transaction is recorded, fully stating which



account is debited, which account is credited, the date, amount of the transaction and a brief narration of the circumstances in which the transaction occurred.

The Journal does not contain any rulings like any account book that you may have seen. You may call the journal a simple diary to date-wise all transactions of your business. The advantage of a journal is that whenever you want to verify why a transaction occurred on a certain day, you will find it there. You will not be able to get at that information from any other account book that you would be maintaining.

Let us look at the following example:

Steven Matthew started business on 1-1-1995. He began by investing Rs. 30,000 as his capital, by borrowing Rs. 60,000, and by introducing his car which had a value of Rs. 15,000.

His first transactions were as follows:

1. Bought equipments costing Rs. 50, 000 by cash.
2. Bought materials worth Rs. 70,000 on credit.
3. Paid salaries Rs. 10,000.
4. Sold goods Rs. 35,000 on cash
5. Paid rent Rs. 2,000.

If you would enter these transactions in a journal, they will appear like this

	Dr.	Cr.
1. Bank Account	30,000	
To Capital Account (Being the capital brought by proprietor)		30,000
2. Bank Account	60,000	
To Loan (Being loan raised from ABC Bank)		60,000
3. Vehicle Account	15,000	
To Capital Account (Being the value of the car introduced by proprietor)		15,000



4. Equipment Account	50,000	
Raw material Account	70,000	
To Cash Account		50,000
to Suresh & Co.		70,000
(Being for lathe and steel purchased)		
5. Salaries Account	10,000	
To Cash Account		10,000
(Being salaries paid for December, 1994)		
6. Cash Account	35,000	
To Sales Account		35,000
(Being cash sales made)		
7. Rent Account	2,000	
To Cash Account		2,000
(Being rent paid for December, 1994)		

While it will thus appear that the journal is a useful document to crosscheck any transaction for getting at all the details of an event, its use in modern accounting is much restricted where we would have a separate subsidiary book for every class of transaction. The journal is these days used only for such transactions that cannot be conveniently recorded in any of the other books of Original Entry, such as a Purchase Book, Sales Book, etc.

### **Other Books of Accounts**

Now you know that the journal is used when it may be necessary for a business of given size to introduce an independent Book of Original Entry for recording a given class of transactions. Ordinarily, a typical business engaged in a manufacturing and trading activity (not, for example, a business engaged in only consultancy service) will find a need to keep the following Books of Original Entry, in addition to the Journal:

1. Purchase Book
2. Sales Book
3. Purchase Returns Book
4. Sales Returns Book
5. Bills Receivable Book
6. Bills Payable Book
7. Cash Book

We shall now take a close look at each one of these Books and the columns they contain



## Purchase book

This book is kept for recording credit purchases of goods made by you. Purchases made by you for cash are not entered in this book. They will be entered in another Book of Original Entry, namely, the Cash Book.

The rulings in a Purchase Book look as under:

Date	Name	Inward Invoice No.	Ledger Folio	Rs.	Ps.
1995					
Jan. 10	Ram & Co.	42	10	3,400	
Jan 15	James & Co.	43	30	1,800	
Jan 17	R. Shastry	44	4	450	
Jan 30	B. Madon	45	58	2,400	
	Total			8,050	

It may be noted that a Purchase Book is used only to record purchase of raw materials, stores, packing materials of such material which is meant either for resale or manufacturing process. All other purchases such as land, building, plant, machinery and equipment, and entered in the respective Asset Account. If such an asset account is not maintained, the purchase will be recorded directly in the Journal.

When you buy materials from your supplier on credit either for resale or for manufacturing process, each Personal Account of the supplier is credited with the respective amount and the monthly total of the Purchase Book is debited to Purchase Account in the Ledger.

For example, the amount of Rs. 3,400 seen above is the total of all credit purchases or material made by you from one supplier, Ram and Co. during a month. The No. 10 seen under the column Ledger Folio denotes the page number of the Book where the personal account of Ram and Co. is kept and in which this transaction would be shown as a Credit Entry.

Invoice means an advice of the description of goods, quantity and price. It will also narrate the number and date of the Order under which the supplier dispatches the goods.

Inward Invoice means invoice sent to you by your supplier.

Outward Invoice means invoice sent by you to your customer.



## Sales Book

The object of this book is to record sales on credit made by you to your customer. The rulings of Sales Book will look as under:

Date	Name	Outward Invoice No.	Ledger Folio	Rs.	Ps.
1995					
Feb. 8	Marson & Co.	90	17	5,200	
Feb. 10	Oliver & Sons	91	18	2,700	
Feb. 17	M. Jain	92	20	1,600	
Feb. 27	S. Sheth	93	26	840	
	Total			10,340	

You should always remember to use this book only to record sales of your goods which you have manufactured or goods in which you trade. In other words, you will not use this book for recording sales of any other item, such as an old typewriter or a used table etc. Sales of such items are recorded in the respective Asset Account. If such asset account is not maintained, the sales will be entered directly in the Journal.

When you sell your goods on credit, you will debit each Personal Account of your customer with the amount of your Invoice and record the event in the Sales Book. Once a month, you will total the entries in the Sales Book and credit the amount of this total to the Sales Account in the Ledger.

You should also remember that the Sales Book is not used to record any cash sales. Sales of goods for cash are to be recorded in the other Book of Original Entry, namely, the Cash Book.

## Purchases Return Book

Sometimes you may find some of the materials you have purchased, defective. You would then decide to return them to the supplier. In such cases, you should send a Debit Note to your supplier along with the materials which you return. Entries are then made in the Purchase Returns Book whose rulings are as under:



Date	Name	Debit Note No.	Ledger Folio	Rs.	Ps.
1995					
Jan. 1	Ramdas & Co.	24	45	5,800	
Jan 7	Sushil Pai	25	48	8,400	
	Total			10,340	

When you return materials, you will debit the supplier's Personal Account with the respective amount and record the event in the Purchase Returns Book. Once a month you will total the entries in this Book and credit the amount of such total to Returns Onwards Account in the Ledger.

### Sales Returns Book

When your customer considers goods sold by you to him as defective, he will return them by means of a Credit Note. You will then respond to the event by using the Sales Return Book which looks as under:

Date	Name	Credit Note No.	Ledger Folio	Rs.	Ps.
1995					
Jan. 1	N. Bhushan.	24	55	12,100	
Jan 6	Sundaresh	28	60	18,000	
	Total			30,100	

You will then credit each customer's Personal Account and enter the event in this Book. Once a month you will total all the entries in this Book and debit the amount of such total to the Returns Inwards Account in the Ledger

### Bills Receivable Book

When you sell your goods on credit, you draw a bill on your customer by which you advise him that he is due to pay you a certain sum and date on or before which he should so pay. You will record the event in the Bills Receivable Book.

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Date when

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Date when received	Received from	Date of Bill	Due Date	Ledger Folio	Amt. Rs.	Ps.
1995						
Jan. 10	R. Pushpa	Jan 8	Mar 12	18	1,200	
Jan. 23	Babu & Co.	Jan 20	Mar 25	26	1,500	
Total					<u>2,700</u>	

Once a month you take the total of this Book and debit such total to the Bill Receivable Account in the Ledger. The corresponding credit would go to sales account in the Ledger.

### **Bills Payable Book**

When you buy materials on credit, you receive a bill drawn on you by your supplier which makes you indebted to him by a specified amount payable on or before a specified date. You will record this event in the Bills Payable Book.

Date when Acceptance	To whom Payable	Date of Bill	Due Date	Ledger Folio	Amt. Rs.	Ps.
1995						
Feb. 3	Venk & Co.	Feb 2	May 7	17	4,500	
Feb. 10	S. Prasad	Feb 9	Mar 25	24	3,000	
Total					<u>17,500</u>	

Once a month you take the total of this Book and credit such total to the Bills payable Account in the Ledger. The corresponding debit would go to purchases account in the ledger.

### **Cash Book**

The object of the Cash Book is to keep a record of all receipts and payments of cash or cheques.

In accountancy, the word cash and cheques are used synonymously. In cash Book you record only transactions involving cash. It means that whenever you pay for your purchases of raw material or stationary, or for services received, such as salary, conveyance, etc., you will enter the event on the credit side of the Cash Book. Similarly, whenever you make a sale or you receive money for any service that you may have





provided, such as a consultancy service or renting out your machine or factory space, you will enter the event on the debit side of the Cash Book.

Transactions not involving cash or cheques are not entered in the cash book at all. This means that if for example you buy your raw material on credit, the cash book will not have anything to do with it at all.

## **Different Forms of Cash Book**

### **Discounting of Cheques with Bank**

You should always remember that when you receive an amount by means of a cheque or when you pay an amount to anyone by means of a cheque, accountancy will consider the event as a cash transaction. Whenever you receive a cheque from your customer, you will naturally send it to your bank for depositing the amount in your business' account. The bank takes in the cheque for collection. After it is drawn it will credit your business account with it. The process of collection takes time; it may sometimes take even a month or longer, depending on the place to which the cheque needs to be sent for collection and the efficiency of your own bank. You are strapped for cash during this time. You may not find it possible to wait for collection. In such an event, you may ask your bank to give you immediate credit for the amount of the cheque and send it for collection thereafter. The bank may agree to do so if your own standing with the bank has been good. The bank will of course charge you for such a facility. This process of giving you immediate credit before the cheque is cleared is called discounting of the cheque. The charge that the bank collects from you for the facility is called 'discount charge'.

Ordinarily, when you make a sale, your customer does not make payment to you on delivery, he may take a little time to pay. Quite often, this delay may become too long for you to bear. At the same time, you would not like to demand immediate payment because, perhaps, your customer is valuable to you and his goodwill for you is what you cherish more than recovering your dues. The best method for you, in the circumstances, will be to use the bank as a medium for immediate recovery.

The bank may agree to discount a bill which you would have drawn on your customer after selling your goods to him. The bank will charge you a fee for the facility. This is also called 'discount charge'

### **Cash Discount**

It is sometimes possible that your need for cash is immediate and you may then make an offer to your buyer that if he would make payment for goods promptly at the end of an agreed period of time, you will concede a small portion of the amount of your bill in his favour. You may make a further offer that if he makes immediate payment, for the goods you will concede a larger portion of the amount of your bill in his favour. In these cases, you are allowing your customer, what is called a 'Cash Discount'



## Trade Discount

It often happens in business that your customer will ask you to give him a discount on your selling price when he agrees to buy your product in large quantity (bulk). This is known as 'Trade Discount'.

### All Discounts work both Ways

Just as your customer demands from you a cash discount for prompt payment and a trade discount on bulk purchase, you would also demand from your supplier similar concessions in your right as his customer.

### A Typical Form of Cash

The following is a typical form of a Cash Book used in modern times, showing

1. Cash transactions
2. Cheque transactions and
3. Discount received or discount allowed to you.

### Cash Book

Dr. Receipt					Payments Cr.				
Date	Details	Dis	Cash	Bank	Date	Details	Dis	Cash	Bank
					Mar 31	Balance c/d		500	1,000
April 1	Balance b/d		500	1,000					

Notice that the discount column will appear on both sides of the Cash Book. You will record discount allowed by you in the discount column on the debit side and record discounts received by you on the credit side of the cash book. Discount paid by you to the Bank is to be recorded in the column on the debit side of the Cash Book.

### Posting in Cash Book

All receipts are posted on the debit side and all payments on the credit side. The total of all entries in the discount column on the debit side of the cash book represent discount allowed by you. This being your loss, the total is debited to discount account in the ledger. The entries in the discount column on the credit side represents discounts received by you. This being your gain, the total is credited to Discount account in the ledger.



### SAQ 8.3

1. Give two examples of events which are entered on the credit side of the cash book.


2. Give two examples of events which are entered on the debit side of the cash book


### 8.8 Difference between Cash System of Accounting and Mercantile System of Accounting

When you record a transaction only when as result of it cash is either received or paid, such a recording system is called 'Cash Accounting System.'

To illustrate:

- Amar purchase equipment worth Rs. 50,000 for his business; in this transaction there may be two possibilities: I) Amar pays cash against delivery of the equipment or II) the supplier delivers the equipment and waits to receive cash from Amar at a later day.

In the first instance, the purchase of equipment is a cash transaction. It is recorded in the books of accounts. In the second instance, it is not recorded in the books of accounts because the cash box of Amar is not yet affected. Amar will record the transaction only on the day he will make such transaction (make payment) to the supplier.

On the other hand, under the mercantile accounting system, every transaction is recorded when the event itself occurs and not necessarily when cash is ultimately paid or received.

Thus in the second instance, Amar will record the transaction by recognizing the fact that he is indebted to the supplier of the equipment.



The Cash System and Mercantile System of accounting are distinguished by two concepts, namely, Cost concept and Accrual concept :

### **Cost Concept**

Transactions are entered in the books of account at the amounts actually involved. Suppose you purchase a piece of land for Rs. 1,50,000 but consider it as worth Rs. 3,00,000. The purchase will be recorded at Rs. 1,50,000 and not at Rs. 3,00,000.

It follows from the cost concept that if a business pays nothing for an item it acquires, it will not appear in the Balance Sheet. Thus, knowledge and skill of the promoter do not appear in accounting books.

### **Realization Concept**

Accounting is a historical record of transactions; it records what has happened. It does not anticipate favourable events of the future, though anticipated adverse effects of past events are usually recorded. This is of great importance; it stops business firms from inflating their profits by recording sales and incomes which they may think will accrue.

### **Accrual Concept or Timing Difference**

If an event has occurred or a transaction has been entered into at one point of time, its consequences will follow later at a point of time. Even if cash settlement has not yet taken place, it is proper to bring the transaction or the event into the books.

Before we illustrate this concept, you must know that all transactions in a business are classified under two heads:

(a) Cash Transactions

(b) Credit Transactions

Cash transaction occurs when you purchase or sell an item to a customer who pays cash for it immediately. Similarly, when you pay salaries to your employees, or pay cash to a contractor or a consultant or to a person who did some repairs for you immediately on completion of the job, you have in all the cases made a cash transaction.

Credit transaction occurs when you postpone either payment or receipt of cash to a future date.

The following are examples of cash and credit transactions made by Amar:

1. Amar commenced business with Rs. 15,000 (Cash)
2. Commission due to Sharma Rs. 100 (Credit)



3. Bought goods for cash Rs. 3,000 (Cash)
4. Paid Brahmi on account Rs. 1,000 (Cash)
5. Received commission from Doray Rs. 50 (Cash)
6. Received from Earnest on account Rs. 2,000 (Cash)

Now we go back to understand the accrual or timing difference concept fully.

In any good business, activities keep continuously moving. When you wish to take a snapshot of your results at any single point in this continuum, that is, on a specific chosen date, say, the 31st March, you will usually see the following typical and similar situations:

1. You have paid cash just before 31st March to a supplier but the material arrives after 31st March.
2. You have received goods before 31st March but would be paying for them only on a date subsequent to 31st March.
3. You have sold your products before 31st March but would be receiving payment only on a date subsequent to 31st March.
4. Your business has borrowed Rs. 1,00,000 at an interest of 15% per year, pay year, payable twice a year, 30th June and 31st December. When you draw up your results on 31st March, you owe interest for the three months period, 1st January to 31st March, but you are permitted to postpone payment of it till the 30th June following.

In accountancy, you record the situations mentioned in the following manner:

1. It is a prepaid expense. This is an expense you incurred in the year all right, but you would get its benefit only sometimes after the year. You will not, therefore, include it to determine your profit or loss for the year.
2. It is a benefit received before the closure of the year; you will, therefore, include the cost of goods so bought to determine your profit or loss for the year.
3. It is where the sale has occurred within the year, although you may receive payment for it sometime after the year. This is accrued income and will be taken into account to determine profit or loss of the year.
4. It is expense accumulated upto the date but you are permitted the facility of paying it only sometime after the year. This is accrued expense which will be included in determining profit or loss of the year.



When you make a payment in advance and the related benefit occurs after the year, you have made an investment and so created an asset. This will go into the balance sheet and does not enter the profit and loss account.

When you receive benefit first and are required to pay for it only after the year, you have created for yourself an obligation. This will go into the balance sheet as liability.

When you have sold goods during the year but conceded to receive payment for it after the year, you have made an investment and created therefore, an asset. This will go into the balance sheet.



# UNIT

## 9

### Contents

#### Chapter IX

1. Principal Financial Statement
2. Balance Sheet
3. Profit and Loss Account
4. Double Entry Book-Keeping
5. Trial Balance

#### The aim of this chapter is to:

- introduce you to the basic ground rules in accountancy
- show you what a balance sheet is about
- show you what a profit & loss account is about
- introduce you to the double entry concept in book-keeping
- show you how to draw up a trial balance.

#### Objectives:

On completion of this chapter, you will be able to:

- acquire a well-rounded concept of accountancy as a discipline
- look into an account book knowledgeably
- converse with your own accountant or banker more professionally than before.



## **9.1 The Basics of Financial Accounting**

Most non-accountants have heard of the Profit and Loss Account and the Balance Sheet. Although these terms have become part of everyday language and refer to the two most important financial statements in use in business, they are still widely misunderstood.

In the next three chapters we will discuss these two financial statements in detail, showing how they are constructed and the rules and assumptions which underpin them, and start to dispel the myth that they are exact statements of fact.

### **Principal Financial Statements**

The Profit and Loss account and the Balance Sheet are normally produced annually by all profit-oriented organisations, for tax purposes if for no other, but can be produced more frequently. In fact, most large companies produce these statements monthly for management purposes.

Each statement provides you with a different view of the financial health of your enterprise; thus

The balance sheet shows the financial status of a business at a precise moment in time by stating everything that a business owns (its assets) and how much, and to whom the business owes money (its liabilities).

The profit and loss account shows how successfully an enterprise conducted its business over a given time period and how it has moved from the situation shown in one balance sheet to that shown in the next one. To put it simply, it shows how much has been earned and what costs have been incurred in an accounting period. The above will explain to you why there are two financial statements; the balance sheet shows the current situation, and the profit and loss account shows a summarized picture of what has happened over time.

### **Need for Accounting Rules**

The contents of the balance sheet and the profit and loss account may appear straightforward, but the process of their creation can be complex. As a simple analogy, the game of football is basically very simple—score more goals than the other team. However, the game of football must be circumscribed by rules if it is not to degenerate into total anarchy. There must be rules regulating, for example, the number of players in each team, the number of goalkeepers allowed, the definition of fair tackling, and so on.

Without rules, the construction of financial statements would be similarly anarchic. Consider the questions on the right.





It should begin to be clear to you that without rules covering the construction of financial statements, any statements that are drawn up would be quite meaningless. They would only have meaning to the accountants who prepared them, as only they would know the basis which had been used in their compilation.

### **Balance Sheet**

- a. Should assets be shown at cost or market value?
- b. Should it show a value for all assets owned by an enterprise, no matter how insignificant they may be?
- c. Should it show the value of having a good relationship with customers?
- d. Should it show the value of money owed to the business even if the person owing the money is unlikely to repay the debt?

### **Profit and Loss Account**

- a. Should income be defined in terms of cash received or value earned?
- b. Should costs only be included if cash has actually been paid?
- c. Should all income be included, including loans received?
- d. Should all costs be included? If a firm buys a factory, should the cost be included in that month's profit and loss account?

### **Boundary Rules**

Boundary rules are those which define the parameters of accounting. We shall just discuss here the accounting periods, and capital and revenue expenditure.

### **Accounting Periods**

The only natural choice of a time period for a business would be one which covers the whole life of that business. In such a period, the accountant would be able to say clearly how well the enterprise has performed, but it would be a too long a time period to wait for such information. Owners, and other interested parties, need to know about an enterprise' performance regularly, indeed it is highly unlikely that the Inland Revenue would be willing to wait until the demise of a company before it could assess it for tax.

The Companies Act and other tax laws require limited liability companies to prepare accounts every year, but there is no logical reason why this time period should not be two years or 196 days, or anything else for other users.



Whatever time period is chosen, it will always be the result of an arbitrary choice so it must always be shown on the face of the accounts. You will then know exactly what length of time is being evaluated.

