# **BUSINESS ECONOMICS**

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# **BUSINESS ECONOMICS**

UNIT – I Statistics – Definition – Characteristics – Uses – Limitations – Sources of data – Primary and Secondary data – Classification – Sampling – Types – tabulation – Diagrammatic and Graphic representation of data.

UNIT II Measures of Central Tendency – Mean – Median – Mode – Geometric Mean – Harmonic mean (definition) – Measures of Dispersion – Range – Quartile Deviation – Mean Deviation – Standard Deviation – Lorenz curve.

UNIT – III Correlation – Meaning – Definition- Types – Methods – Uses – Scatter
Diagram – Karl Pearson's Coefficient of Correlation – Rank Correlation –
Regression – Difference between Correlation and Regression – Regression Lines –
Regression Equations – Uses and Limitations of Regression Analysis.

UNIT – IV Index Numbers – Definition – Uses – Problems in the Construction of Index Numbers - Laspeyre's, Paasche's, Marshall Edgeworth and Fisher's Ideal Index Number – Test for Ideal Index Numbers.

UNIT – V Time Series – Definition – Uses of Time Series Analysis – Components of Time Series – Measurement of trend – Graphic Method – Method of Semi-Averages – method of Moving Averages – Method of Least Squares.

# UNIT - I

#### **MEANING OF BUSINESS ECONOMICS**

In life, everyone wants an infinite number of things but we only have finite resources to acquire what we want. Maintaining an efficient balance between these unlimited wants and limited resources is what Business Economics deals with. Therefore understanding the meaning of Business Economics is extremely crucial. But when we are talking about Business Economics we consider the needs of a bigger entity for eg. a nation, a firm etc.

To understand the meaning of Business Economics we can think of Business Economics as the integration of two major concepts Economic Theory and Business Practices.

#### **Economic Theory**

It consists of various techniques such as demand – supply, cost and consumption to analyse all aspects of business situation. Also it provides us with the past and present information regarding the growth in production and demands.

It is because of Economic Theory that we know that both quantity and quality of resources whether human or non-human has improved with time.

#### **Business Economics**

Business Economics gives information about the elements that affect the production efficiency of resources. It helps to examine economic issues for selecting the best course of action from all the ones available.

This course of action influences the performance of a business. So it is important to make a sound decision.

#### **Decision making**

In business, allocation of resources is very crucial task. And there are several alternatives present. Now evaluating all the alternatives based on the information collected and choosing the most efficient one is nothing but decision making.

## **DEFINITION OF BUSINESS ECONOMICS**

According to **Spencer and Siegelman**, "Business Economics may be defined as the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management." According to **McNair and Meriam**,"Business Economics consists of the use of economic modes of thought to analyze business situation."

# NATURE OF BUSINESS ECONOMICS

**Micro Economic Nature**: Business Economics is micro economic in nature because it deals with the matters of a particular business firm only.

**Use of Economic Theories**: Business Economics uses all economic theories relating to the profits, distribution of income etc.

**Realistic One**: business economics is a realistic science. It studies all matters concerning business organization by considering the real conditions existing in the business field.

**Normative science**: Business Economics is a normative science. It studies the matters concerning the aims and objectives of a business firm. It determines the methods to be adopted for achieving such objectives. It also makes inquiry into the good and bad in decision making. Hence it is a normative science.

**Use of macro Economics**: Even though Business Economics has a nature of Micro Economics, it also uses macro- economic approaches frequently. Certain matters in Macro Economics like business cycles, national income public finance, foreign trade etc., which are essential for Business Economics. So Business Economics uses the macro Economic phenomenon for taking business decisions.

# SCOPE OF BUSINESS ECONOMICS

- 1. **Demand Analysis and Forecasting**: Demand analysis and forecasting of demand facilitates the decision making and forward planning. If demand forecasting of a firm is correct the firm earns more profit and if they are wrong it suffers losses.
- Production Planning and management: Every firm is engaged in certain production, hence it has to plan and manage the production. Firm has to make profitable decisions keeping its factors of production and the product in view.

- 3. **Cost Analysis**: one of the important responsibilities of business managers is to analyze and control costs in order to maximize the profit. It can be done only by proper investigation and research about the respective costs.
- 4. **Pricing Policies and Practices**: deciding the price is one of the important subject of Business Economics. The success of a firm depends upon decisions regarding prices.
- 5. **Profit Management**: Business Economics helps in analysis of profit management and control.
- 6. **Capital management**: Capital management in Business Economics includes cost of capital, profitability of capital and the selection of suitable project or projects out of various projects.
- Decision Theory under Uncertainty: Uncertainties are many fold such as uncertainty of demand, uncertainty of cost, uncertainty of capital etc. Many statistical methods are developed for taking decision under condition of such uncertainties.

