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21UCY302: MANAGERIAL ECONOMICS

Unit IV: Profit planning and investment analysis

Profit - Meaning and nature - Profit policies - Profit planning and forecasting - Cost volume profit analysis - Investment analysis.

Meaning of Profit:

Profit is the surplus of income over expenses of production according to a businessman. It is the amount left with him after he has made payments for all factor services used by him in the process of production. But he may not have been careful in calculating all such expenses of production in the economic sense. Therefore, economists regard businessman's Profit as "Gross Profit".

Definitions:

1. According to Prof. Marshall – "Profit is the earning of management"
2. According to Walker – **"Profit is the rent of ability".**
3. According to Croome – "Profit is the reward for uninsured risks".

Characteristics of Profit:

1. Profit is a Residual Reward:

It means profit is received by the entrepreneur as a residual surplus, which is left over after meeting all the business expenses from the sales receipts.

2. It is not Contractual or Pre-Determined Payment:

Remember Profit is not like rent, wages, interest and Profit a pre-determined contractual payment. Therefore, it can be said that it is not an explicit cost.

3. It is the End Result of Business:

In profit other factors rewards such as rent, wages and interest are received by their agents during the process of production. Profit is realised by the entrepreneur only after the completion of the business, i.e., after completing the sales and meeting all the expenses.

4. Profit is a Dynamic Concept:

Profit depends on many factors such as entrepreneur's organisational ability, changes in market demand and supply conditions, element of monopoly power, innovation such as production of new items, discovery of new-markets, new modes of advertising and sales propaganda etc. and many other dynamics changes in the economy.

5. Profit is not Fixed Income, it is Uncertain and Fluctuating:

Profit being a residual income cannot be fixed in a pre-determined manner. It varies from time to time. It will be high during a period of prosperity. It declines during recession. There may be even losses during a depression. Here, other factor incomes are generally stable over a period of time, Profit is widely fluctuating.

Nature of Profit:

The nature of Profit has even been the most perplexed and troubled problem in the opinion of the economists. In early days, the classical economists regarded Profit as accruing to the capitalist who supplied capital and owned the business, Profits are determined after making all necessary payments from the total income of the business.

It is the demand and supply of entrepreneur. Regarding Nature of Profit Prof. Taussig has said that it is a "mixed and vexed income.' Walker looked upon "Profit as the reward of the entrepreneur with a superior ability than others".

According to Clark, Knight and Schumpeter – "It is an income which arises out of change, uncertainty and friction inherent in a dynamic world, and which the belated operation of competitive forces tends to eliminate."

In this connection the Marxian economists Veblen and Hobson are of this opinion that "Profit is an unearned income and attribute it to the existence of institutional monopolies established by a few capitalists. Monopoly profits arise because a monopolist is able to restrict output and keep the price of his product much above the average cost of production."

Theories of Profit:

1. Rent Theory of Profit:

- This theory was first propounded by the American Economist Walker.
- According to these economists, there was a good deal of similarity between rent and profit.
- Rent was the reward for the use of land while a profit was the reward for the ability of the entrepreneur.
- Rent of superior land is determined by the difference in productivity of the marginal and super marginal land; similarly the profits of the marginal and super marginal entrepreneurs.
- The marginal entrepreneur sells his produce at cost price and gets no profit.
- He secures only the wages of management not profit.
- Thus profit does not enter into cost of production.

Criticism:

1. According to critics there cannot be perfect similarity between rent and profit. Rent is generally positive and in rare cases it may be zero. But rent can never be negative. When entrepreneur suffers losses profit can be negative.

2. The theory explains profit as the differential surplus rather than a reward for an entrepreneur.

3. Profit is not always the reward for business ability. Profit can be due to monopoly or it can arise due to favourable chance to the entrepreneur.

4. This theory maintains that there is no profit entrepreneur just as no rent land. But in practical life there is no such entrepreneur because whether the entrepreneur has ability or not be gets profit as his reward.

5. This theory assumes that profit does not enter into price. But this is unrealistic because profit as a part of the cost of production does enter into price.