## 9.2 Capital And Revenue Expenditure

It is manifestly unfair that year 1 should suffer a loss and subsequent years show increased profits. What should happen is that the cost of the machine although incurred in year 1, should be matched to the income that it will earn in the subsequent years.

To overcome this problem, expenditure is classified as either revenue expenditure or capital expenditure, revenue expenditure is defined as costs which can be attributed to only a single accounting period, such as the cost of wages, rent and power. Capital expenditure is costs whose benefits will be seen in a number of accounting periods, such as purchase of premises or machinery.

The distinction between capital and revenue expenditure is important, since profit is defined as the difference between revenue income (normal business earnings) and revenue expenditure. This capital expenditure is excluded from the definition of profit.

### Dual Aspect

Every transaction made by a business affects that business in two ways. Thus if a business pays out money, it must also have received something or have borrowed the money.

The importance of this rule lies in the fact that it forms the basis of the financial recording systems of every large company irrespective of whether the system is the old manual method or a computerized one. A complete understanding of accounting and the mechanics of financial account preparation would not be possible without an understanding of the underlying basis of how the raw data are both recorded and stored. Consequently, some time will now be devoted to his aspect of accounting.

Note: You are recommended to study this section thoroughly before moving on further.

### SAQ 9.1

1. Why does financial accounting need rules ?
2. To what extent does the cost basis rule fail to disclose the firm's true worth ?
3. Distinguish capital expenditure from revenue expenditure



## Double Entry Book Keeping

The fundamentals of double entry book-keeping lie in three suppositions:

1. that every transaction can be described
2. that similar transactions may be aggregated
3. that every transaction made by your enterprise will affect that enterprise in two ways.

Account is the basic storage unit of all financial information, thus there will be an account for every transaction made by a business. Businesses are likely to make a number of transactions of similar type, such as sales, and it would not make much sense to have a separate account for every single sales transaction-if that was the case, just imagine the number of accounts for sales that would be necessary in a company like IPCL, etc. Rather, similar transactions are recorded and stored in one account, in this case the sales account. Thus not only do all accounts record and store financial information, but the total figure in each account will be a summary of all transactions of that type made by the business.

Accounts can increase as well as decrease. Remaining with the example of the sales account, all sales made by the business would increase this account, but if a customer returned faulty goods and was reimbursed, then the total value of sales in this account would decrease by the value of the reimbursement.

As mentioned earlier, every transaction has a dual aspect, it affects the business in two ways; thus, every time one account is adjusted, another must also be adjusted. If the sales account is increased because of a sale, the cash account must also be increased to account for the money received by the sale. It could become quite tedious if accountants were to continually refer to 'increasing' or 'decreasing' an account; it could also become confusing. To overcome this, accountants refer to debit and credit when describing the effect of a transaction on an account.

## Capital and Revenue Expenditure

Costs which are incurred in one time period and will have a lasting benefit in further time period have to be distinguished from those costs which have only a one-off immediate benefit. Consider a business which has projected profits over the next four years as follows:

	Year				
	1	2	3	4	Total
Profits	Rs 10,000	10,000	10,000	10,000	40,000



The enterprise could buy a machine in year 1 for Rs 16,000 and in so doing would increase all profits by 50%. If the full cost of the machine was charged against that year's profit level, the result would be:

	Year				
	1	2	3	4	Total
New Profits	Rs 15,000	15,000	15,000	15,000	
Less Cost Of machine	16,000	-	-	-	
Net Profit/ Loss	Rs (1,000)	15,000	15,000	15,000	Rs. 44,000

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The term 'debit' and 'credit' can be confusing, probably because they have been adopted into everyday language and are then used in ways which are inconsistent with their use in accounting. The first thing you should realise is that they are just words. Just as the words 'increase' and 'decrease' cause no confusion, neither should 'debit' and 'credit'

## **Debit & Credit**

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The sales account could be shown pictorially thus:

### **Sales**

\_\_\_\_\_  
:  
:

One side would record all increase and the other would record all decreases. The difference between the two sides, the balance, would then be the net value of sales made by the firm.

If, for no reason than that is seemed a good idea at the time, left-hand side is called the debit, and the right side is the credit. Within an account, debit and credit are synonymous with increase and decrease or plus and minus-they simply refer to opposites. Again in the sales account, to increase it would be to credit that account, and to decrease that account would be to debit it.



There is another accounting maxim which says 'every debit has a credit'. All that it means is that every transaction has a dual aspect, that no account may be adjusted on its own, and that every time an account is, say credited, then another account (or accounts) must be debited with a similar sum. This will ensure that the dual aspect rule is maintained and forms the basis of double entry book-keeping.

Suppose in our example you had made sales for cash amounting to Rs. 1,000, then the sales account would be credited with Rs. 1,000 thus:

### **Sales**

---

**: 1,000 (1)**  
**:**

There would have to be debit to another account, the cash account, thus:

### **Cash**

---

**: 1,000 (1)**  
**:**

The debit to the cash account could therefore be said to be increasing that account. Sales are income and cash is an asset, so what could now be said is:

- Debit increases an asset account; and
- Credit increase an income account.

Also since within accounts debit and credit are simply opposites

- Credit decreases an asset account
- Debit decreases an income account.

If you then spent Rs 200 on buying raw materials, then the cash account would decrease (be credited) and the materials account would also be affected - since cash was credited, materials would have to be debited. Thus:

- Debit increases an expense account; and conversely
- Credit decreases an expense account

That is:



Cash	Materials
(1) 1000 : 200 (2)	(2) 200 :
:	:

Again, if you then borrowed Rs 500, the effect would be to increase the cash account (that is, it would be debited) and the dual aspect would be to credit the loan account, thus:

Cash	Materials
(1) 1000 : 200 (2)	: 500 (3)
(3) 500 :	:

- Credit increase a liability; and
- Debit decreases a liability.

Every transaction made by a business can be classified as:

- (a) income
- (b) expense
- (c) asset
- (d) liability

and summarizing the above

### **Debit**

- increases an asset
- increases an expense
- reduces a liability
- reduces income.

### **Credit**

- increases a liability
- increases income
- reduces an asset
- reduces an expense.





## 9.3 Trial Balance

Trial balance is not part of the double entry process but is a useful means of summarizing the balances on all the business' accounts and of ensuring that the double entry process has properly worked. It does so by simply listing all debit and credit balances in all accounts and summing up the list. Since for every debit there must be a credit, it follows that the sum of all debit balances must equal the sum of all credit balances. If the two totals do not agree, an error must have been made somewhere. The trial balance is also a useful starting point in preparing your financial statement as it has summarised all accounts and transactions made by you in an accounting period. Simply because the trial balance balances, it should not be taken as proof that it is 'correct'. Certainly, if it does not balance, that can be taken as proof that an error has been made, but even in a balanced trial balance, errors can be made which will not affect the balancing.

### The more common errors include:

1. Debiting (or crediting) the wrong account. For example, a sale for Rs 274 cash would result in

Debit Cash 274  
Credit Sales 274

If, instead, the following entry had been made

Debit Debtors 274  
Credit Sales 274

then the trial balance would still balance (since every debit has a credit) but it would still be wrong by understating cash and overstating debtors.

2. Complete omission of a transaction will not affect the balancing of the trial balance, but it will make the summary wrong.
3. Reserving the entry will also make the summary wrong but will not affecting its balancing. In the above example, if it had been entered as

Debit Sales 274  
Credit cash 274

such an entry would have been wrong but it would not affect the balance.

4. Transposing numbers can also affect the summary. For example, if instead of Rs 274, Rs 724 had been entered thus



Debit Cash 247  
Credit Sales 247

it is obviously wrong, but it will still balance. Journal entries are simply written statements which explain the recording of financial information and any adjustments that may be necessary from time to time.

### Journal Entries

(1) Debit Bank		5,000	
	Credit Capital		3,000
	Loan		2,000

This introduces entrepreneur's own money as Capital and also the loan raised.

(2) Debit Vehicles		1,800	
	Credit Capital		1,800

The vehicle is just another asset (like cash, only in a different form), which the entrepreneur introduced. The capital account shows the value of all assets introduced into the business by him.

(3) Debit Equipment		2,200	
	Materials		1,200
	Credit Bank		2,400

Cash paid for equipment and materials

(4) Debit Rent		150	
	Insurance		360
	Stationary		70
	Credit bank		580

Cash paid for those expenses

(5) Debit Debtors		176	
	Credit sales		176

Sales made on credit. The debit must be to the Debtors account indicating an increase in assets.

(6) Debit Bank		724	
	Credit sales		724

Sales made for cash



(7) Debit Materials		220
Delivery		16
	Credit Bank	236

Cash paid for listed expenses

(8) Debit Bank		561
	Credit sales	561

Cash received from Sales

(9) Debit Interest		100
	office equipment	416
	Credit Bank	516

(10) Debit Drawing		100
	Wages	240
	Credit Bank	340

Expenses paid in a sole trading business, money drawn out of a business by the owner are not described as wages but as drawings, or personal drawings. The reason is that the owner puts money into the business and any money that he/she takes out is just the business repaying him/her his/her own money. As an analogy, it is like an individual putting money into the bank and withdrawing some of it. In so doing, the individual is not paying him/herself a wage.

(11) Debit Debtors		1,392
	Credit sales	1,392

Sales made on credit are treated in the same way as journal entry number (5).

(11) Debit Bank		56
	Credit Materials	56

Reimbursement for faulty goods. Note that the materials account is being reduced by the credit entry.

(12) Debit Travel		25
costs		
	Credit Bank	25

Cost incurred

### Accounts

Bank

Capital

Loans

---



(1) 5,000	: 3,400(3)		: 3,000		: 2,000
(6) 724	: 580 (4)		: 1,800 (2)		:
(8) 561	: 340 (10)		: 4,800		:
(12) 56	: 340 (10)				
	:				
<hr/>	<hr/>				
6,341	: 5,097				
	:				
<hr/>	<hr/>				
1,244	:				

Equipment	Material	Vehicle
<hr/>	<hr/>	<hr/>
(3) 2,200	: 56 (12)	(2)1,800
: 3,400(3)	:	:
:	:	:
	<hr/>	<hr/>
	1,420	56
	:	:
	<hr/>	<hr/>
	1,364	:

Rent	Insurance	Sales
<hr/>	<hr/>	<hr/>
(4) 150	: 360	: 176 (5)
:	:	: 724 (6)
:	:	: 561 (8)
		: 1392 (11)
		:
		<hr/>
		: 2853
		<hr/>

Stationery	Delivery	Interest
<hr/>	<hr/>	<hr/>
(4) 70	: (9) 100	:
: (7) 16	:	:
:	:	:

Office equipment	Drawings	Wages
<hr/>	<hr/>	<hr/>
(9) 416	: (10) 100	(10) 240
:	:	:



: : :

Travel Costs	Debtors
(13) 25 :	(5) 176 :
:	(11)1392 :
	:
	1568 :
	_____

After the balance of each account has been determined by finding the difference between the sum of all debits and credits within each account, a trial balance can be drawn up. Bear in mind that the trial balance, does not prove that the entries in each account are correct. If it balances, the trial balance will only say that the double entry process has probably been carried out properly.

#### Trial Balance as on 6/1/19xx

	Debit	Credit
Bank	1,244	
Capital	--	4,800
Loans	--	2,000
Vehicles	1,800	--
Equipment	2,200	--
Materials	1,364	--
Rent	150	--
Insurance	360	--
Stationery	70	--
Sales	--	2,853
Delivery charges	16	--
Interest	100	--
Office equipment	416	--
Drawings	100	--
Wages	240	--
Travel costs	25	--
Debtors	1,568	--
	Rs 9,653	Rs 9,653



## 9.4 Classification of Accounts

All transactions of any business engaged in any kind of business activity can be grouped under three classes of accounts:

- 1) Personal Accounts
- 2) Asset or Real Accounts and
- 3) Nominal or Fictitious Accounts.

### Personal Accounts

Personal accounts record your dealings with persons or other businesses. This means, when you buy material from a supplier or when you sell our products to another company or when you receive an advance from a buyer or when you give advance to a supplier, you record these transactions in Personal Accounts.

On the debit side of each personal account, you record transactions by which the person becomes indebted to you : this means, when you give benefits to a person he, therefore, becomes a debtor. Similarly, on the credit side of each personal account, you record transactions by which you become indebted to him: this means when the person gives you the benefit, he becomes, therefore, a creditor.

On any day if you would want to know who owes whom and how much, you will total up the person's account and see if it finally shows a debit balance or a credit balance.

A debit balance in a Personal account would indicate that the person in question has received more benefit than he has given to the business from the amount of the balance.

A credit balance of Personal account would serve to indicate the reserves position, namely that the person has given more benefit than he has received from the business and that, as a result the business owes him the amount of the balance.

### Asset or Real Accounts

Asset or Real Account record dealings in or with property, assets or possessions. A separate account is kept for each class of property, such as cash, stock, plant, machinery, furniture, etc. so that by recording therein particulars of each such asset received or given away, the trader can ascertain the value of each asset on hand on any particular date.

When any asset is received, the amount is entered on the debit side of that asset account, and on the asset being given away, that amount is entered on the credit side of that asset account.

A debit balance in an Asset or Real Account on any date would mean the value of the particular asset in hand on that date.



Note: In practice, there cannot be a credit balance on a Real account except when the asset in question has been finally disposed off at a profit.

## **Nominal or Fictitious Accounts**

Nominal or Fictitious Accounts record a trader's expenses or gains. A separate account is opened for each head of expenditure or income, such as rent, salaries, wages, printing, stationery, cartage, interest, discount, commission, etc. so that the business can see the amount expended, lost or gained under each heading. Each such account is debited when an expense or a loss is incurred and credited when there is an income or a gain.

A debit balance in a Nominal Account would mean that the expense or loss under that particular head has exceeded the income or gain from that head and would then represent a loss.

A credit balance, on the other hand, would mean that the income or gain from a particular head has exceeded the expense or loss under that head and would represent a gain.

## **Rules for Debit and Credit**

The rules of debit and credit in regard to the three classes of accounts may be summarised thus:

- Personal Accounts - Debit the receiver, credit the giver.
- Asset Accounts - Debit what comes in, Credit what goes out.
- Nominal Accounts - Debit expenses and losses, credit gains.

It should be borne in mind that these rules never vary and will have to be rigidly followed under all conceivable conditions.

## **Some typical examples**

1. Paid office rent to landlord Rs. 4,500.

The two accounts affected in this case are the Rent Account and Cash account. The two-fold effect of this transaction is that an expense under the heading of office rent has been incurred and cash has been paid out to meet that liability. Therefore, office rent account will be debited and Cash Account will be credited.

It is important for you to bear in mind in this case is that although the landlord has received benefit from you this does not make him a debtor. The amount paid by you was for office rent. Therefore, you should debit office rent account and not landlord's Personal Account



2. Bought goods worth Rs. 4,500 for cash Raju.

This is a cash purchase, and the accounts concerned are both Asset Accounts- the Goods Account and the Cash Account. As goods have come in, Goods Account will have to be debited, and as cash has gone out, Cash Account will have to be credited

3. Sold Goods to Shankar for cash Rs. 5,000

In this case, it is a cash sale, and as Shankar has paid up cash, the account affected are the Goods Account, and the Cash Account, both Asset Accounts. A complete record of the transaction would therefore be made by debiting the cash account (as cash has come in) and crediting the Goods Account (as goods have gone out)

4. Bought Goods from Anand on credit for Rs. 3,500

This is a credit purchase, and the two accounts affected are the Goods Account (Asset Account) and Anand's Account (Personal Account). As goods have come in, Goods Account will have to be debited and since Anand has become our creditor his account will have to be credited.

5. Sold goods on credit to Sham for Rs. 2,000

This transaction affects Sham's Account and the Goods Account. Now, as Sham is indebted to us as a result of this sale, his account must be debited, and as goods have gone out, goods Account will have to be credited. A complete record of this transaction is thus made by debiting Sham's account and crediting Goods Account.

6. Sold old office furniture for Cash Rs. 5,500

The two accounts concerned here are the Office Furniture Account and the Cash Account- both Asset Accounts. As cash has come in, Cash Account will be debited, and as Office Furniture has gone out, Office Furniture account will have to be credited. Sharma's Account need not be debited as he paid for his purchase in cash.

7. Received from Benjamin Rs. 6,500 on account

The two accounts affected here are the Cash Account and Benjamin's Account. As cash has come in, Cash Amount will be debited, and as Benjamin has given benefit by paying the amount his personal account will be credited.

8. Paid Girish Rs. 8,000 on account

The two accounts concerned here are Girish's Account and Cash Account. As we have given benefit to Girish by payment, Girish's Account will be debited, and as cash has been parted with, Cash Account will be credited.





#### 9. Paid Rs. 2,000 into Bank from Office Cash

The two accounts affected in this case are the Bank account and the Cash account. As the Bank has received the benefit, Bank account will be debited, and as cash has gone out, Cash account will be credited.

### SAQ 9.1

Prepare journals entries for the following transactions:

1. Paid Rs. 4,000 to Ramesh on account.
2. Sold old typewriter to Menon for cash Rs. 2,500
3. Bought goods from Joshi on credit for 8,000
4. Bought goods worth Rs. 6,000 from Ahmed for cash
5. Sold goods to Ganesh for cash Rs. 10,000
6. Paid the telephone bill Rs. 2,000
7. Paid office rent to landlord Rs. 1,500
8. Sold goods on credit to Pyarelal for Rs. 6,000
9. Receive Rs. 3,500 from Abraham on account

### Concept of Closing Balance

Usually, on 31st March of each year you will close all the books of accounts in order to reach the final position of either Debtor or Credit in each account. The purpose of closing the books of accounts is to collect all the final Debit Balances on the one hand and all the Credit balances on the other and verify whether both the totals agree. Such a verification is known as 'Trial Balancing'.

Trial Balance is a means to ensure that while recording each transaction during the year you have duly considered the dual aspects of accounting, that is for every debit entry you have ensured a corresponding credit entry.

We shall follow the following steps to closing each account book on the last day of the year and reopening it with a balance amount on 1st day of the ensuing year.

On the last date of each year, that is, 31st March, you will:

- i. add all entries on each side separately
- ii. when you see, as you will doubtlessly do, that the two totals do not agree, you will enter the balancing figure below the smaller total either on the debit or the credit side of the Book by calling it Balance Carried Down. Both sides will then balance. You will therefore close the Book by appropriately ruling off on both sides
- iii. now be ready to reopen the same Book for the next year. You will do so by entering the same balancing figure on the side opposite of that on which you had



entered it on the last day of the previous year. This time you will call it Balance Brought Down. The Book will then continue taking entries for the next year.

A typical account book will therefore, look like this:

<b>Cash Book</b>					
1994		Rs.	1994		Rs.
Feb 1	To Amar	1,500	Jan. 18	By A & Co.	3,100
Mar.5	To B & Co.	2,300	Feb. 24	By Airfare	2,000
1995					
Jan.3	To capital	5,000	Jan. 9	By Ami & Co.	5,000
				By Bal. C/d	2,200
	Total	8,800		Total	8,800
1995					
April 1	To Balance b/d	3,200			

### **9.5 Errors Disclosed by Trial Balance**

The Trial Balance will disclose the following classes of errors:

1. An item omitted to be posted from a Book of Original Entry into the ledger
2. An item posted on the wrong side of the Ledger Account
3. A wrong amount posted to the proper Account
4. An item in the book of Original Entry posted twice into the ledger
5. Any error in additions or balancing of Ledger Accounts, unless they are of a compensating nature
6. Omission of the balance of an amount in the Trial Balance.

### **How are Errors Rectified**

However, while we think we have learnt the bookkeeping principles the actual job of choosing the right account for recording an event and accurately posting the figures in it



can be error-prone. Because, the job of writing is a manual job and human errors and bound to occur.

We need, therefore, a method of adjusting the errors in the books before we may go to draw up our financial statements.

Types of common errors in bookkeeping may be divided into five main classes, namely:

1. Errors Of Omission
2. Errors of Commission
3. Errors of Principle
4. Not knowing where to post a transaction
5. Error of transportation

### **Error of Omission**

This is an error of overlooking to enter a business event in an appropriate book. You may forget to enter a particular sales in the Sales Book or you may forget to enter a payment or receipt of cash in the Cash book.

