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1. MARKET COMPETITION OR CONCENTRATION?

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Introduction

The economies of almost all countries in the world function on the basis of market competition rules. This competition should lead to maximum usage of resources and the greatest effectiveness of allocation – from the perspective of the economy. However, on the other hand, too fierce competition does not favor achieving large profits by enterprises. Thus, the problem which appears in this context is connected with two contradictory views:

1. Enterprises in the economy should function in environment as competitive as possible since this improves their allocative effectiveness, though at the expense of profits which may be made by them.
2. Enterprises function in order to earn as large amounts of money as possible for their owners (managers), and the slightest competitiveness, the easier it is to achieve such an aim. Market domination, as the research shows, favors making larger and more constant profits (Bain, 1951).

Both above mentioned questions may be analyzed from the point of view of decision-making subjects as well. The first statement will be supported by a state which wants enterprises to achieve as great efficiency as possible, since this will provide society with better and cheaper products and should positively influence economic development. What serves this is, among others, competition policy and appointing the state organs which aim at preventing from excessive concentration¹. Yet, on the other hand, there are capital owners and managers who are of other opinions. As far as they are concerned, greater profit, even at the expense of higher prices for society, is the right solution. Therefore, reasons for looking for such solutions which they perceive as real ones will bring about the fulfillment of intended plans.

The described problem results in the fact that there is no possibility of explicit expressing one's opinion concerning the optimal market structure due to which both aims could be fulfilled simultaneously. The problem, which will be taken into consideration in the present paper, concerns the presentation of the bases of decisions regarding the way in which market is structured in the context of competition and concentration.

The paper consists of three parts. In the first part, differences as for theoretical analysis of competitive and monopolistic enterprises have been described. In the second part, opinions of well-known economists concerning the above-mentioned subject have been presented. Part

¹ In Poland, this is Office of Competition and Consumer Protection, see:
http://www.uokik.gov.pl/pl/o_urzedzie/informacje_ogolne/misja_i_wizja_uokik/ (state on October 1, 2006).

three is an example of a task which may be formulated on the basis of economic issues selected in such a way.

Theoretical differences between monopolistic and competitive enterprises.

Monopolistic enterprises that can be found in the modern economy considerably differ from subjects which are the basis for analysis carried out within a perfect competition model. These differences may be seen both from a practical and theoretical perspective (Scherer and Ross, 1990). Practical since they can be found and function in the economy, in contrast with subjects of the perfect model. They are examples of actually functioning enterprises that make profits or suffer losses, depending on many conditions that influence their functioning. Subjects within the perfect competition structure cannot be identified in the real economy because of too rigid assumptions underlying their functioning (Stigler, 1961, Stiglitz, 2002). The differentiation itself brings about, in a theoretical perspective, many comparative aspects with regard to which both discussed types of subjects differ considerably.

From a theoretical perspective, there are several fundamental differences. The most important ones have been presented below.

First of all, monopolists have a negatively inclined market demand (for their products) curve (individual enterprises). This brings about the fact that, unlike a perfect competitor – who has a perfectly flexible market demand (for his products) curve, they cannot sell every number of goods for the same price, but if they want to boost the sale, they have to lower the price (as long as they do not use discriminatory practices). In perfect competition there is no necessity of lowering the prices, due to the fact that demand curve is horizontal as well as the accompanying assumption that there is a possibility of selling unlimited number of products which would be limited only by the level of costs, represented by marginal costs.

Secondly, marginal takings as for monopolists are not equal to demand as in the case of perfect competition subjects, but are below demand curve. This causes the separation of optimal production size (which brings in a maximum profit) from demand curve. Thus, price does not directly result from the equation $MC=MR=D$ (for a multi-competitive structure), but, theoretically, from demand curve as a result of previous determining the sales and the way it is valued on D curve. Marginal takings of a monopolist are obviously smaller than price, in this case. What also results from this is that when there is a balance, price is not equal to marginal costs, but exceeds them.