6. Rent is a known and expected surplus. It is also a contractual payment. Profit is unknown.

7. Walker has analysed only surplus profit. But profit can be several other types.’

2. Wage Theory of Profit:

- This theory was propounded by Taussig, the American economist.
- According to this theory, profit is also a type of wage which is given to the entrepreneur for the services rendered by him.
- In the words of Taussig, "profit is the wage of the entrepreneur which accrues to him on account of his ability".
- Labourer receives wages for his services, the entrepreneur works hard gets profit for the part played by him in the production.
- The only difference is that while labourer renders physical services, entrepreneur puts in mental work.
- Thus an entrepreneur is not different from a doctor, lawyer, teacher, etc., who do mental work. Profit is thus a form of wage.

Criticism:

1. The main defect of this theory is that it does not make a distinction between wage and profit. Wages are fixed and certain, but profits are uncertain income.

2. The entrepreneurs undergo risk in production; but the labourer undertakes no such risk.

3. Entrepreneur bears the entire responsibility to organize the business, but labourer need not do so.

4. Profits tend to vary with price but wages do not vary so.

5. The labourer get his wages if he has put in the required amount of labour, but the entrepreneur may not get profit even if he works hard.

6. Profit may include chance gain while wages do not include such an element.

3. Risk Theory of Profit:

- This theory is associated with American economist Hawley.
- According to him profit is the reward for risk-taking in business.
- Risk-taking is supposed to be the most important function of an entrepreneur.
- Every production that is undertaken in anticipation of demand involves risk.

- According to Hawley the entrepreneur can avoid certain risks for a fixed payment to the insurance company.

Criticism:

1. Risk-taking is not the only entrepreneurial function which leads to emergence of profits. Profits are also due to the organizational and coordinating ability of the entrepreneur. It is also reward for innovation.

2. According to Carver profit is paid to an entrepreneur not for beaming the risk but for minimizing and avoiding risk.

3. This theory assumes that profit is proportional to risk undertaken by entrepreneurs. But this is not true in practical life because even entrepreneurs who do not take any risk are paid profit.

4. The Dynamic Theory of Profit:

- Prof. J.B. Clark propounded the dynamic theory of profit in the year 1900.
- To him profit is the difference between the price and the cost of production of the commodity.
- Profit is the result of progressive change in an organized society.
- **According to Clark five major changes are constantly taking place in a society. They are:**

  (1) Changes in the size of the population,

  (2) Changes in the supply of capital,

  (3) Changes in production techniques,

  (4) Changes in the forms of industrial organisation, and

  (5) Changes in human wants.

Criticism:

1. It is wrong to say that there is no profit in static state because every entrepreneur is paid profit irrespective of the state of an economy.

2. This theory does not fully appreciate the nature of the entrepreneurial function. If there are no profits in a static state, it means there is no entrepreneur. But without an entrepreneur it is not possible to imagine how different factors of production would be employed.

3. This theory assumes the existence of perfect competition and static state. But they are far from reality.

4. This theory states that profit arises because of dynamic changes. But Knight says that it is only unforeseen changes that give rise to profit.

5. This theory associates profit for imitating progressive changes in the economy. But in reality profit is paid to entrepreneur for other important functions like risk taking and uncertainty bearing.

5. Schumpeter's Innovation Theory:

- This theory was propounded by Schumpeter.
- According to this theory profit is the reward for innovations.
- He uses the term innovation in a sense wider than that of the changes mentioned by Clark.
- Schumpeter makes a distinction between invention and innovation.
- Innovation is brought about mainly for reducing the cost of production and it is cost reducing agent.
- The main motive for introducing innovation is the desire to earn profit.
- Profit is therefore the cause of innovation.
- Profits are of temporary nature.

Criticisms:

1. This theory concentrates only on innovation, which is only one of the many functions of the entrepreneur and not the only factor.

2. This theory does not consider profit as the reward for risk-taking. According to Schumpeter it is the capitalist not the entrepreneur who undertakes risk.

3. This theory has ignored the importance of uncertainty bearing which is one of the factors that determines profit.

4. This theory attributes profit only to innovation ignoring other functions of entrepreneur.

5. Monopoly profits are permanent in nature while Schumpeter says that innovate profits occur temporarily.

Profit planning and forecasting:

An organization should plan profits by taking into consideration its capabilities and resources. Profit planning lays foundation for the future income statement of the organization. The profit planning process begins with the forecasting of Les and estimating the desired level of profit taking in view the market conditions.