### **Errors of Commission**

These types of errors consist of incorrect postings, calculations or choices of the books in which to enter.

- Among usual errors of commission may be enumerated the followings:
- Posting of wrong Accounts
- Posting of figures to wrong Accounts
- Posting of items to wrong sides of Account
- Wrong casting of the pages of any subsidiary book
- Wrong castings of Ledger accounts
- Carrying forward of a wrong amount from the bottom page to the top of the next page
- Carrying forward of a wrong balance of Ledger Account from one page to another.

### **Errors of Principle**

Errors of Principle may involve an incorrect allocation of expenditure, as between Capital and Revenue, the valuation of assets upon an incorrect basis, an inadequate provision in respect of doubtful debts or depreciation, or omission of adjustment in respect of outstanding liabilities, prepaid expenses, income accrued or income received in advance, etc.

### **Suspense Account**



All these kinds of errors which you saw above will need to be rectified through the means of what is known as Suspense Account.

A Suspense Account is a temporary account. It is used to 'collect' a debit or credit entry when the bookkeeper does not know what else to do. There are two situations where a suspense account might be needed.

The bookkeeper knows in which account to make the debit entry for a transaction but does not know where to make the corresponding credit entry. Until the mystery is sorted out, the credit entry can be recorded in a suspense account. A typical example is when the business receives cash through the post from a source which cannot be determined. The double entry in the accounts would be a debit in the cash book, and a credit to the suspense account.

Similarly, when the bookkeeper knows in which account to make a credit entry, but for some reason does not know where to make the corresponding debit entry, the debit can be posted to a suspense account.

A bookkeeping error might have occurred, resulting in the failure of the total debits and total credits of all ledger accounts becoming equal. To restore equality between debits and credits, the balancing figure can be posted to a suspense account.

Before we look at some examples to see how suspense accounts are operated, you should be aware that a suspense account are only made when the bookkeeper does not know yet what to do, or when an error has occurred. Mysteries must be solved, and errors must be corrected.

Under no circumstance should there be a suspense account when it comes to preparing the balance sheet of a business.

We shall now understand the methods of rectifying accounting errors through the Suspense Account by means of an example under each category of errors.

## **Accounting Entries in Suspense Accounts**

### **Errors of Omission**

When Alpha & Sons Ltd. paid the monthly salary cheques to its office staff, the payment of Rs. 5,250 was correctly entered in the cash account, but the bookkeeper omitted to debit the office salaries account.

As consequence, the total debit and credit balance on the ledger accounts was not equal, and credits exceeded debits by Rs. 5,250.

The initial step in correcting the situation is to debit Rs. 5,250 to the suspense account to equalize the total debits and total credits.



When the cause of the error is discovered, the ledger entries to correct the error (logged in journal first of all) should be as follows:

Office Salaries account Dr.	5,250
To Suspense account	5,250

### **Errors of Commission**

A book-keeper might make a mistake by entering what should be a debit entry as a credit, or vice versa. For example:

Suppose that a credit customer pays Rs. 460 of the Rs. 660 that he owes to Zenneth & Co. but Zenneth's book-keeper has debited Rs. 460 to the debtors account by mistake.

The total debit balance in Zenneth's ledger accounts would now exceed the total credits by  $2 \times \text{Rs. } 460 = \text{Rs. } 920$ . The initial step in correcting the error would be to make a credit entry of Rs. 920 in a suspense account. When the cause of error is discovered, it should be corrected as follows.

Suspense Account Dr.	920
To Debtors	920

In the personal account of a customer in the sales ledger, the correction would appear as follows :

#### **Debtors Account**

	Rs.		Rs.
Balance b/f	660	Suspense Account: error corrected	920
Payment incorrectly debited	460	Balance c/f	200
	1,120		1,120

### **Not Knowing Where to Post a Transaction**

Jain & Co. received a cheque through the post Rs. 620. The name on the cheque is Sharma and Co., but Jain & Co., have no idea who this person is, nor why he should be sending Rs. 620. The book-keeper decides to open a suspense account, so that the double entry for the transaction is as follows:

Cash Account Dr.	620
To suspense account	620

Eventually, it transpires that the cheque was in payment for a debt in fact owed by Shah & Co. The suspense account can be now cleared.



Suspense account	620
To Cash Account Dr.	620

### **Errors of Transposition**

The bookkeeper of Peter & Co. made a transposition error when entering the amount for sales in the sales account. Instead of entering the correct amount, Rs. 37,453.60, he entered Rs. 37,543.60, transposing the 4 and 5. The debtors were posted correctly, and so when total debits and credits on the ledger accounts were compared, it was found that credits exceeded debits by Rs.  $(37,543.60 - 37,453.60) = \text{Rs. } 90$

The initial step is to equalize the total debits and credits by posting a debit of Rs. 90 to a suspense account.

When the cause of the error is discovered, the double entry to correct it (logged in the journal first of all) should be as follows:

Sales Account Dr.	90
To suspense account	90



# UNIT

## 9

### Contents

#### Chapter X

1. Profit and Loss Account
2. Balance Sheet
3. Adjustment to Trial Balance
4. Depreciation Adjustment
5. Accruals Adjustment
6. Repayment Adjustment
7. A Comprehensive Example

#### The aim of this chapter is to:

- explain to you the format and functions of the profit and loss account and the balance sheet
- familiarise you with the commonly applied methods of depreciation, accrual and prepayment adjustment

#### Objectives:

On completion of this chapter, you will be able to:

- recognise the importance of profit and loss account and balance sheet
- appreciate the concepts of treating depreciation as cost
- know the justification of each item in the financial statements

Having prepared the trial balance, it is now possible to start preparing the financial statements: the profit and loss account and the balance sheet.

The balance sheet, however, is a 'moment-in-time' document which will show all that a business owns (its assets) and the sources of funding for those assets (its liability).



## 10.1 Profit And Loss Account

The objective of the Profit and Loss Account is to determine the level of profit or loss, which has been earned by a business in an accounting period. It does this by listing all revenue income and then deducting all revenue cost, which have been matched to the accounting period being considered.

The first task, then, is to examine the trial balance and identify all revenue items. To facilitate matters at this stage, the following definitions may help :

\* Revenue income would include all income that a business normally expects to earn in an accounting period. For the majority of business, this would normally be restricted to sales, fees earned and interest received. It would not include sources of cash such as capital introduced, loans raised, grants received or income from the sale of assets. Such sources are not 'normal' or renewable.

\* Revenue costs would include all costs which a business would normally expect to incur every year. They are recurrent costs and the business receives nothing permanent in return. Examples of such costs would be wages, raw materials, power, interest paid and rent.

Costs which provide a business something permanent, such as a new vehicle, would be excluded since that would be capital expenditure (or the provision of an asset). The repayment of loans would also be excluded (although money is spent on repaying a loan, there is no real cost incurred in returning to somebody that person's own money).

The format of the profit and loss account is normally divided into two parts. First, there is the trading account (or manufacturing account if the firm is in manufacturing), which identifies the profit made in just buying in units and then selling them. The manufacturing account identifies the profit made in making something and then selling it. This difference in either the trading profit or the manufacturing profit, is referred to as the firm's gross profit.

The profit and loss account starts with the gross profit and deducts from that all the remaining revenue costs incurred. Although there is a distinction made between the trading account and the profit and loss account, this distinction is normally only seen in the accounts of large organisations. The accounts of smaller businesses normally do not distinguish between the two accounts except by highlighting the gross profit.

Using as an example the trial balance of N. Shah, his profit and loss account can now be drawn up as follows:





**N. Shah**

**Trading and profit and loss account for the period 1/1/19xx to 6/1/19xx**

Sales			Rs. 2,853
Less:	Cost of sales purchase of raw materials		
		Gross Profit	Rs. 1,489
Less:	Expenses		
	Rent		150
	Insurance		360
	Stationery		70
	Delivery		16
	Interest		100
	Wages		240
	Travel costs		25
			961

## 10.2 Balance Sheet

A balance sheet shows the financial status of a business at any given moment in time. It shows the items which are owned by the business, its assets, and sets these off against a list of claims on these assets by those who provided funds with which to buy those assets, and its liabilities. The balance sheet, therefore, can be linked to a photograph of the financial state of the business showing, on the one hand, what the business has and, on the other, where the money came from to acquire those assets. The balance sheet will always balance. This is because of the dual aspect rule and the fact that every debit has a credit. If a balance sheet does not balance, then an error has been made in recording the fundamental dual effect of transactions made by the business.

### Assets

Assets are those things of value acquired by a business at some cost to the business. The balance sheet does not simply list those assets but displays them in a logical order by subtotalling fixed assets (or long-term assets) and current assets (or short-term assets). Conventionally, the distinction between fixed and current assets has been one year. Thus, if the asset is expected to remain in the business in an unaltered form for more than one year, it is classed as a fixed asset; if not, it is classed as a current asset.



## **Fixed Assets**

The permanent assets which a firm could have are fairly common to almost all business/companies and would normally be classified as follows:

- \* Land and buildings.
- \* Plant, machinery and equipment.
- \* Fixtures and fittings.
- \* Motor vehicles.
- \* Investments.

Expenditure on acquiring such assets does not appear in the profit and loss account; it appears in the balance sheet alone.

## **Current Assets**

Again, the classification of current assets is common to most businesses and would appear as follows:

- \* Stock
- \* Work in Progress
- \* Finished goods
- \* Debtors (people who owe the business money)
- \* Bank
- \* Cash

The order in which current assets (as well as fixed assets) appear in the balance sheet is said to be in the reverse order of liquidity; that is, the most permanent comes first, and that asset which is closest to being turned into cash, comes last. The above distinction between fixed and current assets need not always hold true. For example, trucks would normally be considered to be fixed assets except in an enterprise whose business is to sell trucks.

In such a case, any trucks it has would be more properly classe as its stock; that is, as a current asset.



A more useful distinction, therefore, may be that fixed assets are those which are acquired to enable a business to function on a long-term basis, whereas current assets allow the business to function on a day-to-day basis and are the result of everyday transactions.

## **Liabilities**

Liabilities should not be regarded as debts (although they frequently are) but as sources of finance-where the money came from to buy the enterprise's assets. As for assets, liabilities do not appear as a simple list in the balance sheet but are distinguished between long-term liabilities (short term liabilities being called current liabilities). The general one year rule applies to separate them.

### **Current Liabilities**

Current liabilities are generally debts which a business is legally bound to repay within one year. The normal current liabilities to be expected in a balance sheet are:

- \* Trade Creditors
- \* Taxation Provision
- \* Short-term Loans
- \* Dividend payable (for limited companies only)
- \* Bank Overdrafts.

Included in trade creditors are all suppliers of goods and services who are awaiting payment at the date of the balance sheet and could include any cost which a business is likely to incur.

### **Long-term Liabilities**

These are the sources of finance which have been supplied on a long-term basis and are not due for repayment in less than one year. It is normal to see such liabilities categorized into those supplied by you (owner's capital) and those supplied by other parties such as banks.

The owner's capital is normally shown thus:

	Capital introduced (or opening balance)
Plus	Current year's profit
Less	Personal drawings



Note that it is normal, except in the case of limited companies, to show the personal drawings, or personal wages, of the owners as a deduction from capital, since theoretically, all money in a business belongs to them and they can, if they wish, take everything out, not just what they have decided to take. Using as an example the trial balance of N. Shah, his balance sheet can be drawn up as under:

**Balance Sheet of N. Shah  
as at 6/1/xx**

Fixed assets			
	Equipment		Rs. 2,200
	Office equipment		416
	Vehicle		1,800
			<u>Rs. 4,416</u>
Current Assets			
	debtors	Rs 1,568	
	bank	Rs 1,244	
		<u>Rs 2,812</u>	
Less current liabilities			
	creditors		2,812
	Net Assets as financed by		Rs 7,228
Opening capital			4,800
and profit			528
			<u>5,328</u>
Less Personal Drawings			100
			<u>Rs 5,228</u>
			2,000
			<u>Rs 7,228</u>
Long term loans			Rs 7,228

Points to note:

(1) The phrase in the title 'as at 6/1/19xx' indicates that the balance sheet applies only to that moment in time. The balance sheet of 7/1/99xx could be different. If, for example, Shah withdrew another Rs. 20 on 7/1/19xx, then the bank figure would differ as would the personal drawing figure.



(2) The figures are at cost price. The market value of assets could be, and probably is, quite different.

(3) Note the format of the balance sheet. There are a number of formats which could be used in presenting the assets and liabilities of a business but this particular method is most common nowadays for businesses which are not limited companies.

This particular format balances net assets with long-term sources of finance (the opening capital, retained profits and long-term loans). Current assets are netted off against current liabilities, as it is more sensible to display similar items together. In this case, current assets and current liabilities are the result of the normal operations of a business and, as such, are linked to each other. The difference between current assets and current liabilities is called 'working capital'. This represents the cost of current assets which have not been acquired on credit but have been financed by the business itself.

### **10.3 Adjustment to the Trial Balance**

The example of N. Shah above is a rather simplified introduction to the construction of financial statements. There are a number of complications which can, and do, arise in practice. Some of these complications will now be considered.

The trial balance of a business is incomplete in that it does not always show all transactions up to a given date. It will not show the value of stock on hand at the balance sheet date, nor will it show debts which the business will have incurred but for which the business has yet to receive a bill. For example, presumably Suresh Shah has a telephone which he has used. Obviously, in using the telephone, he is incurring cost, but that will not be shown in the trial balance if Indian Telecom has still to invoice him.

The trial balance has to be adjusted and the principal adjustments which will now be considered are for:

- \* Stock
- \* Depreciation
- \* Accrued charges
- \* Prepayments

#### **Stock adjustment**

Businesses which are in either retailing or manufacturing will buy large quantities of stock during a year either for resale or for use in the manufacturing process. At the end of each year, such businesses will undoubtedly have unsold or unused stock on hand.



The matching principle requires that only the cost of purchasing stock, sufficient to account for the volume of sales made in an accounting period, should be used in determining profit. This means that excess stock purchased during the year must be discounted when determining the value of the cost of goods actually sold.

Theoretically, this is a relatively simple process; for example, if a business has 100 units of stock at the start of a year, buys 1,200 units during the year and has 150 units on hand at the end, then the volume used, or sold, would be:

Opening stock	100
add bought in	1,200
	<hr/>
Total available for use	1,300
Less closing stock	150
	<hr/>
Total used	1,150

By applying unit costs to the volume of stock, quantities would become values and the total used figure would become the cost of sales value for inclusion in the profit and loss account. The value for cost of sales is, therefore:

OS (opening stock) + P (purchase made in year) - CS (closing stock)

## Depreciation Adjustment

As mentioned earlier, the purchase of assets does not appear in the profit and loss account. One of the reasons for this is that an asset is going to endure over more than one time period and affect more than one time period's profits. It was previously explained that it would be 'unfair' if the cost of an asset were to be charged against one year's profits when subsequent year would also benefit.

Depreciation is simply a means of allocating the original cost of an asset over the years in which it will be used. In accounting, depreciation is not an attempt to measure the decline in value of an asset; it is just a means of equitably spreading the cost over an asset's useful life.

All assets (except, usually, land) have a finite life, although the length of that life may be determined by various factors such as:

- (a) normal wear and tear
- (b) obsolescence
- (c) passage of time
- (d) technological advance



No matter the reasons which cause assets to have finite lives, all assets ought to be depreciated over their expected periods of economically useful lives.

As with the valuation of stock, there are a number of ways that the annual depreciation can be calculated. Two methods in particular, however, predominate in business. The straight line method, and the reducing balance method.

### **Straight Line Method**

In this method, the net cost of an asset is depreciated evenly throughout the expected life of an asset. Thus, each year will bear an equal proportion of the cost.

For example, assume a business has bought a machine for Rs. 10,000. It is expected to have a useful life of five years after which it will be valueless. (Note: the value to be depreciated is the net cost of the machine to the business. In this case, the net cost is Rs. 10,000. If, after five years, the machine could be sold for scrap for Rs. 1,000, then the cost to be depreciated would be Rs. 9,000, since that would be the net cost of the machine to the firm). The annual depreciation charge is:

$$\frac{\text{(net cost) Rs. 10,000}}{\text{(useful life) 5 years}} = \text{Rs. 2,000}$$

Depreciation is just not a cost to the profit and loss account but its effect is also seen in the balance sheet. It may help to look at fixed assets in the balance sheet as a 'holding bay', where the cost of the asset is held until it can be transferred to the profit and loss account, thus:

	Years				
	1	2	3	4	5
Opening balance	10,000	8,000	6,000	4,000	2,000
Less Depreciation (shown in P & L a/c)	2,000	2,000	2,000	2,000	2,000
Balance (value in each year's balance sheet)	8,000	6,000	4,000	2,000	-

### **Reducing Balance Method**

In this method, rather than each year having an arithmetically equal share of the cost, each year bears an equal percentage of the asset's value. In the above example, this could be forty percent. The percentage is applied not to the original cost but to the reduced balance after deducting previous year's depreciation (hence the method's name). Thus:



	Years				
	1	2	3	4	5
Opening balance	10,000	6,000	3,600	2,160	1,296
Less Depreciation (shown in P & L a/c)	4,000	2,400	1,440	864	518
Balance (value in each year's balance sheet)	6,000	3,600	2,160	1,296	778

### Choosing the appropriate depreciation method

Which method ought to be adopted will depend on the expected wear and tear pattern of the asset. The two methods described above have different depreciation charges annually; the straight line method has high charges in the earlier years of the asset's life and the reducing balance method has low charges in the later years.

### SAQ 10.3

What is depreciation? Outline the mechanics of two methods of depreciation.

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
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### Accrual Adjustment

An accrual is an estimate of a bill which the business knows is due at the year-end but for which it has yet to be invoiced. The usual accruals would consist of the telephone account and the electricity account. Interest account can also be an example.

In the working to produce the accounts the following journal entries would be required:

Debit telephone a/c	275	
	Credit Accruals	275

### Prepayments Adjustment

The accruals adjustment is required for expenses which, although incurred have not yet been invoiced. The opposite can also happen; that is, a business could incur expenditure





in one year which is relevant to the subsequent year. As an example, a business may have a year-end 31-3-19xx. If the business paid its annual insurance premium for the year ended 31-3-19xx in March of the current year, the expenditure would have been incurred in 19x9 but would refer to the year 19x0.

The prepayment adjustment is used to apply the matching rule of accounts and, in the above case, removes the cost of the premium from 19x9 and includes it in the costs of 19x0.

If the insurance premium were Rs. 350, the appropriate journal entry in the workings to produce the final accounts would be:

Debit prepayments 350  
Credit insurance 350

The effect on the final accounts would be to increase the prepayments accounts (a current asset, similar to debtors) and decrease the expense of insurance in the profit and loss account.

### **How Does A Profit And Loss Account Look**

The Profit and Loss Account of a concern is usually divided into two sections. The first section is termed the Trading and manufacturing Account which is so framed as to show the gross profit.

#### **Gross Profit**

It is the different between the cost of goods that have been sold and the proceeds of their sales, without any deduction for distribution expenses and general establishment charges.

A typical form of a Trading and Manufacturing Account will be as follows:

---



Dr.	Rs.	Cr.	Rs.
To stock at commencement		By sales	.....
To Manufactured Goods	.....	Less Returns	.....
To Stock-in-process	.....	Less Excise	.....
To Raw materials	.....		.....
<hr/>		<hr/>	
To Purchase of Raw Materials	.....	Stock at end:	
Less returns	.....	Manufactured Goods	.....
		Stock-in-process	.....
		Raw material	.....
<hr/>		<hr/>	
To Carriage	.....		
To Wages	.....		
To Motive Power	.....		
To Factory Rent and Taxes	.....		
To Coal and Coke	.....		
To Water	.....		
To Oil	.....		
To Belting	.....		
To Sundry manufacturing expense	.....		
To Repairs to factory building	.....		
To Repairs to plant	.....		
To Depreciation on factory building	.....		
To Depreciation	.....		
To Gross Profit (Transferred to P & L A/c)	.....		

Trading and manufacturing account helps in ascertaining Gross Profit and monitor its increase or decrease from year to year as an effective measure to control business results.