Thirdly, in monopolized markets there are entrance and exits barriers. Enterprises which have been already functioning are trying not to let new subjects come onto their market. Whether barriers are major or slight depends on many factors, including degree of market concentration, the nature of the market and product, activity of the state?, etc. On the contrary, as for perfect competition it is assumed that there are no entrance and exit barriers. This influences decisions made by individual free-from-competition subjects and concerning either entering or leaving the market. The basis for their decision (a theoretical one) is only a profit rate which has been made on single markets, and not the necessity of bearing financial, organizational and time outlays in order to overcome barriers that have been built.

Fourthly, there is no perfect information in monopolized markets. This is contrary to the assumption made about such an information on perfect markets. Economic subjects functioning in the real economy have to make decisions in the state of uncertainty and at a risk in this case. According to J. A. Schumpeter, this brings about the fact they have to display innovativeness, resourcefulness and constantly develop (Schumpeter, 1995) in order to meet challenges from the market. At the same time, this lack of complete information allows enterprises for achieving monopolistic position since consumers also do not know everything about what is going on in the market. Information restriction may be a cause of the

monopolization a particular market and of the fact that this state lasts. Products offered by large subjects that have considerable market shares usually distinguish themselves by means of many qualities from substitution products of competitors, the fact which to a great extent makes it difficult to carry out a simple comparative analysis². Consumers do not always have thorough knowledge even of a single product, not to mention its substitutes, despite advertisement and promotion (Tkaczyk, 1997). As a matter of fact, all existing prices of a particular product in a particular area, even just a local one, are not known.

Fifthly, monopolists diversify products in different ways. One should not expect that in such markets products will be standard. A perfect substitutivity exists, just as perfect competition, within which the former can be found only in theory. Products of a particular type, belonging to one group, will usually differ in appearance, container, the way they are promoted or price connected with their location or transport costs. Diversifying the products allows monopolists for using discriminatory practices as well. Due to these, they can maximize their profits even more, using each of the following: the diversity of products, division to consumer segments, as well as the lack of complete information. This is not possible in the case of perfect competition subjects because of the homogeneity of offered products.

Sixthly, monopolistic enterprises make use of various forms of competition, obviously as long as a situation of perfect monopoly or oligopoly conspiracy does not occur. If there is any competition in the market, then subjects try to use not only prices to compete. The fact which turns out from the analysis of traditional models of imperfect market competition is that some firms do not use price competition which is a basis for a perfect model. Subjects that can be found in imperfect competition model very often use various forms of extra-price competition, mainly to attract the attention of a potential customer and keep him/her. This diversity manifests itself by means of using broad forms of marketing actions.

Seventhly, there is no balance among particular subjects of one side of the market as well as among subjects of both sides as for imperfect markets. As for a perfect structure, all the subjects are equal in relation to each other, or, in other words, equally unimportant for each other. Subjects are not only equal, but, what is more, actively take actions in order to highlight these differences. In theoretical solutions, this problem is very often presented as a boss and agent model in which one side is informed in a better way and knows a lot more than the other one, and takes advantage of this information for its purposes ruthlessly.

To sum up, monopolistic enterprises function, in theoretical assumptions and in practice, differently from schemata of functioning which have been provided by perfect competition. The fact that these subjects do not make zero economic profits in a long-term perspective, and their average costs are lower than the price level is an effect of this dissimilarity. At the same time marginal costs are also lower than sale prices. These facts implicate that such actions lead to non-effective allocation of resources, with respect to not satisfying the consumer needs in the best way (Scherer and Ross, 1990). Consumers do not buy products for as low prices as possible, but overpay as they pay an extra monopolistic mark-up to competitive price. Therefore, some of their resources, that could be used in other way, have to be devoted to purchasing the goods that are needed, but on the assumption they pay more than they could have if the level of competition in the market was higher.

