Contemporary Theories of Firm Behavior

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Abstract: The work gives a concise review and critical analysis of the so-called alternative theories of firm behavior. The review includes: a) theories of output pricing in conditions of uncertainty when the target function is not a profit maximization; b) considering the possibilities of management to carry out the business policy outside the owner's interests; c) considering firm behavior when management chooses alternative targets of maximization; d) analyzing the problems causing business efficiency decline because of the uncertainty of some internal process in the firm; and e) researching firm behavior striving for the realization of 'satisfying results'.

Key words: pricing according to the method+, usefulness of managers, market of managers' performance, x-efficiency decline

1 Introduction

Classical firm theories in modeling offer strategies start from profit maximization as a target function of the enterprise that realizes in the conditions of market competitiveness in the form of equation as P=MR=MC, i.e. the equation of price , marginal revenue and marginal costs. Price is an external factor dictated by the market. In all the model of imperfect competition (monopoly, oligopoly markets, monopoly competition), firms form prices starting from the equation MR=MC, but in all the models the rule is still in effect that price is bigger than marginal revenue, i.e. P>MR=MC.

In the several last decades, an increasing number of theoreticians harbor doubt about the validity and universality of the model for determining the balanced firm offers based on the criterion of profit maximization. In this work, we want to give a presentation and a critical analysis of alternative models of optimization of firm offers.

2 Pricing according to the Models of Cost Plus Pricing

Since the 70-th of the last century there have been ideas about pricing according to the so-called model cost plus pricing, as an alternative to the models of profit maximization. Discussions started by the works of Gardner Means, the American economist, about administrative prices. Pricing according to the criteria of the equation MR=MC reacts at any change of marginal costs and demand functions. Administrative prices, however, stay unchangeable in a relative long period, and they are formed to the model of cost plus pricing. They are grouped into three variants of the model [4, 91]:

1 Applying the principle of mark up pricing, prices are formed by calculating an extra pay (net profit margin) to the sum of average variable costs – that are usually taken as constant ones According to this model, division of fixed costs on some products is not done.

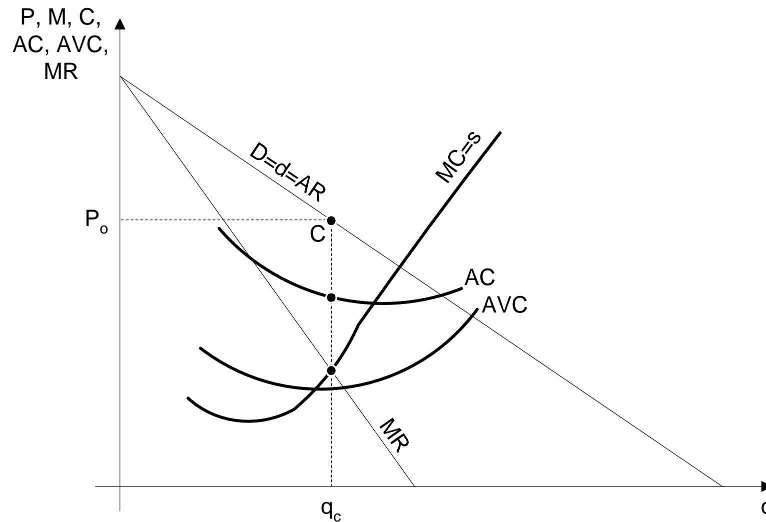
2 To the principle of full cost pricing, all the elements of costs are included in the sum of average product costs, i.e. variable and fixed costs, as well as the costs of disposal of goods. The sum of calculated costs per unit output with the standard level of capacity makes the total average costs that are called standard costs. They are increased at the rate of net profit margin.

3 The third variant is represented by the principle of target rate of return, as a variant of the full cost pricing principle, where adding, i.e. margin is calculated for costs at the level of expected target rate of return on invested capital.

The calculated adding amount on average variables or aggregate costs can be fixed, but changeable, too. In case of fixed cost plus pricing, any change of costs causes the change of prices. When market does not allow that price change follows the change of costs, then the adding sum, i.e. the calculated profit, changes. Pricing by the methods of cost plus pricing does not mean that firms can form prices independently from the change of demand. Pricing by calculated cost plus pricing to a determined rate is not contrary to the classical target function of the enterprise, i.e. profit maximization according to the criterion MR=MC. Namely, pricing to the criterion MR=MC can be also determined by increasing the sum of average variable costs (AVC) and aggregate average costs (AC), i.e. AVC and AC for a determined percent.

