

This completes

### 3.7. Profit : Nature of profit

Profit is the difference between the producer's total revenue and cost. [The producer's own enterprise that goes into the organisation and administration of the enterprise is treated as a separate factor of production called 'organisation' or 'entrepreneurship'. By 'cost' here we mean the expenditure on all factors of production other than entrepreneurship.] Thus, just as rent is the price of land and wage is the price of labour, profit may be called the price of the factor called 'organisation' or 'entrepreneurship'.

■ **Difference between profit and other factor prices :** But, compared to other factor prices, profit has two special characteristics : (1) Other factor prices are contractually fixed. The rent of land, the wage rate of workers and the rate of interest on borrowed capital are contractually fixed. But the rate of profit is not known with certainty. Before starting production the producer does not know how much profit there would be or whether there would be any profit at all. (2) The producer, instead of earning a profit, may incur a loss. Thus profit can be negative. This is a special feature of profit. No other factor price can be negative.

Again, because it is not contractually fixed, the rate of profit is usually more volatile than other factor prices. This year's profit may be much higher or much lower than the previous year's. Some economists think this instability is a third characteristic of profit.

#### 3.7.1. Elements of profit

What are the elements of profit ? The elements that remain after deducting cost from total revenue are as follows :

- (1) **Reward for risk-taking :** The main function of the producer or the entrepreneur is to bear risk.



Profit may be positive or negative. For this reason, 'organisation' is the only factor of production which has to bear risk. The reward that the organiser demands for taking this risk is included in profit. In fact, most economists are of the opinion that this is the major element of profit. But Professor Frank Knight, in his book 'Economics of Risk and Uncertainty', distinguished between risk and uncertainty. By risky events he meant those uncertain events whose 'probability' can be determined. Suppose that we cannot say with certainty whether an event will actually take place or not, but it can be said that the probability of its taking place is 70 per cent. We say that for this uncertain event, the entrepreneur has to bear risk.

- (2) **Reward for bearing uncertainty** : By 'uncertain' events, we mean events whose probabilities are not known. The entrepreneur not only bears risk but also uncertainty. Because he faces 'uncertain' events just as he faces 'risky' events. No other factor of production bears uncertainty just as no other factor bears risk. The reward for uncertainty-bearing is also an element of profit.
- (3) **Monopoly profit** : In reality, almost no market is perfectly competitive. In most cases there are elements of monopoly in the market. Hence, profit also includes an element of monopoly profit.
- (4) **Windfall profit** : Sometimes producers get unforeseen opportunities of reaping excessive profits. If for some reason there is a sudden spurt in demand for the commodity or if alternative sources of supply dry up, the producer can earn unexpected profits. This is also an element of profit.
- (5) **Wages of own labour and prices for the use of own property** : The producer has to spend a lot of time for running his firm. He could have earned wages by working in some other firm during this time. Naturally, the producer expects to be compensated for this lost opportunity. Hence, profit is supposed to be partially the wage of the producer's own labour. Similarly, if the producer uses some of his own properties (e.g., his own land or house or machines, etc.) in the production process, he loses the income-opportunity that he could have earned by renting them to other people. This lost income will again be included in profit. These too are elements of profit.

### 3.7.2. Gross profit and net profit

The profit that includes all the five elements listed above is called gross profit. If from this we deduct item number '5', we get net profit. Thus, if we subtract the costs of other factors of production from the total revenue of the producer, we get gross profit; and if we subtract the wages of the producer's own labour and the prices of the use of his own properties, we get net profit.  $\therefore$  Net profit = Gross profit - opportunity costs of own labour and capital used in the business. What accountants mean by profit is gross profit. However, economists usually refer to the net profit. Net profit, again, can be divided into two parts : normal profit and super-normal profit.

- (i) **Normal profit** : Normal profit means profit at the usually expected rate. In any industry there would be an expected rate of profit. This can be included in the cost of production in the sense that the producer will stop production unless he gets his profits at the expected rate. Thus, the factor called 'organisation' will not be available unless the organiser gets profits at this rate. This is the 'price' of entrepreneurship. Hence, we can include in it the cost of production on the same footing as rent, wages, etc.
- (ii) **Super-normal profit** : If we subtract normal profit from the profit of a firm, what we get is super-normal profit. While normal profit is a part of the cost of production of the firm, super-normal profit is not.

