

# International Journal of Management Cases

## **Microeconomics Background of Managerial Decisions**

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# Microeconomics Background of Managerial Decisions

## Editorial

Managerial decisions are made by nearly every person in business nowadays. They concern not only the decisions made by a firm's authority but also by consumers. From the microeconomics point of view, aiming to market equilibrium and optimisation of decision making is the most important part of the decision background. The first condition can be understanding the environment and how this influences the market decisions made by companies' managers and consumers, too. The business entities have to take into consideration how markets work and what kind of opportunities it gives. The second means is to acquire already settled objectives in the maximum range. The methodology of this is generally based on marginal analysis.

This special issue of International Journal of Management Cases covers a broad range of cases based on microeconomics theory applied in managerial decisions. It can be divided in several parts concerning the main streams in the theory.

The first part covers foundations of all economic decisions. The cases presented show how the decisions are made and what kind of problems accompanied them.

The next section covers market problems. The basic problems describe demand and supply in the market. Both sides have their own problems to solve in terms of its shape and changes. Finally cases from market equilibrium are presented. This part is supplied with some cases about demand elasticity and its managerial background.

The next section describes consumer economic behaviour. Knowledge about fundamentals of the decisions can help companies and its managers to plan its market activities. The cases show how consumers make decisions especially based on utility theory and marginal analysis.

The following part labels microeconomics basis of company activities. The range of topics covers basic aims of companies, issues of cost analysis, revenues and finally profit. Important cases are linked to economic profit in the company analysis. Break-even point and marginal analysis are the main methodology in this section.

The next section of cases refer to companies behaviour in the market. Especially the role of market concentration and how monopolisation is presented. What is interesting is that the reader can follow topics about the relation between the market and the company and its performance. Market structure are the basic terms used in this section.

The closing section discusses the role of production factors. In economics there are three basic factors: labour, capital and land. All companies have to use them to actively perform. The cases show that decisions need to be made when managers think about production factors and its utility in the company. Also marginal analysis is the basic tool to make optimal decisions here.

This issue is an interesting example of microeconomics point of view in the managerial decisions.

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Prof. Tomasz Bernat, University of Szczecin, Poland

## Does Profit Maximization is the Main Task of the Economist?

**Yeliena Prokhorova**

Kiev National Economic University named after Vadym Hetman, Ukraine

Oksana Kovalenko, graduated with honors Master's degree in "Economics" and the first semester working as an assistant of Professor Taras Ivanenko on the "Microeconomics" subject at Kiev University of Economics, drew attention to how students perceive the main assumptions of microeconomic analysis. The students of the first group, the best among other three groups in "Economics", asked Oksana on the last workshop about restrictions of one of the main methods of microeconomic analysis – marginal approach.

Pavlo Morkva, student's leader, noticed that usually we assume that "ceteris paribus" producers seek to maximize their profit, consumers want to maximize their utility, etc. But when Pavlo prepared a paper for the seminar on Economic History about Nobel laureate of 2008 Paul Krugman, he read that Krugman marked the very complexity of modern economic life, when macroeconomic theory can't explain the behavior of economic agents. Oksana was not ready to discuss this question and asked an advice from her Professor, Taras Ivanenko.

Professor Ivanenko was very glad to know that his students are so interested in the subject and want to understand so actual and difficult problems. First of all Professor recommended Oksana to study the article by Paul Krugman "The Failure of Macroeconomics?" Of course, Krugman is right, indicating, that in modern complex world maximizing profit is not the only or the main aim for the entrepreneurs. Each producer has to think about the maximum meeting the needs of consumers, actions of competitors, the appropriate wages for workers, etc. But microeconomic analysis is the fundamental economic science, which introduce students to the basics of economic problems

Also Professor Ivanenko told Oksana, that some economists notice that the graduates of Business schools are very aimed to maximize profit. And Professor found in his archive two articles devoted to the analysis of what economic students are learning for in universities.

Oksana Kovalenko read these articles very attentively and was puzzled. What is the content of articles?

In 2006 Ariel Rubinstein, professor of Economics in Eitan Berglas School of Economics, Tel Aviv University, and Department of Economics, New York University, published his discussing article "A Sceptic's Comment on the Study of Economics". A survey was carried out among two groups of undergraduate economics students and four groups of students in mathematics, law, philosophy and business administration. The main survey question involved a conflict between profit maximisation and the welfare of the workers who would be fired to achieve it. Significant differences were found between the choices of the groups. The results were reinforced by a survey conducted among readers of an Israeli business newspaper and PhD students of Harvard. It is argued that the overly mathematical methods used to teach economics encourage students to lean towards profit maximisation.

### The main task of the survey was:

Assume that you are vice president of ILJK Company. The company provides extermination services and employs administrative workers who cannot be fired and 196 non-permanent workers who do the actual extermination work and can be fired. The company was founded 5 years ago and is owned by three families. The work requires only a low level of skills so that each worker requires only one week of training. All of the company's employees have been with the company for three to five years. The company pays its workers more than minimum wage. A worker's wage, which includes overtime, amount to between NIS 4,000 and NIS 5,000 per month (the minimum wage in Israel was about NIS 3,335 at the time of the experiment). The company provides its employees with all the benefits required by law. Until recently, the company was very profitable. As a result of the continuing recession, however, there has been a significant drop in profits though the company is still in the black. You will soon be attending a meeting of the management at which a decision will be made as to how many workers to lay off. ILJK's Finance Department has prepared the following forecast of annual profits:

**Table1. The terms of the game**

<b>Number of workers who will continue to be employed</b>	<b>Expected annual profit in NIS, millions</b>
0 (all the workers will be laid off)	Loss of 8
50 (146 workers will be laid off)	Profit of 1
65 (131 workers will be laid off)	Profit of 1.5
100 (96 workers will be laid off)	Profit of 2
144 (52 workers will be laid off)	Profit of 1.6
170 (26 workers will be laid off)	Profit of 1
196 (no layoffs)	Profit of 0.4

The answers of the students you can see in Table 2.

The differences between the groups are striking. The economics students, both at the Hebrew University, Jerusalem and Tel Aviv University are much more pronounced profit-maximisers than the students in the other groups. Among the Economics students, 45%–49% chose the profit-maximising alternative, compared to only 13%–16% of the Philosophy and Maths students. The MBA and Law students were somewhere in between.

Doctor Rubinstein asked a question: maybe, we have to change our teaching methods when we prepare the economic students? Because they think only about profit maximization, not about people?

A year later after this study, in 2007 the instructors of the Otto-Von-Guericke-University of Magdeburg repeated the same survey, but changed some frames.

Firstly, they supposed that the fact that economists put more emphasis on profit maximization in a survey may be attributed to a self-selection bias (i.e., economic studies attract certain types of students) rather than indoctrination through teaching. As Rubinstein admitted, his questionnaire did not allow for any conclusive evidence. It is thus important to separate these effects before questioning the way we teach economics.



**Table 2. The distribution of answers for the question about the layoffs for the profit maximization**

Number of workers who will continue to be employed	Specialization of students						Total
	Economics Jerusalem	Economics Tel Aviv	MBA Tel Aviv	Law	Math	Philosophy	
<i>n</i> =	94	130	172	216	64	88	764
100 (profit maximisers)	49%	45%	33%	27%	16%	13%	31%
144	33%	31%	29%	36%	36%	19%	31%
170	7%	9%	23%	18%	25%	25%	18%
196 (no layoffs)	6%	13%	12%	13%	11%	36%	15%
Other	4%	2%	3%	6%	13%	7%	5%
Average layoffs	69	63	54	52	45	31	53

Secondly, it is a general phenomenon that the way a problem is framed can substantially affect decisions. The frame used in Rubinstein's survey puts students into the role of a manager. The problem is that the potential effect of this framing is not controlled for in Rubinstein's paper. Do subjects only consider the workers' welfare and the profit of the company as Rubinstein suggests? Or do they also think about what might happen to a manager who does not act in the interest of the company's owners? In order to clarify this point, researches from Magdeburg added a second frame, which allows testing whether the particular role influences subjects' choices.

To deal with these questions was conducted a similar but modified survey with students from the University of Cologne and the University of Magdeburg in Germany.

Authors tried to design their online survey in a way that on the one hand allows to compare their data with those generated by Rubinstein (2006), but on the other hand also allows to gain some more insights.

In the first two questions authors followed the experimental design by Rubinstein as closely as possible. In total 469 students were asked. The results are presented in Table 3.

Both groups of students had to state the number of workers they would recommend to continue to employ (Q1). After that, they were asked to predict the recommendation of a real vice president (Q2). Q1 and Q2 are identical to the questions used by Rubinstein.

In contrast to Rubinstein, students were asked a third question in order to test how answers are affected by the framing of the questions. Do students only consider the workers' welfare and the profit of the company? Or do they also think about their own standing as the company's vice president? Since it is not clear what students have in mind when answering Q1, Q3 puts them into a situation in which they need not care about their own future as vice president: Assume that you are near retirement and you just have to make this decision. What would be your recommendation?

**Table 3. The distribution of answers for the question about the layoffs for the profit maximization**

Number of workers who will continue to be employed	Hebrew/Tel Aviv			Cologne/Magdeburg		
	Economists	Non-economists	Total	Economists	Non-economists	Total
<i>n</i> =	224	368	592	156	183	339
100 (profit maximum)	47%	22%	31%	38%	15%	27%
144/10	40%	53%	48%	44%	52%	47%
196 (no layoffs)	10%	18%	15%	14%	29%	21%
others	3%	7%	6%	4%	4%	4%
Average layoffs	66	46	53	61	40	51

Rubinstein points out that economics students show a much stronger tendency to maximise profits than subjects in other groups, but he could not determine clearly whether differences are due to a self-selection bias or are the result of indoctrination. Since he found (significant?) differences between economics students and MBA students trained in doing case studies, he tentatively concluded that the difference might indeed be the result of the way in which economics is taught at universities: “the study of cases might stimulate more comprehensive thinking about real life problems whereas the study of economics through mathematical exercises conceals the need to balance between conflicting interests”.

To distinguish the self-selection bias from “indoctrination”, researchers from the University of Magdeburg compared decisions made by first-term economics students and advanced undergraduate economics students. The results reveal that education does not significantly matter for economics students. Instead of becoming more interested in profit maximization they even seem to learn to give the worker’s welfare more weight – although the increase of employment is not significant.

Oksana Kovalenko decided to discuss these articles with her students on the workshop next week. But then another idea occurred. For the first time Oksana plans to conduct a similar survey with her students of four groups studying "Economics" in Kyiv University of Economics. And then the results of the survey have to be compared with the same ones, made by Rubinstein and his German followers.

If the same survey was proposed to you, what would be your choice?

**Questions:**

1. *What is the main task of producers in Microeconomic analysis?*
2. *How do you comment the different approaches to the answers on question one of the survey between economic and non-economic students? Does humanism an economic problem?*
3. *What tasks have to achieve managers in their work? What task is more important: profit maximization or employment?*

## What is seen and what is not seen

**Radu Mustescu**

Academy of Economic Studies, Bucharest, Romania

Kamil Nowak is a 1<sup>st</sup> year student at the University of Szczecin, Poland. He is enrolled in the program of Management Economics at the Faculty of Economics and Management, where he is attending a class of Microeconomics. He is enthusiastic about economics as he discovers day by day that it is a body of knowledge that can be also used in day-to-day life, not just in what professors call “*fundamental research*”.