The methods of pricing according to the cost plus pricing model are applied mostly in cases when the firm does not have complete information on the position and changes of market demand. The exactness of estimating the position of demand function and marginal revenue can be increased by an adding market research, but it is not always profitable because of the high costs of market researching. Therefore, in such cases, firms try to determine the combination P_o

and q_o, i.e. costs and output for profit maximization not knowing exactly the position of the function D and MR. (Diagram 1).



The rate of cost plus pricing in order to form prices at the height of point C must be done by estimation. The more often and intensive the change of curve D is, the more is the possibility to estimate wrongly. Cost optimization and utility from providing useful information is possible by contemporary microeconomic models. There are cases when the aspiration of the firm to reach not maximal, but only 'satisfying' results by the method of pricing by calculating cost plus pricing.

3 Separation of Capital Property and Capital Function (Management)

Classical theories of the firm supposes that the owner is a manager, too – the person competent for decision-making so management cannot have interest different from the owner's aspiration to maximize profit. With contemporary large companies, especially in multinational corporations, ownership and technocratic-managerial structures separate and it is one of the fundamental characteristics in contemporary capitalism.

The American economists Berl and Means [2, 1932] stated in their work published in 1932 that about a half of largest corporations in U.S.A. was really under control of managers, without real possibility of stakeholders to control management and it caused the minimization the function of private property and capital. (Friedrich Engels wrote about the separation of capital property and capital function at the

end of the 19th century. In this phenomenon, he saw the symptom of the quick end of capitalism).

Today, there are controversial understandings about the possibility of managers to get out of control and to carry out firm policy outside the interests of owners. The following arguments are used in this discussion [4, 104]:

1 In case of big dispersion of actions between the mass of small stakeholders, stakeholders cannot use the right to exert influence on the firm business policy. Their individual influence on management is irrelevant, and the costs of forming the coalition of small stakeholders are too high. In such conditions, reappointment of managerial structures carrying out the firm business is a normal thing.

2 Some theoreticians point to the argument that the institutional investors – investment funds are often in the position to, by order of small stakeholders, realize efficient control of management work. It is the same with the banks authorized to vote in the name and account of stakeholders who deposited money in their banks. Control of management by banks, of course, need not obligatory respects the owners' interests.

3 In polemics, as a barrier of business of management outside the owners' interests are often cited the so-called offers for purchasing shares [3, 102]. The essence of the offer to take over debts is that one firm announces a public offer for buying shares of another firm that managed its affairs bad, at price higher than it is at the stock market, which is usually depreciated. The aim of the offer is purchasing control share packets, change of management, reorganization of the firm, increasing dividends and market price shares. Specialized firms are usually in business with purchasing shares, the concerns, i.e. the conglomerates consisted of enterprises of different spheres of production with the mutual management. Their activity includes buying and selling shares from other enterprises in order to acquire profit. Management not respecting the owners' interests is, in principle, is always exposed to danger of taking over the control share packet and to be changed so it is not interested in carrying out such a policy. In reality, however, there is not much evidence for functioning such a selective mechanism of share market. Offers for purchasing shares cause great concern with the firms whose management ignores the owners' interest, as well as those whose management respects the owners' interests.

4 The circumstance that in the process of growth, the firm must increase initial capital also represents the barrier of management policy outside the owners' interests. It is not possible to realize if potential owners are not interested in purchasing additionally issued shares. The cited barrier exists, of course, only if the needs of the firm for additional capital are bigger than the possibilities of investing from internal sources.

5 A special possibility for increasing interest of management for respecting the owners' interest is to pay off part of salaries to managers in the form of coupons for purchasing shares [3, 105]. Coupons authorize managers to purchase some shares at prices fixed in advance. It is considered that such a policy of distribution makes managers interested in business in accordance with the owners' interests, i.e. they will try that the market price of shares surpasses the option price.

From the above, we can conclude that separating property and management in large corporations enables to manage the aims that deviate from the aspiration to profit maximization and clash with the interests of capital owners. Such an option of carrying business policy is, however, limited and it is not always profitable.

