

Business Management and Profit Planning: Application of Economic Concepts and Methods to Business Practice

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Abstract

Business involves decision making and forward planning to achieve objectives of the firm. The principle objective of business firm is profit making. In the process of managerial decisions, the knowledge about economic concepts is quite indispensable. Managerial economics is the branch of economics that integrates economic concepts with business administration practice. The scope of managerial economics offers a variety of techniques and tools which can assist to the management in the process of decision-making. This study viewed that the concepts of managerial economics has a greater impact in decision making and forward planning. The enhancement of sales is the major for making more profits. If the business entrepreneur is capable to predict the cost-output ratio, fixation of price, income of consumer and impact of advertising expenditure, the firm may improve its sales more proportionately. For this purpose, management integrates economic concepts with business decision making practice in order to understand sales behaviour of the firm. In this process, demand analysis plays the pivotal role. This study finds that the concepts of demand are essential ingredients of optimal managerial decisions.

Key words: Business management, decision making, economic concepts, elasticity of demand, sales, profit.

Introduction

The main objective of business firm is profit making. To fulfil this objective, business management involves in decision making. During this process, the knowledge about economic theory and concepts is quite indispensable for management. Managerial economics is the branch of economics that consists of economic theory and concepts which guide the management to take rational decisions especially during the period of uncertainties. The variables in the nature and scope of managerial economics offer a variety of tools which can assist the management in the process of decision making. Managerial economics is the application of economic concepts to solve the problems of decision making by the business firms which aim at achieving certain objectives subject to some constraints. Managerial economics provides a systematic framework to solve the practical business problems like minimizing cost, maximising profits and optimising the resources, etc. The branches of managerial economics like output, consumption, demand, price, market, production, cost, profit, income, etc. provide practical solutions to various business problems. When a business firm is risked in the hope of profit maximisation, the first step it needs to analyse the dynamics of demand for the product and market conditions. Since the basic aim of the firm is profit making, the enhancement in sales become a major concern for survival of firm. The behaviour of sales and its growth is directly related with profit maximisation. If the management is capable to estimate the cost-output ratio, fixation of price, income of the consumer and impact of advertising expenditure and competitor's strategies regarding price and production techniques, it may improve the volume of sales more proportionately. For this purpose, management integrates economic concepts with business decision making in order to analyse the response of sales. Therefore, this study overviews the significance of managerial economics and its contribution to decision making and

formulating future plans. The purpose of this study is to explore the application of managerial economic concepts, models and methods in the optimal managerial decisions under uncertainty and risks. The main objective of the study is to analyse the sales behaviour and its growth plan with the help of concepts of demand analysis.

Integration of Economic theory with Business Practice

The word economics originates from the Greek word 'oikonomikos' which can be divided into two parts: oikos, which means house and nomos, means management. Thus, economics means management of house. It implies how people earn income and resources and how they spend on their necessities. Thus, economics would mean the study of ways in which one organises itself to tackle the basic problem of scarcity of resources. It elucidates that every aspect of human existence is affected by economics due to pervasive nature of economic issues and problems. Economics studies the relationship between cause and effect, it is capable of being measured, it has its own methodology and it has the ability to forecast market conditions. Managerial Economics is that branch of economics which serves as a link between abstract theory and managerial practice. The same idea has been expressed by Spencer and Siegelman (1969)¹, 'Managerial economics is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management'. The basic aim of managerial economics is to apply economic concepts and principles to analyse business problems and suggest solutions. Managerial economics helps business to allocate scarce resources in the optimal manner and give plans for overall development of business firm. Managerial economics deal with how decisions should be made by managers to achieve the organisational goals.