### **Profit And Loss Account**

The profit and loss account begins with Gross Profit on the Income side. All general administrative expenses relating to establishment are shown as expenses. Incomes from non-business sources such as, rent received from premises or idle machines hired out etc. are also accounted for.

The expense side also shows 'Reserve for doubtful Debts', the quantum of which is determined based on past experience. Self-assessment of Income-tax is also made according to the Income Tax Act; the amount payable is shown as 'Provision for Tax' on the Expenses side. If the income side becomes heavier after all these items are listed, the result is Net Profit; if expenses side becomes heavier, the result is loss.



The amount of Net Profit or Loss, as the case may be, shown by the Profit and Loss Account, is then transferred to the Balance Sheet.

## How Does a Balance Sheet Look

After picking out the debit and credit balances which would go into the Profit and Loss account, the Trial Balance will be left with items of debit and credit balances which will be taken over by the Balance Sheet.

### The First Step

The debit balances that go into the balance sheet will be listed under Assets. The credit balances that go into the balance sheet will be listed under liabilities.

### The second step

Having done so, you will see that the total of assets and liabilities will not become equal. If the liabilities appear larger than assets, the difference should be equal to the loss which you posted in the Profit and Loss Account. If the assets appear larger than liabilities, the difference should be equal to the profit which you posted in the Profit and Loss Account.

### The Third Step

You will now enter the amount of profit or loss, as the case may be, under liabilities or assets side of the balance sheet in order to make the two sides equal.

You have now drawn up the balance sheet of your business as on the last day of the accounting period.

### A Typical form of a Balance Sheet

Typically, a simple Balance Sheet of a small business will look like this:

#### Balance Sheet of ABC & Sons as on 31st March, 1995

Liabilities	Assets
Partner's Capital	Fixed Assets
Balance as per last year	Land, building
Add : Share of profit transferred	Less: Depreciation
Less : Drawings	Plant & Machinery
	Less : Depreciation
	Capital
	Work-in-Progress
Partner's Current Account (cr)	Investment and Deposits
	Deposit of telephone
	Lease Deposit with landlord.



	Deposit with Customs/Excise Dept.
	Security deposit with Electricity Board
Reserves	Loans and Advances
General reserve	Advance paid for capital goods
Revaluation reserve	Advance to staff
Others	Loans of associates and sister concerns
Profit transferred from P&L A/c	Current Assets
	Cash and Bank Balance
	Book Debts (consider good)
	Inventories (raw material and packing material,
	stock-in-process, finished goods,
	consumable
	stores and spares)
	Advance paid for raw materials Secured
	Loans
Cash Credit (against hypothecation of stock and book debts)	
Term Loans (against mortgage of plant, machinery or building)	
Unsecured Loans	Miscellaneous Expenses
Current liabilities and Provisions	Preliminary and Preoperative expenditure
Creditors for supplies	Deferred Revenue Expenditure
Creditors for expense	Goodwill, patent, copyright, royalty
Provision for tax	Partner's Current A/c (debit)
	Loss transferred from P&L A/c.

### **Valuation of Stock-in-trade**

As the figure of closing stock would materially affect the trading results, it becomes necessary to set that the greatest possible care and trouble are taken to include this item at a fair and correct value. For this reason, inventories of unsold goods on hand at the close of each trading period should be most carefully prepared under the strict supervision of some responsible person. All quantities as entered on the stock sheet and the rates should be re-checked by some competent and reliable persons. Even the extensions and calculations made by one set of clerks should be checked by some other independent assistants.

The basis of valuation generally adopted is the actual cost price. If, however, any part of the stock is damaged or shop-soiled or has become obsolete or unsaleable, due allowance will have to be made for such depreciation in value. Unsold stock should never be valued at selling price, if that price exceeds the cost price. If the goods unsold are valued at selling price, the result would be to anticipate a profit upon them which may or may not be realized. In other words, the profit on goods should only be brought into account when they are actually sold and delivered.



If, however, the market price is less than the cost price, then a loss has evidently been incurred, since the goods can only be sold at a loss. Under such a circumstance, they should be valued at the market price.

You will bear in mind the fact that the figure of closing stock has to be shown on the credit side of the Trading account in order to ascertain the gross profit, and will then understand how any over-valuation or under valuation of this item will show results at once misleading and false.

The following principles may be laid down as sound in determining the value of the stock of unsold goods on hand, viz-

1. Profit on goods is deemed to have been earned only when the goods are actually sold
2. No profit should be anticipated and taken credit for until it is earned
3. If there is any chance of loss likely to arise, such anticipated loss must be immediately provided for.

In view of the above rules, it follows that the stock of unsold goods should be always valued at cost price or market price, whichever is lower.

### **Contingent Liabilities**

When we draw up our balance sheet as on the last day of the year, we would be narrating all the items which show our obligations under the head 'Liabilities'. Liabilities so shown are obligations which have actually crystallized and which we shall have to discharge without any doubt. In other words, these are absolute obligations, which are actually descended on the business which are not subject to any condition.

On the other hand, in course of running a business, you may find that some obligations may possibly occur upon happening or non-happening of an event. For example, you may have received a claim from your supplier for an amount which you dispute for your own good reasons the supplier may be holding a different view, however, only then the debt becomes absolute and you will recognise it as a liability within the balance sheet.

Such liabilities which arise only upon occurrence or non-occurrence of an event, are called 'Contingent Liabilities'.

Contingent Liabilities do not form a part of balance sheet since the balance sheet records only absolute admitted obligations. By way of information to the reader, the business firm will usually indicate contingent liabilities as foot-notes outside the purview of the balance sheet.



# UNIT

## 9

### Contents

#### Chapter XI

1. Interpretation of Financial Statements
2. What is Liquidity
3. Current Ratio
4. Profitability Ratio
5. Inventory Turnover Ratio
6. Debtors Turnover Ratio
7. Return on Investment Ratio (ROI)

#### The aim of this chapter is to:

- introduce you to method of reading financial statements
- develop an understanding of what liquidity means and how to measure it in the financial statements
- develop an understanding of various financial ratios including return on investment ratio

#### Objectives:

On completion of this chapter, you will be able to :

- interpret your financial statements from a managerial viewpoint
- keep a sharp eye on the trends in profitability and return from your investment made in business





We have said that you as a manager interpret financial statements after the accountant has placed them before you. You should then know the questions you will frame in your mind and thereafter seek answers to, in the financial statements.

The fundamental questions that you should ask when you see a financial statement are:

1. How well did I sell my product this year?
2. Were the profits that I got this year adequate?
3. Did I meet all my current obligations on time?
4. Is my investment in my assets sensible?
5. Did I collect my bills from the customers on time?

These questions, if asked together, will form a comprehensive interpretation of the financial statements. Even so, the questions can be grouped under two categories based on the type of answers they seek.

The two groups are:

1. Questions concerning liquidity
2. Questions concerning return on investment

## **11.2 What Is Liquidity?**

You, as a successful entrepreneur, should always be in a state of readiness to meet all your current obligations exclusively from out of your current resources. This state is called the 'state of liquidity'. If you are running your show in such a manner that you are making a large amount of sales but are not able to pay your supplier of raw material or your statutory obligations, such as taxes, you will soon fold up because the unsatisfied supplier may cease his further supplies or the government may descend on you if you default in taxes.

## **11.3 Current Ratio**

One method of ascertaining the liquidity of your business is by reading the 'current ratio' from the balance sheet.

Current ratio means the ratio between current assets and current liabilities. Current assets are:

- cash





- raw materials
- stock in process
- finished goods
- bills receivable (Outstanding debtors)

Current liabilities are:

- bank overdrafts for working capital
- bills payable to suppliers
- obligations to employees and others.

### Ratio Index

You will conclude that your liquidity is satisfactory if the current ratio remains greater than 1. Normally, it is expected to be around 1.33. If the ratio is too large, it does not necessarily mean over-liquidity. It may be due to a large amount of non-saleable finished goods or large amount of uncollected bills from customers. Neither of these means liquidity.

### SAQ 11.2

1. Mention in your own words what you understand by liquidity?


2. How is a current ratio written?




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## 11.4 Profitability Ratio

The profitability of your business is determined by the ratio:

Net profit divided by net sales.

Net profit means profit remaining over with you after payment of income tax. Net sales means sales receipts less excise duty payable, if any.

### Ratio Index

There can be no index for this ratio. How you will determine whether you are making a reasonable profit in your operations or not, will be through comparing of the profit earned by you with the production costs that you have incurred for earning it; that is, by means of the ratio:

Net profit divided by cost of production.

This is another way of saying that you are measuring how much profit your earned out of investment made by you by way of production costs. When you see that ratio in this manner, you may fix an index for it. Such an index will be, at its least, the rate of interest given by banks on deposits of similar amount made with them.

If your profitability ratio is less than the banks' interest rate, that means, all your efforts in running your firm are not being compensated adequately.

### SAQ 11.3

1. How is the ratio written to determine profitability?


2. What is the index to measure whether your production costs are well invested or not.

(Hint: Compare your net profit with current bank deposit rate)





## **11.5 Inventory Turnover Ratio**

This is a ratio which indicates how efficiently you are using your production facilities. The ratio is:

Annual sales divided by average quantity/number of units of finished goods.

The ratio shows you the number of times finished goods are turned over by way of sales in a year. The larger the number of times that they do so, the larger will be the profits of the business, each turnover generating some profit.

## **Debtors Turnover Ratio**

This ratio indicates the efficiency of collecting bills from your customers. It is given by - annual sales divided by average bills receivable. Ideally, the quotient must be low to indicate that your collection is brisk. It is also possible that owing to an acute liquidity problem, you may be offering heavy cash discounts and keeping your credit period very low.

## **Return On Investment**

We said earlier that the ratios can be grouped in two categories:

- Liquidity and Return on Investment. The current ratio and the profitability fall in the first group.

## **Return On Investment (ROI)**

ROI is profit after tax, divided by total tangible assets. Tangible assets mean only those assets which are employed in production. They exclude items in the balance sheet such as, goodwill, patent, copyright, deferred revenue expenditure etc. which do not constitute production assets but are shown in the balance sheet as charges on future profits.

The ROI ratio indicates how wisely and fruitfully you have made your investments in the assets of the firm. The utility of assets is expressed by the return that you earn by using them in production.

## **Ratio Index**



The amount of return which you may expect from out of your investment should be atleast equal to the return that you would have got from your bank had you invested the same amount spent on your assets in the form of deposits. In fact, the return on investment must be slightly higher than the bank interest rate because you should also be compensated for the risks that you take in business and the efforts you make for running it.

### SAQ 11.4

1. Mention a few tangible assets in a manufacturing firm.


2. State why it is necessary for you to expect a return on your business investment to be higher than the bank interest rate.


### Return on Equity

When you invest your own capital in your business, you would expect that such capital is put to good use; that such capital is made to work for you. How do you measure this performance of capital?

Your capital performs well or badly depending upon the amount of profit your business has given you, after using your capital. In other words, the measure of usefulness of your capital is the `return' which your capital earns for you each year through your business. The return on capital is called `Return on Equity', the word `equity' being used to mean your own capital.

The Return on Capital is given by



## Profits from Operations

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Capital + Reserves + Surplus - Accumulated losses

`Profits from Operations' means gains or losses arising from transactions made by you not relating to your actual business are ignored, e.g., loss on sale of an old machine, or rent received from a part of your business premises let out to a tenant. `Reserves' means profits of previous year re-invested in business. `Surplus' means that portion of profit of the current year which is also retained in business, after drawings.

### **The Ratio Standard**

The standard of measurement of this ratio is that it should be atleast equal to the return which you would have received if you had invested your capital elsewhere alternatively; may be, in some other business, or in a bank or a company as interest-earning deposit. To put it briefly, a fair return on your capital should be somewhat higher than it because the risk you would undertake in running your business must also be compensated by the return you derive.

### **The `Du Pont' Chart: Return On Investment**

A different method of measuring `return from business' is to look at operating profit as a yield from `total assets' employed by you. Total assets are supported both by the capital invested by you and funds borrowed by you from banks or individual persons. The return so calculated will show you how well or badly you have put your assets to use; which is something more than knowing how profitable your own capital has been. Return on total assets is also known as `Return on Investment (ROI)'.

ROI is a good tool for keeping a vigil on management of assets; that is, it will help you see which assets have proved burdensome and idle and which assets are profitable to hold and, perhaps, worthy of augmenting. As operating profit is also a factor of this ratio in the numerator, ROI is a further tool to investigate which department of your business is incurring undue cost and proving, therefore, a drag on your overall return from business. That ROI as a good overall means of control over business is best understood when we can decompose it into its component it into its component parts as under:



### Du Pont Chart

$$\begin{array}{rcc}
 \text{ROI} & \frac{\text{Profit}}{\text{Total Assets}} & \\
 & \frac{\frac{\text{Sales minus}}{\text{Total Cost}}}{\frac{\text{Sales}}{\text{Total Assets}}} & \frac{\text{Variable cost plus fixed cost}}{\text{Inventory plus Receivables plus cash}}
 \end{array}$$

You will observe that ROI is the result of events occurring along two streams, namely, costs and assets. Analysis of ROI means traversing through the two streams down to their bases so as to home in on the specific component causing a disturbance to ROI. This chart is ascribed to a US company, DU Pont Inc., and is named after it.

### Capital Gearing and its Impact on Return on Capital

The assets you would employ in your business are supported by two sources: (i) your own capital and (ii) borrowed money. Your own capital is called 'Equity' and borrowed money is called 'Debt'. A business is run by means of a combination of both these sources. It cannot be run by borrowings or debt alone or capital or equity alone for a long time. You would then have to be constantly keeping an eye on the ratio between the two. This is called the debt-equity ratio.

A businessman's objective is to maximise the rate of return on his own capital invested in business. This rate will be large if debt is obtainable at a cost lower than the rate of return on his capital available to him in alternative investments in the market. Given this circumstance, a businessman would try to minimise the extent of his own capital and borrow to the maximum extent. Such a combination of debt and equity which result in maximising of return on capital is called 'Capital Gearing'.

The impact of capital gearing on Return on Equity is best understood by means of the following:

#### Illustration

Consider two companies, Alpha and Beta which are identical excepting that Beta has a debt component. The capital structures of the two companies are as under:



	Alpha	Beta
Assets (Rs.)		
Debt (Rs.)	15,00,000	15,00,000
		10,00,000
		(@ 15% p.a.)
Equity (Rs.)	15,00,000	5,00,000
Return on Assets (%)	20%	20%

Assume a tax rate of 60%. It is required to calculate return on equity.

	Alpha	Beta
Earning before Interest and Tax		
Less: Interest	3,00,000	3,00,000
		1,50,000
Pre-tax earnings	3,00,000	1,50,000
Less: Tax (@ 60%)	1,80,000	90,000
Net Profit	1,20,000	60,000
Return on equity Net Profit		
(----- %)	8%	12%
Equity		

The capital gearing employed by Beta has enabled it to increase its return on equity to 12% from 8% of the unlevered company Alpha.

Gearing will however become unfavourable that is, the return on equity will be less - if cost of debt is higher than the return on assets. This can be verified in the above example by assuming return on assets as say, 12%, all other circumstances remaining the same.

	Alpha	Beta
Earning before Interest and tax		
Less: Interest	1,80,000	1,80,000
		1,50,000
	1,80,000	30,000
Less: Tax (@ 60%)	1,08,000	18,000
Net Profit		
Return on equity Net Profit	72,000	12,000
(----- %)	4,8%	2,4%
Equity		



# UNIT

## 9

### Contents

#### Chapter XII

1. Funds Flow Analysis
2. Sources and Uses of Funds
3. Objectives of Funds Flow Statement
4. Funds Flow Statement from the Balance Sheet
5. Inferences

#### The aim of this chapter is to:

- introduce you to the method of identifying sources and uses of funds in business
- help you construct a funds flow statement from the balance sheet

#### Objectives:

On completion of this chapter, you will be able to:

- read a balance sheet from a managerial concern over the direction of the flow of funds
- draw conclusions which help control the nature and extent of bottlenecks impending business





## 12.1 Funds Flow Analysis

You have already learnt what management accounts indeed mean and how the financial statements which your accountant gives you could be interpreted by you for decision making.

Now you know how to read a Profit and Loss Account and a Balance Sheet in terms of measuring your business state of liquidity, how well you have put your assets to good use, how profitably you have invested your own cash in the form of capital, how efficient you have been in collecting bills from your customers and so on.

This kind of investigation into the financial statements constitutes one aspect of your business functions. An equally important question is; "To what kind of uses have I invested my available funds in my business and what have been the sources of such funds for me?"

In other words, the question is, 'What are my sources of the funds for my business and what are the uses to which they are put?'

Such an analysis of the financial statements is called 'Funds Flow Analysis'.

## 12.2 Sources and Uses of Funds

A balance sheet sets out the obligations of your business under the head 'Liabilities and facilities' under the head 'Assets'. In other words, Balance Sheet is a statement of what the business owes and what it owns.

A going business does not however perceive its liabilities as obligation which need to be paid off as though they are borrowings for a short term for a single transaction, but rather as sources which will be available to it as long as the business is alive. Liabilities are a line of support for a business which is continuous. Even though individual creditors are satisfied, the business simultaneously creates fresh creditors in their place, as the business stays dynamic. For example, credit offered by a supplier of raw material is a source which needs to be paid off within a stated time; at the same time, a fresh credit for further supply will rise in its place either from the same supplier or another.

The Balance Sheet shows a static picture of assets and liabilities and does not indicate the processes by which changes have occurred in the assets and liabilities. A change in the capital of the business is partially shown by the profit and loss statement, as the profit or loss occurring at the bottom line of the statement is transferred to the capital account at the end of the financial years.



Assets are uses to which liabilities are applied in business. The sources and the uses shown in the Balance Sheet are categorised as long term sources, long term uses, short term sources and short term uses. they comprise:

Sources		Uses
Long term		Long term
	Capital and Reserves	Fixed Assets
	Deferred Liabilities	Miscellaneous Assets
		Intangible Assets
Short term		Short term
	Current Liabilities	Current Assets
Provisions		
Long term		Long term

## 12.3 Objectives Of Funds Flow Statement

The health of a business is not measured so much by the levels at which its assets and liabilities stood at a given date but rather by the manner in which the streams of inflow and outflow of resources occurred between two accounting periods. Streams become visible only when the changes in positions of assets and liabilities are measured between two successive dates.

When an asset item is seen to have declined or a liability item is seen to have risen, between two successive balance sheets of the business, sources have flowed into the business. On the other hand, when an asset has risen, or a liability declined, sources have flowed out of the business.

The inflow of resources are of 2 kinds: Long term and short term. The transactions that can be categorised under the two types of inflow are as follows:

Long Term	Short Term
Increase in Term Loan	Increase in Cash Credit
Capital	Trade Credit
	Provisions
	Other Current Liabilities

The outflow of resources from a business are also of two kinds: Long term and short term. They can be classified as under:

Long Term	Short Term
Decrease in Term	Decrease in Cash



Loan Capital	Credit Trade
	Credit Provisions
	Other Current Liabilities
Increase in Fixed Assets Investments	Increase in Inventory
	Receivables
	Other Current Assets

### SAQ 12.1

1. Complete the following sentences:

a) The liabilities shown in a balance sheet indicate \_\_\_\_\_ (Sources of Funds / Use of Funds).

b) The assets shown in a balance sheet indicate \_\_\_\_\_ (Sources of Funds/Uses of Funds).

2. Give two examples of Short Term Sources.

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3. Give two examples of Long Term Sources.

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## Analysis Of Funds Flow Statement From The Balance Sheet

You have learnt that liabilities in the balance sheet indicate sources and that assets indicate uses. But when you look at them at a particular date, it does not give you much information. At best, a single balance sheet will only show you what assets were standing in your books on that date and what sources were available exclusively as on the date to support them. On the other hand, the answer you want should be not how much funds did you create and apply, but also, what were the sources from which you created those funds and what were the specific investments you made out of them.

To answer such questions, you need to know the movement of each asset and each liability between two successive years' balance sheets.

Funds move out (used) or move in (generated) whenever an asset or a liability is either reduced or increased. For example, when you sell your finished goods, funds are generated because finished goods as an asset become reduced.