Separation of property from management in capitalism refers primarily to large firms only. Capital owners are economic subjects that can provide the offers of financial resources at the market of private capital. Managers are, in fact, experts having special knowledge and capabilities for managing firms and they are recruited at the special partial market of factors, i.e. at the market of successfulness or performances of managers. If the selection of 'actors' is done these market, then, we can say, we have the market control of private capital over the market of managers' performance instead of the control of management by capital owners. Namely, if the enterprise is forced to bid for financial resources at the market of private capital, management of the firm must necessarily carry out policy of supporting the owners' interests. Turnover maximization or increasing does not appear any more as an arbitrary aim of management, but as the indirect aims of management in aspiring to long-range profit maximization.

Besides, permanent deviations of management policy from the owners' interests cause a decline of market price of shares, decreasing the firm competitiveness in providing additional private capital. The decline of market price of shares hides in itself a danger that somebody purchases the control packet of shares and changes managers. The changed management must account on weakening its position at the market of managers.

To sum up, separation of property capital and function capital (i.e. management) should not be understood as a complete clear up of private property but as a transfer of control function on the partial capital market and capital of managers, as a result of a particular specialization.

4 Alternative Aims of Maximization

While the conventional firm theory starts from profit maximization as a target function of the enterprise, newer models emphasize the alternative targets of

maximization. We shall cite those recommending maximization of one of the following strategic variables:

1 The famous theoretician of contemporary microeconomics W. Baumol [1, 1959] for example, considers that in cases of gigantic corporations the aspiration for profit or turnover maximization makes the target function of the firm. To his opinion, the rate of income, power and the manager's reputation, both in the corporation and outside it, depends more from the realized turnover of the firm than the realized profit. As a secondary condition, of course, there is a requirement to realize some income minimum that will satisfy stakeholders and enable additional capital.

2 Some authors, trying to surpass the static character of the firm theory, see the target function of the firm in developing the enterprise in the time dynamics, as, for example N. Blattner. In order to solve the model, they supposed the balanced development of the firm and supposed the steadiness of relations (steady state) of the growth rate of capital goods and production. Instead of the aim of profit maximization in the static model, here comes to selecting the way of the enterprise development that maximizes the value of capital in the sense of the difference between the sum of discounted income and the beginning sum of capital necessary for realizing the selected rate of development.

   Some authors, as R. Morris [7, 84] suppose that mangers choose the maximization of turnover growth rate providing that the rate of realization (the quotient of the stock market value and the sum of capital) does not fall under the determined value. The fact that the rate of growth is more important than the level of turnover, they explain by the circumstance that not all the managers are interested to accept offered positions in larger corporations. Not denying an exceptional importance of developing dynamic models of the firm market strategy, we should have in mind that, for disputable starting suppositions (balanced growth, and so on), these models give neither conclusions of limited validity only, which, among other things, do not respect neither the old enterprises nor the limits of market expansion for output realizing.

3 There are theoreticians who suppose that managers are guided by the aspiration to maximize the utility they realize. These ideas can be widened to the aspiration of maximization of profit, turnover or the enterprise growth if we take these aims to be determinants of utility of managers. Yet, most authors take the following variables for the elements of utility functions:

   a) P. I. Curwen [4, 28] takes the choice between income and free time, considering that income makes the determinant variable of managers' utility function that exerts influence on the height of their income and the length of free time.

b) Theoretician A. Papandreu proposed the construction of general preference function of managers that would include elements as prestige, power, and quiet life, and so on, that, to his opinion, reflect the system of values of managers. We are right to raise a question about the possibility of implementing such a general utility option for concrete cases, i.e. the problem of variable quantification, before all.

c) We often meet the ideas that managers aspire to maximize their so-called 'life income'. These authors support the opinion that capital owners, i.e. stakeholders are content with the 'satisfying income' because of income uncertainty by the realization of their actions and purchasing financial assets. Such a strategy of the owners gives the possibility the managers to maximize their income in the monetary and non-monetary form (power, prestige, and so on).

d) The so-called 'staff model' is well known which emphasizes the number of staff under the control of managers. To Oliver Williamson's opinion [10, 1963], variables connected to the special forms of expenses play an important role for the utility of managers. To his view, increasing expenses for the staff and its number provides to managers more money, security, power, respect and success in profession. Besides, investments and expenses connected to this have a significant role in the utility of managers.