Nature, Scope and Significance of Managerial Economics

The nature of managerial economics is concerned it aims to provide concepts and policies in decision making practice. In this notion, Joel Dean² pointed out 'the purpose of managerial economics is to show how economic analysis can be used in formulating business policies'. The nature of managerial economics is noted below:

- Managerial economics is micro-economic in character as it concentrates on the study of the firm. The various concepts of micro economics used in managerial economics include elasticity of demand, marginal cost, marginal revenue, production techniques, profit plan and market structures and their significance in pricing policies, etc. Managerial economics also takes the help of macro economics to understand and adjust to the environment in which the firm operates. The concepts of macro economics uses to identify the level of demand at future point in time, based on the relationship between the level of national income and demand for a particular product.
- Managerial economics is pragmatic in its approach because it emphasises on the real life problems faced by any business firm and their possible solutions, rather than concentrating only on some abstract economic theories.
- Managerial economics is both conceptual and metrical. It takes the help of conceptual framework to understand and analyse the decision problems and takes the help of quantitative techniques to measure the impact of different factors of policies. Business decisions relate to output to be produced, input to be used, prices to be fixed, estimated cost and revenue schedules, etc., are expressed in quantitative terms.

¹ Managerial Economics, Irwin, Illinois, 1969, p.1.

² Managerial Economics, Prentice Hall, Englewood Cliffs, N.J, 1951.

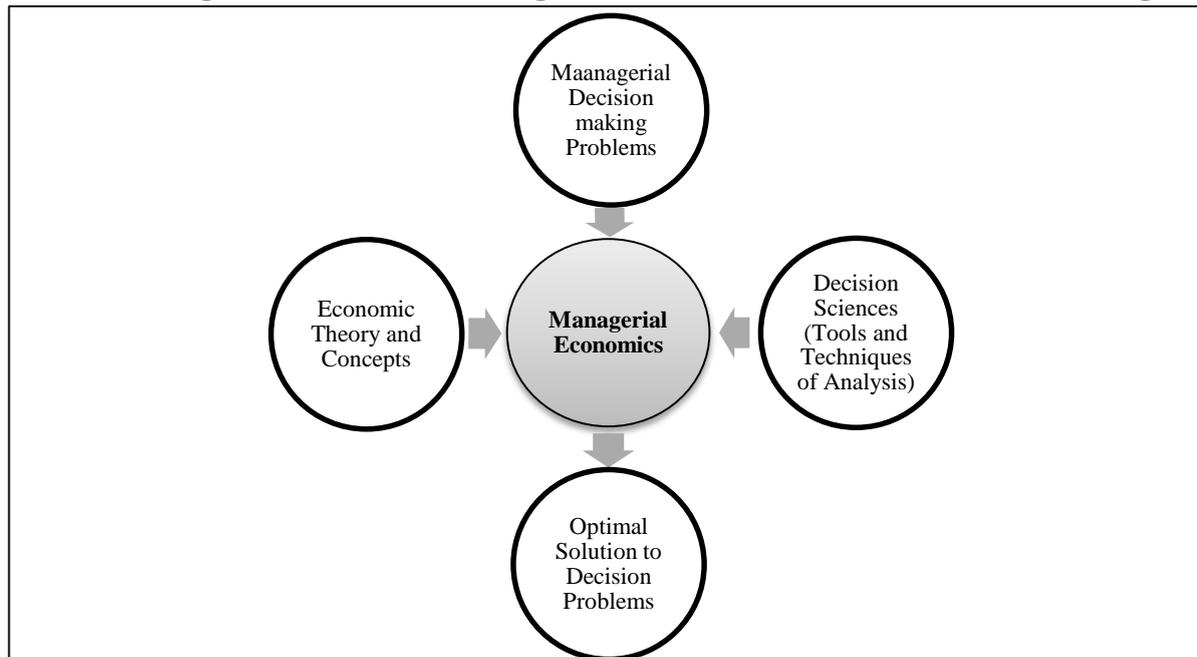
- It is prescriptive rather than descriptive. That is, it is concerned with the type of decisions that the firm should take in order to prosper, which involves value judgements and not a mere description of behaviour of the firm.