His father, Mateusz, runs his own business. This is a restaurant specialized in Italian recipes called *Bella Italia*. Mateusz Nowak is a well gifted *Chef* who amassed his initial capital after working eight years in Italy. There, he also refined his skills that he developed both in family and in working at different employers. Currently, he owns the premises of the restaurant (which is a house in the old quarter of the town, inherited from a relative). He has eight employees but he keeps his job as the main *Chef*, even if he has two other aides which allows him the luxury of being absent some days. He invested the equivalent of 100,000 Euros both in renovation and as working capital.

This evening, Mateusz Nowak is satisfied that his business, according to his accountant, has experienced in the last year a gross profit of 50,000 Euros. That is, more than 4,000 Euros per month as personal income. He challenges his son on how important is learning economics at the university as opposed to the experience derived from “*doing business*” as entrepreneur, even if a small one.

Kamil responds:

*Father, would let me know more about your your business?*

*Of course, Kamil. Ask me anything.*

*Which are your main assets?*

*The building, the working capital and my hands proudly answered Mateusz.*

*We learned that each firm is a bundle of assets. And each asset has an opportunity cost, that is, a rent that could be got from allocating it towards other uses.*

*So what does it means, Kamil?*

*Let's do a simple exercise. How much does the pharmacy next to your restaurant pays as a rent?*

*Why does it matter for the profitability of my business? I own the premises of my business. You'll see!*

*Around 5,000 Euros a month.*

*How much does Piotr, your friend from Italy, earn as chef at the restaurant of the big transnational hotel chain in our town?*

*Around 2,000 Euros a month*

*Father, you use in your business two assets, you and the house you own, that do not appear in the booking records, that is, neither in the balance sheet nor in your profit and loss statement.*

*So what?*

*Just from these two assets you should earn at least 7,000 a month. And if you also take into account the capital you invested in, around 100,000 Euros, and its abandoned return of, how much, 3.5% a year? that would means, in general terms, around 10,000 Euros a month as gross profit. That is, around 120,000 Euros a year, that correct?*

*Hm, pretty correct.*

*The fact that we do not put some assets into our bookkeeping records does not mean that they do not have a cost. It is called opportunity cost, father.*

*How could you introduce in your profit and loss account some costs that you do not incur? Obviously, you cannot. But that is the accounting perspective. Economics is not about adding and subtracting but about an entire approach to how we are acting as individuals and businessmen ... in fact, to auction even more, economics tells us that you are engaged in an process of consumption of approximately 70,000 Euros a year*

*This is a pretty strong word.*

*It surely is. The core questions now are: why don't you rent your house to the pharmacist and get a job together with Piotr?*

*No, Kamil. That's because I love my job and my father, that is, your grandfather, and his father were cooks. I love my job.*

*Some economists would argue that keeping your business running is an irrational choice.*

*Now I can challenge their rationality.*

*How, father?*

*The fact that I am not maximizing my profits, as you said, does not mean that I am not rational. I choose running my own business because I like it. And the house we use as premises for the restaurant, I do not consume his value. By contrary, I conserve it. And I hope that someday the profits would be so great as to satisfy also all your professors of economics.*

*Kamil is smiling but also thinking: What should I do in his place?*

### **Questions:**

- 1. Should businessmen always take into account only accounting expenses or they should pay attention to other forgone opportunities?*
- 2. Is an accounting profit always a mark of an economically profitable business?*
- 3. Please explain why is so important for businessmen to stay alert to the dynamics of the prices of their inputs and outputs?*
- 4. Do you think there is a conflict between short term and long term objectives of a businessman?*
- 5. Does "rational" always means "profit seeking"? What do you think should be the standards of "rationality" in business decisions?*

## Market dilemmas

Jarosław Korpysa  
University of Szczecin, Poland

A pneumatic drill has penetrated the space of an awakening capital city with its noise. Poland under construction – thought Andrzej Smuga while lifting his sleep-heavy eyelids. (...) *but why at 6 a.m.?* he added in his thoughts...

Dragging his still limp body out of a large marriage bed was a great exertion. Slippers, a dressing gown and the kitchen... Although the plan was simple, the will continued the struggle another while with a recurring thought of returning under the cozy duvet. The wife and kids were still asleep.

*Which day is it? Probably the fourth... I must prepare this strategy at last or I'll finish myself off...* he said to himself lost in thoughts.

The strategy depriving Andrzej, better to say the boss of “Apteo” pharmaceutical company of sleep, was supposed to be a market innovation. The “Apteo” Co. has been specializing in producing diet supplements and medicine based on natural ingredients for years. Unfortunately, the competition on the market on which Andrzej Smuga’s company has been operating, has become so big that a new production strategy has become necessary.

The commuting has been accompanied by the noises of diggers, horns, cranes and shouting of drivers unable to manage their road rage. The boss, because that’s become his title, has been striding briskly towards his office since he left the lift on the 20th floor of a skyscraper. A large leather-coated armchair standing behind a massive oaken desk almost made Andrzej doze off.

*I can't allow myself any rest* – he said aloud.  
*Not yet...* - he added in his mind.

Ania, the secretary, has brought a cinnamon latte together with a crunchy gingerbread just as she did every morning. A pleasant fragrance has spread all over the room.

*Good morning Mr. Chairman. Mr. Piotr has delivered new data regarding the production and the competition. I've put them in your desk.*

Staring into a heap of documents he realized he was so tired he did not see them. He was aware that the next days’ work will seal the company’s fate. He turned his cozy chair towards the window. The panorama of Warsaw was breathtaking. At least for the ones who were not familiarized with it. Andrzej Smuga calmed his nerves when he gazed at the city... He lived in the capital since he was born. He remembered how it was changing. After 2004 these changes accelerated even more. He also decided to put all his eggs in one basket. A fresh master of pharmacy supported by his wife – Kasia, decided to start a business. He was motivated by the EU support, although he had to mortgage his grandparents’ house anyways. Initially, the production was of small amounts. Having the know-how and a lot of zeal he single-handedly manufactured ointment and pharmacy mixtures in a laboratory by his house. With time the company started generating profits and the sales allowed to employ a few people and to broaden the offer. A family business

made its way in the world five years later. Andrzej's constant work, innovativeness and entrepreneurship led to the opening a fully professional factory near Warsaw in 2009. A fulfilled dream, achieved at the cost of not enjoying family life gave the boss immense satisfaction.

Meanwhile, the Smugas have produced their offspring: a daughter Asia and a son Janek. Andrzej unceasingly wanted to spend more time with his family, unfortunately the pharmaceutical market in Poland has become a subject of a fierce competition among both local and foreign companies. Andrzej, defending his position on the market had to continue sacrificing his free time for the sake of work, each year promising himself that he needed only one more year and everything will settle. He knew he was not doing it for himself, at least not only for himself. He wanted to provide a foreign education for his children, and Kasia has been pursuing her passion – horse riding. *I'd not be able to deprive them of it. They deserve what's best, the things I'd not give them as a mere druggist*, he often thought to himself.

*The crane is transporting something... the sun squeezes between skyscrapers... people like ants... cars like toys...* - a series of observations has woken Andrzej up who'd been lost in thoughts and memories.

*It's time to get down to the paperwork and analyze it all again. What have we got here, Piotr? It's time to decide which product is going to be stopped being manufactured* – he said to himself and he grabbed a file filled with sheets of printed paper.

The first analysis he encountered had been prepared by his friend Olek, whom he had known since high school times. Olek graduated from economics and was at that moment working for an international logistic company. Piotr has started studying the material meticulously, which immediately captured his attention:

Specification	Product			
	Gemno	Otron	Zupryt	Intran
Production size	100	300	200	400
Product cost (PLN)	80	95	100	90
<b>Average variable costs</b>				
Material consumption	25	30	35	20
Energy consumption	10	5	10	15
Distribution costs	15	10	10	5
Other variable costs	5	10	5	10
<b>Company fixed costs</b>				
Employees' salaries	10500			
Company insurance	2500			
Depreciation	4000			
Expenses for promotion	6000			
Other costs	2000			

Below the table Olek has left a handwritten message: *Dear Piotr, as a present from me you've got a piece of information regarding your products. I managed to obtain it from the market. In my opinion you require it to take the right decisions:*

*demand function for specific products:*

- Gemno –  $1600-18*P$
- Otron –  $750-5*P$
- Zupryt-  $2000-18*P$
- Itran –  $1600-14*P$

Looking at this information Piotr realized it was time to employ a person responsible for the company's finance – *But can I afford it? The production of which product should I terminate? Which one gives the highest yields.* The thoughts kept appearing in „Apteo” owner's head.

**Questions:**

1. *Please draw a demand line for all function given in the text. Describe differences between them.*
2. *Based on demand function calculate which products should be terminated*
3. *Which product is the most valuable for the company?*



## What does happiness give?

Jarosław Korpysa

University of Szczecin, Poland

Street noise and intense traffic was something typical of Zdrojowa Street. Why? Well, the street lies in almost the very center of a big metropolis, being in addition an artery leading to a big university campus. Mostly young people were sitting in a nearby park. Some of them solitarily reading books and hastily copied notes, others pursuing less scientific entertainments. On the benches, one could spot hugging couples, elderly people feeding pigeons and a few mothers resting after a walk with their offspring. The spring sun accentuated the grass greenness and the colorfulness of flowers. Looking at Zdrojowa Str. one could get an impression that it is a gastronomical center of the city. Every second building invited with an impressive sign of such kind: „Gospoda Staropolska” (Old Polish Inn), „Jadłodajnia u Ani” (Beanery at Ania’s) , or „Pizzeria Paolo” (Paolo Pizzeria). It was obvious that the main patrons of the restaurateurs were students.

Weronika was just opening her place. Her „Snack Bar – Smaki Świata” (Snack Bar – The Tastes of the World) offered snacks and fast lunch dishes coming from the majority of continents. The pizza dough was already being made, meats for Mexican dishes were being cooked, chicken and beef for the kebab sandwich were being grilled. In the past the traffic lasted unceasingly all day long, because hungry students always turned up on their way to lectures or during a break. Whereas in the evenings until closing at 11 p.m. so called student’s life thrived, giving the owner quite high yields. However, recently Weronika was beginning to notice that her business was heading towards a situation when the costs are higher than profits. Worried by her finding she decided to study the local restaurant market. After a short walk in Zdrojowa Str. all became clear. To her astonishment, she observed a few new bars with fast snacks, where the prices were lower than in „Smaki Świata”.

*I must do something about it because the competition is going to finish me off*, she thought to herself.

Weronika spent the following days intensely looking for a solution, which would give her a market advantage over her new competitors. She was aware of the fact she could not lower the prices, because the quality of the dishes served in her bar was most important for her. She was not going to lower herself to the level of a second-rate beanery as she had assumed at the beginning of her business.

Together with her husband Jan, a retired policeman and their daughter studying economic they met up at the kitchen table every evening to think through the further development of „Smaki Świata”. Foreign inspirations came to their aid.

*Today I’ve read on an American restaurant forum that there exists a solution proven by many restaurateurs. Particularly by those addressing their services to such a target as ours* Monika said at the beginning of the evening meeting.

*To what, dear?* – asked Jan.

*Dad, you could’ve learned English so your life would have been easier* – retorted his daughter jokingly.