5 Declining Internal Efficiency of the Enterprise

Classical theories suppose that firms minimize the cost of production with any level of output. At the competitive market, market mechanisms decrease price at the minimum level of the long-range function of average costs (LAC). LAC is derived from the supposition about cost minimization. In modeling market strategies in the conditions of imperfect competition, we also start from the paradigm of cost production minimization, even in the conditions when the alternative aims of the enterprise are taken into consideration.

H. Libenstein was the first to cause suspicion about the paradigm of cost minimization by introducing the so-called 'X-inefficiency' conception that represents the difference between the possible least and real production costs for some input. The loss of efficiency is found, before all, on an inefficient knowledge of connections between production and costs. Besides, according to the mentioned author, the loss of efficiency is increased by innate inclination of labor of all the categories, including management, to save, i.e. not to use maximally their capabilities. The weaker the competition on the firm is, the loss of efficiency increases. There are authors that connect efficiency with the phenomenon of separating property capital from management and the affirmation of alternative

aims. If the firm owners are not capable of controlling the work in the enterprise, losses appear unavoidably. Losses in efficiency can be, in principle, kept in some tolerant limits by a material stimulation, control of labor and management. Minimization of efficiency loss can be worthwhile until adding costs of stimulation and control are lower than cost saving.

6 Attaining 'Satisfying' Results and the Theory of Firm Behavior

All the models passing from separating property capital and capital function and which, instead of profit maximization take the maximization of alternative aims, place, as an additional condition, a requirement that all the owners must be provided by a 'satisfying' minimal income. Herbert Simon [9, 1995] was the first to support the conception that we should start from the aspiration of the 'actors' to realize the aims at the satisfying level instead of the supposition about the maximization of aim variables, as profit, market participation, turnover, and so on. The cited author sees the aspiration for the realization of satisfying income in the application of pricing according to the principle 'cost+'. The attempts to realize satisfying results instead of maximal ones, is explained by uncertainty that is followed every decision-making in the enterprise. The 'satisfying' conception plays the leading role in the theories of firm behavior that differ from classical and some contemporary firm theories. Besides, this conception is not normative and prescriptive but positive and descriptive one.

The most famous alternative of the 'satisfying' conception is connected to the names of Richard Cyer and James March [5, 1963]. To these authors, the enterprise always presents a special coalition of managers, owner, the staff and creditors. In this coalition, most participants have not too big clams to influence on defining the firm aims on condition that they realize satisfying side-payments for their services in the firm, in the form of participating in income, rent or interest. Giving this income, managers can amortize most of the potential conflicts between partners connected to aim defining. It is considered that even the majority of managers themselves do not aspire to the maximization of their aims, but they try to attain some level of satisfaction, where the firm prosperity plays an important role in its realization, especially the part where they are responsible. The majority of the rest possible conflict situations inside the technocratic-managerial structure itself can also be amortized by side-payments in order to renounce the participation in aim defining. One part of the aims are qualitative aims as, for example, 'consumer satisfaction', 'and welfare of the staff'. These aims can easily be used for decision-making of any decision. The quantitatively expressed aims usually refers to production, costs, supplies, realization, market participation, income degree. To realize the quantified aims, obligations of department managers are determined.

Expectations connected to their realization change relatively very slowly. The target indicators are the results of the previous bargains and they represent consistent and compromise solutions of the conflicts. Desires for changing aims appear if, in the course of the long period, the aims turn to be failures or they exceed the expectations and then the process of their redefinition begins.

If the position of the firm becomes more favorable than expected, to the opinions of the cited authors, the so-called ‘organizational slack’ appears i.e. the organizational reserve as a difference between the expected and realized level of satisfying desires of the coalition partners. For example, bigger wages or bigger incomes are shared than it is justified. If in unfavorable circumstances the firm cannot realize defined aims, the exhaustion of the ‘organizational slack’ for a while can prevent conflicts between the coalition partners. Therefore, the organizational reserve changes in the direction opposite to the change of the firm position so it plays the role of a special buffer.

The organizational slack and the previously mentioned X-inefficiency represent the similar appearances. They point to the inefficient allocation of resources inside the firm, but their causes are different. The cause of X-inefficiency is in incomplete providing useful information connected to the possibilities in production, cost reduction and exploitation of human resources. However, the organizational slack results from the rigidity of set aims in the short-term and the middle-term period.

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