With the continuous expansion of world business, the scope of managerial economics has also increased to a great extent. Some of the important fields of study which fall under the purview of managerial economics are following: (i) demand analysis, (ii) production and cost analysis, (iii) objectives of business firms, (iv) pricing decisions and policies, (v) capital budgeting, etc. Business firm has to produce various products keeping an eye on the demand pattern. So demand analysis is necessary for any business firm to improve the sales. The analysis of production and cost are important to undertake proper project planning. In fact, in a competitive business environment, the existence of a firm depends much on its cost-competitiveness. Generally, the main objective of a business firm is to earn maximum profit. However, a modern firm may have some other objectives such as maximisation of sales revenue, minimisation of risks, etc. Thus, an analysis of the alternative objectives of any business firm becomes relevant. Any business firm has to fix its product price in such a manner that it can cover not only its average cost of production but also create some profit margin. Thus, analysis of pricing policy becomes pertinent. Capital budgeting decisions refers to the process of planning expenditure which would generate returns over a particular time span. So, the exercise of capital budgeting also comes under the purview of managerial economics. Therefore, the function of economic aspects helps in reaching a variety of business decisions in a complicated environment. Certain examples are: (i) what products and services should be produced? (ii) what input and production technique should be used? (iii) how much output should be produced and at what prices it should be sold? (v) when should equipment be replaced? (vi) how should the available capital be allocated, etc.?

Contribution of Managerial Economics in Business Decision Making

The prime function of business management is decision making and establish plans for the future. Decision making may be defined as the process of selecting the better actions from among several alternative actions. While performing his function management has to take a lot of decisions in conformity with the objective of the firm. The problem of decision making arises whenever a number of alternatives are available. Such as: (i) what should be the price of the product? (ii) what should be the size of the plant to be installed? (iii) how many workers should be employed? (iv) what kind of training should be imparted to them? (v) what is the optimal level of inventories of finished products, raw material, spare parts, etc.? Managerial decisions make to involve identifying these problems and generating alternatives to implement and evaluate the solutions. Most of the decisions used to take under the condition of uncertainty and risks.

Figure.1: The Role of Managerial Economics in Business Decision Making



The uncertainty and risks arises because of various reasons: unpredictable movements of market demand for product, unforeseen changes in the input prices both in home market and world market, changes in the tax policy, export-import policy, licensing policy of government, changes in business environment, political and social environment, changes in consumer tastes and preferences, external influence on the domestic market, maximum use of limited resources, etc. Hence the decision maker tries to take cautious steps to minimise such problems. For this purpose, managerial economics provide a link between traditional economic concepts and decision science techniques to solve business problems, as shown in Figure 1. Managerial economist has to integrate concepts and methods from all these disciplines in order to understand and analyse practical managerial problems. Managerial economics answers the following fundamental problems of decision making: (i) what should be the product-mix? (ii) which is the production technique and the input-mix that is least costly? (iii) what should be the level of output and price for the product? (iv) how to take investment decisions? (v) how much should be the selling cost? (vi) how to allocate an advertisement fund between different media? The decision making process in managerial economics can be analysed from the view of various functions of business. The decision variables can be identified for each of these functions (see Exhibit 1).

Exhibit 1: Functional Aspects of Decision Making

Managerial Functions	Decision Variables
Demand analysis	Elasticity of demand, demand forecasting, marginal revenue, economies of scale, regression analysis, etc.
Production	Scale of production, product diversification, choice of technology, factor substitutability, type of products, capacity utilisation, etc.
Purchase of inputs	Input costs, inventory control, time of purchase, etc.
Price	Price determination, perfect competition, price discrimination, bundling, product differentiation, price skimming, penetration pricing, tailoring the product, etc.
Cost	Type of costs, cost-output functions, economies of scope, survivor techniques, learning curve, cost control, etc.
Marketing	Advertisement, selling expenses, transport costs, distribution channel, customer care, pattern of competition, product price, etc.
Finance	Cost of capital, sources of fund, capital structure, cash flow and fund flow, dividend policy, etc.
Personnel	Wages and bonus payments, incentive schemes, job rotation and training, etc.
Legal	Tax laws, pollution control regulations, labour laws, licensing policies, export-import policies, etc.
Profit	Profit policy, break-even analysis, margin of safety, profit forecasting, profit planning, etc.