### 3.7.3. Accounting profit and Economic Profit

The accounting profit of a firm refers to the difference between the sales revenue earned by the firm and the monetary cost incurred by the firm during any particular time period. Thus, the accounting profit of the firm, in book keeping sense, depends on the explicit cost and revenue of the firm. It includes the explicit costs of doing a business such as the cost of raw materials, wage cost, depreciation, interest and tax payments, etc.



∴ Accounting profit of a firm = Sales revenue of the firm – All explicit costs of the firm during a particular year.

This profit is calculated on the basis of some generally accepted accounting principles (GAAP).

Thus, the calculation of accounting profit of a company is based on the realised or actual gains and losses. It shows an excess of revenue gains over and above the explicit costs incurred by the company during any particular accounting year.

However, there remains a difference between the notions of accounting profit and economic profit. The economic profit or the profit of a firm in economic sense considers both explicit and implicit costs (or the opportunity costs) while determining the profit.

∴ Economic profit = Sales revenue (–) [Explicit costs + Implicit costs].

For example, the sales revenue of a firm is ₹ 40,00,000 per year; the explicit costs include the material cost of ₹ 5,00,000, the wage cost of ₹ 6,00,000, the transport and advertisement cost of ₹ 3,00,000 and the interest on loan to the extent of ₹ 50,000 per year. The owner of the firm is an engineer and the production work is carried out in his own land and building.

In this case, the accounting profit of the firm would be ₹ 40,00,000 – (5,00,000 + 6,00,000 + 3,00,000 + 50,000) = ₹ 25,50,000 per year.

Now, as a qualified engineer, the owner of this firm could earn a monthly salary of, say, ₹ 1,50,000, and he could also earn a rent income from his own land and building to the extent of, say, ₹ 50,000 per month. These are considered as the 'opportunity loss' or the opportunity cost of the firm (or the implicit cost).

Thus, the implicit costs of the firm per year would be  $(1,50,000 \times 12) + (50,000 \times 12) = ₹ 24,00,000$ .

Now, if we deduct this implicit cost or the opportunity cost from the accounting profit, we get the economic profit of the firm.

∴ Economic profit = 40,00,000 (–) [14,50,000 + 24,00,000] = ₹ 1,50,000

So, economic profit becomes less than the accounting profit.

### **3.7.4. Normal Profit**

While discussing the notions of gross profit and net profit, we have touched upon the concept of normal profit of a firm. Again, the discussion of long-run equilibrium of a firm under perfectly competitive market also included the concept of normal profit.

Normal profit in economic sense refers to that factor price which has to be paid to the entrepreneur for supplying his/her own labour and capital in operating the business firm. It is supposed to be the minimum expected price of an entrepreneur, say, an expected return of 12% per annum on the own capital invested in the business firm. This minimum expected return is often determined by the opportunity cost of the firm. If any entrepreneur does not get this minimum expected price for his entrepreneurship then he will refrain from undertaking such business. This minimum expected price or the normal profit of the entrepreneur is included in the cost of production of a firm.

[∴ Total cost = Cost of labour (wages)  
+ Cost of capital (interest)  
+ Cost of land (rent)  
+ Cost of entrepreneurship (normal profit).]

Since this expected return or the opportunity cost varies from firm to firm, so the normal profit would also vary from one firm to another.

### **3.7.5. Invention and Innovation : Meaning of invention and innovation**

The term 'invention' means making or designing something that has not existed before, and could be found through continuous research (e.g., invention of radio by Marconi). When any entrepreneur



adopts this invention in the production process, we call it 'innovation'. Thus, by term 'innovation' we mean the finding of a new process of production or sale of a commodity already in the market or of a new commodity which can be produced and sold in the market. Sometimes, innovations, may make it possible to produce or sell a group of new commodities rather than a single new commodity.