² Mobile telecoms services market may be an example here, as for which a product (a telephone conversation) is, only theoretically, the same in the case of every operator. In fact, there are many possibilities of differentiating between them, as e.g., price for a particular time of conversation, extra services included in a rental charge, rental charge itself, or a chance to get a branded phone for a low price (sometimes even for free).

Small or large enterprise?

The size of enterprises functioning in the market plays a crucial role in the fact they achieve intended aims. Although this is not the only reason, achieving good financial results may be a very significant criterion influencing the evaluation of their functioning in the context of the present subject. The scientific discussion, the aim of which was to indicate factors influencing the way market structures are construed, has been presented below. First of all, views supporting the functioning of large economic subjects (and concentrated structures) will be presented, then views against.

Views supporting the functioning of large subjects, against too fierce competition.

J. A. Schumpeter has been the first who tried to answer this question (Schumpeter, 1995). According to him, technological progress cannot be combined with perfect competition requirements. The lack of technological progress implies that there is no inventiveness, innovativeness, and resourcefulness. However, these are the result of a natural will to make a greater profit than an average (normative) one, greater, i.e., such that can never be made within the structures of perfect competition. This will can be reduced to the fact that irregularities are created in the market, when entrepreneurs and their enterprises, more competitive than the others, achieve better position and gain market power. Such actions are aimed at lowering the production costs, due to which making greater profit is possible, and compensation for their resourcefulness and innovativeness is plausible as well. According to him, the golden age of perfect competition is over, and monopolization age has dawned. Large enterprises functioning in the economy, are doing more, in relation to creativity, in order to increase society's standards of living than they are harmful.

J. Jewkes also supports monopolies in the economy (Jewkes, 1953). He gives the following arguments for a particular degree of concentration:

- monopolies can lower prices, instead of increasing them, e.g., when there is an economic boom,
- it is not easy to prove that monopolies earn profits of ungrounded amounts,
- monopolies can price their products appropriately (without any discrimination), by means of a 'live and let others live' rule,
- the owners (and managers) of monopolies, themselves, do not attach considerable significance to the fact they have dominant position, just the opposite they deny it and it is extremely doubtful whether they would like to use it to strengthen their position, e.g., by means of corruption or lobbying (since they have achieved this position themselves),
- monopolies contribute to economic development through new investments and technical progress (a statement that is similar to J. A. Schumpeter's one).

J. K. Galbraith's opinion is similar to J. A. Schumpeter's one. As far as he is concerned, competition is important, yet lack of any possibility of achieving overall social effectiveness, due to the functioning of large subjects, is compensated by technical changes that have been introduced. Modern, concentrated trades are just meant to induce potential substitutes and innovative actions. J. K. Galbraith has doubts as for oligopolies both with regard to theoretical deliberations and facts concerning the will to introduce technological changes. However, he then states that these changes are more plausible than within competitive model. As for the research, the fact that one concentrates only on the issue of ineffectiveness, caused by market power that can be found in the market, brings about a situation in which one loses the view of possibilities that it provides. Relying on the observations of the American economy, he states that the sale of goods for a price that is not the lowest one is not a tragedy. Certainly, perfect

competition model would, according to him, make life easier, but technical progress, which would not be present there, is the thing that “makes the economy go well”.

R. Nelson, M. Peck and E. Kalachek are of the same opinion as J. K. Galbraith (Nelson at all, 1967). Supporting his conclusions, they state that large enterprises spent much more money on research and development than on employment and sale. This results from two things: first of all, because large subjects have any research programmes at all, and secondly, because they spent more on research than small firms. Large subjects are obviously interested in maximizing the profit, yet achieving this aim takes place mainly via outlays on B&R. According to them, this results from three things.