Similarly, if you purchase a machinery, asset is increased and therefore a use of the resources occurs. Or, when you take a loan from a bank, liability increases and now, this kind of statements may be quite confusing to you. It is not surprising. In the beginning, the play of words, increase in liability, decrease in asset, decrease in liability and increase in asset, can create quite a havoc in your mind. But we can evolve a simple thumb rule to know whether a source occurs or a use follows whenever a liability or asset changes.

### **The Thumb Rule is:**

1. Whenever you see a change in assets or liabilities, mentally look at your cash box position, If, owing to a change in the assets or liabilities, the cash increases, then such a change constitutes a source.
2. If, on the other hand, owing to a change in the assets or liabilities, the cash box stands depleted, the change in the assets or the liabilities will constitute a use of funds.
3. If, the change occurs in current assets or current liabilities, then the source or the use as the case may be, will be of short term nature.
4. If, the change occurs in the non-current (long term) assets or liabilities, the source or the use as the case may be, will be of long term nature.



## SAQ 12.2

Complete the following sentences:

1. When a current asset declines between two successive years, a \_\_\_\_\_ occurs (Short Term Source/Short Term Use)
2. When a term loan decreases upon payment of a installment, a \_\_\_\_\_ occurs (Long Term Source/Long Term Use)
3. When you pay off your dues to the supplier of raw material, a \_\_\_\_\_ occurs (Short Term Source/Short Term Use)

The lesson you have learnt so far are that when you want to watch the movement of funds, either as increase in source, decrease in use, increase in use or decrease in sources, you will need to place the balance sheets of two successive years side by side and measure the increase or the decrease that has occurred under each category of assets or liabilities.

We shall now consolidate our learning by means of an example.

### An Example

Using the following balance sheet of M/s. Shah & Mehta, construct a funds flow statement:

<b>Liabilities</b>	<b>1983</b>	<b>1984</b>	<b>Assets</b>	<b>1983</b>	<b>1984</b>
Issued Share Capital	1,50	2,00	Fixed Assets (depreciated)	2,55	2,49
Reserves	0,15	0,20	Stock	0,35	0,42
Surplus	0,29	0,42	Debtors	0,39	0,47
	_____	_____			
	1,94	2,62			
Term loan	0,50	0,25	Cash & Bank	0,06	0,10
Cash Credit	0,40	0,90			
Trade Creditors	0,24	0,36			
Provision for tax	0,27	0,35			
	_____	_____		_____	_____
	3,35	4,48		3,35	4,48
	_____	_____		_____	_____



## Solution

<b>Long Term Sources</b>	<b>Rs. in lakhs</b>	
Increase in Share Capital	0,50	
Increase in Reserves	0,05	
Increase in Surplus	0,13	0,68
<b>Long Term Uses</b>		
Decrease in Term Loan		
Increase in Fixed Assets	0,25	
Long Term Deficit	0,94	1,19
		0,51
<b>Short Term Sources</b>		
Increase in Cash Credit	0,50	
Increase in Trade Creditors	0,12	
Increase in Tax Provision	0,08	0,70
<b>Short Term Uses</b>		
Increase in Stock	0,07	
Increase in Debtors	0,08	
Increase in Cash	0,04	
Short Term Surplus		0,51

### SAQ 12.3

1. Study example of M/s. Shah & Mehta and state what inferences you can draw from funds flow statement as regards:

- a) how the firm has financed increase in its Fixed Assets.
- b) whether the increase in cash credit is validated by higher working capital and
- c) whether the firm has generated enough sales to pay off Trade Creditors.

2. Whenever you see a long term deficit in a funds flow analysis, your conclusions are that there has occurred a diversion of \_\_\_\_\_ to finance \_\_\_\_\_ uses.



3. The consequences of diversion of short term sources for long term uses will be :


## 12.4 How to Reconcile Bank Statement

The Bank with which you operate your business account gives you a statement of your account periodically, usually once a month. If the transactions in the account are in large numbers, the Bank may give you the statement even weekly or fortnightly.

The objective of such a statement is to verify if the balance shown by the Cash Book written by you agrees with the balance actually laying in your account at the Bank. If there is a disagreement, it may mean any of the following:

- you may have issued a cheque to a person and he may not have encased it yet
- you may have deposited a cheque received by you into your account but the Bank may not have credited it to your account pending collection
- the Bank may have charged your account with interest or discount or commission for a transaction but, being unaware of it, you may not have recorded it in your Cash Book
- some bill which you may have got discounted by the Bank may have been returned by the person who should have paid it. You may not have known about the dishonour and omitted, therefore, to show it in your Cash Book
- the disagreement between the balances in your Cash Book statement may be due to an error or omission of an entry either by the Bank or yourself.

### How Reconciliation is made

Reconciliation means either proceeding from your Cash Book balance and making it agree with the balance shown in the Bank's statement or the other way round. Ordinarily, we proceed from our Cash Book balance and make it reach the Pass Book balance by cross checking each entry in the Cash Book with each entry in the Pass Book. The steps followed will be:

- a) when the Pass Book shows an entry which the Cash Book has omitted, rewrite the Cash Book balance by including that entry; and



b) when the Pass Book does not show an entry which appears in your Cash Book, rewrite the Cash Book balance by removing that entry.

Usually, a business would have some loan arrangement with a Bank. Therefore, the Bank Pass Book will show an overdraft balance. As you proceed from your Cash Book balance, you should then apply the following rules:

- when you see an extra amount credited in the Pass Book, you reduce your Cash Book balance
- when the Pass Book shows a Bank charge, such as, interest, discount or commission, you increase your Cash Book balance
- when a cheque deposited by you in the Bank does not appear in the Pass Book, you increase your Cash Book balance
- when a cheque issued by you is not recorded in the Pass Book, you reduce your Cash balance

### **A word of caution**

Be careful to remember that all these steps of correction apply only if

- you proceed from the balance shown in your Cash Book and
- your balance in the cash book shows an overdraft position (that is, the balance indicates the amount that you owe to the bank).

We shall now consolidate or learning by means of a typical example.

From the following particulars, ascertain the Bank Balance as would appear in the Bank statement of A's account as on 31st March, 1995:

1. The Bank overdraft as per Cash Book on 31st March, 1995 was Rs. 15,000
2. Interest on Overdraft for six months ending 31st March, 1995, Rs. 500 is debited in the Pass Book
3. Bank charges for the above period are also debited in the Pass Book, amounting to Rs. 125
4. Cheques issued, but not cashed, period to 31st March, 1995 amounted to Rs. 3,750
5. Cheques paid into Bank, but not cleared and credited before 31st March 1995 were for Rs. 6,250
6. Interest on Investment collected by the bankers and credited in the pass book amounted to Rs. 4,500.





## Bank Reconciliation Statement as at 31st December, 1970

	Rs.	Rs.
Bank Overdraft as per Cash Book		15,000
Add: Interest on Overdraft debited in the Pass Book	500	
Add: Bank Charges debited in the Pass Book	125	
Add: Cheques paid into Bank, but not yet collected	6,250	6,875
		21,875
Less : Cheques issued but not cashed	3,750	
Less : Interest on Investment credited by Bank but not adjusted in the Cash Book	4,500	8,250

### 12.5 Analysis of Funds Flow Statement

The word 'Fund' is a broader term than 'Cash'. A Funds Flow Analysis means tracing where sources for working capital of the business came from. 'Fund' comprises working capital, names, inventories, receivables and cash.

Ideally, the sources of working capital are: (i) Short Term Liabilities and (ii) Owner's Working Capital Margin contribution. Short term liabilities are namely, Cash Credit from Bank and credit extended by suppliers of raw materials and other resources. 'Working Capital Margin Contribution' is derived from the surplus of Long Term Sources after meeting the Long Term uses.

Long term sources are the aggregate of promoter's capital, reserves, term loans from bank and unsecured loan raised from friends and relatives. Long term uses comprise fixed assets and investments.

### The Concept of Funds Flow

As a given business is normally dynamic, changes keep happening in both Assets and Liabilities constantly. It means that sources and uses are constantly in a state of flux; that is, when you compare balance sheets of your firm for two successive years, you will notice increases or decreases in sources and uses under each specific head. Funds are stated to flow into business whenever liabilities increase and funds are stated to be flowing out of business whenever assets increase. Equally truly, funds flow in when assets are reduced and flow out when liabilities are reduced.

We have defined as to what we mean by working capital. It, therefore, follows that if we excluded short term sources and uses (increases or decreases in current liabilities and current assets), and examine the net increase or decrease occurring in long term sources and uses (capital and term loans, and fixed assets in investment), we can inunciate a following rule:



Net surplus in long term sources creates increase in working capital and net deficit in long term sources creates decrease in working capital.

The objective of funds flow analysis is to determine whether there has emerged a net deficit or net surplus in a comparative study of two successive balance sheet and, secondly, which specific item of capital has responded to it.

We shall now consolidate our learning by applying it to a typical example:

**Consider the following Balance Sheet of Zephyr & Co.,  
as at 31st March, 1994 and 1995**

Liabilities	(Rs. in lakhs)		Assets	(Rs. in lakhs)	
	Year-I	Year-II		Year-I	
<b>Current Liabilities</b>			<b>Current Assets</b>		
Cash Credit	3,85	4,20	Cash	0,10	0,25
Sundry Credits	1,10	2,15	Inventories	3,50	2,00
Others	0,30	0,15	Receivables	3,40	3,25
			Others	0,50	0,50
	<b>5,25</b>	<b>6,50</b>		<b>7,50</b>	<b>6,00</b>
<b>Deferred Liabilities</b>			<b>Fixed Assets (Net)</b>		
Term Loan	5,00	4,50	Plant & Machinery	7,00	6,50
Unsecured Loan and Deposits	2,00	2,00	Sundries	0,90	1,50
	7,00	6,50		7,90	8,00
<b>Net Worth</b>			<b>Miscellaneous Assets</b>		
Capital	2,00	2,00	Investments	1,50	4,35
Reserves	3,15	3,85	Deposits	0,50	0,50
	5,15	5,85		2,00	4,85
	<b>17,40</b>	<b>18,85</b>		<b>17,40</b>	<b>18,85</b>

The changes in the long term assets and long term liabilities may be listed out as under:

Long Term Sources		Long Term Uses	(Rs. in lakhs)
Increase in Reserves	0,70	Increase in Sundries	0,60
Decrease in Plant & Machinery	0,50	Decrease in term loan	0,50
		Increase in investment	2,85
	<b>1,20</b>		<b>3,95</b>

The deficit in long term sources after meeting the long term uses is therefore:  
3,95 minus 1,20 = 2,75



This means that the company's transactions in the long term accounts, (non-current liabilities and net worth on the one hand and non-current assets on the other) were such that it invested more than the resources that it raised. The result of it is that the company's working capital suffered a decline. This can be seen by listing out the changes that occurred in current assets and current liabilities as under:

		(Rs. in lakhs)	
Short term sources		Short term sources	
Increase in cash credit	0,35	Increase in cash	0,15
Increase in Sundry Creditors	1,05	Decrease in other Current liabilities	0,15
Decrease in inventories	1,50		
Decrease in receivables	0,15		
	<b>3,05</b>		<b>0,30</b>

The surplus in short term sources is :  $3,05 \text{ minus } 0,30 = 2,75$ .

## 12.6 Cash Flow Statement

So far we have discussed the movement of funds, namely, net increase or decrease in working capital. You would be happy if the result of your working for a year creates an increase in working capital because you would then think that you have created wealth of a kind.

Paradoxically, even after seeing a large profit in your financial statement, you may not have enough cash in your cash box to repay a loan or pay dividends or even taxes. This may be because your business has either not received cash even though profits have been made or, possibly even though it may have been received, it has been drained off in other activities. Cash is a part of working capital does not necessarily mean a change in the cash position. As funds comprise of other sources of funds, besides cash inflow of funds, it does not necessarily mean inflow of cash. It becomes incorrect therefore to say that a sound fund position does not follow a sound cash position.

A company will therefore, need to prepare a statement which analyses the inflow and outflow of cash on account of increases or decreases in assets and liabilities during two successive years. Such a cash flow statement does not take into account the long term or short term nature of in-flow and out-flow. This is the crucial difference between funds flow analysis and cash flow analysis.

Cash flow analysis means commencing with the opening cash balance of the business at the beginning of the year, plotting the inflows and outflows of cash on account of changes in the assets and liabilities position over the previous year's balance sheet and finally reaching the closing cash balance position.



A Cash Flow Statement is drawn from out of a Funds Flow Statement by taking out from it items which will affect cash. In other words, from the funds flow statement, if we take off the accrual and pre-paid, the net affect on the cash box can be isolated.

The process of conversion of a Funds Flow Statement to a Cash Flow Statement by means of analysis statement.

The following illustration demonstrates the conversion process:

### Illustration

**Following are the condensed balance sheets of ABC Company Ltd.**

	1994(Rs)	1995(Rs)
<b>Current assets</b>		
Cash at Bank	2,15,000	3,00,000
Book debts	3,95,000	2,85,000
Inventories	9,80,000	11,30,000
<b>Total</b>	<b>44,40,000</b>	<b>47,15,000</b>
<b>Current liabilities</b>		
Creditors for goods	6,45,000	5,30,000
Outstanding expenses (Admn.)	85,000	15,000
	7,30,000	5,45,000
<b>Accumulated provision for depreciation</b>	1,00,000	1,40,000
Secured Loans	2,00,000	3,00,000
Equity share capital	20,00,000	20,00,000
Reserves and surplus	14,10,000	17,30,000
<b>Total</b>	<b>44,40,000</b>	<b>47,15,000</b>

### **Condensed Income Statement for the year 1995**

	Rs.	Rs
<b>Sales</b>		33,00,000
Cost of sales (including Rs. 40,000 depreciation)		26,50,000
	<b>Gross Profit</b>	<b>6,50,00</b>
Less: Selling and administration Expenses	2,40,000	
Other expenses	60,000	
Interest on loans	30,000	
		<b>3,30,000</b>



Profit for  
the year 3,20,000

You are required to work out the figures of operational funds flow. Convert the same into operational cash flow.

### Solution

Operational funds flow		Rs.
	Profit	3,20,000
	Add: Depreciation	40,000
		3,60,000

If all the operational receipts and payments have been on cash basis, the operational cash flow would also have been Rs. 3,60,000. This being not so, the following adjustments are required to arrive at the operational cash flow:

		Rs.
Operational fund flow		
	Add: Collection from debtors	3,60,000
	(Rs. 3,95,000 Rs-2,85,000)	1,10,000
		4,70,000
	Less: Payment to creditors	1,15,000
	(Rs. 6,45,000-Rs. 5,30,000)	
	Payment of outstanding expenses	70,000
	Purchase of inventory	1,50,000
		3,35,000
		1,35,000

### Operational Cash Flow

This can be considered as the net inflow of cash from operations.

### Preparing a Cash Flow Statement

Once the operation funds flow is converted into operational cash flow, as the rest of the items from non-found area generally affect the cash, a cash flow statement can be presented on the same lines as a funds flow statement. In the above illustration, the cash flow statement will appear as follows:



## Cash Flow Statement

	Rs.		Rs.
Balance of Cash (Opening)	2,15,000	Plant and equipment Purchased	1,50,000
Secured loan obtained	1,00,000	Closing balance of cash	3,00,000
Operational cash flow	1,35,000		
	4,50,000		4,50,000



# UNIT

## 9

### Contents

#### Chapter XIII

1. Definition of Cost
2. Technique of Classification
3. Overheads Absorption Method
4. Standard Costing

#### The aim of this chapter is to:

- introduce you to the concept and definition of cost
- acquaint you with classification of costs
- help you learn the method of absorbing overheads in determining total cost
- introduce you to the system of budgeting costs and analysis variance

#### Objectives:

On completion of this chapter, you will be able to:

- develop a keen consciousness of cost in each business transaction
- learn to determine total cost of each activity
- look at the cost estimates and supervise cost



## 13.1 Definition of Cost

Costing, sometimes referred to as cost finding, is simply the calculation of the costs of individual units of product or service. It differs from financial accounting and budgetary control in that it does not deal with the finances of a whole business or sections of it; costing looks at the unit of production. It has multiplicity of uses. The uses to which costs can be put include:

- \* providing a 'base line' to help establish selling prices for products or services
- \* enabling the profitability of products or services to be measured over time by comparing changing costs with changing selling prices
- \* helping in the search for improved profitability by highlighting potential savings
- \* providing data for financial studies of various kinds, such as evaluation of capital expenditure proposals.

## 13.2 Types of Cost

### Technique

As a first step in establishing what products or services actually cost, accountants have found it useful to classify, or categorise, the various types of business expenses passing through the accounts. This makes calculation of unit costs easier and ensures that they can be put to maximum use. In manufacturing business it is a standard practice to break business costs into direct material, direct labour and overheads or expenses.

### Direct Material

Direct material is the material which goes into, or becomes part of, the finished product. If an enterprise manufactures desks, then the wood and metal of which they are made are direct material cost. The term is not applied to retail business. The costs of products sold in a shop would simply be referred to as 'cost of goods sold' or 'cost of sales'.

### Direct Labour

Direct labour is the cost of production wages related to the manufacture of a unit of product or service. Again, this term does not apply to retail or non-manufacturing business.

### Overheads (Expenses)





These might simply be defined as those other business costs which do not fit into the above two categories, hence their description is as 'indirect costs' in the context of manufacturing firms. It is also a common practice to break overheads into at least two categories, manufacturing overheads and selling and administration overheads. Examples of overheads include depreciation, salaries, maintenance costs, computer hire costs and employee welfare costs.

### SAQ 13.1

1. Suggest a definition of 'Costing'.

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2. Define 'direct material' and 'direct labour'.

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The treatment of overheads in the calculation of unit cost is not so straightforward. Relatively, a few overhead expenses can be directly related to the production of a single unit of output. How much of the depreciation on the office building 'belongs' to a single unit produced or to each production department? The exception is job or contract costing, where the sheer size and diversity of the tasks undertaken make this easier. The process of assigning costs in their entirety to specific jobs, contracts or departments in this fashion is called allocation.

Where this is not possible, it will be necessary to divide overheads up between products or departments in proportions that are felt to be reasonably fair. This is done by



approximation, sharing overheads out pro rata to floor area, numbers employed or some other indicator of usage. Once allocation and appointment have been attended to, it is then necessary to devise methods of loading total overheads into absorption rates, which are often developed using budget data.

A number of approaches are possible. Absorption rates can be expressed as a percentage of direct labour cost or direct labour hours. On the other hand, if it were felt that the expenditure on overheads was more dependent on the amount of direct material handled (perfectly possible in a mechanical process industry), then an overhead absorption rate based on direct material could be devised. It is even possible where it is judged to be appropriate to the business, to develop absorption rates based on prime (direct) cost. In mechanical engineering business, overhead absorption rates may even be based on machine hours. The level of sophistication required depends on the amount which a company is prepared to spend on costing. There are no norms. All that is required is that absorption rates are rationally based. The example which follows demonstrates the principle outlined above:

### Example

**The following list of budget overheads is available for XYZ Ltd:**

Indirect Wages	Rs. 25,000
Employee benefits	15,000
Salaries	10,000
Salaried benefit	3,000
Maintenance and materials	5,000
Heat, light	10,000
Power rates	20,000
Depreciation	3,000
Miscellaneous	2,000
	93,000

XYZ has two production departments, Machining and Assembly, for which the following information is available:

	Machining	Assembly
Direct workers	3	2
Indirect workers	3	2
Last year's maintenance costs	70%	30%
Floor area	1,000 Sq ft	2,500 Sq ft
Asset values	Rs. 12,000	Rs. 9,000
	Machining	Assembly

The overheads might be elevated and apportioned as follows:

Machining	Assembly	Basis chosen
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Indirect wages	Rs. 15,000	10,000	No. of workers (3/2)
Employee benefits	9,000	6,000	Total workers (6/4)
Salaries	6,000	4,000	Total workers (6/4)
Salaried benefits	1,800	1,200	Total workers (6/4)
Maint. materials	3,500	1,500	Last year
Heat, light	2,857	7,143	Floor area
Power rates	5,714	14,286	Floor area
Depreciation	1,714	1,286	Asset Values
Miscellaneous		2,000	
	45,585	47,415	

XYZ must now decide on a basis for absorption rates. The following information has been made available for the budget year:

(a) Direct hours: Machining 5,000 Assembly 3,000-

(b) Direct wages: Machining 20,000, Assembly 14,000

(c) Machine hours: 40,000

The possibilities suggesting themselves are therefore:

(1) rate per direct labour hour

(2) rate per Rs. 1 direct labour cost

(3) machine-hour rate.