In order to enable the manager to become a more competent model builder in the business, managerial economics provides the following concepts:

- i. *Opportunity cost*: Opportunity cost of anything is the cost of the next best alternative which is given up. This concept helps in the best allocation of available resources.
- ii. *Incremental reasoning*: The concept of incremental reasoning is quite helpful in optimal allocation of resources. Incremental principle can be used in the theories of consumption, production, pricing and distribution.
- iii. *Time perspective*: Economists often make a distinction between short run and long run. In the short run, change in output can be achieved by changing the intensity of use of fixed inputs, while the same can be achieved in the long run by adjusting the scale of output, size of firm, etc. A decision should take into account both the short-run and long-run effects on revenues and costs so as to maintain a right balance between long-run and short-run perspectives.
- iv. *Discounting principle*: The concept of discounting principle is based on the fundamental fact that a rupee now is worth more than a rupee earned a year after. Even if one is certain about future income, yet it must be discounted because to wait for future implies a sacrifice for the present. For making a decision regarding investment which will yield a return over a period of time, it is, therefore, advisable to find its net present worth. The net worth may be calculated for various investment proposals: some of which may yield higher returns in the earlier years, while others higher returns in the later years. Some investments may yield higher returns for only limited number of years, while the others a small return for a longer period. Thus, even the same amount of investment in two alternatives uses may have different annual returns and a different duration of such returns. To transform these returns into a common measure we use the discounting principle.

- v. *Equi-marginal principle*: This principle provides a base for maximum exploitation of all the inputs of a firm so as to maximise the profitability. The objective is to allocate resources where they are most productive. The equi-marginal principle can also be applied in multiple product pricing and applied in allocating research expenditures and budgeting, etc.
- vi. *Optimisation*: A business firm usually aims to maximize profits and minimize costs. It is therefore, necessary to have the knowledge of the techniques of optimization - both constraint and unconstrained. The methods of finding maxima and minima in calculus help us in working out unconstrained optimization.
- vii. *Contribution*: The term 'contribution to overhead and profits' is quite popular in modern management analysis. This term finds its most wide use in pricing, product-mix decisions, replacement analysis and capital budgeting. It helps in determining the best product mix when allocation of scarce resources is involved.

Thus, the subject matter of managerial economics consists of all these methods, concepts and policies which can be used to analyse the business environment and to find out solutions for practical business problems.

Sales Behaviour and Role of Managerial Economics

The principle goal of any business firm is to maximise its profits. In the scenario of making more profits the enhancement of sales volume to be paid major attention. If the business firm is able to predict the dynamics of price, income and market conditions, the firm would improve its sales. Therefore, to understand the behaviour of sales and to plan their growth, it needs to quantify the components that influence sales. The concepts of managerial economics provide a systematic framework to logically solve these issues. Generally business enterprises take decisions under conditions of uncertainty and risks. The main reasons behind uncertainty and risks were include demand and supply, fixation of price, changes in income of the consumer, changing business environment, government policies, external influence on the domestic market, etc. Once a particular quantity of output is ready for sale, the business firm has to fix its price given the market conditions. In this situation, economic theory offers a number of analytical concepts which can be helpful for management in solving business problems. Demand analysis is one of the fundamental economic concepts that can be used in decision making process. The factors determining demand include price of the commodity, income of the consumer, tastes and preferences of the consumer, prices of related goods, advertisement, consumer's expectations of future prices and future income, etc.

Relation between Demand for the commodity and its Determinants

A mathematical expression of the relation between quantity demanded of the commodity and its determinants is known as the demand function. When this relationship relates to the demand by an individual consumer it is known as individual demand function, while if it relates to the market it is called market demand function.

