Production and Producer's Behavior in a Competitive Environment

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Abstract

The consumer goes to market in order to buy the products that are useful for him or simply to buy something which makes him happy. In other words he tries to satisfy his basic needs (such as food, clothing etc) as well as the secondary ones.

The producer comes to market with the products requested by the consumers and tries to sell it at a price that would cover production costs and obtain a profit. The manufacturer must meet the consumer desires offering him those products that have desirable characteristics, have a nice design, etc. The manufacturer has a multitude of ways to promote his products so that they can be sold and not kept in stock, there by wasting a substantial amount of resources.

Keywords*: manufacturing, competitive environment, comparative advantage, competitive behavior, single market*

JEL classification: **M12, M14**

1. General issues

It is known that production, as a process, expressed in the most general terms, represents a set of operations or activities to transform, through labor and means of employment, goods and materials into finished products in order to meet specific needs of consumers and make profit.

Economy, in generally, and management, in particular, operate with the notion of production in order to find solutions to minimize resource consumption and maximize the profit of the manufacturer.

Production factors are grouped into three categories: labor, land and capital, which register large variations in the long term, and the production function is expressed by the relation (1).

$$X+P = f(L, K, F, T) \tag{1}$$

Specialists in economics have concluded that the classical theories of international trade competitiveness of countries, namely, the theory of absolute advantage developed by Adam Smith and the theory of comparative advantage developed by David Ricardo, are no longer able to answer to specific problems, emerging economy of the developed countries economically.

Based on these findings, new theories of competitiveness, highlights the theory of competitive advantage of Michael Porter (Porter, 1998). It starts from the simple observation that some countries are more successful than others in exports. He also noted that some countries with natural potential, which gives them an absolute advantage, sometimes they fail to exploit fully, while others without such an advantage, are successful.

Porter suggests that the explanation of these appearances (paradoxes) is how countries and firms develop strategies for increasing their productivity and competitiveness over time. After Porter, what matters for competitive advantage are not so endowed with natural resources and production factors, especially as efforts to investment and capital formation, and no amount of these efforts, and especially their quality.

Indeed, countries with lower endowment in factors of production can develop key sectors to stimulate investment and innovation, investing in infrastructure and creating supply of skilled labor (David, Stanley, Rüdiger, 1987). This task is destined mainly to companies, but government can help to carry it by creating a proper business environment and investment climate to encourage firms to specialize and become world leaders.

Behavior derives from the nature of competitive economic system based on market rules. Considerations of rationality implies that the individual companies, not only pursuing their own interest but also to one of reaching competitive advantage against rivals (on market share, technological advances, domination by costs or prices, customer loyalty, reputation products).

Eventually even consumers are the ones that confirm and give competitive advantages allowing to the firm to consolidate the position on the market. The metaphor refers to a vote of confidence in recognition and appreciation of customer loyalty product.

Competition, a very active form of free enterprise, private property is caused by this being, in turn, an essential feature of the market economy. Manufacturers are interested in obtaining profit, while consumers indicate their choices that they offer their goods aimed at their usefulness.

The market is the best innovation in the organization of supply and demand, and the main requirement that any economy must cope with is to allocate its resources so that both producers and consumers are satisfied. Through competition, a manufacturer may seek permanent change in the market and the relationship between resources and expenditure. They influence the market by charging lower prices and attract as many consumers as possible, to their products.

2. The concept of comparative advantage and the concept of competitive advantage

Correct explanation of the concept of comparative advantage and the concept of competitive advantage is topical and of particular importance especially when it comes to the application of appropriate economic policies, to ensure Romania's external competitiveness.

The theory of comparative advantage implies a favorable natural environment in an economy (for example, reduced costs of production factors) in comparison to other national economies. In this case, specialization, achieved only in certain areas, is based on the benefits of using natural agents available.

Economic objectives of the action are performed autonomously by the free play of market competition. That is the cause why economic policies used are way more passive than active no action is directed towards achieving of certain goals.