(These have been suggested because they can be easily developed from the available information.)

(1) If a rate per direct labour hour is chosen, the following absorption rate would be calculated:

$$\text{Machining } \frac{\text{Rs. } 45,585}{5,000} = \text{Rs. } 9.12 \text{ per direct labour hour}$$

$$\text{Assembly } \frac{\text{Rs. } 47,415}{3,000} = 15.81 \text{ per direct labour hour}$$

(2) If a rate per Rs. 1 direct labour cost is chosen, the rates would be as follows:



$$\text{Machine : } \frac{\text{Rs. 45,585}}{20,000} = 228\%$$

$$\text{Assembly : } \frac{\text{Rs. 47,415}}{14,000} = 339\%$$

(3) If a machine-hour rate is chosen (this is only possible for machining), it would be:

$$\frac{\text{Rs. 45,585}}{40,000} = \text{Rs. 1.14 per machine hour}$$

These methods are alternatives, and it is possible to have permutations-for example, a machining and an assembly rate based on Rs. 1 direct labour cost. A cost will now be built up using these rates.

It should be noted that its is not necessary to develop separate overheads absorption rates for machining and assembly. A combined or total rate could be developed by dividing total budget overheads by either direct labour cost or hours. Using labour cost rate would be:

$$\frac{\text{Rs. 93,000}}{34,000} = 274 \%$$

The product would then cost:

M	Rs. 14.50
L	3.00
O	
Rs 3 x 274%	
	8.22
Total cost	25.72

We have now developed four different costs using the same information simply by choosing different types of absorption rates. This has been done to show that the treatment of overheads is the most subjective area in costing and to emphasize that costing, like accounting itself, is not an exact science. One of the approaches is the 'right' one. However, it should be understood that, whichever type of absorption rate is chosen, the aggregate amount of overheads charged to all product costs will differ under different system of absorption.



# Standard Costing

Standard costs and budgeted costs. In practice, the terms are virtually interchangeable.

There are two main approaches in the setting of standard or budget costs. The first of these is the ideal standard approach. Under this method, the costs are established on the principle that the target costs for the product should reflect the most efficient working practices and production methods possible in market the product. Comparisons with actual cost during the budget year will reveal how far short of realizing its potential the company is.

The second approach involves production of attainable standards. The underlying principle here is that budget costs should be `hard but achieving. Those cost and efficiency improvements which are considered to be achievable during the budget year are then incorporated.

When setting standard costs, whichever method is chosen, management should consider some or all the following question, as they relate to the budget year.

## Material

- (a) Can this be purchased from suppliers at a cheaper price either by sourcing it (giving out for job work) elsewhere or by buying larger, and therefore cheaper, batches?
- (b) Can wastage or scrap be reduced or eliminated, perhaps by improving material handling methods or equipment, restraining operations or providing better tools and machinery?

## Direct Labour

- a) Can operators be induced to work more efficiently, either by increasing bonus for more output, or by eliminating waiting time or breakdowns, or by better supervision?
- b) Would more careful quality control of materials bring about elimination of scrap during work in progress?
- c) Will restrictive practices, if any, contribute?

## Overheads

- a) Can expenses be better controlled through introduction of requisition systems on the shop-floor, or improving those already existing?
- b) What can be done to eliminate pilferage (stealing)?
- c) Is energy (heat, light, power) being used efficiently?



- d) Can in - house service, such as a canteen, be provided by an outsider for a cheaper price? Is reverse the case?

No system of standards and budgets will improve performance in its own right. It will only help insofar as it generates questions such as these and only then action follows.

## SAQ 13.2

1. How do you determine absorption rates?


2. The information given below relates to the budget year of RLT Ltd. a small business:

Machine shop	10,000 machine hours
Assembly shop	15,000 man hours
Budget overheads	Rs.
Salaries	7,500
Indirect wages	15,400
Maintenance	3,900
Depreciation machines	2,500
Depreciation assembly	1,000
Heat, light, power	6,000
Computer hire	2,750
Miscellaneous	1,960
	41,010

Required: allocate and apportion the overheads to machine shop and assembly

### How to work out process costing

In some industries production follows a number of distinct but successive stages. The finished output at one stage of production becomes the input for the next stage. At the end of all the stages of process, the completed production is sold or transferred to finished goods stock. Examples of this type of production are chemical works, oil refineries, paint



manufacturers. Process costing is used in companies with this type of production to find the cost of the product at each of the various stages of process of manufacture. For each process both direct costs (such as materials and labour) and manufacturing overheads are charged. By dividing the costs of one process by the number of units, the average costs per unit is calculated.

Cost units which are similar in nature pass through each of the production processes. It is essential that appropriate case units are chosen. Where the product is liquid, the cost unit might be litre, with a solid product, a kilogram or tonne would be more appropriate.

As cost units move from the first process to the second, the costs incurred to date are transferred with them. This cost transfer carries through all the processes and the costs thus accumulated give the total at the end of production.

### **Cost Elements**

The costs incurred in production comprise the usual elements, that is, materials, labour and overheads. When the work in progress-the partly completed units - is examined at the end of a period, the degree of completion may differ for each of the cost elements. The units may be almost complete as far as materials are concerned, but further substantial labour and overheads cost may be treated separately to find out the number of equivalent units and to calculate the cost per unit.

### **How to absorb overheads**

We have already seen how overheads are collected for retrieval from production departments.

Two problems remain, however. First, a good method should be found for charging overheads to individual cost units which pass through the production departments. Second, the total cost of a particular job needs to be calculated.

The problem of charging overheads to individual cost units becomes complex when products manufactured in a firm are dissimilar but nevertheless pass through the same production departments. Overheads absorption or overheads recovery will not be simple when, in the course of manufacture, demands made on the production process will be different for individual cost unit and the lengths of time for which these demands are made will also be different. It, therefore, becomes necessary for a fairly accurate charge to the individual cost units reflecting these differing demands made by them on production resources.

### **Overheads Absorption Rate**



Fairly accurate recovery of overheads will be possible if we are able to charge a fair proportion of total overheads to each cost unit. This means that a suitable rate of overheads is necessary to be determined.

The overheads absorption rate is determined by dividing the overheads for a particular cost centre by the number of units of the factory resources demanded by a cost unit. This means that one can determine distinct absorption rates for each category of factory resource absorbed by the cost unit. For example, if total cost centre overheads amount to Rs. 1,50,000 and the number of labour hours expended for a cost unit is 2,000, the rate of overheads absorption with labour as the basis for absorption will be Rs. 1,50,000 divided by 2,000, namely, 75; that is, this cost unit will be loaded with labour hour overheads at Rs. 75 per hour.

### Illustration

**Arora Industries present the following data for the year ended 31<sup>st</sup> March 1989**

	Standard	Actual
No. of units produced	32,000	16,000
Capacity (hours)	60,000	35,000
Prime Cost: Materials	10Kgs/unit @Rs. 4/kgs	81,000 Kgs @Rs. 6/Kgs
Labour	10 hours unit @ Rs. 3/hr	2,00,000/hrs @Rs. 2/hr
Overheads: Variable	Rs. 40,000	Rs. 18,000
	Rs. 90,000	Rs. 65,000

The variances that emerge are analysed as under : (F=favourable, A=adverse)

Particular	Standard	Actual	Variance
Materials	Rs. 4x10 Kgx16000 = Rs. 6,40,000	81000 Kg x Rs.6 = Rs. 4,86,000	Rs.1,54,000(F)
Labour	10 hrs x Rs.3x16000 = Rs. 4,80,000	2,00,000 HrsxRs.2 = Rs. 4,00,000	Rs. 80,000 (F)
Variable Overheads	40,000 _____x 16000 32,000 = 20,000	18,000	Rs. 2,000 (F)
Fixed Overheads	90,000 _____x 16000 32,000 = 45,000	65,000	Rs. 20,000 (A)





## 1. Two-way analysis of prime cost

$$\begin{aligned}\text{Material Price Variance} &= \text{AQ (SP-AP)} \\ &= 81,000 (4.00- 6.00) \\ &= 1,62,000 \text{ (A)}\end{aligned}$$



# UNIT

## 9

### Contents

#### Chapter XIV

1. Pricing Methods
2. Marginal Costing
3. Price Discrimination & Differential Selling

#### The aim of this chapter is to:

- introduce you to different methods of pricing
- help you evaluate right extent of pricing
- assist you in quoting different prices for the same product to suit given circumstances

#### Objectives:

On completion of this chapter, you will be able to:

- appreciate the relationship between cost and price
- develop efficient pricing policy



## 14.1 Pricing And Cost Behaviour

### Pricing Methods

Businesses establish the prices they will charge for their products or services in a variety of ways, which include:

- \* `cost-plus' pricing
- \* market exploitation
- \* fee basis pricing
- \* marginal cost based pricing.

Let us discuss each of them

#### **`Cost - Plus'**

Cost-Plus pricing involves establishing the total cost of a product or service by methods already outlined and then adding a profit margin. Profit margin may be expressed as a sum of money, where, for example, a business may wish to make a specific profit on each unit sold. The percentage uplift could be established in several ways: a customer might accept that his/her supplier is entitled to recover all costs and a `reasonable' percentage on top as profit. In other words, the profit percentage may be agreed upon by the parties at the outset.

As an alternative, the supplier may well establish the percentage him/herself. Given that he/she has access to figures of budgeted or forecast sales for the next financial year, he/she will be in a position to calculate the proportion of profit that he/she will require in order to receive an appropriate return on capital invested.

`Cost-Plus' is normally only practiced where the supplier is in a monopolistic position and the purchaser is unable to obtain alternative price quotations. Until recent times it was quite common in the defence industry for ancillary work after the award of a major contract in the construction industry. It has been criticised that this method encourages inefficiency. If the supplier's workforce or methods of operation are not efficient as they should be, the extra cost is passed on to the customer, and the mark-up uplift is proportionately large.



## Example

Average capital invested	Rs. 500,000	
Forecast budget annual sales	Rs. 1,00,000	
Profit required (say 25% on capital invested)	Rs. 125,000	
Therefore, profit as a percentage of sales	125,000	= 12.5%
Therefore, profit as a percentage of cost (mark-up or uplift)	1,000,000	
	-----	
	Rs. 125,000	
	-----	= 14.3%
	1,000,000-125,000	

14.3% is therefore added to the estimated or actual costs of products to arrive at a selling price.

'Cost-Plus' is normally only practically where the supplier is in a monopolistic position and the purchaser is unable to obtain alternative price quotations. Until recent times it was quite common in the defence industry for ancillary work after the award of a major contract in the construction industry. It has been criticized that this method encourages inefficiency. If the supplier's workforce or methods of operation are not as efficient as they should be, the extra cost is passed on to the customer, and the mark-up or uplift is proportionately larger.

## 14.2 Market Exploitation

Market exploitation simply refers to the practice of charging what the market will stand. Where demand for a product is high and supply is limited, 'price skimming' is often attempted, that is, pushing prices as high as possible. Naturally enough, competition will limit what can be charged and excessive supply will exert downward pressure on prices and margins. However, products and services may well have slightly different characteristics which, even in times of tough competition, will tend to ensure that price differentials are not eroded.

While the selling prices of some products will be close to costs dictated by market forces, the selling prices of others will compensate by being well in excess of costs. The supplier must, however, ensure that the aggregate profit he/she makes over a period is sufficient for his/her requirements. He/she will therefore, keep an eye on the profits yielded by each segment of the market, whether generated by volume sales or high margins on a small number of units. The age of products must also be taken into account in establishing the price to be charged to the customer. If they are made to old designs and are becoming less



competitive, prices will be forced downwards. The reverse will apply to new designs, constant comparisons of unit costs and selling prices, as they increase or decrease.

## Fee Basis Pricing

In the case of very large engineering or construction projects, it would not be wise to quote the customer a fixed price at the outset. It would almost be impossible to estimate the total costs accurately and consequently difficult to establish a final selling price. The expedient of adding a huge margin to cover contingencies would result in prices which would be unacceptable. In view of these difficulties many large contracts are carried out on a 'fee' basis. In essence this means that the contractor promises to carry out the project at whatever cost it takes in return for a fixed fee, or profit, payable at agreed intervals. In these circumstances, either the contractor may pay the bills himself/herself and claim reimbursement from his/her client; or alternatively, the client will meet all costs directly and supply all materials directly to the site. Large petrochemical projects are frequently built on this basis, doubly necessary since they are often still being designed as construction proceeds.

### SAQ 14.1

1. Mention four ways in which you can establish the price of your product.


2. You desire a return of 25% on the capital of Rs. 4,00,000 invested by you in your firm. If your market survey indicates a possibility of sales of Rs. 10,00,000 what should be the percentage of mark up on your cost while fixing prices?

a) Capital invested	= Rs.4,00,00
b) Return @25%	= 1,00,000
c) Budgeted sales	= 10,00,000
d) Total costs [(c) - (b)]	= 10,00,000 - 1,00,000
	= 9,00,000



e) Mark up on cost r

$$\begin{aligned} \text{required} &= (b) / (d) = \% \\ &= 1,00,000 / 9,00,000 \\ &= 11.12\% \end{aligned}$$

## 14.3 Marginal Costing

While discussing costing we talked about the assumption that in establishing costs of products or services, it is necessary to include all costs. This approach is referred to as absorption costing or full costing. There are, however, situations where it is preferable to exclude part of the total costs in making pricing and other business decisions.

Marginal costing is the term applied to this approach, which involves omission of fixed costs from unit cost. Fixed costs are not forgotten, but are considered separately. Fixed costs, referred to earlier, are those which do not tend to fluctuate with the volume produced or sold, and are invariably overheads costs. In most businesses, they are easy to identify: you can isolate total fixed costs in the profit and loss account or in the budget overheads. The simple idea behind marginal costing is that the difference between variable cost of a product and its sales revenue is available to make a contribution to fixed overheads and then to the profit. Sometimes, it may be advisable to continue to make and sell products which do not contribute their full share of fixed costs. As long as some contribution, even a fairly small one, is made to fixed costs, production of those products would be worthwhile. To discontinue production and sales would result in lost contribution, which would reduce profits since fixed overheads would still be incurred at their previous level.

### Example

Product A sells for Rs. 15, and it is expected that 1,000 units will be sold in the year. Fixed costs relating to this product are Rs. 3,000 per year and its variable costs are as follows:

Direct material Rs. 5

Direct labour 2

Variable overheads 2

Your sales staff tell you that there has been a sudden increase in overseas competition in product A's market and that it can now be sold only for Rs. 11. Should you continue to make the product?



The product as you see still generates a contribution of Rs. 11 per unit:

Sales			Rs. 11
Materials	5		
Labour	2		
Var. Overheads	2	Rs. 9	
Contribution		Rs. 2	

Assuming 1,000 units can still be sold, the total contribution would be Rs. 2,000, leaving only Rs. 1,000 in fixed overheads to be met. This is preferable to discontinuing the product, which would result in Rs. 3,000 in fixed overheads still being incurred. It should be sold, therefore, at Rs. 11.

However, if product A were the only product sold by the company, an absolute loss of Rs. 1,000 would appear in the profit and loss account, in which case the proprietor might decide to close his business. The decision to continue product A would be perfectly sound in normal circumstances, where it was only one of a range of more profitable products which gave enough surplus to offset the absolute loss of Rs. 1,000 it still made.

### Marginal costing for decision making

Suppose that a company has three departments, each making a single product. The following figures have been abstracted for the financial year:

Product	A	B	C	Total
Sales	5,000	6,000	5,400	16,400
Materials	1,000	2,000	1,500	4,500
Labour	500	400	600	1,500
Prime cost	1,500	2,400	2,100	6,000
Gross margin	3,500	3,600	3,300	10,400
Variable overheads	700	800	900	2,400
Contribution	2,800	2,800	2,400	8,000
Fixed overheads	1,800	3,300	2,000	7,100
Profit (loss)	1,000	(500)	400	900

The analysis clearly shows that B is making a loss, leading to the conclusion that it is not commercially sensible to keep on producing it. This reasoning is mistaken, since to discontinue the product would result in a loss of contribution of Rs. 2,800. Fixed overheads would remain, giving the following revised totals:

Profit in product B is discontinued.

	Contribution	Fixed overheads	Profit (loss)
A	2,800	1,800	1,000



B		3,300	(3,300)
C	2,400	2,000	400
	5,200	7,100	(1,900)

The lost contribution from product B, of Rs. 2,800, takes the profit of Rs. 900 down to a loss of (Rs 900) because of fixed overheads, and it would therefore make sense to keep making product B.

In practice, other factors would have to be looked at, if B were to be continued. Is there any scope for price increase? Can production costs—that is, direct material, labour or variable overheads—be reduced through introduction of more economical methods or working, such as, rationalized work layout, better flow of products, engineering modifications reducing wastage or greater operating efficiency? If these were possible, contribution would be increased, reducing a smaller overall loss for the product and a larger overall profit for the company.

The question of discontinuing a product entirely is seldom made on financial grounds alone. Supposing the three products just discussed were three models of agricultural tractor, small, medium and large. If the firm discontinued a model, the tractor distributors selling this company's products would be at a disadvantage compared with the distributors of other manufacturer's products, who would be able to offer a complete range to their customers. Products are often inter-dependent in this way.

Marginal costing is applied in many circumstances. Restaurants provide 'cheap businessmen's lunches' at little more than the variable cost in order to make a contribution to fixed costs, such as, rent and rates. Cheap tariffs are offered in hotels at week ends for similar reasons, or as stand by tickets on airlines. There may also be sound marketing reasons for pricing on a marginal costing basis. Customers may be encouraged to come back at times when the full rates are being charged.

## 14.4 Pricing Discrimination And Differential Selling

The principle that price should cover all costs, however fundamental, can be given up with advantage in certain circumstances, namely, (a) when fierce competition exists or (b) when goods are perishable. In either of these cases, survival is the consideration and not cost. Losses can be recouped later. In many other cases, concession in price might help raise sales and profit. This is because, increase in sales will not raise fixed costs and therefore additional unit cost will only be the marginal cost. If the available selling price is higher than the marginal cost, additional sales will increase profit.

Profit does arise even though the concessional price is lower than the total costs so long as the price quoted is higher than the marginal cost. The principle is subject to two important qualifications, namely:

- i) the additional sale or production should not be such as to push up fixed costs through exceeding capacity limit





### Example

M/s Aries Product have the following economics of operations:

Capacity	:	80,000 units per year
Production	:	50,000 unit per year
Fixed cost/unit	:	Rs. 8
Variable cost/unit	:	Rs. 24
Selling price/unit	:	Rs. 40

What should be the firm's decision when:

- an order for 30,000 more units is received at a selling price of Rs. 30.00 per unit
- further order is received for 15,000/- units (over and above the order (a) at selling price of Rs. 30.00 per unit; additional fixed costs owing to capacity expansion would be Rs. 115,000 per year.

It is also possible that owing to the concession offered to a few, general sales will fall to 30,000 units as some existing customers would react and withdraw their patronage.

Solution:

		(Amount in Rs.)
Existing Profit		400,000
Additional Profit		
a) O/a of increase in sale (30,000 units @Rs. 30/unit)	900,000	
Less: Increase in variable		
	720,000	180,000
Total Profit		580,000

### Finance For Small Scale Industries

b) Sales	2000,000	
Existing Sales		
Additional Sales	1350,000	3355,000
(45,000 units @ Rs. 30/unit)		
Cost		
Variable cost	2280,000	
(95,000 units @Rs. 24/unit)		
Fixed Cost (@Rs.8/-upto 50,000 units)	400,000	
Additional Fixed cost	115,000	2795,000
Total Profit		555,000
c) Sales		
30,000 units @ Rs. 40/unit	1200,000	



45,000 units @ Rs. 30/unit	1350,000	
Cost		
Variable cost		
(75,000 units @Rs. 24/unit)	1800,000	
Fixed Cost	515,000	2315,000
		235,000

ii) differential selling or price discrimination may not be allowed to have a negative impact on the reputation of the business. Price reduction upto, of course, marginal cost, is resorted to when the firm needs to stabilise or popularise a new product in the market. The firm would have also to convincingly justify to the existing customers that the concessional selling price given by it only to say (i) government bodies (ii) promoters of exports or (iii) pursue a social objective such as supplying journals, books, magazines etc., to schools and colleges.