Individual Demand Function:

$$Q_{dx} = f (P_x, Y, P_1, \dots, P_{n-1}, T, A, E_y, E_p, u)$$

Where

Q_{dx} refers to the quantity demanded of product X

P_x refers to the price of product X

Y refers to the level of household income

P_1, \dots, P_{n-1} refers to the prices of all other related products (include substitutes and complements)

T refers to the tastes of the consumer

A refers to advertising

Ey refers to consumer’s expected future income

Ep refers to consumer’s expectations about future prices

u refers to all those determinants which are not covered in the list of determinants given above.

Market Demand Function:

$$Q_{dx} = f (P_x, Y, P_1, \dots, P_{n-1}, T, A, E_y, E_p, P, D, u)$$

Where

Q_{dx} , P_x , Y , P_1, \dots, P_{n-1} , T , A , E_y and E_p are the same as in the individual demand function, while P refers to population (which reflects the size of the market), and D refers to distribution of consumers in various categories depending on income, age, etc.

Exhibit 2: Mathematical expression of relation between Demand and Determinants

Demand for the Commodity X	Determinants	Relation (- or +)
Quantity demanded of good X	Price	Negative (-)
Quantity demanded of good X	Income	Either - or +
Quantity demanded of good X	Substitutes	Positive (+)
Quantity demanded of good X	Compliments	Negative (-)
Quantity demanded of good X	Tastes and preferences	Either - or +
Quantity demanded of good X	Advertisement	Positive (+)
Quantity demanded of good X	Expectation on future prices	Positive (+)
Quantity demanded of good X	Expectation on future income	Positive (+)
Quantity demanded of good X	Population	Positive (+)
Quantity demanded of good X	Distribution of consumers	Either - or +

If we look carefully at the two demand functions we find that the prices of compliments have a negative relationship with the demand for X (see Exhibit 2). This implies that if the price of good X or price of its compliments increases, the quantity demanded of good X decreases. On the other hand, if the price of a substitute increases, or the consumer expects to have higher income in future or he expects price of good X to rise in future, he will demand a larger quantity of good X. We can, therefore, say that these three variables have positive relationship with quantity demanded. The relationship between advertisement (in specific products), population and demand is also positive. However, income of the consumer, his tastes and preferences and the distribution of consumers can have either negative or positive relationship with quantity demanded. For example, as income increases demand for a normal good will increase while demand for an inferior good will fall. Tastes and preferences as well as distribution of consumers may go in favour of the commodity or against it. If it goes in favour of the commodity demand rises, while if it goes against it, the demand for the commodity falls.

In fact, the change in any demand determinant does not affect the demand of every good to the same extent. Therefore, the firm need to be deeply concerned about the impact of these factors on the quantity demanded of the product. It is with the understanding of these impacts the firm can predict its level of sales. The firm without an adequate level of sales relative to costs cannot be successful. Fortunately, in the concepts of managerial economics, there was a tool to measure the effect of changes in any one of the

demand determinants in the demand function that affect sales. This tool is known as elasticity of demand³, which helps in providing a quantitative value for the responsiveness of the quantity demanded to change in each of the determinants. The concept of demand elasticity uses to predict the level of sales in both present and future. The larger the absolute value of this elasticity, the more responsive is quantity demanded to change in the determinant under consideration. While it is conceptually possible to measure elasticity of demand with respect to each of the demand determinants, however, there are certain obstacles in quantifying certain variables. For example, a scientific quantitative measure of tastes and preferences does not exist, which makes it virtually impossible to measure its elasticity. Somewhat similar problems do arise in case of expectations also, yet a somewhat approximate measure of expectations is possible. We will, therefore, consider the following elasticity measures: price elastic of demand, income elasticity of demand, cross elasticity of demand and advertising elasticity of demand. If production is to be profitable, the volume of goods and services produced must be in accordance with the demand for the commodity. Barring the perfectly competitive market, seller in every other market has to know the influence of price on quantity demanded for his product. While the price and cross elasticity of demand are useful for pricing policy, income elasticity can be used for forecasting demand for the product in future. Thus, management in the long run depend upon the knowledge of income elasticity, as the businessman can then find out the impact of changing income levels on the demand for his commodity. We thus, find that the concept of elasticity of demand is pervasive in different facets of economic decision making.