Steps involved in the profit planning process:

1. Establishing profit goals:

Implies that profit goals should be set in alignment with the strategic plans of the organization. Moreover, the profit goals of an organization should be realistic in nature based on the capabilities and resources of the organization.

2. Determining expected sales volume:

Constitutes the most important step of the profit planning process. An organization needs to forecast its sales volume so that it can achieve its profit goals. The sales volume can be anticipated by taking into account the market and industry trends and performing competitive analysis.

3. Estimating expenses:

Requires that an organization needs to estimate its expenses for the planned sales volume. Expenses can be determined from the past data. If an organization is new, then the data of similar organization in same industry can be taken. The expense forecasts should be adjusted to the economic conditions of the country.

4. Determining profit:

Helps in estimating the exact value of sales.

It is calculated as:

Estimated Profit = Projected Sales Income – Expected Expenses

After planning profit successfully, an organization needs to control profit. Profit control involves measuring the gap between the estimated level and actual level of profit achieved by an organization. If there is any deviation, the necessary actions are taken by the organization.

Profit forecasting:

Profit planning cannot be done without profit forecasting. Profit forecasting means projection of future earnings taking into consideration all the factors affecting the size of business profits. Joel Dean has pointed out the three approaches to profit forecasting:

a. Spot projection: Projecting the entire profit and loss statement for a specified future period by forecasting each important element separately forecast are made about sales volume and prices and costs of producing the anticipated sales.

b. Break – even analysis: Identifying functional relations of both revenues and costs to output rate with profits related to output as a residual or alternatively relating profits to output directly by the usual data used in break even analysis.

c. Environmental Analysis: It is relating the company's profits to key variables in the economic environment, such as the general business activity and the general price level. These variables are external to the company.

Cost Volume Profit Analysis:

- C.V.P. analysis is a technique used to study the inter-relationship between costs, sales and net profit.
- It shows the net effect that fluctuation in cost, price and volume has on profits.
- The higher the volume of output, the lower will be the unit cost of production and vice-versa as the fixed overhead cost in total cost does not change with changes in the volume of output.
- The concept of C.V.P. is relevant to virtually all decision-making areas.

- The managers use this technique extensively to determine B.E.P., Margin of safety, Profits /Losses at various levels of output, etc.
- It is an important tool of short term planning and forecasting of business activities and is useful in taking short-run decisions and formulating business policies.

Objectives of cost volume profit analysis:

1. To forecast profit accurately, it is absolutely essential to determine the relationship between costs and profits on one hand and volume on the other. It aims at measuring variations in cost with volume.

2. C.V.P. analysis is used in setting up flexible budgets which show costs at various levels of activities.

3. C.V.P. analysis helps management in the evaluation of performances for control purposes.

4. C.V.P. analysis may be helpful in formulating pricing policies by projecting the effect that various price structures have no costs and profits, especially when the demand for the product is elastic.

5. C.V.P. analysis helps to ascertain the amount of overhead costs that could be charged to product costs at different levels of operation.

6. It helps in making short-run tactical decisions, e.g., shift working, acceptance of special order, choice of sales-mix, etc.

Purpose of cost volume profit analysis:

(i) To ascertain the amount of profit (or loss) at any level of activity.

(ii) To determine the selling price/sales volume which will give the desired amount of profit.

(iii) To ascertain the selling price/sales volume which will yield the desired return on capacity employed.

(iv) To determine costs and revenues at various levels of activity.

(v) To ascertain the effect of change (increase or decrease) in fixed costs, variable costs, selling price, production/sales volume on profit.

(vi) To suggest the change in sales mix for obtaining maximum profits.

(vii) To compare profitability among products and firms.

Investment Analysis:

The practice of evaluating an investment for profitability and risk is known as investment analysis. Its ultimate goal is to determine whether a certain investment is a good fit for a portfolio. It can also range from a single bond in a personal portfolio to a fledgling business investment and even large-scale corporate ventures. The process of evaluating an investment for income, risk, and resale value is known as investment analysis.