## SAQ 14.2

1. Define 'Marginal Costing'.

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2. What is 'Contribution'?

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# UNIT

## 9

### Contents

#### Chapter XV

1. Working Capital Assessment
2. Basis of Assessing Working Capital
3. Estimation of Sales

#### The aim of this chapter is to:

- acquaint you with methods of estimating turnover
- introduce you to procedures of assessing working capital level.

#### Objectives:

On completion of this chapter you will be able to

- make a fair guess of your likely turnover
- work out the extent of your investment in working capital



## 15.1 Working Capital Assessment

Working capital assessment means "the process of estimating as realistically as possible the quantities of raw material or components, stock in process, finished goods stock and bills receivables you will need to carry at any given time at such levels that will ensure uninterrupted production and inflow of cash".

### Basis Of Assessing Working Capital

The need to have working capital is to sustain production. You will, therefore, readily understand that the basis for assessing working capital level at a given point of time is turnover or sales during the period.

The first step in assessing working capital is therefore, estimation of sales.

## 15.2 Estimation of Sales

Estimating sales is an exercise in prediction. It is speculation made logically, rationally and based reliable data.

### (a) Past trend

Sales reached in past years are first plotted out for analysing the trend. Out of this data, any abnormal sales growth seen in a year due to unusual reasons is weeded out (not considered). You will then peep (take to look) a little bit into the next year and approximately calculate the sales growth in it based on past sales trend.

You will understand this procedure better, seeing the following illustration.

	Year1	Year2	Year3	Year4	Year5
Sales (Rs)	5,45,000	6,79,350	7,91,013	11,07,418	13,28,900
Percentage of growth	21%	23%	18%	40%	20%
Production (units)	36	47	49	76	99
Percentage of growth	20%	29%	25%	30%	30%

Based on the foregoing data, what should the growth estimate be fore year 6? The growth of 40% witnessed in the year 4 is seen to be unusual and cannot therefore be relevant to the estimates for year 6. Probably, a normal growth rate of 20%, as indeed seen in more typical years 1,2, and 5, may be accepted for the year 6, assuming absence of any other compelling factors such as an unexpected large order since received or a considerable escalation in selling prices.



## **b) Production Capacity**

It is one thing to target sales based on past trends. Soon on after such estimation, you should verify that your business has the necessary production capacity in terms of machines, labour, power, water, transportation etc. You will also ensure that you would arrange for fresh sanctions or permissions necessary for higher production from relevant authorities.

## **(c) Confirmed Orders and Market Share**

As far as possible, obtain written or reliable oral orders from customers in order to verify whether your sales estimates are realistic. If your product is correlated with any bulk product, such as capital equipment or large consignment of a durable item, planned for manufacturing by a large scale or Government Company, you will make your sales estimate based on your expected market share in it.

## **(d) Capital Expenditure Assessment**

When you have made a well justified sales estimate based on your view of the market demand, you may find that your existing machinery capacity would be inadequate for realising the estimate. You may be required to add some more on-line machineries or introduce a few balancing equipments. All these involve costs in terms of Capital Investment. Before you start on the adventure of increasing your sales, determine such capital expenditure and negotiate with your banker, if necessary, for mobilising adequate resources.

### **SAQ 15.1**

1. Why is it necessary for you to assess working capital?

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2. Mention the factors that help in estimating sales.

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## Procedure for Assessing Working Capital

After estimating sales as you saw before, you go through the following steps:

1. Identify, in terms of percentages of sales, the following components:-
  - Raw materials, components and stores
  - All other overheads
  - Profit
2. Determine the level of holding raw materials, components and stores which you desire to hold optimally (neither too much nor too little), expressed in terms of months of consumption.
3. Calculate the total costs estimated for one month, including consumption of raw material, components and stores. You will obtain this figure from the total of the percentages of raw material, components, stores and all other overheads. Multiply this total cost by the period required for processing raw material into finished goods, expressing this period also in terms of months. Averaging the periods that different batches would have spent in process, divide the figure that you get from such multiplication. That will be the level of stock in process in value.
4. Take once again the total cost of production for one month, the same way as you did above. Determine how many months or weeks of manufactured stock that you think is necessary to hold optimally (neither too much not too little) based on past experience or, if you are still multiplying by the period of carrying stock held as working capital.
5. On the basis of market practice, state of completion and your own acumen for salesmanship, determine the period of credit (in terms of months) that you might offer to your customers. This period multiplied by the monthly gross value of sales (including excise duty and the profit element) will give you the value of bills receivables carry held as working capital.
6. Total up all the value of raw materials, components and stores, stock in process, finished goods and bills receivables. This will give you `Gross Working Capital. Deduct therefrom value of bills payable by you on purchases. The remainder is the `Net Working Capital'.

### SAQ 15.2

Go through every step enumerated under "Procedure of Assessing Working Capital" carefully and work out the following problem closely following those steps.



Ex and Zee, manufacturing automobile ancillaries, want you to tell them how much aggregate working capital should they hold, under the following circumstances.

Estimated sales per month	:	Rs 6 lakhs
% of raw materials, components and stores	:	55%
% of other overheads	:	25%
Profit	:	20%
Total	:	100%

The desired levels of carry:

1. Raw materials, components and stores	:	3 months of consumption
2. Process period	:	6 Weeks
3. Finished goods	:	2 Weeks
Credit offered to customers	:	60 days
Credit enjoyed on Purchases	:	45 days

#### Solution

1. Monthly consumption of raw materials etc.  
= Rs. 6 lakhs x 55% = Rs. 3.30 Lakhs  
Desired level of carry = 3 months  
Therefore, working capital on account of raw materials etc., is  
Rs. 3.30 Lakhs x 3 = 9.90 Lakhs (A)
2. Monthly production costs = Rs. 6 lakhs x (55% + 25%)  
= Rs. 4.80 Lakhs.  
Process period = 6 weeks = 1.5 months  
Carry of stock in process = Rs 4.80 x 1.5/2 = Rs. 3.60 Lakhs (B)
3. Monthly production costs = Rs. 4.80 Lakhs (as above)  
Desired level of carry of finished goods = 2 weeks = 0.5 weeks  
Therefore, working capital on account of finished goods  
= Rs. 4.80 Lakhs x 0.5 = Rs. 2.40 Lakhs (C)
4. Estimate sales per month = Rs. 6 lakhs  
Credit offered to customers = 60 days or 2 months  
Working capital on account of bills receivable = Rs. 6 Lakhs x 2  
= Rs. 12 Lakhs (D)



5. Monthly consumption (purchase) or raw materials, components, stores	: Rs. 3.30 Lakhs (as above)
Credit enjoyed on purchases	: 45 days or 1.5 months
Bills payable being a source of working capital	: Rs. 3.30 Lakhs x 1.50 = 4.95 Lakhs (E)
Gross Working Capital	= A + B + C + D
= Rs. (9.90+3.60+2.40=12.00)Lakhs	= 27.90 lakhs
Less Bills payable	= E
	= 4.95 Lakhs
Net working capital	= Rs. 22.95 Lakhs

## 15.3 Working Capital Assessment

### Tandon Committee Recommendations

A 'Study Group to Frame Guidelines for Follow-up of Bank Credit' was constituted by the Reserve Bank of India in July 1974 with the objective of ensuring the end-use of cash credit facilities extended by the banks to manufacturing enterprises. The group, popularly called Tandon Committee, after the name of its Chairman, submitted its report in 1975 laying down guidelines for short term bank lendings, while assessing the levels of working capital and extent of related bank finance.

The guidelines of the study group are for businesses whose fund based short term bank borrowings aggregated to Rs. 10 lakhs and over.

In its original form, the Group has recommended norms for holding raw materials, stock in process, finished goods and receivables by the borrower firm as eligibility criteria for qualifying for working capital facilities from banks. In its revised form, the inventory norms have been since given up. This means that the lending banker will himself assess the reasonableness of the borrowers proposals of holding levels in his application form. The bank will only verify the desired levels in the context of usual holding pattern of the business in the past, the current market demands for justifying the holding levels and any other related circumstance which may be specific for the particular business.

### Lending Norms

The Study Group evolves three methods of assessing cash credit limit for the business, each method ensuring progressive increase of the business' margin contribution towards working capital. All the methods are based on the principle that working capital should be funded by three sources:

Net Working Capital (NWC) Current liabilities other than bank borrowings (OCL) Short Term Finance (CC).





## **Naik Committee Recommendations**

In December 1991, the Reserve Bank of India appointed a committee under the chairmanship of Shri. P. R. Naik, Deputy Governor to examine the adequacy of institutional credit to the Small Scale Industrial Sector and related aspects.

The recommendations of the Naik Committee relating to the following two areas have been accepted by the Reserve Bank and these are to be implemented immediately:

a) The working capital requirements of all small scale industrial units would be computed on the basis of minimum of 20% of the projected annual turnover for new as well as existing units and enjoying aggregate fund-based working capital limit upto Rs. 50 lakhs (since increased to Rs. 100 lakhs) including cottage and village industries as well as tiny sector units, if any, falling in this category. The SSI unit will be required to bring 5% of their annual turnover as margin money. In other words, 25% of the output value should be computed as the quantum of working capital required by such units, of which at least four-fifths should be provided by the bank and the balance one-fifth would be required to be brought in by the borrower as his contribution by way of margin for the working capital.

In cases where the output exceeds the projections or where the initial assessment of working capital is found inadequate, suitable enhancement in the working capital limits should be considered in time by competent authority.

The operating functionaries, particularly at the branch level, at the time of credit appraisal of the loan proposal have to ensure that the projected annual turnover is reasonable and achievable by the units and further, the estimated growth, if any, in sales over previous year(s) is realistic. For this purpose, a reference to the return filed by the borrowers with sales tax/revenue authorities may be useful.

## **Bills Purchased or Discounted Limit**

In addition to the Cash Credit Limit, bank may fix limit up to which the borrower may obtain minimum cash against lodgment of bills drawn by him covering his sales. If bills are payable on demand, the banks purchase them for further drawer; if bills are payable after a period of credit, the banker will discount them for the drawer.

In the case of bills purchased, the bank charges the drawer with Exchange and when a bill is discounted, the bank charges the drawer Discount.

## **Factors Influencing Investment in Working Capital**

Working Capital, as we saw, is the aggregate of investment made in Raw material, Stock in process, Finished goods and Book debts due from customers. Just as it is true of any investment, working capital investment also has a cost attached to it; namely, Interest on



Funds so invested if they are borrowed or loss of interest that would have been earned if these funds had been invested alternatively.

## **Consequences of under-over assessment of Working Capital**

It becomes therefore, important for you to be careful in deciding on the amount of your investment in working capital. Too much of investment means loss of interest and too little of it may result in stoppage of production.

We shall now see the salient factors which should influence your decision on maintaining the levels of each of the components of working capital.

### **Raw Material Carry**

1. When the raw material required by you is easily and indigenously available, you may store it equivalent to the consumption for one production cycle time.
2. When, however, your material requires to be imported, the facts which should determine their carrying level should be: time required for its manufacture by the supplier abroad, period of its journey up to India, the time which is normally taken for its clearance at customs and its transportation from the customs to your place of business.
3. In case of imported material, you will also maintain stocks to cover the period which may become necessary for locating an alternative supplier if one supplier proves unreliable.

### **Stock In Process**

The process period depends on the availability of technology. Another important factor is the existence of any imbalance in capacities of machines on the shop floor through which material traverses in succession. The third factor will be the need for keeping your product in quarantine, in which case such period will also be added to the process period.

### **Finished Goods**

Ideally, finished goods do not need to be stocked. However, if you are making customer products with a range of variety, the factors which will decide your carry of finished goods will be based on your retailer's experience. Where your goods are such that they are required to be transported either abroad or to distant places within the country, availability of shipping space or railway rake will be a pertinent factor.

### **Book Debts**

The carry of book debts will be influenced by the extent of demand that your product commands and the status it has in a competitive environment.



# UNIT

## 9

### Contents

#### Chapter XVI

1. What is an Operating Cycle?
2. What is Working Capital?
3. Current liabilities as Working Capital Source.
4. Net Working Capital

#### The aim of this chapter is to:

- define 'Operating Cycle' and 'Working Capital'
- introduce you to the method of measuring carrying levels of stocks and receivables

#### Objectives:

On completion of this chapter you will be able to:

- determine what kind of investments constitute working capital
- know the length of an operating cycle and thereby endeavour to reduce the cycle length for greater turnover



## 16.1 What is an "Operating Cycle"

When you wish to manufacture a product, what you need in the first instance is an adequate quantity of raw material; if you are making furniture, you will need wood, if you are making drugs, you will need chemicals and so on. If your activity consists of an assembling job, what you need in the first instance would be components; if you are making a radio set, you will need diodes, triodes, resistances, etc.,

These raw materials or components stay in storage continuously so that you can draw them on the shop floor as and when needed.

On the shop floor itself, you will see stocks at all times at different stages of completion into finished product. You may find a portion of a table, for instance, legs disjointedly lying at one place of the shop floor and table in some other place, awaiting their union with the legs.

These stocks lying on the shop floor are known as 'Stock in Process' or 'Unfinished goods'.

Upon completion of the manufacturing process, you will have on your hands 'finished goods'. You may be in a position to despatch all of the finished goods to your customer immediately. If that is possible, you will not carry any stock of finished goods in your stores. All your stocks will then consist only of raw materials and stock in process.

If, however, you are making a product, say, radio sets, you may not have a ready customer to whom can send the sets immediately on completion. You may then send the sets to various shop keepers who will agree to display the sets in their show rooms. You will get your price only when and if the sets are bought by customers.

In this type of cases you will then have all the unsold sets as finished goods stocks at any point of time.

When indeed you sell your finished product, your customer may or may not agree to pay you for them immediately. It is only when his need for your product is urgent, that he will pay immediately. Otherwise, if the customer would have his way and if you are running in a competition to sell your products, you will have to agree for a delayed payment by the customer. This period of waiting for payment is called 'Credit Period'. The amount of payment remaining to be received by you from your customers at any given point of time is called 'receivable', 'book debts' or 'sundry debtors'

### SAQ 16.1

- How is 'raw material' different from 'components'.



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- Unfinished goods are also called \_\_\_\_\_
- The total stocks comprise \_\_\_\_\_, \_\_\_\_\_ and finished goods.
- When does credit period necessarily arise?

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We have thus seen that the production process goes through following stages:

- i) Carrying raw material or components in the store.
- ii) Carrying unfinished stocks during processing.
- iii) Holding finished goods until sale.

The cycle commencing from holding of raw material or components and ending with carry finished good is known as 'Production Cycle'.

Now you know that you may be required to offer a credit period to you customer for paying you bill on account of sale. The cycle which extends further beyond the stage of 'finished goods carry' upto the 'carry of receivables' due from the customers is called 'Operating Cycle'.

**SAQ 16.2**

- What items constitute one production cycle?  

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- How is one operating cycle different from one production cycle?  

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## 16.2 What is Working Capital

When you run a manufacturing business, you will need to invest in two kinds of assets: One, fixed assets, such as machinery, land, building; and two, operating assets, namely assets enclosed by one operating cycle. Operating assets are called 'Working Capital'.

Working Capital, therefore, means the total costs represented at one given point of time by

- i) stocks of raw materials or components
- ii) value of unfinished goods lying on the shop floor
- iii) cost of finished goods held in stock
- iv) value of bills remaining unrealised on account of sales made on credit.

### SAQ 16.3

- What are the two kinds of investments made in a manufacturing business?

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- What is working capital in a manufacturing business?

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When you read the items comprising working capital, you will see that they are also the 'current assets' held by you on a given date.

## 16.3 Current Liabilities as Working Capital Source

You will also remember that when you buy raw material, components or stores for production, your supplier will usually offer you a credit period for his payment; after all, he is also a seller of his product. Just in the manner that you, as seller of your own final product, would offer a credit period to your buyers you will also demand a credit period from your supplier.



The amount due from you towards purchase of raw materials, components and stores are called, 'Bills Payable'.

In the same manner as you enjoy a credit on purchases from your suppliers, you will also enjoy a facility for delayed payment to others who supply services of various kinds. For example, your workers and employees give you their services for a whole months first and receive their wages and salaries only after the expiry of the month. Therefore, you have obtained a line of credit from them. The amount so due from you on this account at any given time is called 'Credit for Services'.

Again you might be permitted by the electricity board to pay up your bills one month after you have consumed power. Similarly, the Telephone Department will send you their bill two months after you have used the facility. Further, if you have borrowed money from the bank, the bank will recover its interest only after a time, say, one month or sometimes three months. When you enjoy privileges to make payments belatedly for this kind of services, you are running up another line of credit called 'Creditors for expenses'.

Summarizing, alongside a set of current assets that you will be holding at a given point of time, you will also be carrying a set of current liabilities. So long as you are successfully and legitimately able to hold on to them without payment them off, these liabilities will constitute a source to meet the investment costs for working capital. As these liabilities are raised for the purposes of current production, they are called 'Current liabilities'.

## SAQ 16.4

- What are Current Liabilities?

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- Identify in the following list, items which constitute current liabilities
  - a) Amount due to landlord
  - b) Amount of wages payable
  - c) Income-tax payable
  - d) Telephone bill and due
  - e) Installment due to term loan from bank.



## 16.4 Net Working Capital

When you total up the value of all current assets, namely:

- Raw materials, components
- Stock in Process
- Finished goods
- Bills receivable and
- Cash balance

You have, what is known as 'Gross Working Capital' invested by you in production at a given point of time. As current liabilities are supportive source for working capital, you will subtract the total.

- Bills payable on purchases
- Credit for services
- Creditors for expenses from the gross working capital.

The balance will then be called 'Net Working Capital'.





# UNIT

## 9

### Contents

#### Chapter XVII

1. Fund-Based Facility
2. How is Cash Credit Determined
3. Loan Applications for Cash Credit and Term Loan
4. Margin of Safety
5. Debt Service Coverage Ratio
6. Disbursement Formalities for Cash Credit & Term Loan

#### The aim of this chapter is to:

- make you aware of data desired by banks and institutions for considering cash credit and term loan disbursement
- appreciate the relevance of such data in their decision making process

#### Objectives:

On completion of this chapter you will be able to:

- re-look at your own project from the lending banker's or institution point of view
- ensure that the presentation of your application for credit facilities becomes acceptable
- know the disbursement formalities and, therefore, your own rights and obligations as a borrower



In this chapter, you will learn about the general contents of an application that is required to be made to a bank or a financial institution for different kinds of loan facilities.

## Types of Loan Facilities

The loan facilities offered to a manufacturing or trading business fall under two categories:

- a) Fund Based Facility and
- b) Non-fund based facility

### 17.1 Fund Based Facility

We shall first look into the first category and then go on to the other.

Fund based facility means a loan under which the bank of the institution lends money to a business in cash forms. Examples of Fund Based Facility are: Cash Credit and Term Loan.

### How is Cash Credit Determined

Cash Credit means a facility given to your business in the form of a running current account from which you can time to time draw only for meeting your working capital requirements. This account is subjected to what is known as 'Drawing Power'. Drawing power is the limit upto which you can draw funds from out of this account. The drawing power is determined on the basis of market value of your stocks and book debts at a given point of time less the amount of margin which is predetermined.

For example, if the market value of your stocks as on date is Rs. 6, 50,000 and the total value of book debts as on that date is Rs. 8,50,000, the drawing power is determined as under:

Market Value of Stocks		Amount
		6,50,000
Value of Book Debts		8,50,000
	Total	15,00,000
Less: Margin contribution of the borrower at, say 20%		3,00,000
Therefore, drawing power is		12,00,000

In a practical situation, the market value of stock and book debts keeps changing from day to day. The power also accordingly keeps changing. The drawing power on each day is therefore on the basis of a statement of stock and book debts given by you, to the bank.