Elasticity of Demand and Optimal Managerial Decision Making

Business firms have to take prudent decisions regarding the type of product, product price, purchase of inputs, pricing policy, market conditions, economic environment, sales promotion, etc. keeping in view the targets of the firm. Since future is uncertain, such tasks of decision making for the future progress of the business firm are really difficult. The methods of managerial economics make this difficult task a bit easier and systematic. In the analysis of sales behaviour, the insights of elasticity of demand can be used for forecasting change in demand for the product due to expected change in the demand determinants⁴. In order to understand the behaviour of sales and to plan their growth, it is necessary to identify the factors that influence the sales and to quantify their effect. The identified factors can be classified into two categories:

- Factors that can be under control of the business firm, like price, advertising expenditure, quantity and quality of the product, etc., and
- Factors that are beyond control of the business firm, like tastes & preferences, fashion and incomes of consumers, competitors' price and strategy regarding price and advertising expenditure, etc.

³ Percentage change in quantity demanded of the commodity caused by percentage change in the any of the determinants is called elasticity of demand.

E = Percentage change in quantity demanded of good X/Percentage change in determinant Z

$E = \Delta Q/Q/\Delta Z/Z = \Delta Q/\Delta Z.Z/Q$

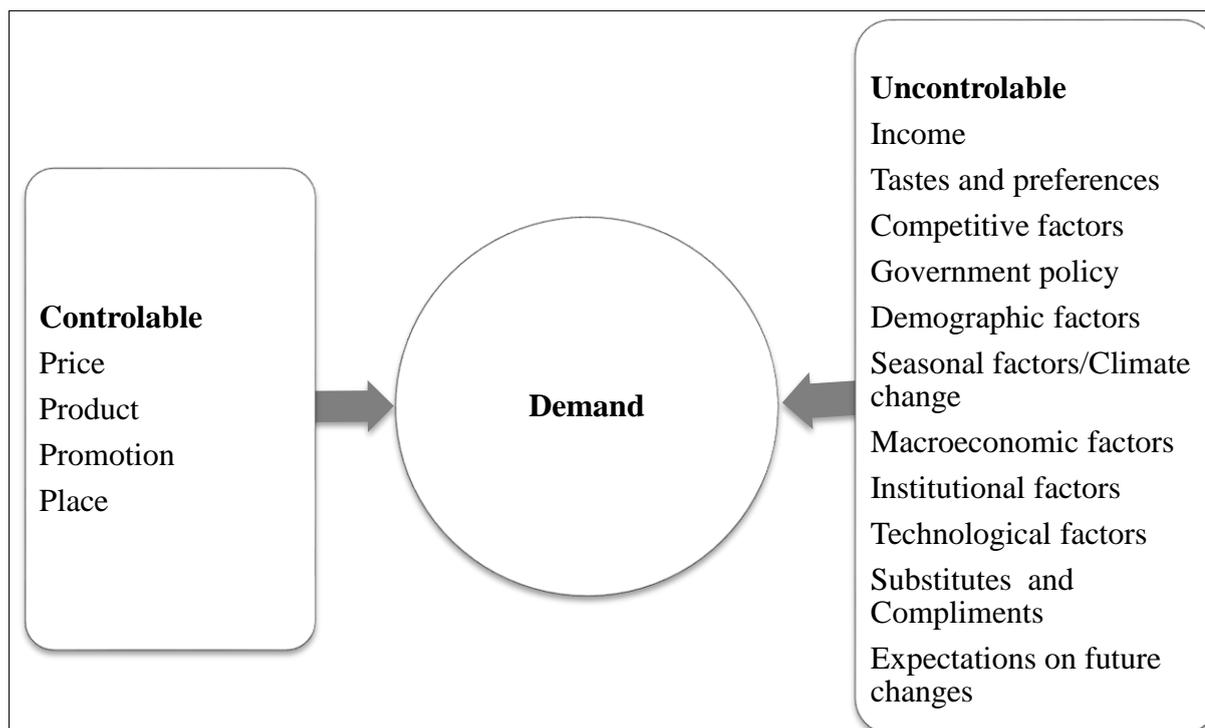
E refers to elasticity of demand, Δ refers to change, Q refers to quantity demanded, and Z refers to a demand determinant.