Factors of investment analysis:

1. Risk: Risk is the first consideration in every investment analysis. The rationale for this is simple: if the investment's risk is too high, a loss is almost certain. Cash flows and resale value aren't important in this situation because the investment is worthless.

2. Cash Flow: Cash flows are the second aspect of investment analysis. Dividends from publicly traded stocks, interest payments on bonds, and even free cash flow that can be paid to small business investors are all examples of cash flows (again, in the form of dividends). One of the ways to return investment is through cash flows. As a result, an investor will want to look at cash flows to see if they can repay the investment while also covering the risk assumed. Future value of cash flows and Discounted Cash Flow Analysis are two methodologies for assessing cash flows.

3. Resale Value: The resale value of an investment is the third aspect to consider. The profit from selling comes from an increase in the asset's market value. Profit from resale value occurs when an asset is sold to another investor for a higher price than it was purchased for.

Types of Investment Analysis

1. Bottom-Up: The bottom-up approach focuses on the specific company where the investment will be made. This allows small investors to concentrate and plan their investments in a specific firm rather than examining the entire market for investing purposes. It is a cautious attitude that, on the other hand, aids investors in making the best decision possible.

2. Top-Down: In a top-down analysis, investors must look at the entire market. This type of technique is generally attractive to large investors. The emphasis is solely on large markets and businesses, not on small businesses. It is a broader approach to investment analysis than any other.

3. Fundamental: It is a typical way of analysis in which the investor determines whether or not to buy the company's stock by determining the Fair Market Value of the investment. It's yet another good and successful approach to investment analysis.

4. Technical: By observing stock market information, this strategy is utilized to determine and discover trading opportunities. Experts advise on when and where to invest to maximize profits.

Break even Analysis:

A break-even analysis is an economic tool that is used to determine the cost structure of a company or the number of units that need to be sold to cover the cost. Break-even is a circumstance where a company neither makes a profit nor loss but recovers all the money spent.

The break-even analysis is used to examine the relation between the fixed cost, variable cost, and revenue. Usually, an organisation with a low fixed cost will have a low break-even point of sale.

Break-even point = Fixed cost/-Price per cost – Variable cost

Importance of Break-Even Analysis

- **Manages the size of units to be sold:** With the help of break-even analysis, the company or the owner comes to know how many units need to be sold to cover the cost. The variable cost and the selling price of an individual product and the total cost are required to evaluate the break-even analysis.
- **Budgeting and setting targets:** Since the company or the owner knows at which point a company can break-even, it is easy for them to fix a goal and set a budget for the firm accordingly. This analysis can also be practised in establishing a realistic target for a company.
- **Manage the margin of safety:** In a financial breakdown, the sales of a company tend to decrease. The break-even analysis helps the company to decide the least number of sales required to make profits. With the margin of safety reports, the management can execute a high business decision.
- **Monitors and controls cost:** Companies' profit margin can be affected by the fixed and variable cost. Therefore, with break-even analysis, the management can detect if any effects are changing the cost.
- **Helps to design pricing strategy: The** break-even point can be affected if there is any change in the pricing of a product. For example, if the selling price is raised, then the quantity of the product to be sold to break-even will be reduced. Similarly, if the selling price is reduced, then a company needs to sell extra to break-even.

Components of Break-Even Analysis

- **Fixed costs:** These costs are also known as overhead costs. These costs materialise once the financial activity of a business starts. The fixed prices include taxes, salaries, rents, depreciation cost, labour cost, interests, energy cost, etc.
- **Variable costs:** These costs fluctuate and will decrease or increase according to the volume of the production. These costs include packaging cost, cost of raw material, fuel, and other materials related to production.

Uses of Break-Even Analysis

- **New business:** For a new venture, a break-even analysis is essential. It guides the management with pricing strategy and is practical about the cost. This analysis also gives an idea if the new business is productive.

- **Manufacture new products:** If an existing company is going to launch a new product, then they still have to focus on a break-even analysis before starting and see if the product adds necessary expenditure to the company.
- **Change in business model: The** break-even analysis works even if there is a change in any business model like shifting from retail business to wholesale business. This analysis will help the company to determine if the selling price of a product needs to change.