*In my times they taught us Russian, and I have an educated daughter delegated to translations. So what is this tarot? – asked the jolly father.*

*“Target” daddy, meaning a group to which a given product is mainly addressed. It’s the youth in our case, mostly students.*

*All right, let’s not play explaining terminology. What’s the solution daughter? Asked Weronika.*

*Their recipe for success is the all-you-can-eat method. The idea consists in their clients being allowed to consume unlimited amounts of foods for a set price. Here you can choose which category of dishes would be a part of this special offer. It can be for example a salad bar, a breakfast buffet table or a lunch consisting of spaghetti or pizza. The dishes ought to be filling.*

*But honey, they’ll put us on the street. Do you know how much can a hungry student devour? – interrupted Weronika.*

*Mum, theoretically yes, but the theory and practice of economics show otherwise. Imagine that for 15 PLN you can eat as much spaghetti as you wish. Everybody who uses such a service wants to make best use of what they paid for. However, each reasonable person knows that consuming every next serving will be one serving too many and that it will make them feel sick. Of course it may happen that a client will come and he’ll eat without moderation not caring for his good mood and health but they’ll be sporadic accidents. Therefore, the offer all-you-can-eat is profitable and very beneficial in regard to marketing. It’s a so called expected utility hypothesis. I studied it last year.*

*Hmm... pondered the „Smaki Świata” owner and said All in all it makes some sense. In the evenings I could make the offer of the supper sale of the food from all day. Nothing is going to be wasted then.*

*An average student can spend 20 PLN on the lunch. The majority of them prefers sets consisting of a specific dish and beverage. At what price could we offer such a set, Mum? I think 7 PLN for a lunch dish and 2 PLN for juice.*

*Wouldn’t cola be better?*

*Cola for 3 PLN.*

Let’s assume that preferences from the enumerated goods consumption shape as follows:

Quantity	Satisfaction from lunch consumption	Satisfaction from cola consumption
1	40	25
2	68	37
3	89	40
4	96	43

*Monika I think you can help us solve the problem...*

### **Questions:**

- 1. What is market competition?*
- 2. Do you think the number of companies is important for market competition?*
- 3. Do you think the size of companies matter for competition?*
- 4. How the case given to Monika should be solved? Hint: calculate utility level to get knowledge about number of products.*

## The American Beekeepers' Dilemma

**Kibuk Tetyana**

Kiev National Economic University named after Vadym Hetman, Ukraine

The report provided recently to the Minister of Agriculture of the USA based on the analysis in the world honey market caused strong concern from his part about situation not only in the world honey market, but also situation of the national market of honey of the USA. Especially worried him trend shortage of supply of different varieties of honey on the world market at a constant increase in demand and thus increase the prices for it. In addition, concerns were raised about the precarious position of the USA, as the leader of export to the world market of honey and strengthening of competitive fight. After all, according to the report, the USA, as well as her eternal competitor - Argentina, can't produce on 100 thousand tons of honey per year any more. For a solution of the problem of retaining leadership in the world honey market, Minister of Agriculture decided to hold an extraordinary meeting of the National Honey Council (NHC), on which should be invited representatives of the American Beekeeping Federation (ABF) and the American Honey Producers Association (AHPA) for elaboration of the general strategy.

During his opening speech at meeting, the Minister of Agriculture of the USA expressed his concern about the actual state of affairs at the American honey market, such as the permanent growth of cost of honey, and also by increase of expenses of beekeepers that, in his opinion, first of all, is connected with the necessity of conservation of bee families at constant reduction of the areas under melliferous land, and also with the necessity of transporting bees to remote areas, etc. Mister of Agriculture of the USA also was surprised by the tendency to increase imports of honey of the USA while progressively reducing its production. So, according to the experts, in 2013 production of honey in the USA was considerably reduced in comparison with previous year and made only 50-60 thousand tonnes that led to growth of retail and purchase prices of honey. Therefore the National Honey Council is especially concerned by possibility of reorientation of consumers of honey on other cheaper sweet products. Then the Minister asked other members of meeting to explain a similar situation, and also to offer possible ways of improvement of the created situation.

The representative of American Beekeeping Federation expressed outrage over the behavior of many American farmers who carried out reorientation instead of production of alfalfa and clover on the production of soybeans and corn for which demand is constantly increasing in the world market. In addition, as the representative of ABF reported, held on the initiative of the National Honey Bard assessment of the factors that had the greatest impact on the reduction of honey production in the United States revealed the following problems in the production of honey:

1. Intensive use of pesticides for processing of all agricultural crops, like melliferous (such as citrus) and non-melliferous (e.g., soybean and corn).
2. Development of parasites and diseases of bees, among which infection with bacteria, viruses, fungi, and also pincers (tracheal and Varroa) and monocelled parasites from the sort Nosema. In addition, ongoing collapse of bee families after wintering, which still cannot be explained by the scientists, calling it a biological catastrophe.
3. Reduction of the areas under uncultured melliferous plants and spreading out the areas under grain crops, such as soybeans and corn.

4. Stresses experienced by bees in relation to the necessity for them to relocate for long distances.
5. The use of modern technologies in agricultural business.
6. The increase in climatic anomalies.
7. Aging of a beekeeper profession owing to the lack of inflow of youth specialists to the beekeeping industry.
8. Public outrage caused by increasing the africanized bees in the regular melliferous states of the USA.
9. The influx of cheap imported honey from such countries as, for example, Brazil. The beekeeping of Brazil, on their opinion, continues to experience negative consequences of a drought and other climatic anomalies of 2012. It led to decrease in outputs and honey export. While in 2011 its export made 22.3 thousand tonnes, for the current year it has only been 10 thousand tonnes. In comparison with four previous years, the export of the most demanded abroad ecologically clean honey produced in the North-West of the country decreased by 85%. But beekeepers in Brazil recoup losses of bees quicker, than in other countries of the world. This might be explained by the fact that the dominant in Brazil africanized honeybees tolerate drought and other anomalies of climate easier, than the "European" bees.

The representative of American Honey Producers Association expressed the opinion that the main problem to remedy the situation at the national honey market of the USA, and also for strengthening of position of the country in the world honey market, it is necessary to fight against illegal import to the country of cheap honey from countries, such as Argentina, Vietnam and especially China. We have already sent a petitions to the U.S. government to address the issue of violation of the rules of « fair international trade» especially countries such as China and Argentina, who constantly pursue dumping policy by the supply of honey to the USA.

According to statistical data, over the year 2013 the USA has imported 120.6 thousand tonnes of honey (+7.2% in comparison with the similar period of 2012 year) for US\$381,8 mln. (+15.1%) at the average price of \$3164 per tonne (+7.4%). Argentina became the major supplier of honey to the USA, having far outstripped last year's leaders – Vietnam and India. Honey export in 2013 from Argentina made 58.4 thousand tonnes (– 4.8% in comparison with the similar period of last year). So, we have been able already to contribute to expose the illegal operations with Chinese honey at two leading honey companies in the USA which were forced to curtail their operations. Therefore, in Florida there was closed the Groeb Farms Company's plant capable to process and pack of 12 thousand tonnes of honey a year.

The main anxiety of this Association caused the situation in China. China remains the world's largest producer and the exporter of light grades of honey collected from, acacia, rape linden, clover, sunflower and cotton. However, the numerous scandals connected with fraudulent transactions in the honey market of the USA resulted in essential damage of the reputation of China as supplier of honey. In 2012 the Chinese companies delivered products of beekeeping to the world market for 272 mln. dollars. According to the Ministry of Agriculture of China, last year the quantity of bee families made 8.5 million units, and production of honey – 448 thousand tonnes. It is estimated that by 2015 these indicators will have respectively increased to 10 million units and 500 thousand tonnes.

In addition, the indignation of AHPA causes the purchase of the EU countries an increasing amount of cheap Chinese honey, including the one to be counterfeited by a variety of

sweeteners and disguised as if it was produced by the third countries producers. A scandal is brewing in connection with the fact that some European importers at the beginning of 2013 purchased 5–7 thousand tonnes of Chinese honey at the prices close to the prices of rice syrup.

Representatives of AHPA at the end of their speech, demanded that government of the USA would tighten measures for these countries - infringers of rules of international trade for the settlement price on the domestic market of the USA.

On what the Minister of Agriculture of the USA answered that regulatory authorities of the USA have already tightened quality control of the imported honey. So, the U.S. Department of agriculture, in 2013 there were found unacceptably high levels of antibiotic residues in the batches of honey, supplied from Russia, India and Turkey. Chloramphenicol, which is a "marker" of the Chinese honey, was also found in that honey. Production supplied to the USA by exporters from the above listed countries, "from now on is subject to automatic check".

Also the U.S. Government intends to prolong anti-dumping sanctions concerning the honey imported from China. There has been declared the introduction of anti-dumping duty of 2.63 dollars/kg imposed on the following products from China: natural honey; flavored honey; the artificial honey containing more than 50% of natural honey on weight, and the honey mixes containing more than 50% of natural honey on weight.

However, after the end of the meeting, the question still remains open whether these measures to ensure the preservation of leadership on the world market of honey for the USA and to meet the demand for honey within the national honey market of the USA.

### **Questions:**

- 1. Highlight the international markets to be referred to in the case.*
- 2. What are the very factors to have affected the international honey market and caused growth of prices for honey?*
- 3. What factors influenced the state of the local honey markets of large producers of honey mentioned in the case?*
- 4. What other markets have an impact on the equilibrium in the international honey market?*
- 5. How might the balance of the honey market in the USA be influenced by the experts' concerns-related proofs about reorientation of honey consumers to cheaper sweet products?*
- 6. How is the increase in the prices for honey likely to affect the market of the honey-based cosmetics?*

## Correct prices

Jarosław Korpysa

University of Szczecin, Poland

Edward was going towards the chemist's situated nearby his block of flats, as he did every month. The pensioner slowly took step after step in order to buy the prescribed medicine for hypertension. A categorical ban on drinking coffee – his favorite stimulant, was a taxing result of his ailment. The elderly man read once, that coffee beans used to be a currency in South America and the very drink was thought to have been of divine origin. Or maybe it was cacao...anyways something for the memory might come in useful. A modest budget was big enough only to buy the necessary medicine and food for the coming month.

- *How good it is, that Stonka is so close. I'll buy everything I need and maybe even save some cash* – thought the pensioner passing a supermarket.

Even from a distance Edward realized something was amiss. A big commotion in front of the chemist's unnerved him. When he approached a young hostess welcomed him at the door and handed him a red balloon:

- *We're inviting you to use our special offer for a drug treating enlarged prostate. "Prostomal" will alleviate your pain* – she stated after which she smiled gently.

- *Thank you miss, but fortunately I have no problems with it* – he replied a bit embarrassed. Inside the chemist's he encountered a ten persons line. He joined it at the end remembering the times of the queues of the past age. Luckily there was his next door neighbor Alicja standing in front of him.

- *Oh, good morning Alicja* – he said – *what do all these people want to buy?*

- *Good morning Edward, it's a sale day today. You can buy any medicine you want for half the normal price.*

- *But I'm almost fine. Only the problems with hypertension.*

- *Whatever Mr. Edward. Maybe they'll come in handy one day. Here's the list: for diarrhea, flu, insomnia, hypertension, low blood pressure and whatever you need. Forty positions or so* – informed the neighbor.

- *So maybe it's worth buying if it's half the price...*

The meeting between the Minister of Welfare and the Minister of Finance at the Prime Minister's office was long expected by all sides. It is high time to regulate certain issues, which were promised during the election campaign.