# SIGNIFICANCE OF BUSINESS ECONOMICS

- Business Economics covers various concepts such as demand and supply analysis, short run cost, and long run costs and Law of Diminishing marginal Utility. These concepts support managers in identifying and analyzing the problems and finding solutions.
- 2. It helps managers to identify and analyze various internal and external business factors and their impact on the functioning of the organization.
- 3. Business Economics helps managers in framing various policies such as pricing policies and cost policies on the basis of economic study and findings.
- 4. By studying various economic variables such as cost, production and business capital, organizations can predict the future.
- Business Economics helps in establishing relationships between different economic factors such as income, profits, losses and market structure. This helps in guiding managers in effective decision making and running the organization.

# **OBJECTIVES OF BUSINESS FIRM**

# **PROFIT MAXIMISATION**

The principal objective of a business firm is profit maximization. Under the assumptions of given tastes and technology, price and output of a given product under perfect competition are determined with the sole objective of maximizing profits. The firm is supposed to act as one of the large number of producers which cannot influence the market price of the product.

It is the price taker and quantity adjuster. Thus the demand and cost conditions for the product of the firm are determined by factors external to the firm. In this theory, maximum profits refer to pure profits which are a surplus above the average cost of production. It is the amount left with the entrepreneur after he has made payment to all the factors of production, including his wages of management.

In other words, it is a residual income over and above his normal profits. It is a necessary payment for an entrepreneur to stay in the business. The rules for profit maximization are

MC = MR MC should cut MR from below

## **OUTPUT MAXIMISATION**

Milton Kafolgis suggests output maximization as the objective of business firm. According to him," the performance of firms frequently is measured directly in terms of physical output with revenue occupying the secondary position." Thus kafolgis prefers output maximization both to profit maximization and revenue maximization as the objective of the firm.

Given some minimum level of profits a firm wants to maximize its output. It will spend its funds on increasing production rather than on advertising. Thus the

firm will produce a larger output and its revenue sales may be less than the sales maximization firm.

# Criticism

- 1. Kafolgis' emphasis on output maximization as against Baumol's sales maximization is not a satisfactory explanation of the objective of a firm. If the firm simply aims at output maximization without sales maximization, it may not be in a position to survive for long.
- If the firm is a multi-product firm, how the output of different products, say radio, TV, and watches can be added. It is only the value of sales of each product that can be added together. This is nothing but maximization of sales.

# **SECURITY PROFITS**

Rothschild has put forward the view that the firm is motivated not by profit maximization but by the desire for security profits. In his words," There is another motive which is probably of a similar order of magnitude as the desire for maximum profits, the desire for security profits.

Rothschild argues that so far as the objective of profit maximization is concerned, it is valid only under perfect competition or monopolistic competition in which the number of firms is very large, and the individual is not faced with the security problem, so is the case with the monopoly firm.

But under oligopoly, a firm is not motivated by profit maximization. It is engaged in a constant struggle to achieve and maintain a secure position in the market.

The desire to increase its security leads to the struggle for position and to the setting of a price which will not be so low that it provokes retaliation from rivals, nor so high that it encourages new entrants, and it must be within the range which will maintain a protection against the aggressive policies of the rivals and bring about a reasonable profit above its cost of production. Rothschild's profit motive is nothing else but profit maximization in a different garb.

### **BAUMOL'S SALES MAXIMIZATION**

Baumol's findings of oligopoly firms in America reveal that they follow the sales maximization objective. According to Baumol, with the separation of ownership and control in modern corporations, managers seek prestige and higher salaries by trying to expand company sales even at the expense of profits.

Being a consultant to a number of firms, Baumol observes that when asked how their business went last year, the business managers often respond, "Our sales were up to three million dollars." Thus according to Baumol, revenue or sales maximization is consistent with the actual behavior of firms.

Baumol cites evidence to suggest that short run revenue maximization mat be consistent with long run profit maximization. But sales maximization is regarded as the short run and long run goal of the management. Sales maximization is not only a means but an end in itself. He gives a number of arguments in support of his theory. According to him a firm attaches great importance to the magnitude of sales and is much concerned about declining sales.

If the sales of a firm are declining, banks, creditors, and the capital market are not prepared to provide finance to it. Its own distributors and dealers might stop taking interest in it. Consumers might not buy its products because of its unpopularity. But if sales are large, the size of the firm expands, which innnnnn turn, means larger profits.

### MARRIS GROWTH MAXIMIZATION

Robin Marris in his book The Economic Theory of Managerial Capitalism 1964 has developed a dynamic balanced growth maximizing theory of the firm. He concentrates on the proposition that modern big firms are managed by managers and the shareholders are the owners who decide about the management of the firms. The managers aim at the maximization of the growth rate of the firm and the shareholders aim at the maximization of their dividends and share prices. Marris develops a balanced growth model in which the manager chooses a constant growth rate at which the firm's sales, profits assets etc., grow.

He will therefore, retain higher proportion of total profits for the expansion of the firm. Consequently, profits to be distributed to shareholders in the form of dividends will be reduced and the share prices will fall. The threat of take-over of the firm will loom large among the managers.

As the managers are concerned more about their job security and growth of the firm, they will choose that growth rate which maximizes the market value of shares, give satisfactory dividends to shareholders, and avoid the takeover of the firm.

On the other hand, the owners (shareholders) also want balanced growth of the firm because it ensures fair return of their capital. Thus the goal of the managers may coincide with that of owners of the firm and both try to achieve balanced growth of the firm.