Difference between forecasting and planning:

BASIS FOR COMPARISON	**FORECASTING**	**PLANNING**
Meaning	Considering the past and existing performance of a company to predict its future performance	The process of determining the future activities of an organization so as to achieve the organizational objectives
Depends on	Assumptions and making guesses to some extent	Facts and information
Carried out by	Managers and analysts	Top-level management
Focus on	Making predictions and estimates about future trends or events	Evaluating the future and making preparations for it
Consider	Past and present facts	Past and present facts, as well as expectations and objectives

Business Cycle:

A business cycle is a cycle of fluctuations in the Gross Domestic Product (GDP) around its long-term natural growth rate. It explains the expansion and contraction in economic activity that an economy experiences over time.

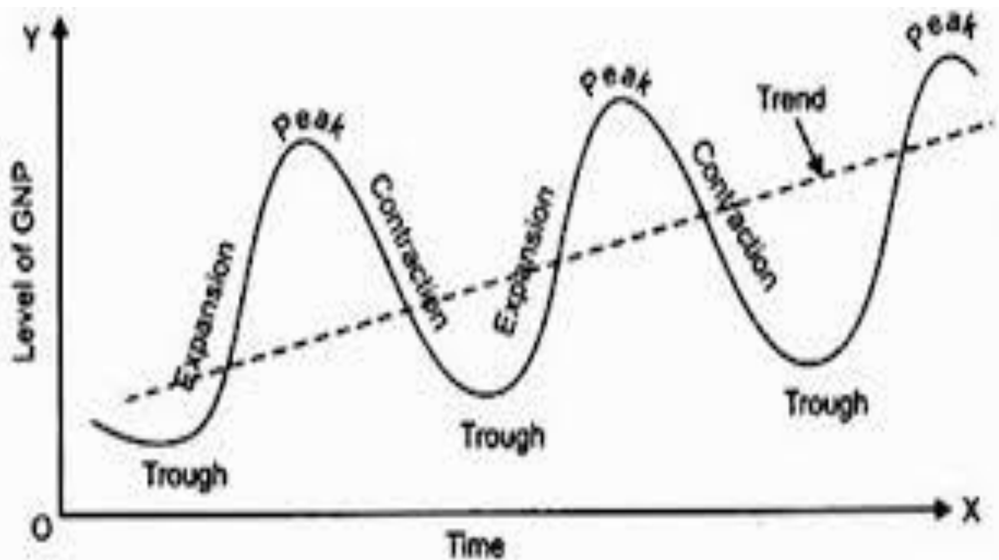

Fig. 13.2. *Cycles with Trend (i.e., Growth)*

1. Expansion : The first stage in the business cycle is expansion. In this stage, there is an increase in positive economic indicators such as employment, income, output, wages, profits, demand, and supply of goods and services. Debtors are generally paying their debts on time, the velocity of the money supply is high, and investment is high. This process continues as long as economic conditions are favorable for expansion.

2. Peak: The economy then reaches a saturation point, or peak, which is the second stage of the business cycle. The maximum limit of growth is attained. The economic indicators do not grow further and are at their highest. Prices are at their peak. This stage marks the reversal point in the trend of economic growth. Consumers tend to restructure their budgets at this point.

3. Recession: The recession is the stage that follows the peak phase. The demand for goods and services starts declining rapidly and steadily in this phase. Producers do not notice the decrease in demand instantly and go on producing, which creates a situation of excess supply in the market. Prices tend to fall. All positive economic indicators such as income, output, wages, etc., consequently start to fall.

4. Depression: There is a commensurate rise in unemployment. The growth in the economy continues to decline, and as this falls below the steady growth line, the stage is called a depression.

5. Trough: In the depression stage, the economy's growth rate becomes negative. There is further decline until the prices of factors, as well as the demand and supply of goods and services, contract to reach their lowest point. The economy eventually reaches the trough. It is the negative saturation point for an economy. There is extensive depletion of national income and expenditure.

6. Recovery: After the trough, the economy moves to the stage of recovery. In this phase, there is a turnaround in the economy, and it begins to recover from the negative growth rate. Demand starts to pick up due to low prices and, consequently, supply begins to increase. The population develops a positive attitude towards investment and employment and production starts increasing.