*Gentlemen* –the Prime Minister initiated – *do present how your ministries would like to solve the situation on the reimbursed medicines market.*

*Maybe I will start, Mr. Prime Minister* – began the Minister of Finance – *government prices and margins of reimbursed medicines, a ban on pharmacies promotion and advertising as well as incentives such as e.g. gifts for patients and doctors – are the most important changes introduced by the reimbursement bill which came into effect on 1.01.2012.*

*Fixed prices and margins of reimbursed medicines are supposed to provide equal access to medicines, since not all pharmacies, particularly in smaller towns, use promotions for its purchase – interjected the Minister of Welfare. What is more, until now the pharmacies included the medicines financed by NFZ (National Welfare Fund) in their promotions, you could purchase them for a symbolic 1 PLN. It resulted in a situation when the patients were encouraged to buy medicines not because they were needed but because they were cheap, because the state reimburses it. Because of that, the patients bought medicines they did not need.*

*- Setting the limits for reimbursed medicines is an important solution introduced by the bill. They concern the size of sums limiting their reimbursement. In case when the retail price is higher than the set limit, the patient is to cover the difference – interjected the Minister of Finance.*

*- All right, please show me practical solutions in case of the scandals connected to tightening the cooperation between hospitals, doctors, pharmacies and pharmaceutical companies – interrupted the Prime Minister.*

*- Well... - began the Minister of Finance – as we all well know from the reports presented to us, the producers of reimbursed medicines directed certain incentives to doctors and patients. Substantial donations, gifts and presents in return for maintaining loyalty programs were bestowed upon hospitals. The new bill deems such practices illegal, simultaneously introducing a ban on pharmacies promotion and advertising. In further perspective it is supposed to exclude pharmaceutical market participants from mutual competition for the patient, who cannot be treated as a consumer in this context. In addition, from now on, the pharmacies will be required to sign agreements with NFZ, in which they will commit themselves to follow the prices included in the Minister of Welfare's announcements, containing lists of reimbursed medicines. It will curb the price willfulness of pharmacies, since administrative penalties for having higher prices and margins which are higher than the fixed will be in force – interjected the Minister of Welfare.*

The Prime Minister got up from his chair and approached the window. In silence, he glanced at a tree in front of the Council of Ministers building, then faced his guest and said:

*- Gentlemen, your reports are insufficient... I request a summary in a broader context. What will cause the introduction of a government price on the medicine market both for consumers and producers?*

*- Mr. Prime Minister, maybe this question should be asked to the Minister of Economy...*

### **Questions:**

1. *What are main reason to implement government price at market? Are there any differences between minimum and maximum prices?*
2. *Describe the real perform markets where government prices can be seen.*
3. *What should be the decision of the Prime Minister?*
4. *Do you think the free market is always better then state regulation?*

## Does raising price on cigarettes reduce number of smokers?

**Valentyna Oberemchuk**

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Do you smoke? No? Sometimes? Regardless of whether you smoke or not, we are interested in your opinion: is demand for cigarettes elastic or inelastic? Are cigarettes a major need for smokers? Let smokers themselves try to answer this question. Are there any close substitutes for cigarettes? Candy? Lollipops? Chewing gum? Alcoholic beverages? If only these were so wonderful substitutes, we would not have so many people still smoking. In general, it is safe to say that demand for cigarettes is inelastic. How inelastic? If you are really interested, let us after a brief review of existing researches select the correct answer to the question: "Can price increase on cigarettes make quit smoking?" Yes or no?

Let's face it: now smokers have less pleasure from visiting various public places. In light of a certain discomfort that almost everywhere they go, they encounter restrictions on smoking and an inscription: «No Smoking». Yet they may further get upset that price of a pack of cigarettes has increased many times over just a few years. In these circumstances, one would assume that very large number of people have gave up smoking.

However, the results of the review of the world tobacco market indicate that the market is dynamic and total production and sales of cigarettes continue to rise. [3]

Studies of renowned scientists Michael Grossman, Gary Becker, and Kevin Murphy [ 1] emphasize that increase in price of cigarettes by 10% reduces consumption of cigarettes among adults by 4% in the short term, and by 7.5 % over a long period (more than five years).

Results of research of individuals who smoke, allow to assess how different groups respond to changes in price of cigarettes. Young people often smoke occasionally, do not have too much dependence on cigarettes. Experts estimate that the elasticity of demand for cigarettes by young people is about three times higher than that for adults and ranges from 0.9 to 1.5.

In a survey of about 25,000 teenagers, researchers Donna B.Gilleskie and K Coleman S.Strumpf the University of North Carolina found that tax increases by only \$1 per pack would reduce the likelihood of smoking in this age group by half. [2]

In this regard, there is also the issue of public policy in the manufacturing of cigarettes and public health. Ministry of Health continues to remind us on every pack of cigarettes that "Smoking Kills". Also, in newspapers, magazines and online publications we find a description of various diseases and horrible things that smoking will do to us. This is probably an effective measure to stop smoking for those consumers who care about their health and longevity.

But even more effective would be the introduction of high taxes, two or three dollars per pack of cigarettes, as there is in Canada, UK, Ireland, Denmark, Norway and some other countries. Canadian tax of \$3 per package (which is going up all the time) [2,4] has helped to reduce per capita consumption by more than 50%.



**Questions:**

- 1. So, have you changed your opinion about elasticity of demand for cigarettes?*
- 2. Can you now give a negative or arguing answer or perhaps you need to analyze all the possible categories of customers: adults, young people, teenagers, women and men, to take into account a country where the consumer resides, time period (long or short) and more.*
- 3. Does raising price on cigarettes reduce number of smokers?*
- 4. Answering this question, please indicate factors that prove inelasticity of demand for cigarettes and factors that support the idea that the demand for cigarettes is elastic. Based on this information, please, substantiate your point of view.*

## Vending machine pizza

Jarosław Korpysa

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Jacek was going to his classes as he did every Monday. The trip took him app. 20 min by bus. When he was alone he usually listened to the radio or read a newspaper. This time was totally different. While leaving his house he heard on the radio that some XEK foundation is offering young people willing to start a business 50 thousand dollars for a start. The lack of age conditionings and preferences in the field of education of future entrepreneurs was significant. Jacek was a student of the second year but he has always dreamt of his own business. He wanted to produce pizza machines which would work just as beverage vending machines. Everybody willing to eat pizza would put a set sum of money in and within a couple of minutes would get a ready product. In spite of having a good product, he was still struggling with having insufficient funds. As soon as he heard that XEK foundation will finance the best 45 ideas for a business he immediately thought that this offer was cut out for him. Going to the university he decided that during the very first break he would phone the foundation and ask about the details. Impatiently he was waiting for a physics lecture to end. Suddenly the professor asked: *Are there any questions?* He added after a while: *if not thank you for your attention.* At this moment Jacek started dialing. After a short while he heard a voice in the speaker:

*Good morning, XEK foundation, how can I help you?*

*Good morning, my name is Jacek Lech. This morning I heard on the radio that your foundation is going to financially support people who have an interesting idea for creating their business. Please tell me what requirements should I meet for my application to be taken for consideration?*

The lady from the foundation replied.

*First of all an innovative idea counts. It is supposed to be proven that the planned business have chances of succeeding on the market. Thus you are supposed to show in front of the assessment board the clients' adequate demands for the product or service, which will generate income exceeding the costs related to the production of the offered goods. Please, remember that the meeting with the experts has been scheduled for next week, that is Monday at 4 p.m.*

Jacek was pleased to hear that because he finished classes at 3 p.m. on Mondays so he would not have to skip lectures in order to go to the presentation. I decided to ask about one more detail.

*Thank you for a very exhausting answer but do you have a sample outline of a conversation with the assessment board? I would be grateful if you could send it via e-mail.*

The foundation representative confirmed that such a document existed and it was immediately sent on his e-mail.

In the afternoon Jacek opened his mailbox. Among many messages he spotted an e-mail from the foundation with a presentation outline attached and decided to open it at once. There were questions at the end of the message which were to be answered by each participant. Having read them he sat at the computer and started looking for the necessary information. At the beginning he decided to determine the clients profile. A report produced by a research agency dealing with the food market analysis came in handy. Reading the report, Jacek learnt that in Poland despite still growing consumer awareness in the field of

healthy nutrition in case of 76% of citizens pizza is still the most popular meal delivered to home, and among people eating out 91% reports the very pizzeria as the restaurant of their primary choice.

People aged 18-44 are mostly pizzeria patrons. Consumers aged more than 45 prefer to prepare their pizza themselves at home. Additionally, the latter dislike buying frozen pizza at all, whereas consumers aged 18-44 sometimes do it. Pizza eaten in the pizzeria, followed by delivered pizza is most popular among the Polish consumers. It is probably connected to active and fast lifestyle represented by these groups. The least popular are frozen pizzas and pizza bottoms. It is important that the clients like getting a big pizza for a small price. Unfortunately a low price of a product is usually correlated with its low quality. Moreover, they prefer service in the shortest time possible. They find waiting for the ready product an irritating experience. It is significant that a monthly expenditure on pizza is statistically 12 PLN per capita annually. Additionally, the observation of the pizza market shows that the most important factor influencing the demand is still the price of the product. Thereby clients change preferences to pizza producers depending on the price. If the prices are high they switch to a cheaper producer. An interesting aspect is that the material status of clients has no influence on pizza purchase. Well off people buy the product in the same amounts as the rest. However, it can be observed that more pizzas are bought in Autumn and Winter than in Spring or Summer.

Bearing the above mentioned information in mind Jacek made an appointment with a mate who is a pizzeria owner. At the beginning he said: *Tomek thank you for this meeting. I'd like to hear your advice on my business project. I'm planning to start a business manufacturing pizza vending machines.*

Tomek asked: *Jacek, but who will be your client.*

Jacek replied – *People aged 18-44, preferring to have their product ready with a couple of minutes. My offer is addressed both to the people earning more than the national average income and the people who earn minimum wage. The price will be suited to clientele capabilities.*

Then Tomek asked – *What about the competition?*

Jacek retorted – *I have none. My only threat are pizzerias and restaurants serving other dishes besides pizza. However, I think that my pizza will be exceptional, because I want the machine producing it to be made from best quality materials and semi-finished products. Moreover, my company will use the most modern technology at the production.*

Tomek smiled and kept asking: *Jacek, how many pizzas a day will your machine produce? What will be the demand for the offered products.*

Jacek showed market tendencies on his laptop, which represented market demand and vending machine pizza production trends.

Daily demand	Price	Daily supply
30	4	13
26	6	26
24	8	28
20	11	43

Tomek looked at the table and asked: *Do you know what other factors, besides the price and the cost of production should you include?*

Jacek replied: *Yes I do. In addition to all that I must consider the perspectives of the pizza market development in Poland. Moreover, it's important to determine the number of specialists who will be needed to manufacture a given number of the machines. Is there anything else I should include...?*

**Questions:**

- 1. Calculate the supply and demand determinants for the pizza market and explain how they can influence the demand and the vending machine pizza production.*
- 2. What other demand and supply conditions apart from the abovementioned could be pointed out?*
- 3. Determine the law of supply regarding the vending machine pizza.*
- 4. What might be the barrier price for the vending machine pizza?*
- 5. Do you think that the production at the given daily demand of 20 pieces makes sense? Justify your opinion.*

## Biotechnological revolutions

**Tomasz Bernat**

University of Szczecin, Poland

The increase of the number of the world's inhabitants, constant climatic changes and increasing environment pollution are the causes of diminishing agriculture efficiency. A production which will allow sustainable satisfaction of healthy food demand is necessary. It is necessary to implement new, safer than GMO technologies. The European Commission dedicated over 2 billion Euros for technologies development – up for grabs almost immediately.

*My idea at last has a chance for realization!* Piotr almost exclaimed, having read a headline of a global magazine that have been issued for almost a century. He was a head bioengineer and simultaneously a manager in “Biotech Farm” – a local company. His enterprise was created less than a year ago as a university spin-off, established by three mates from a biochemical faculty. They have designed a new technology as a result of their research which caused seeds to sprout faster, give higher yields and to be more disease resistant. At the same time the grain was not genetically modified.