Some trades require expenses on B&R to be of considerable amount, so that success could be achieved, the fact which excludes small subjects. Large subjects see a greater influence of expenses incurred on B&R on profitability than small subjects do. This is caused by the relation between profit and market size. They may simply expect that outlays will pay for themselves after a certain period of time. After all, in some trades, such as aviation one, only large scale projects may be an important source of technical development, or profit on a production scale. It turns from the research that small enterprises, if integrated into one large unit, could incur greater expenses on research and development, but only when the aggregated employment size, resulting from the size of an enterprise, would amount to c.a. 1000 workers. This is unrealistic. According to them, effects have similar influence with regard to production, distribution, and advertisement. However, relation between benefits resulting from the size of an enterprise, and research and development is particularly distinct and justifies the necessity of the existence of large subjects.

S. H. Slichter also defends large enterprises and concentrated markets. According to him, perceiving big business, which has considerable market power itself, negatively is a mistake. On the basis of the American economy example, he states that restrictive anti-trust and anti-concentration policy is based on false conception of viewing the role of large corporations in the American economy. This is a result of construing more diversified and integrated enterprises which can satisfy domestic market needs in a better way, adjust to market and technological changes, can weather all turbulence in the market, and support research and development with their size. Trade concentration is better than intense competition for two reasons. Firstly, large enterprises compete with other large corporations more intensively in their own market than small subjects. Secondly, competition between large subjects is based, to a great extent, on the increase in the importance of technical research. Thus, no other expenses are not, according to him, as competitive as the ones incurred on improving the products, developing new ones, and reducing the costs. High expenses incurred on research contribute to the fact that there are more possibilities of choice made by consumers, and which could not be found in a situation of competition between a great number of small subjects.

According to A. F. Daughety, market concentration may be advantageous for society (wealth) in the case of asymmetrical market structure (Daughety, 1990). Reducing the number of enterprises or the degree of concentration may bring about an increase in wealth. This is caused by strategic behavior of enterprises aiming at the maximization of profits. By means of evening out the market asymmetry (marketing actions, research, and development), better adjusting to the market and, in this sense, social benefit of consumers increases.

M. Boldrin and D. K. Levine (Boldrin and Levine, 2005) assume, in their paper on property rights protection and market size, that private benefits are a natural measure which is connected with the creation of monopoly power. What is more, these have a considerable influence on the relation that holds between private and social benefits, and thus on market structure. According to them, when market is small enough, establishing the unlimited monopoly in it may be an optimal solution. Yet, in the case of large market limiting the

actions taken by monopolies is necessary. Monopolization degree may be justified on the grounds of property rights protection (patents, licenses) however, social losses are a consequence of these actions.

Views against market concentration, for greater competition

F. M. Scherer is convinced, in his research, that large subjects play a crucial role in the market (Scherer, 1965). He believes that monopolies existence and market concentration are well-grounded only in trades in which basic research were carried out due to a considerable risk and possibility of making the profit that would cover investment costs. The results of the research show that there is no clear relation between innovative production and market power, profitability, liquidity, and diversification of production. According to him, the influence on market structure depends on the relation (game) between greater possibilities of coming up with innovations that are provided by monopolization and a greater stimulation so that actions triggered by competitive structure could be taken. What results from this is the equality between competitive structure (oligopoly or monopoly competition) and its intense attitude toward technological process that is triggered by external technical capabilities or a rapid demand growth, as well as between considerably concentrated or even monopoly market which may be preferred in small, static markets. Therefore, the struggle here is between opportunities and stimulation so that they could be used. Thus, considerable market concentration is neither necessary nor needed.

E. Mansfield asks a crucial question in terms of market structure or concentration: Do data confirm the fact that markets that are dominated by several large enterprises are in general more progressive than the ones in which there is a great number of small subjects? (Mansfield, 1970). He touches upon a few important issues while answering this question. According to him, there is no distinct relation between expenses incurred by large corporations on B&R and their domination in the market. There is also no confirmation to the fact that big research programmes bring greater benefits than small ones. Obviously, there are exceptions such as airplanes or rockets producers, but they rather confirm this tendency. There is also no positive relation between outlays on B&R and a greater productivity of large subjects in comparison with small ones. As far as he is concerned, the fact that commercial implementation of new processes and products will be used by large corporations in a better way than by small units is not confirmed. Furthermore, market concentration does not bring about the fact that a trade quickly absorbs technical innovations. In fact, it just the opposite. Great concentration leads to the fact that there is no quick diffusion of innovations into the market. Summing up, he states that there is no evidence that large enterprises are needed in all or most of the trades to promote rapid technological changes and use new techniques.