# Criticisms

- 1. Marris assumes a given price structure for the firms. He therefore does not explain how prices of products are determined in the market.
- 2. It ignores the problem of oligopolistic interdependence of firms.
- 3. This model also does not analyse intedependence caused by non-price competition.
- 4. The model assumes that firms can grow continuously by creating new products. This is unrealistic because no firm can sell anything to the consumers. After all, consumers have their preferences for certain brands which also change when new products enter the market.
- 5. The assumption that all major variables such as profits, sales and cost increase at the same rate is highly unrealistic.
- 6. It is also doubtful that a firm would continue to grow at a constant rate as assumed by Marris. The firm might grow faster now and slowly later on.

Despite these criticisms, Marris theory is an important contribution to theory of the firm in explaining how a firm maximizes its growth rate.

### SIMON'S SATISFICING OBJECTIVE

According to Simon, the firm's principle objective is not maximizing profits but satisficing or satisfactory profits.

We must expect the firms goals to be not maximizing profits but attaining a certain level or rate of profit, holding a share of the market or a certain level of sales." Under conditions of uncertainity, a firm cannot know whether profits are being maximized or not.

In analyzing the behavior of the firm, Simon compares the organizational behavior with individual behaviour. According to him, a firm, like an individual has an aspiration level, in keeping with its needs, drives and achievement of goals.

The firm aspires to achieve a certain minimum or target level of profits. Its aspiration level is based on its different goals such asproduction, price, sales, profits, etc., and on its past experience. This also takes into account uncertainities in the future. The aspiration level defines the boundry between satisfactory and unsatisfactory outcomes.

In this context, the firm may face three alternative situations.

- a) The actual achievement is less than the aspiration level.
- b) The actual achievement is greater than the aspiration level and
- c) The actual achievement equals the aspiration level.

In the first situation, when the actual achievement lags behind the aspiration level, it may be due to wide fluctuations in economic activity or on account of qualitative deterioration in the performance level of the firm.

In the second situation, when the actual achievement is greater than the aspiration level, the firm is satisfied with its performance. The firm is also satisfied in the third situation when its actual performance matches its aspiration level. But the firm does not feel satisfied in the first situation. It may be that the firm has set its aspiration level very high. It will, therefore, revise it downward and start a search activity to fulfill its various goals in order to achieve the aspiration level in the future. Similarly if the firm finds that the aspiration level can be achieved, it will be revised upward. It is through such search activity that the firm will be able to reach the aspiration level set by the decision maker.

The search process may be done through a sequence of possible alternatives using past experience. But the search activity is nit a costless affair. The firm while behaving rationally is satisficing rather than maximizing.

#### **BASIC BUSINESS PROBLEMS**

Uncertainty about the future. Financial management Monitoring performance Regulation and compliance Competencies and recruiting the right talent Technology Exploring data Customer service

#### **BUSINESS ECONOMICS AND BUSINESS DECISIONS**

The business economist is expected to play a positive & Constructive role in modern business set up. A business is essentially involved in the process of decision making as well as forward planning. Business decision is an integral part of management. Management and decision making are to be considered as inseparable. Business decision is the selection of a particular course of action, based on some criteria, from two or more possible alternatives.

### **Role of Business Economist:**

• **Identifying various business problems**: Various companies face many problems such as labour problems, pricing problems, and other problems related to Government controls and restrictions. The basic job of business economist is to identify various problems that are uplifting a company, find out various reasons behind these problems, analyze their effects on the functioning of the company and finally suggest rational alternative and corrective measures to be taken by the management.

Also, it's his duty to design various course of action to maintain & improve the existing systems.

• **Providing a quantitative base for decision making & forward planning:** The business economics with his vast experience has to provide a quantitative base for decision making, policy making & forward planning in a business. Business economist helps to study the in-depth knowledge of the various factors, controllable & non-controllable which influence the working of a business unit.

Business economist helps in planning, production & marketing planning, employing the latest organizational model & develop management techniques to maximize output & minimize operating cost of the firm.

• Advisory to the company: The business economist advises the businessman on all economic and non-economic matters. By virtue of business economist experience it helps to analyze various problems related with volume of investment, sales promotion, competitive conditions, financial positions, labour relation, and Government policies so that he it will help to secured the business while doing every activity.

Business economist must be in touch with fast changing technological development and suggest the most suitable information technology to be adopted by the company.

- Knowledge about the environment factors which affects the business: In order to make the business more viable and profitable the business economist should have a detailed knowledge and information about the environment of a company. Broadly speaking the environmental factors are divided in two parts:
- 1. Business Environment (External Factors)

# 2. Business Operations (Internal Factors)

Business Environment helps to study the all factors and forces and beyond the control of individual business enterprises and its management which will help to maintained the business as stable. Business operation helps to study those factors and forces, which operate, well within the company and influence its operations which can minimize the cost of the business.

Now, after discussing above aspects every business organization needs to appoint a Business Economist who have all the knowledge and fundamentals of the economics to run a business smoothly.