In recent years, the agriculture has been dominated by genetically modified seeds, delivered by a global tycoon – Monsanto company. This manufacturer's products were available in almost every country in the world. The main emphasis was put upon economically developed countries assuring not only the very sales but appropriate prices as well. Not until the broad scale implementation of the food safety policy and the ecological products popularity did the genetically modified products stopped being so widely wanted. What is more, countries started regulating agricultural policy banning or limiting to a significant extent the access of the modified products to the market.

*Jacek! Piotr exclaimed, do come! We must talk about the possibility of the realization of our technology for boosted plants growth. Hey, have you heard the morning news about a new funding path for such research as ours?* He asked impatiently as soon as Jacek entered his office. Jacek was a director responsible for the company's finance. *In my opinion, it is a great opportunity for us! We have an operational technology together with a research project for its development as well as the old project of a grant application. We only have to wait for the announcement of the call!*

*I know, I know!* replied Jacek. *I've heard and read about it. However, do you remember why our last, how you call it “old” application didn't qualify? Too much optimism, too few facts! That's what they wrote in response!*

*I agree with you, but now we have different times, different goals, different tasks, different environment, and we are way smarter. Listen, we must just apply ourselves better to this grant. Can we meet in an hour to discuss the essential points, which prevented us from winning the last time? We'll do a draft of the crucial parts of our proposal! Ok?*

*All right! I'll be there!*

After an hour....

*Jacek, and what do you think of our old project and its assessment in relationship to applying for a new grant? Is there anything that has captured your attention?*

*Oh yes, a couple of important elements. You know, these postgraduate studies in economics at the university, made me look at our project from a different angle. I can see a few flaws of economic nature, concerning chiefly our offer and proving that we're capable of profiting from it.*

*So I'm all ears!* stated Piotr, grasping a pen and sheets of paper in order to take notes. *Do go on!*

*Piotr, I've noted a couple of important elements, discussed after all by our reviewers, which are not polished. First of all, the matters of demand. We had written in the previous application that we expected a substantial interest in our product among farmers in Poland and Europe – for a start. And only that. I think we have to significantly deepen our analysis including the factors influencing demand.*

*What do you mean?*

*You know, such elements as the number of farmers interested in buying our products – you know, for example not everybody sows the corn! The factors inducing them to buy our product, and thus influencing the demand are also important. Furthermore, we'd written that our product wouldn't have any such technologically advanced equivalents, so we'd have no competition. I think it was our big mistake. I know from my studies that not only is the direct competition important but also the potential one. The level of our offer depends then on many factors which will influence us.*

*You mean for instance the offer of Monsanto? They have similar products, not of such technology as ours, but still to be treated as competitive?*

*That's right, stated Jacek, our consumers will always compare our product with theirs, and it's enough to treat our market as competitive. At the same time we mustn't forget that Monsanto is a gigantic company with great capabilities at their disposal. Therefore, we must pay special attention to the factors determining our future supply. The sale price of our products is another substantial matter. You know, it makes me laugh when I'm reading what we had written. Our price will be "competitive". Firstly we said we had no competition and then we wrote about the competitive price. What's more we mentioned nothing of the price shaping itself on the market. Knowing that the European Commission is currently taking actions supposed to boost competitiveness increase, we can assume that the market will be fully competitive. So the price will be set as a result of the market mechanism taking place.*

*It must be some kind of nonsense!* exclaimed Piotr. *But we all well know that Monsanto as the leader fixes the level of prices! We can only adapt to that!*

*I know that, however, as the examples of the markets dominated by individual companies show, introducing new technologies have always forced lowering the prices and decreasing the power of these companies. Just have a look at the telecommunication market and providing the Internet services. At the very beginning our sole provider TP SA, that is Orange today, was the only company and it fixed both the prices and the level of sales. Today, in spite of its still significant market power, it doesn't have such capabilities*

anymore and a lot of new businesses have occurred on the market. I think that such a future awaits us too. Do have a look here, I've estimated the potential prices of our products together with the levels of their demand and supply on our market:

Demand (in thousands of items)	The price of a package	Supply (in thousands of items)
100	450	0
95	500	40
90	550	60
85	600	85
80	650	95
75	700	110
70	750	130

You can see how the estimates look like. 560 PLN for a package is the breakeven price at which we start making profits. So if we're able to achieve it we'll have a great opportunity of acquiring capitals for further development.

I can't make heads or tails of what you are presenting here Jacek. All right, assuming that we really manage to make profits what happens when the Ministry of Agriculture introduces administered prices for our products. It happened very often in the past. As far as I remember the administered price for a similar Monsanto product was 500 PLN per package. What then?

Yes, we have to take it into account. For all I know, deficiency payments for producers are introduced then. We'll get the payback but, nonetheless, the market will not be in balance any longer. Piotr, apart from that, we must also take the changes happening on the market into account. Looking at the recent past I've figured out that we must take two main change factors into consideration: introducing new technologies (similar to ours) by our competitors and the increase in the society affluence manifesting itself, among other things, in the situation that the people who can afford to buy something more expensive are more concerned with the products safety and quality. We must make sure we include this in our business plans.

You know, what you've been saying is really interesting. I've read recently about the study revealing how much the demand will increase if consumers' income raises. Economic prognoses show that the level of an average monthly income will rise from 4000 PLN to 4400 PLN in the near future.

You're right, Jacek interrupted, in this case I estimate at least 15% rise of the demand resulting from that. However, I don't really get how it can affect us. I mean is it good or bad? Because, if in relationship to this, the balance price at which we'll sell our seeds will rise by 60 PLN and the demand will fall from the current level to 81 thousand pieces, will we be able to continue rising our price then or rather abstain from it? We'll have to analyze these problems in our new project.

Piotr, the things I've presented are the key questions we have to consider from the economic angle. There are also a couple of technical problems, but we'll deal with them as

soon as we have a look at the grant application form. Maybe we'll look for a university partner for cooperation, which would present our greater capabilities.

**Questions:**

1. Calculate the supply and demand determinants for this case.
2. Determine the level of market balance and represent it on a graph.
3. Determine how the level of balance will change in the above-mentioned situation of on the market.
4. Determine and interpret the demand's income elasticity factor.
5. Determine the producer's price strategy in relationship with the value of the price flexibility of demand.



## The Food Stamp Program in USA: the Impact on the Consumer's Choice

**Yeliena Prokhorova**

Kiev National Economic University named after Vadym Hetman, Ukraine

Outside the social security office in a rundown area of Washington, Jamie Cremeans, 31, sits with her boyfriend smoking a cigarette, waiting to pick up the benefits that keep them afloat.

Her boyfriend, who is partially blind, has been receiving disability benefits for years, but Ms Cremeans is new to this. Like millions of other Americans buffeted by the financial crisis, she is receiving food stamps for the first time, now part of a multibillion-dollar benefit recently renamed the supplemental nutrition assistance programme, or SNAP.

Ms Cremeans started to use the programme when the couple moved from southern California to Washington to find work after she, like thousands of other middle-class Americans, lost her job in the recession. "We moved ... because there's no work there," she says. "I just wanna work; I probably apply for five jobs a week."

The average SNAP allowance is \$130 to cover a month of food, an amount Ms Cremeans says is insufficient. "We never have enough food, sometimes we just go without, but there are a lot of different programmes, lots of churches help out with food." The programme is available to anyone under the government's designated poverty level who does not have more than \$2,000 in liquid assets or own a home. It is dispensed through a debit card which is topped up automatically at the beginning of the month.

What is SNAP? In most countries, the governments use a variety of programs to subsidize the most urgent expenses of the poor. In the United States since World War II, a program of "food stamps" exists. If you try "SNAP" or "food stamps" in Google, you can find the next information.

Supplemental Nutrition Assistance Programme (SNAP) is America's most important welfare programme, the main task of which is to provide the minimum rate of food consumption by the poorest American citizens. SNAP is supervised by the Food and Nutrition Service (FNS) agency of US Department of Agriculture's Food, Nutrition, and Consumer Services.

### *A Short History of SNAP*

The *First Food Stamp Program* (FSP) existed from May 16, 1939 until spring 1943. The program operated by permitting people on relief to buy orange stamps equal to their normal food expenditures; for every \$1 worth of orange stamps purchased, 50 cents worth of blue stamps were received. Orange stamps could be used to buy any food; blue stamps could only be used to buy food determined by the Department to be surplus.

The program ended "since the conditions that brought the program into being: unmarketable food surpluses and widespread unemployment no longer existed."

*Pilot Food Stamp Program*, May 29, 1961-1964. The pilot programs retained the requirement that the food stamps have to be purchased, but eliminated the concept of special stamps for surplus foods. The emphasis was on increasing the consumption of perishables.

Development of *Electronic Benefit Transfer* (EBT): 1988-2004. Electronic Benefit Transfer is an electronic system that allows a recipient to authorize transfer of their government benefits from a Federal account to a retailer account to pay for products received. EBT eliminates the cumbersome processes required by the paper food stamp system. By eliminating paper coupons which could be lost, sold or stolen, EBT may help cut back on food stamp fraud. EBT creates an electronic record of each food stamp transaction, making it easier to identify and document instances where food benefits are exchanged for cash, drugs, or other illegal goods.

Spending on food stamps has more than doubled to around \$80bn a year in the wake of the 2008-09 recession as they are the frontline anti-poverty measure for working age families. In 2011 44.1m Americans were fed in some part by SNAP, the highest number in the 50-year history of the programme. As the US continues to reel from stubbornly high unemployment, the number of US citizens using the programme has ballooned from 2008 to 2011 by almost 17m, an increase of 61 per cent.

The Department of Agriculture estimates that every \$5 of Snap money spent in the local community generates \$9 of economic activity. Very few people can afford to save their food stamps.

At current levels only two-thirds of those eligible for SNAP enrol, meaning 59m Americans qualify for the benefit, or about a fifth of the population. Among minorities that is even higher. In 2006, the last year, for which there are records, 44 per cent of Snap household heads reported their race as Hispanic or African American, while they comprise 29 per cent of the general population.

Jamie Cremeans was surprised to read, that in 2013 this welfare programme was at the centre of a political tug-of-war as a leading think tank called for reforms to strengthen food stamps, including a 30 cent rebate for every dollar spent on fruit and vegetables. Diane Schanzenbach, author of a report published by the Hamilton Project, said that random controlled trials showed a subsidy for fresh food could boost consumption by 25 per cent among low-income households, with significant health benefits.

Food stamps are the main obstacle to passing a long-delayed farm bill through Congress. House Republicans want to cut \$40bn over the next 10 years – on top of the recent expiry of some benefits – while Senate Democrats are offering savings of \$4bn.

In further evidence of the political gulf, Ms Schanzenbach wants to make it easier for unemployed adults to get food stamps, while Republicans want to make it harder. At present, able-bodied adults without dependants can only get food stamps for three months in every three years, but states can apply for a waiver in times of high unemployment. Ms Schanzenbach argues instead for keeping the waivers and expanding eligibility to six months in every year, arguing it can take many months for someone in long-term unemployment to find a job (recall Jamie Cremeans case), and that they should receive a nutritious diet while looking.

### **Questions:**

1. *Imagine the typical budget line of the consumer, who spends money on two goods: food and all other goods. How would be changed this budget line after the consumer will*

*receive food stamps? What impact on the consumption of food will have using of food stamps?*

*2. Using graphics illustrate how the mechanisms of using food stamps in 1942, 1962 and in 2013 affect the changes in budget line and the consumer choice.*

*How can you estimate the effect of SNAP on the consumer's choice and the consumption of the food by the poor people*

## Is the consumer always right?

**Yuriy Bilan**

University of Szczecin, Poland

Marat (father) and Stefan (son) are discussing current affairs at breakfast.