G. J. Stigler claims that big business is harmful for the economy for two reasons: it takes monopoly actions as well as influences labor market and governmental actions (Stigler, 1978). According to him, monopoly actions are nothing but using monopolistic practices, the effects of which can be seen in the economy and society. The relation between big business and labor market is distinct with regard to the influence on public opinion. Besides, as for G. J. Stigler big business is not particularly more effective than the one of a medium-size enterprise. He believes that market competition, but not too fierce, is a good solution. He views anti-trust law as a remedy to monopolistic actions, but in relation to specified practices used by enterprises.

In his paper concerning market monopolization as carried out by Microsoft Corporation, B. Klain analyses the relation between market monopolization as an action that brings profit to enterprises and its influence on social benefits of consumers. According to him, the functioning of monopoly, which this enterprise is, consisting in making such

programs as Internet Explorer within Windows system available for free is not a reason that justifies social benefits resulting from such a considerable degree of concentration. The only exception in which monopoly power can function in the market is a situation when there is substantive (qualitative) competition and consumer benefits are great.

The above presented deliberations concerning the evaluation of the structure (and the way it is construed) with regard to the degree of competition show that there is no clear evidence that market ought to be either concentrated or competitive. Moreover, works of contemporary authors can be characterized by a particular objective as for which deliberations on market structure are just the background. The only certainty is that it is not possible to attain perfect competition, while pure monopoly, though potentially plausible, is a bad solution as far as market is concerned. There is an area of research between these two extreme cases. It is neither fully organized nor examined.

Analyzing the statements made by particular economists, one may draw a conclusion that the solution to the dilemma: concentration-competition is not easy due to a great number of issues connected with the formation of market competition level that should be taken into consideration (Boehlke, 2005). **One should not be afraid of large enterprises.** These subjects, although can actually attain considerable market power (and use it), providing society with a lot of benefits at the same time. Not only can a positive influence on innovativeness, considerable expenses on research and development (possibility of increasing such costs at all), or establishing and carrying out such research programmes be included in the benefits, but also influence on competition – making it more intense in relation to other subjects of a trade, the necessity of implementing new, better solutions because of modern globalization and impossibility of reducing competition just to local markets. At the same time, large subjects make substantial profits, as confirmed by the results of the research. In many cases, these profits ought to be treated as society's incomes due to the fact that the functioning of these enterprises is share in nature, or, as in the case of Poland and many countries in the world, as total or share property of the State Treasury.

Certainly, there will always be some doubts. However, a general description of market concentration that will not be wearisome for society can be provided. Freedom of the functioning of an enterprise and freedom for new competitors to enter the market should be its main elements. This will bring about the fact that even if a dominant subject functions in the market, its behavior will be pro-competitive for fear of actions taken by competitors. What is more, this will provide consumers with a chance of choosing other goods or services than the ones of a monopolist. The situation is relatively obvious with regard to pure monopoly – all such actions are eliminated if there is no indication of “natural monopolization” via, at least, letting competitors function. In the opposite situation, when there are natural monopolies, first of all, dividing them into smaller activities dealing with other forms of providing the services (e.g., as for gas industry: separate output, transport, and transmission), as well as, what is more important, a specific policy of a state supporting the alternative solutions. For instance, electric energy with regard to natural gas, and promoting other means such as airlines or bus service with reference to rail transport.

Comprehension check: *Case study Intel vs. AMD*

Please carefully read the text below and answer the questions at the end.