⁴ Change in Demand (ΔQ), say, due to change in price of product X may be expressed through price elasticity as follows: $\Delta Q = \Delta Q.\Delta P/\Delta P.P/Q = (\Delta Q/\Delta P.P/Q).\Delta P/P.Q = Q.E_p (\Delta P/P)$. Where E_p is the price elasticity of demand. We can similarly calculate the change in quantity (ΔQ) for due to income elasticity, cross elasticity and advertising elasticity. By summing up their impact we can find total change in quantity.

The business firm needs to find out elasticity of demand for both categories of factors. The former elasticity estimates to formulate optional operational policies and the latter elasticity estimates to find effective ways to respond to changes by competing firms.

- 1) *Factors that can be under control of the firm:* If demand for the product is highly price elastic, it can gain by reducing price as it would increase sales more than proportionately. Similarly, if the price elasticity is higher than advertising elasticity, the firm should better rely on price policy to expand its sales.
- 2) *Factors beyond control of the firm:* On the other hand, elasticity of sales with respect to factors beyond control of the firm suggests that firm responds in a particular manner. For example, in case cross-elasticity of demand of firm’s product vis-a-vis competitors’ product is high, the firm would reduce its price immediately in response to competitor’s price cut as it would otherwise lose customers, sales margin and market share. Had it been low cross-elasticity, it would not have bothered to reduce price. Similarly, when income of society increases, a low income elasticity of firm’s product would prompt the firm to diversify into new product lines. Thus, we find that the elasticity’s of demand are essential ingredients of optimal managerial decisions in the short run as well as for the long run plans of the business firm.

Figure 2: Factors that influence Sales Behaviour of the Firm



Case problem study⁵:

Let demand equation be: $Q_x = 2 - 5P_x + 1.5I + 2P_s + 4A$

Where P_x is price of the product; I is personal disposable income; P_s is price of substitute product, and A is the advertising expenditure.

Suppose at present, $P_x = 3$, $I = 4$, $P_s = 4$ and $A = 1$.

⁵ Addison, W. and M. Nerlove, 1958.

Then sales would be: $Q_x = 2 - 5(3) + 1.5(4) + 2(4) + 4(1)$
 $= 2 - 15 + 6 + 8 + 4 = 5$ units

Elasticity of demand in the above case is;

Price elasticity (Ep)	$-5(3/5) = -3$
Income elasticity (Ei)	$1.5(4/5) = 1.2$
Cross elasticity (Exy)	$2(4/5) = 1.6$
Advertising Elasticity (Ea)	$4(1/5) = 0.8$

Now let us use these elasticity's to forecast sales for next period. Suppose, next period the firm plans to increase its price by 10 percent, personal disposable income is to go up by 5 percent, advertising expenditure by 4 percent, but price of substitute product to fall by 2 percent. Then expected sales of the firm in the next period (Q_t) would be: $Q_t = Q_x + \Delta Q$

Using estimates of elasticity's we can determine sales in next year as follows:

$$\begin{aligned}
&= Q_x + Q_x.E_p (\Delta P/P) + Q_x.E_i (\Delta I/I) + Q_x.E_{xy} (\Delta P_s/P_s) + Q_x.E_a (\Delta A/A) \\
&= 5 + 5(-3)(10\%) + 5(1.2)(5\%) + 5(1.6)(-2\%) + 5(0.8)(4\%) \\
&= 5 + 5(-3)(0.1) + 5(1.2)(0.05) + 5(1.6)(-0.02) + 5(0.8)(0.04) \\
&= 5 - 1.2 \\
&= 3.8 \text{ units}
\end{aligned}$$

Therefore, elasticity of demand helps management in estimating present sales behaviour and expected sales in the future.