**Marat:** *I'm leaving on a business trip for a conference on the problems of modern economic development, market characteristics and competition. And what are your plans?*

**Stefan:** *Strange coincidence. I must also do economics. Stashevskiy and Ivan instructed me to prepare a practical lesson, like business games on the topic: The concept of the consumer in economy. I do not know what to start from?*

**Marat:** *I think you should first understand the topic yourself. Anyway, you should identify the main issues and then on come up with tasks on these issues.*

**Stefan:** *I guess the main or first question should be put like this: Who is the customer? What place the customer occupies in the economics?*

**Marat:** *That's right. But I think that we should all consider the problem of needs. Abraham Maslow talked about the pyramid of human needs. Maybe you split session into two parts: first, discussing theoretical issues - the notion of the economics of the consumer, the needs and the rights. And then give a practical task to the participants of the seminar.*

**Stefan:** *Yes, we will try.*

**Some time later.....**

**Stefan:** *I have prepared a response to the question - who is the consumer? Briefly, this can be expressed as: Consumer is a citizen having an intention to order (buy) and use the goods (works, services) only for personal use, non-profit making.*

**Ivan:** *That is, it means that in the today world every person enjoys things that he/she bought for money. We all are consumers. It turns out that the seller behind the counter is also a consumer? The seller also acquires goods for own needs. And even the president of the country is a consumer, as the costume he wears is not sewed be him.*

**Stefan:** *The customer is not only a man who has acquired goods and uses it, but one who is just going to make it. This means that if we approach the dealer to show the goods and tell about its properties, we become a consumer. And what have you prepared?*

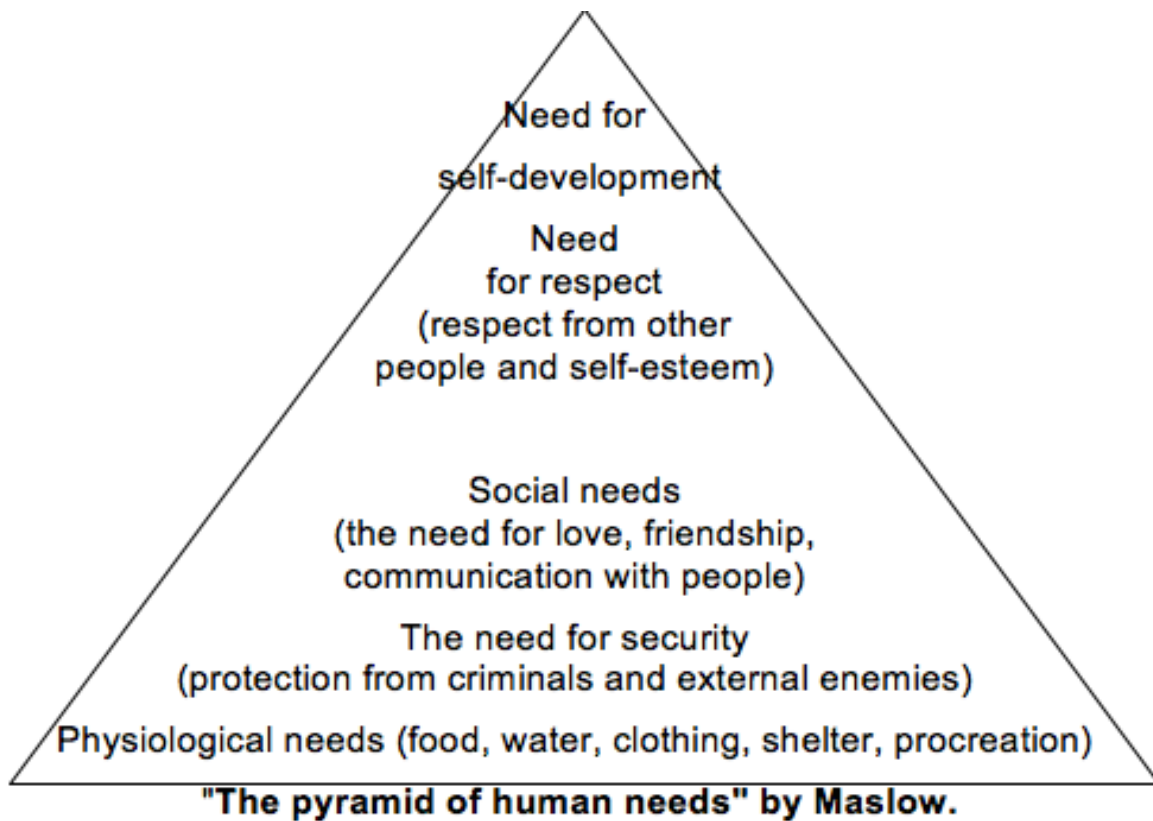
**Ivan:** *I have studied the concept of needs, but I still have a bit to prepare. Come next time.*

**Next time.....**

**Ivan:** *I have understood that, firstly, the consumer seeks to meet own needs through the personal use of useful qualities of economic goods and services. But he cannot do it always. He is limited in income and prices. Secondly, the problem of satisfying the needs related to incentives. And they, in turn, depend on external factors (the state of the*

business environment, market conditions, pricing, etc.) and on the primary motives – buyer's desires. See, how everything is intertwined.

**Stefan:** The very needs are diverse. Briefly it portrays Abraham Maslow's pyramid. We can prepare and demonstrate a drawing at a workshop.



**Ivan:** Then there's another concept – consumer sovereignty. Every consumer decides by himself- to buy a product, find another, more suitable price and quality, and he can also refuse to buy anything at all. Buying or not buying is the independence of consumer decision-making.

**Stefan:** Are there any factors that limit the sovereignty of the consumer?

**Ivan:** Of course. Briefly they can be characterized as follows:

- monopoly of producer s
  - unprofessionalism of consumers
  - misrepresentation
  - formation of consumer preferences through aggressive advertising.
- Perhaps there are more of them.

**Stefan:** Let's give the tasks to characterize consumer rights. Each participant determines what rights the user obtains, and we will be able to generalize the data.

**Ivan:** Good idea.

**Later.....**

**Marat:** *How was your seminar?*

**Stefan:** *Has not passed yet, we are still preparing. Message and one question for the group are ready. We will discuss the notion of consumer needs and ask the group to describe the rights of consumers.*

**Marat:** *You can still discuss the behavior of consumers in the market environment. For example, a consumer buying a particular good, spend different amounts of money, as each good has its own good market price. For a fixed personal budget and unchanging current prices for goods a consumer is governed by the rule of common sense: due to the marginal utility of any product he is trying to maximize the total effect of the consumption of all purchases. You may want to consider the indifference curves and give the task to represent them in different situations.*

**Stefan:** *Thanks for the idea.*

**A few hour later.....**

**Stefan.** *After reading a variety of materials about consumer behavior, I realized that evaluation of the marginal utility of goods for consumers can be done in terms of money or quantity of goods.*

**Ivan.** *I am also interested in the theory of consumer behavior. English economist F. Edgeworth introduced the term "indifference curve" at the end of XIX century. The method of studying individual consumer demand with the usage of indifference curve was first used by the Italian scientist V. Pareto in early XX century. The method relies on the geometric alignment of the two types of curves – the so-called budget lines and indifference curves. Do you know something about it?*

**Stefan:** *Yes. I know. Budget line shows the changes in the price of goods, respectively, reflected by the slope of the curve. Budget lines give an answer to the question: what consumers can afford, with a certain level of income, taking into account the level of commodity prices. Desire to buy a certain amount of goods reflects consumer preference. It is described by the indifference curve.*

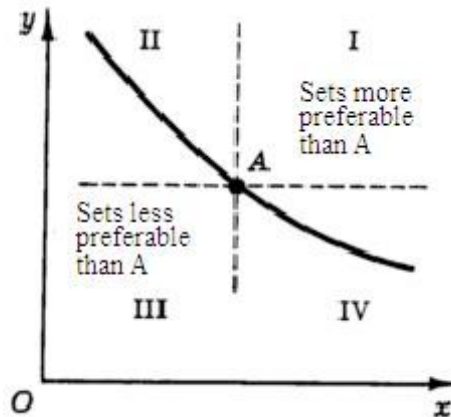
**Ivan:** *We can prepare graphic preferences of a customer, e.g. such a table.*

Combination	Products	Clothes
A	7	3
B	6	4
C	5	5
D	4	6

*Consumers are limited in their desires by personal budget. Each indifference curve reproduces a specific set of products that have the same utility. That's why the consumer is therefore careless which set of options to choose. For example, there are 4 types, consisting of two groups of products – clothes and products. Buying food and clothing to meet their needs, the users can combine them in different quantity ratios, rank.*

**Stefan:** *As can be seen from the table, all four options are virtually identical set of goods, and therefore are characterized as a set of indifference, which gives the consumer the same level of satisfaction.*

The figure shows the indifference curve, which is obtained by connecting the dots, characterizing sets of benefits (for the consumer does not care which of these sets to choose). Indifference curves of all possible sets of benefits represent indifference map.



**Ivan:** It is necessary to note that all indifference curves have a negative slope.

**Stefan:** I think the task is clear.

### Questions:

1. Define what is indifference curve and budget line.
2. Draw indifference curve for the goods  $x$  and  $y$ , and characterize the benefits of goods preference in quadrants I, II, III, IV.
3. Draw indifference curves for tightly complementary goods (two seals, two shoes) and perfectly interchangeable commodities (aspirin of different manufacturers)

## White or dark?

**Tomasz Bernat**

University of Szczecin, Poland

Jacek and Agata a couple married for almost 10 years, went shopping to the hypermarket as they did every week. Daily work duties and very late returns home during the week, resulted in the couple being forced to buy food at weekends. It caused the necessity of planning the shopping in advance in order to avoid shopping sprees and buying in excess. On this occasion the trip to the shop was not preceded by making a shopping list.

*Agata as usual in such cases complained about her husband: Again we haven't made the shopping list because of you! Did you have to stay at work that long? I bet this secretary of yours – Julka detained you. You couldn't resist her long eyelashes again? Now we're going to spend half a day in the shop because of you! And we were going to visit my Mummy in addition!*

*But love, Jacek began, it's true I stayed at work longer but as I had informed you before, I had an important meeting with our strategic client! Don't complain, please. We're going to try to do the shopping ASAP and we're going to visit Mummy immediately afterwards. He knew everything will end up in a row, but he attempted to prevent it nevertheless.*

Meanwhile they managed to reach the shop. In spite of the hordes of shoppers all was going smoothly. After putting almost all the staples into the trolley, the last thing was the shelves with baked goods.