Intel loses market share in own backyard (Krazit T., 2006)

Chipmaker loses share to AMD worldwide, but fourth-quarter losses run especially deep in the U.S. retail market.

Intel lost significant share to Advanced Micro Devices in the U.S. retail market in the fourth quarter, according to figures released Wednesday by Current Analysis.

Intel executives said Tuesday that they expected to lose about one point of market share to AMD during a disappointing fourth quarter. That figure refers to worldwide sales of microprocessors during the quarter, an Intel spokesman confirmed. Among U.S. retail PCs, however, the results were more striking.

Intel's share of the U.S. retail PC market fell by 11 percentage points, from 64.4 percent in the fourth quarter of 2004 to 53.3 percent, said Sam Bhavnani, a senior analyst at Current Analysis. Current Analysis' market share numbers measure U.S. retail sales only, and therefore exclude figures from Dell, which uses its Web site to sell directly to consumers. Dell, the top PC vendor in the U.S., exclusively uses Intel's processors in its PCs. (Sales by online retailers were excluded from the market share analysis as well).

Sales of Intel-based desktop PCs fell 22.3 percent during the fourth quarter, according to Current Analysis. As a result, sales of AMD-based desktops took the lead during the pivotal fourth-quarter holiday shopping season. AMD chips were found in 52.5 percent of desktop PCs sold in U.S. retail stores during that period.

Intel partially blamed poor demand for desktops for its fourth-quarter earnings results that were below expectations. But desktop shipments grew 13.4 percent among U.S. retail customers during the quarter, Bhavnani said. Last month, IDC predicted the entire U.S. PC market would grow only 8.3 percent during 2006.

Intel Chief Financial Officer Andy Bryant also noted that Intel's yearlong supply problems with desktop chipsets extended into the fourth quarter, hurting sales of Intel-based desktops and allowing AMD-based systems to make inroads at Intel's expense.

Notebook PCs have been the fastest-growing segment of the PC market for several quarters, and Intel has a sizable advantage over AMD in that segment. But its lead shrank during the fourth quarter as the percentage of AMD-based notebooks increased from 22.3 percent in the fourth quarter of 2004 to 30.5 percent in the fourth quarter of 2005. Shipments of AMD-based notebooks doubled compared with the previous year, while shipments of Intel-based notebooks increased by 34 percent in the U.S., Bhavnani said.

AMD is expected to report its own fourth-quarter earnings Wednesday afternoon. The results are eagerly awaited by analysts; investors are wondering if Intel's problems are its own, or if the three-year boom in the PC market has finally run its course.

"In posting the weakest Q4 revenue result and Q1 outlook since the bursting of the bubble, Intel has made it clear how much competitive ground the company has lost to AMD. The extent of the losses has exceeded our expectations," Merrill Lynch analyst Joe Osha wrote in a research note on Wednesday.

Intel's stock closed down 11.5 percent, or \$2.91, to \$22.60 on Wednesday trading on the Nasdaq. AMD's stock ended the day up 1.5 percent, or 51 cents, at \$33.37.

Questions:

1. Describe what kind of changes can be seen in the microprocessors market in the world?
2. Does market size really matter? Do you think competition between cheapmakers would differ if there are more than 2 companies? Justify your opinion, please.
3. How big should the market share of noted firms (Intel and AMD) be so that they would be the most efficient (in economic sense)?
4. Do you think that describing the market would be more efficient in an allocative sense if competition increased?

5. Specify arguments for and against more intense competition or concentration in the microprocessor market.

Summary

Market competition and concentration are two clashing market opposites. On one hand, a country wants to influence an increase in the degree of competition via its organs. On the other hand, enterprises try to defeat competitors – reduce competition. It turns out, from these actions, that there should be some kind of a balance limit as for both aims that would satisfy both sides of a struggle. Yet, it always has to take the specificity and nature of a particular market into consideration.

Suggested reading

- Monopoly Power and Economic Performance, ed. E. Mansfield, W.W. Norton & Company Inc., New York

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