### 3.7.6. Distinction between innovation and invention

Innovation has to be carefully distinguished from invention. Innovation has an economic connotation. It must be related to something which can be sold in the market. This is obvious when a new commodity (or a new group of commodities) is produced. But this is also the case when a new process of production is found. Because the new process will reduce the cost of production of some commodity which was already being produced or will increase its demand. An invention on the other hand, is a purely scientific phenomenon. A new commodity may be designed, but it may not be possible to produce it profitably. Then the finding of this new commodity will be called an invention rather than an innovation. Similarly, a new process of production is only an invention (not an innovation) if it cannot be applied in practice to reduce the cost of production of some commodity. In brief, an invention is a scientific finding which may or may not have immediate economic significance. An innovation is an economically profitable way to produce and sell goods and services in the market. Thus, designing a new computer software through a research-work, is an *invention*. However, the commercial application of this software by a business firm, is an *innovation*.

### 3.7.7. Innovation theory of profits

Innovations are related to profits. The relationship was clarified in the theory of profits expounded by Prof. Joseph Schumpeter. According to Prof. Schumpeter, profits arise due to innovations. If today it is discovered that fuel can be produced from plants but fuel cannot be extracted from the plants at a lower cost for the process to be profitable, then no producer will use this new finding. Production of fuel will continue to use the old methods and will earn profits at the normal rate. In this case, the scientific finding is an invention.

But suppose that the scientists find a way to extract fuel from plants at a cost which is lower than the cost of producing fuel by older methods. In that case, the producers, will adopt that new method in the production of fuel. This, then, is an innovation. Producers will use the new method and, because of the lower costs, will enjoy higher profits. In this way, profits arise from innovations.

**Features of the theory :** There are several things which need to be clarified in this context.

*First*, we note, that it is super-normal profits that Schumpeter is talking about. The conventional methods which were used before the innovation were not unprofitable. But they earned profits at the normal rate. Innovations bring profits over and above this normal rate.

*Secondly*, the super-normal profits that are made possible by innovations cannot be a permanent phenomenon. Whenever an entrepreneur starts earning super-normal profits, other entrepreneurs will enter the field, attracted by the lure of profits. This will increase competition. By pushing up the costs of raw materials and by pushing down the price of the output, the competition will soon eliminate the extra profits. For this reason, *the super-normal profits that innovations bring, are only temporary phenomena*. Profits soon return to normal levels.

*Thirdly*, the lure of super-normal profits is, however, so strong that the search for innovation continues. As soon as another innovation takes place, the whole cycle is repeated. Again, some entrepreneurs enjoy super-normal profits for a short period. After this period, profits again return to their normal levels. In this way, *super-normal profits appear on the scene again and again*.

*Fourthly*, it should be noted that innovations are not always technological or scientific in nature. For instance, a new type of sales campaign or advertising may make an old product more profitable.



That is why we have emphasised that *an innovation is a new way of either producing or selling goods*. Finally, the theory emphasises the vital role of the entrepreneurs in applying the innovations in practice. The mere fact of innovation will not bring (super-normal) profits. The profits arise only when an entrepreneur puts an innovation to use. Thus, *Schumpeter's theory turns crucially on the role of the entrepreneurs*.

■ **Criticism** : The innovation theory of profits given by Schumpeter has been criticised on several grounds.

- (1) The theory focuses exclusively on innovations as the root cause behind profits. But profits can also be explained in other ways. For instance, some economists consider profits as rewards for risk-taking. This aspect of profits has been ignored by Schumpeter.
- (2) Similarly, profits also arise due to uncertainty-bearing by entrepreneurs. The relationship between profits and uncertainty has also been ignored in Schumpeter's theory.
- (3) In practice, we often see that some producers enjoy super-normal profits, not because of any innovations, but because of some special advantage that these producers have compared to other producers. (For instance, a producer may have access to some vital sources of raw materials or to some vital information regarding the way in which the pattern of demand is going to change in the future.) This particular cause behind super-normal profits has also been ignored in Schumpeter's theory.

### **3.7.8. Risk and uncertainty**

According to some economists, profits are the reward for risk-bearing and uncertainty-bearing. Within this type of theory, we should distinguish between the risk-bearing theory of profits and uncertainty-bearing theory of profits.