*Agata, are we taking the baked goods supply as always? Asked Jacek.*

*Yes, but this week I'd like more dark rolls, preferably all, because the ones you bought the last time were not tasty.*

*All right, all right, but let's buy a bit of white bread I like more, too.*

*Jacek, but do you remember our last discussion concerning healthy nutrition? The specialists say one must eat healthy dark bread! But you're always talking about the white.*

*Well, but I like it and I'm healthy. Said Jacek flexing his muscles and displaying a radiant smile. So how many rolls would you like?*

*I think 16 should be enough. We eat two a day, plus 2 in stock.*

*Wait a second! But you've forgotten about my favorite bread rolls! I'd recommend buying fifty-fifty, 8 of each kind. I'll have mine and you'll have yours!*

*Jacek have you forgotten that you've promised me to try and eat more healthy? The time is now! Wake up darling!*

*Ok, I agree on 9 dark and 7 white rolls.*

*Don't be funny! It's not a change at all! I suggest you eat dark bread at least every second day!*



*It means...started Jacek grabbing his calculator, that we must buy...click, click, click he calculated aloud, that we have 3 days when I eat these rolls, that is 3 plus and 3 minus. It gives us 11 dark and 5 white rolls. Happy? He spoke mockingly. I'm NOT completely. I'd rather prefer if I bought my favorite and delicious rolls! On is ok, two are way better than one but three are just awesome – needless to say daily! I wouldn't eat four. It's too much even for me. He concluded with a full smile.*

*Well, you could at last get to like healthy food. But for now let it be! I'll forgive you a few of these bites of unhealthy food.*

*So it's a deal! Let's buy! But look how expensive your food is! My roll costs only 0,4 PLN but yours as much as 0,8 PLN.*

*Oh be still! You've been given a rise recently so these additional 2 PLN will not ruin you!*

*Hmmm, I don't know Jacek continued to tease. Are we buying bread as well? Ah yes, but which?*

### **Questions:**

- 1.Explain what is utility theory and indifference curve theory.*
- 2.What are differences in both consumer's theories and what are similarities?*
- 3.Draw an indifference curve graph for this example base on white and dark rolls.*
- 4.Calculate the level of budget for Jacek and Agata referred to this purchase.*
- 5.Write a budget line onto the indifference curve graph and indicate the optimal solution.*

### **Teacher's note**

- 1. Briefly discuss the consumer theory issues. Relate to the utility theory and indifference curve theory.*
- 2. Ask students to remind the basic rules and principles of these theories.*
- 3. Briefly discuss a case with emphasizing the very problem of economic choice. Pay attention to utility as a measure of the consumer's satisfaction. Request finding the fragment with justification, where the utility as a measure of the satisfaction is explicitly indicated.*
- 4. Relate to the indifference curve theories. Based on the conversation between Jacek and Agata concerning the number of the bought rolls, ask to create an indifference curve.*
- 5. For every set of rolls discussed in the case, calculate the level of budget. Ask for determining the optimal budget in this choice. Put the optimal budget in the form of a budget line onto the indifference curve graph.*
- 6. Ask students to present a similar choice from their own experience.*
- 7. Conclude everything.*

## Production of computer software in a SaaS model

**Marcin Mastalerz**

University of Szczecin, Poland

*Begin* is a company that produces computer software based on the web technologies. It has been operating in the IT sector for several years. Its target group consists of individual customers as well as small enterprises which order solutions tailored to their needs and business requirements.

In the first years of its operation, the company carried out mainly one-week projects, meeting customers' requests for individual IT solutions which were built from the very start without using any repeatable components. To accomplish such a project, it took the three-people team 10 hours of intense work a day, 6 days a week. Profit generated for the company as a result amounted to 50% of all expenditures on a project. After completion of each project, a break was needed for the team to rest. Hence, they were able to complete only three projects a month. Employees could not endure that work style, so they usually quitted the company after several months. Such work system lasted for a couple of years but then the owner realised that constant searching for new team members as well as training them was extremely expensive and risky at the same time. Information technologies were developing, which resulted in longer period and higher cost of introducing new members to the team. Specialised candidates were charging more and more for their services, which finally led to the drop in the company's profit to the level of 25% of total expenditures. In the end, it turned out that it was impossible to increase incomes by accomplishing more projects or putting the prices up.

Concerned with such a state of affairs, the owner decided that the way the company operated should be changed and a contemporary method how to provide its services should be introduced. He chose to implement the new software delivery model - software as a service (SaaS). It required designing a complicated information solution which could be used by many clients simultaneously and the expenses of adjusting the solution in question to customers' needs were to be considerably low, only 10% of the profit. In SaaS model, a customer pays for the access to a certain service (functionality of the system) and does not need to buy the whole product, which may have a considerable impact on lowering the price and acquiring new clients.

Unfortunately, initially such an approach requires vast investments that are likely, as it has been estimated, to pay off only in four years' time. Building the basic information solution that enables implementation of SaaS model is planned to take a year. Thus, the first incomes may appear only after a year, however, they are expected to grow systematically. In two years' time, the first profits are to be generated and they are also expected to grow systematically. The employees are supposed to work 8 hours a day, five days a week. The improved work conditions and the pay level remaining unchanged will probably motivate the employees to stay with the company longer. The company will get a chance for a long-term development.

### **Questions:**

1. *What does short-term productivity mean? Give an example.*
2. *What does long-term productivity mean? Give an example.*
3. *Describe the difference between short- and long-term productivity.*

4. *Is it true that long-term productivity is a more effective way to develop a company? Why or why not?*
5. *When should a company focus exclusively on short-term productivity?*

## To print or not to print?

**Aleksandra Gąsior**

University of Szczecin, Poland

As a result of changes in the higher education bill, much greater emphasis has been put among didactic-scientific staff on the publications giving lots of points. Thereby, one of lecturers Wiktor Kowalski Ph.D. hit upon an idea to organize an issuing of a Faculty Scholarly Book. However, he has not sure if he could assemble a sufficient number of colleagues interested in the publication. So he decided to do a collective publication offering a possibility for publication to his colleagues working at other scientific centers.

Unfortunately his profession prevents him from a total involvement in conducting the entire process connected with the publication. He decided to involve a student of the third year in taking care of the whole process. Looking for a suitable person to assist him, meanwhile he made a reconnaissance of the things one must do to meet all the requirements related to the correct process of scientific papers publication. Using the fact that there was a Scientific Publishing House at the university he met the director and the manager responsible for the correct realization of the publishing process.

Wiktor Kowalski Ph.D. *Good day director. I'm interested in publishing scientific materials in your publishing house. I need detailed information regarding the entire publishing process.* The director of the publishing house. – *I'm glad to hear you've thought of our publishing house. I've invited the editing department manager to our meeting. Tymoteusz will explain in details the criteria you must meet to be able to publish in a Scholarly Book. Tymoteusz, please discuss in details with Wiktor each and every stage of the publishing process. Whereas I will go, if you don't mind, to a meeting with the marketing manager. Should any questions arise, don't hesitate to make Zosia phone me.*

WK.: *Thank you, director.*

The editing department manager: *As the director has mentioned there are a couple of things necessary for a proper publishing process course. First of all, you must obtain a written permit of the book series editor for printing in his scholarly book according to the following requirements:*

- 1. One is to submit a letter to the Publishing Council requesting the assessment of the proposed reviewers.*
  - 2. Then the topic editor arranges the material in one entity sending the articles to individual reviewers dealing within their areas.*
  - 3. The reviewers analyze the submitted material. It must be noted that the reviews undergo double "blind" review. It's important that the articles from your center mustn't be reviewed by the reviewer appointed from your center.*
  - 4. All remarks from the reviewer must be sent to the authors anonymously.*
  - 5. In case of your thematic domain the articles must undergo the statistical editor's assessment.*
  - 6. The corrected articles must undergo language and editing correction.*
  - 7. The composition is the penultimate stage*
  - 8. The material is sent to the editor for a so called audit.*
  - 9. In the last resort the files are sent for printing.*
- Oh! I almost forgot. A cover must be bought, which in case of your book is identical for this series.*

WK.: *Wow! A lot of formalities. I've got a couple of questions.*

EDM: *But of course! How can I be of service?*

WK.: *My first question is of formal matter. Will it not be a problem if the student I'm going to cooperate with will be responsible for all the technical and formal matters?*

EDM: *Obviously not. There's not a smallest problem if only you introduce them personally or they come with a written authorization. However, all the documents will be signed with you as our university employee.*

WK.: *I see. What's most important for me is the price list of all the individual stages. Can you specify how much they cost?*

EDM: *A lot depends on the number of pages published in the book. A part of costs is ascribed to the very book and doesn't depend neither on the number of pages nor on edition. I understand the articles will be written in accordance with the Scholarly Book standard, won't they?*

WK.: *Yes, they will. For all I remember each article ought to be written in Times New Roman 12 pt. paragraph 1,5 line and 10-12 pages including the requirements I've found on the Scholarly Book website, correct?*

EDM: *That's right. If I could suggest something, I'd recommend maximum 650 pages. It's the volume which works well with the soft cover – it's not stitched but glued together – which allows lower costs of production.*

WK.: *Does it mean I'd need 65 authors?*

EDM: *It can be maximum 65 people but it'd be better if it were 64. It will give you a margin in the number of pages.*

WK.: *Therefore, I understand that something within 63-65 authors limit. So knowing the volume how do the expenses shape up?*

EDM: *Going step by step, according to the stages the net prices are as follows, please don't forget we'll add 23% VAT tax:*

*1. The Topic Editor Service: 50 PLN for 200 pages.*

*2. The reviewers: 45,5 PLN per article.*

*3. The Statistical Editor service: 50 PLN for 200 pages.*

*4. Language and editing correction: 9 PLN per page.*

*5. The composition: 5 PLN per page.*

*6. Printing. This stage is partly dependent on the number of graphs and tables in the material as well as on the number of books. But we can assume that on average a book of B5 format (170/240 mm.), 200 p. (NIE ZNALAZŁEM ZADRUK ŚRODKA PO ANG), paper of the inside block offset 80 g., cover 4/0 laminated, soft cover, number of books 100 – cost 760 PLN.*

*7. Cover design 200 PLN net.*

WK.: *I think I have all the data needed for calculation. Thank you for your time.*

EDM: *Thank you, good luck and see you soon.*

Wk.: *See you soon.*

#### A CONVERSATION WITH THE STUDENT

After a recruitment conducted among the third year students Wiktor Kowalski Ph.D. selected a highly communicative, enterprising and resolute student Agata. Having announced the results he had a conversation with her introducing her to the details of the entire undertaking.

WK.: *Welcome Agata. I'm glad we're going to cooperate.*

A.: *The pleasure is mine. I'm glad I could be of some help and earn a bit as well.*

WK.: *For a start you can just call me Wiktor – it'll facilitate our cooperation. Here's how I see your role in the project:*

*For a start we must do the mailing:*

1) *To the people whose addresses I'll give you together with the information about the article standards and a deadline of three weeks for sending the ready material. You must do it within a day. That'll be 65 e-mails – just as many as the authors of the publication.*

2) *Next, coordinating the correspondence, that's replying all the publication participants questions.*

3) *Having received the texts, you give them to the Topic Editor: Wojciech. He'll have five work days to do his job.*

4) *The material you get from him must be given to the Statistic Editor who'll have five work days to do his job.*

5) *After these two stages you'll give the articles to the reviewers, following my and the editors' suggestions. They've got two weeks for delivering their reviews.*

6) *And here things get a bit dicey. After all remarks from the editors and reviewers you must do the mailing with a request for corrections to all the people who'll have received the reviews with some remarks. The authors will have five work days to send the material back.*

7) *After the authors' corrections you'll show the material with the final version of the provisional table of contents to Ula, who will do the language and editing correction. This is the longest and hardest stage. It'll last around 4 weeks of almost constant correspondence and contact with Mrs. Editor. After completion Ula will give the files to Janek for composition.*

8) *Having finished this stage, which lasts a week we do the checking if everything is ok and the material will be sent to printing.*

9) *We'll send the books after a week. The cost of the book sending is 9,5 PLN. It'll be a total 58 people who aren't from our university and the packages must be sent to them. The local people will receive the books personally without any costs.*

W.K.: *You can do the job here at my room or on your laptop in the area of the whole faculty. You have no fixed working hours but all must be done according to the schedule. For the coordination of this project I'm offering you 2 500 PLN.*

A.: *Wow! For sitting at the computer, when I'm online 24 7 anyways, I'll get 2 500 PLN at unlimited working hours. Sounds cool for me.*

W.K.: I'm glad you like the fee. However, before we get down to work we must calculate something. **So you must count:**

1. What price should be fixed for each author:

a) to cover all costs related to the printing at 100 copies?

b) if we would like to make profits of 20%

2. What will be the cost of printing, If we decide to divide the articles into two books of smaller volume? Will the difference in costs be significant?