Comparative advantage theory generally relies on three pillars:

- *abundant and cheap natural resources:*
- *general competitive business environment;*
- *a neutral economic policy.*

The law of comparative advantage has allowed operating freely on the configuration of the Romanian industry, the objective factor, leading to dysfunction of the industrial sub-systems, which meant, ultimately, a general degradation of the industrial structure of our country.

Romania has developed areas of economic activity calling for large amounts of natural resources (eg: steel industry, bauxite processing, petrochemical, chemical fertilizer industry etc.), but these resources are found in insufficient quantities in the country (Nedelea, 2003) to cover needs of these industries, are extracted from the basement with high costs, reasons for the difference was imported.

These industries could be developed but only to the satisfaction level of domestic demand and not to export. This thing can be made only by countries with abundant natural resources, such as for example: Iran, Iraq, Venezuela etc. for crude oil, Australia, Brazil, Ukraine for iron ore, etc.

Romania would have to develop economic activity areas (food, leather, textiles etc.), related to natural resources from agriculture, because it has very favorable conditions (large area of fertile soil, favorable climate, the alternation of seasons etc.).

Romania also may develop the information technology (IT) because it posses very good specialists in the field and opportunities for training of future specialists at the country (Marin, Hartulari, Albu, Galupa, 2001).

No European developed country, large or medium, could not afford to attend the contraction or disappearance of certain industries and companies that contributed in significant measure (Dima, 2007), to the generation and dissemination of technical progress in the economy, or the disappearance of branches supporting implementation of investment programs, the computerization of the economy and society as happened in our country.

The law of comparative advantage, allowed to act freely in a still inoperative market, as it is in our country, with an unstable business environment, affects not only companies with no prospect of development, but also their reliability.

Competitive advantage, the invisible component of any strategy, designate organizations to achieve significantly superior products or services to consumers, compared with similar offerings of most competitors on the market.

Competitive advantage refers to one or more element critical for the consumer, which induces him to buy the product or service, and the parameters to which the organization carried out the item or items need to be better than those done by the majority of competitors, in other words to be at the top of the hierarchy of products or services provided by the industry in which fits the organization.

According to Michael Porter, an organization`s competitive advantage is reduced, in essence, at the providing of a low cost product/service or a product/service that distinguishes itself by its qualities, from the other similar products/services offered by other competitors or by the most of them.

The only source in achieving the competitive advantage is the innovation, which may refer to the renewal of product, technology, equipment, owner, management, marketing, finance, personnel, information etc.

Developing a competitive advantage, as well as the necessity of increasing competitiveness, involves a set of related tasks, which have a specific goal and are assigned as projects (Nastase, M., Tapurica, O., Tache, F., 2010).

By the strategic option, as for instance using projects, one can see how innovation is achieved, innovation by which the competitive advantage is acquired. In order to be viable, competitive advantage must be constructed on a long term basis, and it must be sustainable for a long period of time. Otherwise, we can't speak of a strategic type of competitive advantage, but of a temporary advantage based on the exploitation of fleeting opportunities or good times.

The concept of competitive advantage, presented in a dynamic and microeconomic vision points out that economic success depends on competitiveness of the companies on national and international markets (Nicolescu, Verboncu, 2001), the implementation of technical progress and less on the existence of natural resources.

The real economy is manifested in the competitiveness of each company and is performed at the level of individual industries with direct implications in the national economy indicators. Basically, firms create and sustain competitive advantage.

If the strategy starts from the existence of cheap and available resources, market forces are free, unlimited, but flawed. Romanian companies which operate in a hostile economic environment (inflation, financial jam, inconsistent legislation etc.) are disadvantages to the big firms in developed countries, which have a superior competitive power.

By applying the law of comparative advantage these companies are favored in developed countries. Domestic firms have not, in fact, designed according to comparative advantage, competitive protection from shock, not practical in any way stimulated domestic capital (Pricop, Tanțău, 2001). Appropriate policies can be implemented, but having that competitive edge theoretical foundation, which has a strong operational character.

