MICRO ECONOMIC ANALYSIS

ALTERNTIVE THEORIES OF FIRM

Introduction

The traditional theory of the firm has been profit maximization. But empirical evidences overwhelmingly point toward other objectives of business firms, such as sales maximization, output maximization security motive, satisfaction maximization, utility maximization, growth maximization, and satisfying

Meaning

The business firm is profit maximization under the 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 a 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 factor of external to the firm.

It is a necessary payment for an entrepreneur to stay in the business. The rules for profit maximization MC=MR

Nobel laureate, Herbert Simon was the first economist to propound the behavioral theory of the firm. According to him, the firm's principal objective is not maximizing profits but satisfying or satisfactory profits.

We must expect the firm's goals to be not maximising profits but attaining a certain level or rate of profit, holding a certain share of the market or a certain level of sales.

Williamson's Utility Maximisation

In large modern firms shareholders and managers are two separate groups. The former want maximum return on their investment and hence the maximisaion of profits.

Managers have consideration other than profit maximisation in their utility functions. Thus the managers are interested not only in their

Why Maximum Profit?

- From the above hypothesis we may provide two important rationale for maximizing profit.

- Firstly, in a single owner firm, where the entre-preneur is both owner and manager, maximizing profit will maximize his own income. For a given amount of effort this is considered to be rational be-haviour, irrespective of the structure of the market (or nature of competition).

- If, however, the magni-tude of profit varies with the amount of entrepre-neurial effort expended, and effort has negative utility (disutility) for the entrepreneur, rational behaviour would dictate something else. He must find an optimal trade-off between effort and profit to maximize entrepreneurial utility which is un-likely to lead to maximum profit.

- Secondly the impact of competition from rival firms forces the entrepreneur to maximize profits. Profit maximization therefore is not an aspect of discretionary behaviour (choice) but rather a com-pelled necessity. The entrepreneur is forced to max-imize profit for his long-term survival.

- Thus, the justification for profit maximization depends upon the nature of competition. If competi-tion is absent (as in monopoly) there is no such pres-sure, although the previous argument still holds. Under highly competitive conditions the entre-preneur has to maximize profit just for survival.

Criticisms of Marginality Theory of the Firm

The profit maximization hypothesis developed during 1874-1890 by Leon Walras, W. S. Jevons and Alfred Marshall has formed the basis of the neo-classical (marginalist) theory of the firm. It has not been challenged up to the 1920's. But from early 1930s it has been subject to various criticisms.

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Being dissatisfied with both of the justifica-tions, modern economists and management special-ists have suggested various alternatives to profit- maximization.

Baumol's Single Period Sales (Revenue) Maximization subject to Profit Constraint

One alternative to profit maximization has been suggested by W.J. Baumol that firms operat-ing in oligopoly will seek to maximize sales reve-nue subject to a profit constraint.

His argument is largely, if not entirely, based on **"public statements by businessmen and on a number of a priori argu-ments as to the disadvantages of declining sales, for example, fear of customers shunning a less popu-lar product, less favourable treatment from banks, loss of distributors and a poorer ability to adopt a counter strategy against a competitor."**

Baumol's basic argument is summarized in Fig-ure 7.4, which enables us to understand the differ-ence between profit maximization and sales max-imization.
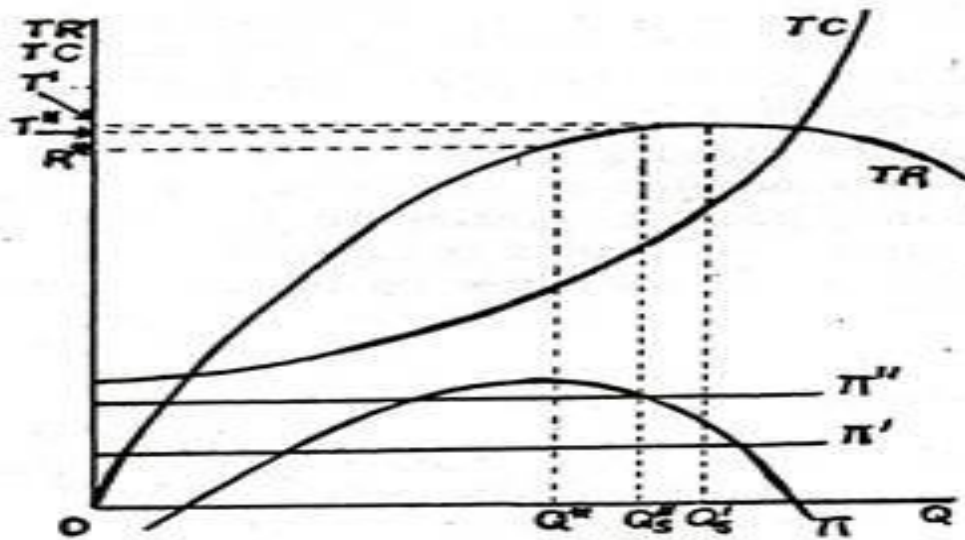
Figure 7.4
Baumol's sales-maximizing model