Conclusion

Managerial economics provides a number of concepts which can help business firm to solve problems in business operations. As evident from the study, managerial economics applies economic tools and techniques to business and administrative decision making. This study proved that the tools and techniques of managerial economics have a greater impact on firm's principle objective of profit making. Therefore, the concepts of managerial economics help in decision making under uncertainties and improve profits more proportionately. This study revealed that managerial economics has bridged the gap between traditional economic theory and managerial practice in the process of decision making. It indicates that the integration of economic theory and concepts are helpful to solve practical business problems and achieve the desired results of the firm. The analysis of the study revealed that elasticity of demand was a major tool to estimate the sales behaviour of firm and its future growth plan. It can be observed from the study, the concepts of demand elasticity served as a major instrument to analyse the sales behaviour in both factors that under control and beyond control of the firm. Therefore, managerial economics played a dominant role in business decision making under uncertainties and risks. We thus, find that the concepts of demand analysis are essential ingredients of optimal managerial decisions in the short run as well as long run plans of the business firm. We can therefore, conclude that the application of managerial economics techniques and tools are imperative in the process of decision making to deal with various uncertainties faced by the business firms.

References

1. Addison, W, and M. Nerlove. (1958). Statistical Estimation of Long Run Elasticities of Supply and Demand, *Journal of Farm Economics*, November, pp.861-80.
2. Dean. J. (1975). Estimating the Price Elasticity of Demand, in *Managerial Economics and Operation Research*, ed., E. Mansfield, 3rd ed., New York: W.W. Norton.
3. Dean, Joel, 1951. *Managerial Economics*, Prentice Hall, Englewood Cliffs, N.J.
4. Dominick Salvatore. (1989). *Theory and Problems of Managerial Economics*, Schaum's Outline Series, McGraw-Hill Book Company, New York.
5. E.F, Brigham and J.L. Pappas 1972. *Managerial Economics*, The Dryden Press, Illinois, p.1.
6. Granger, C.W. (1989). *Forecasting in Economics and Business*, New York: Academic Press.
7. Jensen C Michael and Meckling H William. (2000). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure, *Journal of Financial Economics*, Vol.3, No.4, December.
8. Malcolm P. McNair and Richard S. Meriam, 1941. *Problems in Business Economics*, McGraw Hill, New York.
9. Mehta P.L, 2014. *Managerial Economics Analysis, Problems and Cases*, Sultan Chand & Sons, New Delhi.
10. Milton H. Spencer and Louis Siegelman, 1969. *Managerial Economics*, Irwin, Illinois, p.1.
11. Nasirizadeh Hamidreza, Dehghanpour Mohammad Reza and Vahid Navid. (2013). Comparison between accounting profit and economic profit and its effect on optimal point of production, *European Journal of Natural and Social Sciences*, Vol.2, No.3.
12. Nick Wilkinson. (2005). *Managerial Economics - A Problem-Solving Approach*, Cambridge University Press, New York.
13. Waykole M.V, (2013), "Role of Managerial Economics in Competitive Edge Dynamic Business Decision-Making Process", *Asia Pacific Journal of Marketing & Management Review*, Vol.2 (1).
14. Wiesskoff, R, (1971), "Demand Elasticities for a Developing Economy: An International Comparison of Consumption Patterns", *Studies in Development Planning*, ed, H.B. Chenery, Cambridge, Mass.: Harvard University Press.
15. William J. Baumol, 1961. What can economic theory contribute to managerial economics? *American Economic Review*, 51 920, pp. 142-46.
16. Wold, H, (1953), "*Demand Analysis*", New York: John Wiley & Sons.