In fact, empirical analysis is performed at the micro level that is designed to identify direct and indirect effects of actions or the application of economic policy implementation. Finally, it identifies ways of action to achieve the main objective, namely increasing competitiveness.

The comparative and competitive advantage manifest themselves at different levels and in different proportions in the entire world economies, so that in less developed economies leads the comparative advantage, while in highly developed countries leads the competitive advantage.

In this situation, highly economically developed countries are advantaged because, using continuous innovation in manufacturing processes, they produce goods at a low cost but high quality and sell their superior quality products at very low prices compared to similar products from the competing countries with a less developed economy.

Japan, South Korea, Taiwan, Malaysia etc, can be given as examples. Although they have small quantities of natural resources and are importing a big variety of prime materials, they managed to make miracles with their national economies by intelligent exploitation of those resources, imposing themselves vary fast on the international market.

The European single market can bring multiple benefits to firms, including the Romanian ones, giving them the opportunity to increase economies or obtain incentives for increasing exports but also to make new investments.

The single market free movement means, in fact, unrestricted flows of goods and services to meet a more sophisticated and growing demand, to which all producers have the opportunity to participate. However, under ever-increasing competition, only strong firms with international activity can be victorious.

Legislation must effectively support the Romanian companies by increasing their competitiveness towards concentration, until they become strong enough on the market for both national and European Union markets and the world as they did years ago, Japanese authorities, South Korean ones (for example, during the economic crisis economic legislation has been partially suspended to allow Japanese oligopolies to withstand shocks caused by the crisis).

Uncertainty and rivalry - the consequences of interdependence between firms in oligopolistic market - may generate price wars, but this risk is avoided by establishing formal arrangements or informal firms, which may be explicit (cartels) or silent (price leadership and almost all agreements).

Oligopolistic market structure is characterized by a small number of companies compared to the large number of consumers. The laws of the oligopolistic market are more complex compared to the traditional operating way of perfect competition, which distinguishes by the absence of rivalry between producers. Each oligopolistic organization is seeking to establish its production level in a manner that allows profit maximization. This fact is conditioned by the existence of more random factors, such as:

- ✓ in obtaining of the organizations profit, taken individually, the organization depends on the other oligopoly organization's behavior ;
- ✓ each organization can influence the market price through product variations;
- ✓ the price variation, causes uncertain consequences (for example, if the sale price is lowered it is possible that the competitors make the same thing or not;
- ✓ the predictions regarding the opponents' reactions respecting the strategy that follows to be adopted are inexact because the organizations can decide independently one of each other or upon an agreement.

If there are only two organizations we are talking about duopoly market. One way to approach the decision under conditions of oligopoly is that the equilibrium is based on actual predictions. This approach is known as the Cournot model and the balance obtained is called "Cournot equilibrium".

The term **cartel** is used to describe a variety of formal agreements on cooperation on all aspects of production and distribution of goods. In fact, most of these agreements relate to price, in this form, the cartel may seek to act as a monopoly.

In the case of Cournot equilibrium every organization is maximizing their profit in condition of a prediction about the output of other organizations and also the prediction is confirmed, meaning that each organization chooses a level of output that was predicted by the other organization. Another feature of the Cournot equilibrium is that none of the organizations doesn't consider profitable to change its output when the output reveals other organizations.

Comparing production under conditions of Cournot equilibrium and the cartel results that the optimal level of production, where Cournot equilibrium is higher than the optimal level of production in the case of cartel , and the price, if Cournot equilibrium is less than if is cartel.

Setting the share with which participates each organization of the cartel on the market is made according to certain rules, as follows:

- when the price is determined on the market, each organization gains a certain market segment for that specific product, using other means than price;
- percentage rates rule is usually determined by the sales volume of each of the cartel's organizations or by a specified time period taken as a basis for comparison;
- the agreement of the parts regarding the level on which each organization will participate in that market.

When the main objective is to ensure understanding of the participating firms to maximize profit, the cartel is called" perfect".