- Sales maximization, on the other hand, refers to maximization of total revenue (= P x Q), rather than maximization of Π (It is because if a firm quotes zero price it can sell an astronomical amount but its total revenue will be zero.) Total revenue is maximum when MR = 0, and MR = 0 when the de-mand for a company's product is unitary elastic.

- In Figure 7.4 we observed that if the firm wish-es to maximize total revenue (without profit con-straint) it will choose output Q's, where TR is maxi-mum (i.e., the slope of the TR curve is zero or MR = 0). However, Baumol has argued that, a constraint operates from shareholders. They require a mini-mum sum as dividend which would keep them con-tent.

- Alternatively put, shareholder demand a level of absolute profit of some amount which is ex-ogenous (i.e., determined outside the model). If this minimum acceptable level of profit were π', the firm could produce Q''_s and still generate profits greater than π'. Hence in this situation it will be worthwhile to produce Q'_s.

- Likewise if the minimum acceptable profit is π'', Q'_s will not generate sufficient profits. The firm will have to reduce output to Q''_s which is indeed the optimal output with the profit constraint spec-ified.

- Baumol's model thus predicts that profits will be sacrificed for revenue. The sales-maximizing level of output will exceed the profit-maximizing level and can only be sold at a lower price under imperfectly competitive market conditions.

- In fact, the first main difference between the profit maximizer and a constrained sales maximizer is that the latter can charge a lower price to sell the extra ($OQ''_s - OQ^*$) output. This has to be the case if both have the same demand (AR) curve.

- In terms of Figure 7.4, the profit maximizer pro-duces OQ^* and charges a price of OR^*/OQ^* (= total revenue ÷ output). Alternatively, the sales maxi-mizer produces (in the π'' constrained case) Q''_s and sells at a price of OT''/OQ''_s.

Rationale

- Baumol's model no doubt carries enormous good sense. The motivation to maximize sales revenue is justified on the ground that the managers of large firms stand to gain more from this strategy than from profit maximization. Sales maximization im-plies expanding the size of the organization, en-hancing the status of managers as also their promo-tion prospects.

- Again their wages and compensation are directly related to responsibili-ty, which, in its turn, is again an increasing func-tion of size. Conversely, as Baumol argues, it is quite irrational for managers to maximize profits for shareholders when they will get hardly any-thing themselves. (It is just 'head I win, tail you lose' type of affair — one-sided game, that is).

Implications and Limitations

- Baumol's' model is a single-period sales maxi-mizing model. It applies at a single moment of time — i.e., it is static in nature. However, the model can be made dynamic for an in-depth study of multi-period optimization.

- For this it will be necessary to consider various combinations of sales and revenues over time. In that case profit would be endogenous (i.e., deter-mined from within the model) and would form the vehicle for growth through reinvestment of funds. This would enable us to predict an optimal combination of profits and growth rate of revenue.

The managerial utility function includes such variables as salary, security, power, status, prestige, professional excellence. Of these variables only the first (salary) is measurable. The others are non-pecuniary and if they are to be operational they must be expressed in terms of other variables with which they are connected and which are measurable. This is attained by the concept of expense preference, which is defined as the satisfaction which managers derive from certain types of expenditures.