The drawing power itself is limited to the cash credit limit approved and sanctioned by the bank on the basis of detailed assessment of your working capital requirement. The process of making such an assessment has already been explained to you in Working Capital Assessment. Cash credit facility is always repayable to the bank from out of the sale proceeds of the goods manufactured and sold by your business.

## **Loan Applications For Cash Credit And Term Loans**

### **Contents of Loan Application for Cash Credit**

The Broad aspects of data sought in the application for cash credit facility are:

- i) justification for the estimated sales during the next year
- ii) justification for assuming the percentage of raw material consumption during the year.
- iii) justification for anticipating the sources for raising the required margin money
- iv) nature and value of any collateral security to be offered by the borrower.

### **Contents of Loan Application for Term Loan**

A standard loan application form for a term loan comprises the following four broad aspects:

- i) Technical Feasibility
- ii) Economic Feasibility
- iii) Finance or Commercial Feasibility, and
- iv) Managerial Competence

(a) Under Technical Feasibility, the application seeks the following information:

- i) location of the project
- ii) size of the plant
- iii) type of technology
- iv) availability of technology
- v) availability of labour
- vi) availability of power and transport

b) Under Economic Feasibility, the application seeks the following information:

- i) How big is the market for proposed product?
- ii) By how much is the market share likely to grow in foreseeable future?



c) Under Finance or Commercial Feasibility, the application seeks the following information:

- i) the estimated cost of the project
- ii) estimates of earning and operating costs in future years.

The loan application desires this data to determine 'margin of safety' and debt-service coverage's. We shall now introduce these two concepts in just the necessary details.

## 17.2 Margin of Safety

Margin of safety means the difference between the value of fixed assets finance by the term loan, after they are depreciated up to the year, and the outstanding in the term loan, after the upto date installments are paid.

### Other Contents of the Application are:

- i) cost of project including working capital
- ii) cost of production and estimates of profitability
- iii) cash flow estimates for the period covering the span of the term loan.

The cash flow estimates will help the lending institution to decide the disbursal of the term loan. The estimates of profitability and the break even point, will enable the banker to draw up the repayment programme, start-up time (gestation period), etc. The profitability estimates will also give estimates of the 'Debt Services Coverage' which is the most important single factor in the term credit analysis. A study of the projected balance sheet of the business is also essential, since, unlike working capital advances, a dynamic analysis is necessary for appraisal of a term loan to ensure that the business will continue to have a sound financial position even after implementation of the proposed scheme.

## 17.3 Debt Service Coverage Ratio

The debt service coverage ratio services as a guide for determining the period of repayment of a loan. This is calculated by dividing cash accruals in a year by the amount of annual obligations towards repayment. The cash accruals for this purpose should comprise net profit after taxes with depreciation provision added to it.

Cash accruals

Debt Service Coverage Ratio (DSCR) =  $\frac{\text{Cash accruals}}{\text{Maturing annual obligations}}$



This ratio is valuable, in that it indicates the repayment capacity of the borrower to the lenders and is, therefore, appropriately included in the cash flow statements. The ratio may vary from industry to industry but the banker will view it with circumspection when it is less than two. The repayment programme should be so stipulated that the ratio is comfortable.

### **The DSCR to determine the loan period**

The banker will estimate DSCR for each year covering a span of, say, 5 years on the basis of the projections of profitability furnished by you. He will stipulate installments in such a manner as to maintain a DSCR of 2 : 1 or thereabouts. The aggregate of the installments so emerging will justify the amount of term loan.

It is possible that in the initial years of the term loan which are spent in erection, commissioning and trial runs of plant and machinery, no cash accruals would possibly flow. The banker would then consider giving a repayment holiday in those initial years. This period is known as the period of Moratorium.

## **17.4 Disbursement Formalities**

### **Cash Credit**

Cash Credit facility is exclusively meant for meeting the working capital requirements of a business. In other words, no part of the cash credit should be used for purposes such as investment in sister concerns, unduly large withdrawals for personal use by you as borrower, purchase of capital assets, or for hoarding stocks for speculative purposes. Such misuse of cash credit is called 'Diversion of Funds'.

In order to forestall any attempt by you to resort to diversion of funds, the bank giving the credit facility will observe the following disbursement procedures:

- i) In case of doubt of the borrower's intentions, the bankers will insist on paying the supplier of raw material directly from out of the cash credit from time to time. The banker may disallow withdrawal from the cash credit account in cash form beyond a stipulated level. The borrower should submit to the banker a certified statement of stock holdings and book debts outstanding at weekly, fortnightly, or monthly intervals as stipulated by the banker for constantly determining his/her drawing power.
- ii) The banker may refuse to honour a cheque, even if the amount falls within the available drawing power of such cheque is suspected by him to be for unauthorized investments.
- iii) The disbursement of cash credit is made subject to a yearly review of the arrangement. The review will be based on the actual levels of stock holding pattern, production, and sales during the year under reviews



compared with the estimates in these respects furnished by the borrower earlier.

## **Term Loan**

Term Loan is meant for acquiring capital assets only. In other words, it is not meant to replace an existing loan of the business raised by it for any other purpose. In order to ensure proper end-use of the term loan, the term loan lending bank institution will follow the following procedures for disbursement:

- i) The supplier of the machinery or any other capital asset will be paid off directly by the bank or institution on behalf of the borrower from out the term loan account. Before doing so, the bank or the institution will examine the amount and genuineness of the invoice of the supplier of the capital asset.
- ii) In the case where the term loan is granted for construction of building or erection of plant, the contractor will draw bills at various periods during the process of construction or erection. These periods will be at specific stage of the work under completion. These are called 'stage bill'. The borrower would pay such bills after examining them in the context of the work actually completed. If the banker feels that there exists a need for his supervision over the borrower, he may examine the 'stage bills' and conduct an inspection of the work under completion and make the payment directly to the contractor if he is satisfied with the genuineness of the bills. The building under construction or a plant under erection will not generate revenue unit it is ready for use for commercial production. The period is called 'gestation period'. During this period, the borrower will not be able to pay any installments towards the term loan. However, if the gestation period prolongs beyond the period as assessed in the application, the bank or the institution may insist on commencement of the repayment of the term loan, though the capital assets have not begun generating revenues.



# UNIT

## 9

### Contents

#### Chapter XVIII

1. Primary Security
2. Collateral Security
3. Acceptability of Assets as Security
4. Types of Charges
5. Pledge
6. Hypothecation
7. Mortgage
8. Common Loan Documents

#### The aim of this chapter is to:

- make you aware of the distinction between primary security and collateral security
- familiarise you with the nature of documents commonly required by the banks for their loans

#### Objectives:

On completion of this chapter, you will be able to:

- appreciate it when your banker asks you for reinforcement of securities for his loans
- have the knowledge of all the documents you will be executing for your loans and why.

In this chapter, you shall learn the necessary details about the nature and extent of securities that the banks and financial institutions would require for sanctioning loans to you.



We shall also introduce you to the nature and type of documents that you, as a borrower, would have to execute before obtaining the loan.

## **18.1 Securities**

The first thing you should know is that the securities required by the banks and institutions are of two categories:

- i) Primary security
- ii) Collateral security

### **Primary Security**

Primary security comprises the tangible assets, namely, stock of raw materials, stock in process, finished goods, and book debts, held by you as a borrower if the loan is cash credit. In other words, all the assets contained in working capital will form the primary security for obtaining a cash credit facility.

Where the bank or the institution grants a term loan or a deferred payment guarantee, the particular asset which is financed by the term loan will constitute the primary security; for example, a building, plant, or machinery.

## **18.2 Collateral Security**

Generally speaking, banks and financial institutions are supposed to obtain the security of only the assets financed by them by way of cash credit or term loans. That means they are satisfied with the primary security only for the facilities granted. Where however, the banks and institutions ask for any other kind of security in addition to the primary security for the loans granted by them. Such other securities are called Collateral Securities (In practice, you will be almost always asked to furnish collateral security).

The collateral securities may be in the form of either tangible assets or intangible assets. Intangible assets mean; guarantees from the borrower or persons who are third parties.

### **When are Collateral Securities demanded?**

Banks and institutions demand collateral securities in the following circumstances:

- i) when the market value of primary security is rather unsteady.
- ii) when the primary security suffers from rapid obsolescence
- iii) when the project itself is new and unprecedented.
- iv) when the managerial competence of the owner or the borrower is yet to be tested and





- v) when the lending bank or institution feels the aggregate net worth of the proprietor or the partners of the business inadequate, considering the size of the loan.

## 18.3 Acceptability of Assets as Security

The assets offered by you either as primary or collateral security should be acceptable to the lending bank or institution as good for the loan. The banks and institutions determine acceptability of assets on the basis of the following:

1. Ascertain ability of value
2. Marketability
3. Stability in value
4. Transferability of ownership
5. Durability, that is, the security must not be of perishable nature.

### Types of Charges

Any security, primary or collateral, is obtained so that the lending bank or institution may be in a position to take hold of it, sell it and thereby recover its loans if the borrower fails to repay as stipulated.

Obtaining security for the loan conventionally means taking physical possession of it. However, it may not be possible for the bank or the institution to take physical possession of all assets financed by it, for example, book debts. Therefore, the leading banker or institution will be satisfied with the charging of the security offered to it in its favour. Charging means making security available to the bank of disposal and recovery of the loan whenever desired

There are six different modes of charging security, they are:

**i) Pledge:** In the pledge, the ownership of the goods remains with the borrower, but the bank will keep its physical control with him. In case of default of the borrower, the bank can directly dispose of the security to recover its loan without any legal process but merely by serving a notice to the borrower.

Pledge is obtained only in cases where the borrower is not known to the banker or when his creditworthiness is not considered too high.

**ii) Hypothecation:** Pledge takes away control over the goods from the borrower which may not be practicable as the borrower would require certain goods under his control to continue his manufacturing and/or trading activities. An equitable charge in favour of the bank over the goods is created in such cases without parting with the possession of the goods. A charge on a property of a debt where neither ownership nor possession is passed on to the credit is known as 'hypothecation charge'. Hypothecation agreements obtained



by banks generally have a clause under which hypothecation can be converted into a pledge at a later date.

This form of charge is ideal from the point of view of the borrower as he is always in control of goods offered as security to the bank. In case of default by the borrower, the bank may take possession of the goods and convert hypothecation to pledge only with the consent of the borrower notwithstanding any clause to this effect being included in the hypothecation agreement. The bank will have to move a court of law for taking physical possession of goods or their attachment before judgment.

Hypothecation charge extends to all the goods and movable properties with the borrower as per the agreement of hypothecation. Operations in these accounts are permitted on the basis of the stock statement, submitted by the borrower periodically, usually every month. Hypothecation may, however, be created as a fixed charge over a particular machinery/vehicle, etc.

**iii) Assignments :** Assignment means the transfer of a right, property, or debt by one person to another person. The person transferring the right is known as assignor, and the person to whom the right is transferred is known as assignee. The assignment may be legal, in which case the assignor must give written notice of the assignment, stating the name and address of the assignee to the debtor, or it may be equitable, where no such notice is sent. This form of charge is generally adopted for charging book debts, money due from Government (supply bills), life insurance policies, etc. Banks generally go in for legal assignment and insist on obtaining on the acknowledgment of assignment from the debtor.

**iv) Mortgage :** Mortgage is a transfer of an interest in a specific immovable property for the purposes of securing a debt. Mortgages are obtained by the bank or institution when the asset financed by the loan is permanently fastened to the earth, such as a plant or machinery, or building. Mortgage is also possible to be obtained on transport vehicles, for example, even though they are not permanently fastened to the earth.

Mortgage is created by either of the two methods. They are:

i) Mortgage by deposit of title deeds. The borrower gives physical possession of the title relating to the asset which is mortgaged to the bank. He will also execute a document called 'Memorandum of Deposit', which states the intention of the borrower to create a mortgage on that property to secure the debt.

This form of mortgage is also called 'Equitable Mortgage'.

Equitable Mortgage is popular because it does not require execution of any 'mortgage deed' and its subsequent registration which requires payment of heavy stamp duty. It is created simply by depositing the title deeds with the bank with an intention to create a security and no other agreement. Equitable mortgages can be created only at places notified by Government in this regard.



ii) **Simple Mortgage:** Simple mortgage is a form of mortgage in which the borrower personally binds himself to pay the debt and agrees that in the event of his default, the borrower will lose his absolute right to sell the asset.

Simple mortgage deed executed by the borrower. This document is required to be registered after paying the necessary stamp duty. Stamp duty is usually ad valorem, which means the amount of stamp duty will depend on the value of the asset. Stamp duty may therefore become substantial. Usually therefore, a simple mortgage is not created as, for instance, in cases where the title deeds are not available.

**v) Lien:** Lien means the right of the creditor to retain the goods or securities of the debtor which are in his possession until the debt is paid. It does not require any specific agreement to support this right. The lien may be general, which confers the right to retain any goods for a general balance of the account, or it may be for a particular debt only. The person exercising a general lien has only a right to retain the goods till the dues are paid and cannot sell those goods.

The right of the bank to the general lien is, however, considered on a different footing and banks have a general lien on all securities deposited with them. A banker's lien is thus more than a general lien, and it is an implied pledge. The bank, therefore, has a right to sell the goods in its possession after giving reasonable notice. The lien can be exercised on bills and cheques deposited for collection, warrants for dividends received by the bankers as a mandate from the customer, and securities left with the banker after a particular loan has been paid. The banker's lien, however, does not extend to:

- a) securities of valuables lying in the locker rented to the customer
- b) securities deposited by a particular trust
- c) securities left with the bank after an advance against them has been adjusted
- d) securities left inadvertently with the bank.

No specific letter of lien agreement is necessary as the banks enjoy the right of lien under the Contract Act. However, in some cases the bank may obtain a specific letter of lien so that the borrower is not able to contend later that the securities were deposited by him for a specific purpose inconsistent with the lien.

**Negative Lien:** The borrower may sometimes have non-encumbered assets which are not charged to the bank as security. The borrower is thus free to deal with these and may even sell them if he so desires. To restrict this right of the borrower, the bank may sometimes request him to give an undertaking to the effect that he will either create any encumbrance on these assets or sell them without the previous permission of the bank so long as the advance continues. This type of undertaking obtained by the bank is known as 'Negative Lien'.

Negative lien is in the form of a personal assurance or undertaking which has a binding effect but confers no right on the bank to proceed against the property itself and thus creates no encumbrances or charge on the property.



**vi) Set Off:** Set off is the right of combining accounts between a debtor and a creditor to arrive at a net balance payable to one or the other. Set off in relation to the bank means the bank's right to apply the credit balance in the customer's account toward the liquidation of the debit balance in another account of the customer, provided both the account are maintained by him in the same capacity. The right may not be considered absolute, and the bank may be required to give a notice for exercising their right to set off. The right of set-off can be applied by the bank only if the following conditions are met:

- a) the liability of the borrower is for a sum which certain
- b) the repayment of debt is due and
- c) both the accounts are held by the customer in the same capacity.

## **18.4 Common Loan Documents To Be Furnished By The Borrower**

Different banks and institutions may have drawn up different forms of documents covering their loans. Generally speaking, however, the following documents obtained by any lending bank or institutions

In the case of Proprietary or Ownership Business:

- i) Demand Promissory note
- ii) Demand Promissory Note Delivery Letter
- iii) Pledge Agreement
- iv) Hypothecation Agreement
- v) Memorandum of Deposit
- vi) Agreement to mortgage
- vii) Deed of mortgage
- viii) Notice of assignment

In addition to the above mentioned documents, the borrowing firm or company will be also required to furnish the following:

Non-Corporate Bodies	Limited Companies
i) Letter of Partnership	i) Articles and Memorandum of Association
ii) Letter of Joint Hindu Family	ii) Copy of Certificate in incorp.
iii) Declaration by 'karta' and all major copartners	iii) Copy of board resolution Empowering the company to borrow and offer security
iv) Copy of trust deed	



## Assignment

1. Make a cost sheet of your Product
2. Compare any five bath soaps. List positive as well as the negative points.
3. Compare two scooters of different brands.
4. Plan the distribution system for table fans.
5. Study the distribution system of any product which is similar to yours and is presently in market.
6. Design an advertisement for your product.
7. Meet a salesman and discuss the advantages and disadvantages of his profession.
8. Which are the three important factors of financial management? Discuss giving examples.
9. What books of Account should you keep as a small entrepreneur? Explain the purpose for which they are kept.
10. Explain the difference between Cash Accounting System and Mercantile Accounting System by giving examples
11. What are the three classes of accounts? Name and explain them.
12. Work out the cost of your product on the basis of XYZ Ltd.
13. a) State whether the following are True/False
  - i. Own capital is the amount borrowed from banks, institutions for starting a venture.
  - ii. Finance Planning refers to a wise employment of unlimited resources to meet limited demands.
  - iii. Finance invested to acquire assets is called "Capital Expenditure."
  - iv. The return on investment that you expect can be lesser than the prevailing rate of bank interest offered to you.
- b) Fill in the blanks :
  - i. Borrowed Capital refers to
  - ii. Finance Functions of a manager refers to
  - iii. Profit Planning means
  - iv. Liquidity is the term used to denote



c) List out in brief the job demands of a Finance Manager

14. a) Explain the following in a few sentences:

i. Potential Investors

ii. Role of a Accountant

b) State whether the following statements are True/False

i. Creditors are people who only lend money after carefully considering if their loan can be repaid on due date.

ii. Lenders are people who are owed money by your business.

iii. Whereas Financial Accounting provides information on planning the future, management accounting is concerned with supply of financial information about the past.

c) What items you would include when your enter your transactions in a journal?

d) Fill in the blanks:

i. The Purchase Book is used for

\_\_\_\_\_

ii. The Sales Book helps

in \_\_\_\_\_

iii. Sales Return Book is essential

for \_\_\_\_\_

iv. Accounts Receivable Book is useful

for \_\_\_\_\_

v. Cash Book is used for \_\_\_\_\_

vi. All receipts are posted on \_\_\_\_\_

v. Cash Book is used

for \_\_\_\_\_

vi. All receipts are posted on \_\_\_\_\_ side and all payments on \_\_\_\_\_ side.

vii. The fundamentals of book keeping are

\_\_\_\_\_.

15. a) State whether the following statements are True/False

i. Whereas sales refer to an asset, cash refers to asset

ii. Credit always increases an asset account while debit increase an income account.

iii. When any asset is received; the amount is entered on debit side of that asset account and when asset is given, the amount is entered on the credit side.

16. Refer to any Accountancy book if necessary and prepare the structure of a Balance Sheet



17. Structure of a Profit-Loss Account, using hypothetical items and figures.

18. a) State whether the following statements are True/False

- i. Bills payable to suppliers are classified as current assets
- ii. Bank overdrafts are part of current assets
- iii. Raw material and cash are to be taken as current liabilities
- iv. Whereas bills receivable are part of current liabilities, obligations to employees and others are to be considered as current assets.
- v. Stock in progress and cash alongwith obligation to employees are to be seen as current assets.

b) Answer in brief;

- i. Profitability ratio is calculated by
- ii. Inventory turnover ratio is calculated by determining
- iii. Return on investment also known as profit after tax refers to
- iv. Debtors turnover ratio

19. a) Answer in brief:

i. What are the sources of funds for an enterprise and what are their uses?

b) Fill in the blanks :

- i. When a current asset declines between two successive years a \_\_\_\_\_ occurs.
- ii. When you pay off your dues to the suppliers of raw materials a \_\_\_\_\_ occurs.
- iii. Whenever you see a long term deficit in a funds flow analysis you can conclude that there has occurred a diversion of \_\_\_\_\_ to finance \_\_\_\_\_ uses.

20. a) Fill in the blanks :

- i. Costing is the calculation of \_\_\_\_\_
- ii. Cost includes \_\_\_\_\_, \_\_\_\_\_ and overheads.
- iii. Assessment of working capital before head will help you \_\_\_\_\_ and prevent \_\_\_\_\_.

b) Price of a product is established in various ways. State them and explain in brief.