In Figure 1 one can track the equilibrium point in case of a cartel.

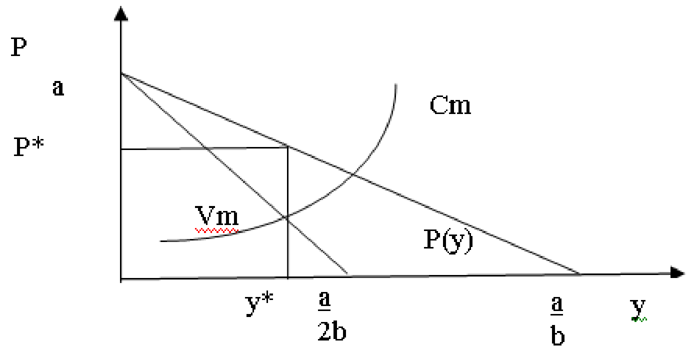

Figure 1 Equilibrium point in case of a cartel [Dumitru, p. 128]

Market with imperfect competition is present in many forms, differing in the number and economic power of producers and consumers, as follows:

- monopoly;
- oligopoly;
- the market with monopolistic competition;
- the competition market oligopsony (monopsony).

Managers use three types of methods for determining prices. In this sense, can be mentioned:

- cost-based methods;
- methods based on competitiveness;
- methods based on market research (demand).

In Figure 2 are three methods.

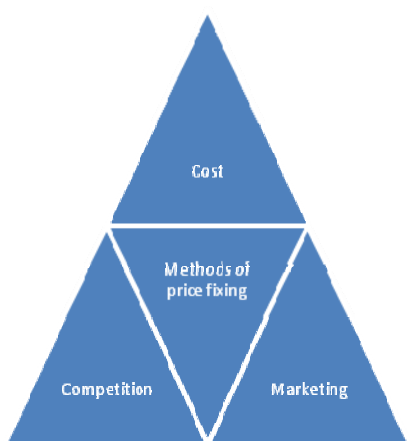

Figure 2 Company in the competitive environment [Moşteanu, p. 196]

The first method reflects a strong national orientation and is based on costs. The second method is geared towards competition based pricing, where the activities of competitors are very important. Pricing, marketing oriented, is focused on the value customers attach to the product market place and their marketing strategies.

Regardless of which method or strategy used, producers must find an effective solution that must be legal to market and benefit from promoting and selling their products.

There are basically two types of producers' behaviors that can hire a company having a dominant position which may be considered abuse.

In the first category, charging monopoly prices or reducing output in order to create a supply shortage can be given as an example.

In the second category a company creates or strengthens its market power by preventing other competitors to enter and compete effectively.

In the first category we find the discriminating prices and dumping prices that are manufacturer's tactics to profit by any means.

3. Price discrimination

There are three forms of discrimination: grade 1, 2 and 3, the last being the most common form.

Discrimination of first degree is difficult and for this reason monopolies maintain a uniform price, but often is added an entry tax, which is independent of consumption levels. The aim is to acquire the business of consumer surplus.

Discrimination of second degree is about constantly practicing for the first x units consumed and another price for the next group of y units.

Practical monopoly uses the third-degree discrimination when concerns different methods of segmentation of that market, succeeded in imposing different prices.

Generally, discrimination is prohibited by law for the protection of competition, but there are countries where it is legal, as the U.S.A, where it is carried by a seller in order to compete with other sellers.

4. Dumping price

Dumping means the act of selling products in a foreign market at a low price, lower than the prevailing domestic market to sell the same good.

Dumping prices often involve national levels below cost of production or distribution of goods, which implies setting high sales prices on the domestic market to the disadvantage of domestic consumers.

Anti-dumping actions are currently used in global trade, both in terms of number of countries that resort to it, and in terms of range and volume of products under its scope and volume.

In the U.S.A like in any other countries, dumping is seen as a improper competitive practices. New users appeared among developing countries, like Mexico, Brazil, South Korea, India.