### **3.7.9. Risk-bearing theory of profits**

**Types of risk** : This theory was proposed by Prof. Hawley. According to Hawley, profits are the reward for risk-bearing. Now, what did Hawley mean by risk ? By risk he meant any type of uncertainty that arises in course of the production or sale of commodities. He distinguished between different types of risk, viz., (a) replacement risk, (b) obsolescence risk, (c) uncertainty, and (d) risk proper. When a new investment is made, attention has to be paid to the fact that the machines will depreciate over time and there will come a stage when the machines will have to be replaced. Since it is not known with certainty when the machines will need to be replaced, this is a type of risk for the producer. Similarly, a machine may be rendered obsolete even before the end of its physical life-span if new and better technology suddenly appears on the scene. This is obsolescence risk. By 'risk proper' he means the risk arising out of the lag between the time at which investment is made and the time at which the product is sold in the market. The longer the time lag, the greater is the risk, because during this time-gap, something may happen to upset the producer's calculations. By 'uncertainty', Hawley meant any type of risk other than replacement and obsolescence risks and risk proper (for example, uncertainty regarding the prices of the output, not because of the time lag mentioned above but because prices may change within short periods).

### **3.7.10. Reward for risk-bearing**

According to Hawley, profits are nothing but incentives given to the producers for bearing the different types of risks. (He was aware, however, that replacement needs of machines can often be estimated from engineering data and adequate provisions can be made for depreciation. These depreciations are cost items. They will not enter into profits.) It is wrong to look upon profits as rewards for management because the job of management can be entrusted to salaried managers.



■ **Criticism** : It is obvious that Hawley's theory contains an important element of truth. He clearly distinguished between the risk-bearing and the day-to-day managerial functions of an entrepreneur and attributed profits to risk-bearing. Yet the theory suffers from some defects.

- (1) *The risk-bearing and the day-to-day managerial functions of an entrepreneur may be inseparably linked.*  
A producer may not be able to bear risk efficiently unless he devotes time to the day-to-day running of the enterprise.
- (2) More importantly, Hawley did not always clearly distinguish between those types of risk whose costs can be calculated (and which, therefore, become cost items and have to be excluded from profits) and those whose costs cannot be calculated. It is the bearing of the second type of risks that gives rise to profits.

### 3.7.11. Uncertainty-bearing theory of profits

The most well-known among the risk-and-uncertainty type of theories of profits is the uncertainty-bearing theory expounded by Professor Frank Knight. Professor Knight's fundamental contribution was the clear distinction between risk and uncertainty. According to Knight, profit was the reward for uncertainty-bearing and not for risk-bearing.

**Reward for risk-taking is a cost** : The reward for risk-taking can be included in cost of production. Professor Knight has shown that some risks can be avoided through insurance. The premium of the insurance can be treated as the cost of risk-taking. For instance, there may or may not be an accident in the factory in which the production would be carried out. But if the producer buys an accident insurance policy (say, fire insurance) from an insurance company, he does not have to bear the risk of an accident. If there is an accident, the loss will be compensated by the insurance company. In exchange, the insurance company gets a fixed amount of money each year from the producer (irrespective of whether there is an accident or not.) This is the premium for the insurance. Thus, the producer can avoid risk-taking by paying the premium regularly.

Premium payments are obviously a cost item. But there are many types of risks for which there are no insurance companies in the market. In these cases, it is not possible to avoid risk-taking by paying the premium. The producer must bear these risks. For example, risks arising out of future changes in the preference pattern of consumers, changes in Government policies etc. But it can be shown that, for the events which are 'risky' but not 'uncertain' (i.e., for which we can calculate 'probabilities') it is possible to calculate mathematically (on the basis of the known probabilities) what the premium payments would have been. Thus, whether, in reality, the producer is buying an insurance policy or not is irrelevant. What the premium would have been (had it been possible to buy such an insurance policy) can be calculated. This premium payment would then be treated as cost of risk-taking and would be labelled as 'normal profit'.

### 3.7.12. Uncertainties and profit

Notice that in case of uncertainties, the probabilities of risks are not known. Hence, the premium payments for their insurance cannot be determined. Uncertainty is, therefore, uninsurable. Hence, the reward for uncertainty-bearing is not a cost item. It is pure (i.e., super-normal) profit. This is how Professor Knight explains the point that profit is the reward for uncertainty-bearing.

**Types of uncertainties** : Knight also described the different types of uncertainties. He explained how uncertainties can come from different sources — uncertainty regarding the changes in demand conditions, uncertainty arising of the entry of new firms and growing competition in the industry, uncertainty regarding technological change, uncertainty regarding the policies of the Government, etc.

■ **Criticism** : Despite the insightful nature of Professor Knight's theory, it has been subjected to criticism from several angles.