In April 2001, the U.S.A. anti-dumping and countervailing duties were established for 265 products in 40 countries. Among the 38 products manufactured in China, subject to duties, we can count pencils, cotton towels, paper clips, brushes, diamonds and freshwater crayfish.

In the international context, where anti-dumping rules are applied, a level of fair play is maintained, through which the producers located in similar position are treated equally. In other words, honest or fair trade means that producers use only natural comparative advantages, like natural resources, a favorable climate, advanced technology, skilled manpower, and not any artificial advantages.

Economists have never been very happy with the idea of eliminating the dumping practices on the grounds that it would be a prohibited practice. First, price discrimination between markets could be a perfectly legitimate business strategy, like discounts offered by airlines to students, elderly people or passengers willing to remain at the end of the week. However the definition given by law to dumping deviates greatly from the economic definition.

Since it is very difficult to prove that foreign organizations practice higher prices on domestic markets compared to the export prices, the U.S. A. and other countries often try to calculate a presumed fair price level based on cost estimates of foreign production.

The use of anti-dumping procedures is a relatively recent phenomenon, and the first recent occurrences are dated of the last century when Great Britain attempted to combat in this way the German steel cartel practices. The first coding of tools such as antidumping measures has also been linked to the steel industry; in Canada, for example, was adopted a law to protect the American steel industry trusts.

On the other hand, it followed the adoption of similar laws in Australia, New Zealand, France and Japan. A special figure in the economic landscape of developed countries that are using antidumping measures is made by Japan: the first investigation was only initiated in 1982, and in the next 15 years were registered no more than ten investigations. Moreover, only two of them have led to the imposition of dumping duties, the first case being recorded in 1993.

Why dumping has developed in the last few years? Because of the different ways in which countries have liberalized markets. With the emergence of AT &T in the U.S. and the privatization of telephone companies in other countries, this practice was no longer valid everywhere. But in Japan and some European countries the old rules still apply. Not surprisingly, telephone equipment manufacturers in these countries continue to charge higher prices on the domestic market, while offering lower prices to U.S.A. buyers.

Conclusions

Manufacturers can not start to produce what they intend to produce without a perfect knowledge of the market, without a careful study of it, in order to find out what are the requirements, opportunities and who are their competitors because they are high risk to loose resources (material, human, financial, informational) advanced in the manufacturing process and to risk their goal of making profit.

Therefore, the assessment of the producers evolution takes account on the level of resources used to achieve established production, but also on the leverage its market.

References

1. Dima, A. M. (2007) *European business environment. Competition Policy* Bucharest, ASE Publishing House.
2. Nedelea, Şt. (2003) *Applied Microeconomics*, Bucharest, ASE Publishing House.
3. Marin, D.; Hartulari, C.; Albu, C.; Galupa, A. (2001) *Microeconomics - Theory and Applications – Markets in perfect competition imperfect*, Bucharest, ASE Publishing House.
4. Năstase, M.; Ţăpurică, O.; Tache, F. (2010), "Involving Project Leaders within Project Management Teams - Key Factor towards Competitiveness", *Revista de Management Comparat International/Review of International Comparative Management*, Volume 11, Issue 4, October 2010, Bucureşti, Editura ASE.
5. Nicolescu, O.; Verboncu, I. (2001) *Fundamentals of management organization*, Bucharest, Tribune Economics Publishing;
6. Pricop, M.; Tanţău A., (2001) *Globalization and business strategy*, Bucharest, Efficient House.
7. Moşteanu, T.; Alexandru, F.; Dragomirescu, H. (2000) *Company in the competitive environment*, Bucharest, Tribune Publishing House.
8. David, B.; Stanley, F.; Rüdiger, D. (1987) *Economics*, Second Edition, McGraw-Hill Book Company.
9. Porter, M. (1986) *L'avantage concurrentiel*, Paris, Editons Inter.
10. Hofstede, G. (1980). *Culture's Consequences: International Differences in Work Related Values*, Beverly Hills, CA, Sage Publications.