There is one more calculation that is worth doing. I've stumbled upon an idea that if the book became popular among readers its sales should be considered. I've roughly estimated it already and the result was the price of 50 PLN.

3. What are the costs of printing at various numbers of books printed: 100, 150, 200, 250, 300?

4. At which number do we get a break-even point?

Here's the table, which should be of help during calculations.

TP	P	TVC	TFC	TC	TR	Π
100						
150						
200						
250						
300						

### Questions:

1. Is this venture profitable?

2. At which stage could one try to find savings?

3. Where can you see difficulties?

4. Where can you see difficulties in the realization of the venture?

5. Being a student without a job, would you be interested in organizing the publishing of a collective publication under a lecturer of your faculty?

6. Represent the TC and TR values on the graph and say what is the break-even point.

## Dumplings? “LEVADA!”

**Olena Kyzenko**

Kiev National Economic University named after Vadym Hetman, Ukraine

A thought about dumplings struck Glafira as soon as she entered the supermarket. The day was hard today: Glafira has been working as an office manager of the big construction firm for three years and she is often given high-profile assignments. Being tired she was going to the frozen uncooked food counter, and only one thought occurred to her: “Just fast and tasty.” Having stopped in front of freezers with dumplings she started scanning the assortment packed in bright plastic packages:

- Dumplings Sybyrsky “Try vedmedy”, 900gr. – 54,41hrn;
- Dumplings with pork and beef “Cesar”, 450 gr. – 38,27 hrn;
- Dumplings with pork and beef “Levada”, 1000gr. – 55,34 hrn;
- Dumplings homemade “Lada”, 500gr. – 18,58 hrn;
- Dumplings with pork and beef “Hercules”, 900gr. – 54,41hrn;
- Dumplings with pork and beef “Easy good”, 900gr. – 45,70 hrn;
- Dumplings with pork and beef “Elyka”, 900gr. – 52,69hrn.

It was easy to make a decision. Having no desire and energy to examine the ingredients on the labels, Glafira remembered how she had watched on TV the latest awards for the best achievements in the field of frozen uncooked food production. So, she quickly took a package of dumplings “Levada” and went to the checkout counter to pay for the purchases and get home where she would be able to enjoy her meal and have a rest at least...

Dmytro Volkov, the co-owner of “Levada” group of companies, gazed at the shelf in his cabinet with awards products for various international trade fairs and national rankings on it. Recalling the success story of the family business, he was thinking about himself as a young leader who was educated in the UK and for many years worked in various positions in the company under the guidance of his father. And now he is considering again about the reason why the products of his company have been still chosen and what should be kept in focus to hold the leading position in the future.

His memories were interrupted by Pavlo Napriyenko, CEO and co-owner of “Levada”. He vigorously came into the room, caught Dmytro’s pensive look and said, “Are you remembering the past or making plans for the future?” “We always need to look to the future” - said Dmytro to Pavlo with a smile and showed him the article about the frozen food market of Ukraine, which was given by the head of marketing department last night, in which it was stated:

*“... Group of companies “Levada” is the largest manufacturer of frozen food products in Ukraine occupies a leading position in the market. In addition to workshops on production, the company has a staff of regional and territorial representatives for distribution and three trading houses. Today, “Levada” is about 15% of the market frozen foods and instant food in Ukraine (26% in Dumpling group)...”*

With a smile on his face Pavlo looked through the article and they went together to the boardroom, where the managers of major business units had already gathered for a meeting to discuss plans for next year.



Pavlo started the meeting and gave the floor to Julia Kurkan, director of marketing, who talked about the general market developments.

Competition in the market of frozen food is strong in spite of the fact that this segment of the market is divided between major industry manufacturers TM "Hercules", TM "Try vedmedy" and TM "Levada", the market is represented by products of foreign brands, mostly Russian, network of supermarkets, which open their own culinary workshops, and small regional firms. The range of "Levada" is formed and developed in such a way as to meet the different needs of consumers in the frozen food. The greatest demand among consumers is observed on the dumplings with pork and beef in a red package. These products can identify and name the classics of our production, because most of these dumplings were appreciated by our customers. The study revealed the following market segments of dumplings price: low 18 - 30 hrn. per 1 kg., middle - 30 - 50 hrn. per 1 kg., high - 50 - 60 hrn. per 1 kg. and premium - more than 60 hrn. per 1 kg. In Dumpling group the fierce competition in the upper price segment still continues due to the gradual movement from cheap consumer segment to the more expensive and high quality one. To strengthen their competitive positions, businesses need to improve the quality of products, maintain competitive prices and expand the assortment.

The discussion began.

*Levada" product range is constantly expanding. High demand is supported by excellent taste and consistently high quality of our dumplings - the sales director began the discussion.*

*Therefore our company conducts quality control at all stages of production - supported him the quality director. - The quality of the finished product is confirmed by corresponding certificates.*

*"Levada" carefully selects only eco-friendly raw materials for the production - said the supply director.*

*Retail provides more than 70% of sales- said the director of logistics. - Trading margin is 9% of the wholesale price at which the products are shipped.*

*The high-tech equipment is used - said the chief engineer. - Technology for shock freezing «smart cool» allows preserving the original freshness of the product at a temperature of 45 ° C, then the product is stored at a temperature of 18 ° C.*

After listening all of them attentively, Pavlo summed up: "Levada" production workshops are equipped with the high-tech equipment which produces high quality products, but how not to make a mistake with the pricing policy and assortment?

The marketing director: *In order to keep their positions, manufacturers offer new and interesting products for the new season. Next year we plan to go out in the price segment "de luxe" which is hardly represented at the Ukrainian market today.*

The sales director: *Planning diversification, it is necessary to provide two types of dumplings with pork and beef: the higher price segment, which now the company runs, and the premium segment. They will be sold around in the following proportion: 90% - higher price segment and 10% - premium segment "de luxe".*

CFO proposed to apply the methodology of CVP - analysis (Cost-Volume-Profit) for flexible planning of the assortment implementation of dumplings and to determine pricing. Dmytro Volkov supported this proposal. The general director added that the final decision regarding the advisability of diversification will be taken based on the CFO report on the results of the calculations. The meeting ended.

Upon assuming the calculation method of CVP - analysis, financial director of enterprise information system has found the following information: the operating cost of dumplings

with pork and beef at variable expenses is 20 hrn. per 1 kg. Fixed costs of production are 125,000 thousand hrn., the target profit is 6% of the wholesale price at which the products are sold to retail trade networks. Planned wholesale price is 50.77 hrn. per 1 kg of dumplings. The total volume of sales in all price segments of dumplings with pork and beef is planned to be 4700t. in the coming year.

After 2 days the finance director finished the calculations of break-even point in sales volume of dumplings as a whole, that would allow reimbursing all costs and getting zero profit, and presented it to Pavlo Napriyenko and Dmytro Volkov. Before making a final decision on whether the sale of dumplings in a segment of "deluxe" would be profitable, Dmitry revised calculation and put the following **questions**:

**Questions:**

1. *What sales volume will allow reimbursing all costs and getting economic benefits in the target dumpling product group in general?*
2. *Which base allocation should be used to distribute fixed costs when calculating the break-even point in different price ranges, if the variable costs of dumpling production in "de luxe" segment remain unchanged, and the additional fixed costs for this product in average are 92 thousand annually?*
3. *How much can sales of dumplings decrease in general (or the price segment) before the company incurs losses?*
4. *How much will earnings hiccup change while reducing turnover target by 1%?*
5. *In what price segments will the sales of products have the maximum profit margin per unit?*
6. *In what price segments would be the most appropriate to expand sales?*

## The Rise and Fall of the Tyco Empire and its CEO

**Olena Mykhailenko**

Kiev National Economic University named after Vadym Hetman, Ukraine

It is well known that, occasionally, senior managers of major companies commit fraud such as tax evasion, manipulation of financial statements and theft. In many cases, crimes are discovered only after 3 or 4 years, when they are repeated. When discovered, the perpetrators, once perceived as pillars of society, become recognized as criminals.

A particularly tragic example is Dennis Kozlowski, the former CEO of Tyco International Ltd, one of the world's largest developers of fire safety systems for trading companies, oil and gas corporations, stadiums and airports. Kozlowski was revered as one of the world's top managers until his company's financial position became desperate, and he knowingly sold his stake in Tyco before notifying shareholders and regulatory authorities. Kozlowski and his cronies milked Tyco for \$600 million. In later years, Kozlowski would reflect on this experience—on his ascension power, and his downfall, precipitated by greed and dishonesty. He had much time to think after he was sentenced to 25 years in prison!

Today, Tyco exists as a shadow of its former self—a company several times smaller with fewer businesses units. In business circles, Tyco is recognized as an example of an ineffective conglomerate requiring separation. Tyco Group was created owing to an unprecedented series of acquisitions.

Multidisciplinary industrial group Tyco, with tens of billions dollars in annual turnover, was founded in 1960 by Dr. Arthur Rosenberg, and has grown from a small research laboratory serving the Pentagon. In 1962, Rosenberg transformed Tyco into a private company (Tyco Laboratories) focused on product innovation. This company created the world's first laser device, safe battery charger, and several types of semiconductors. To accelerate growth, Dr. Rosenberg acquired small firms also engaged in pursuing new materials and the manufacturing of semiconductor devices and circuits. Owing to this policy, the company's revenues for 1969 increased by \$41 million.

Massive absorption eventually increased the complexity of the company's management structure, reduced efficiency, and ultimately, caused losses. Because of this, in 1970, a series of reorganizations occurred. However, Tyco continued to pursue a policy of acquisitions, thereby hoping to increase its stability during local industry crises. This strategy did not mitigate all problems (e.g., increased management costs and the development budget's spray between multiple unrelated projects). However, by buying one company and selling another, senior management increased Tyco's income up to \$1 billion a year.

In the early 1990s, Tyco was a diversified but still compact industrial group, with most of its income generated through American activity. The 1990's provided unrestrained growth, initiated by the new CEO, Dennis Kozlowski. Under his 10-year leadership, Tyco International (registered in Bermuda) emerged victorious in a number of absorption transactions. About 1,000 companies, with total revenue of \$36 billion per year, were included into the international conglomerate. Having once stated he would turn Tyco into "new General Electric", Kozlowski, who stubbornly pursued his acquisition strategy, got dubbed "Deal-a-Month Dennis". The company's office in Manhattan, New York, was considered one of the most luxurious headquarters in the United States.

However, unbridled acquisition of new businesses finally overloaded the company's structure. The group became too large, heterogeneous and difficult to manage. By the early 2000s, an accumulation of missteps turned Tyco into a crumbling business. A project to establish a network of underwater cables for broadband Internet—the largest of its kind, and which cost more than \$3 billion—was a complete failure. In fact, it was clear by the middle of the 1990s that the company's costs were increasing faster than revenues. The situation was aggravated by Kozlowski's passion for luxury. His wife's birthday celebration, which took place on Sardinia, an island in the Mediterranean, cost about \$2 million! And some of this money was a corporate loan that the CEO never intended to repay.

Tyco was a "bicycle corporation," maintaining balance through constant momentum—in this case, acquisitions, which temporarily increased its revenues and profits.

In January 2002, in an effort to regain market confidence and pay debt, Kozlowski announced a dramatic strategy change. He halted growth through acquisition, and initiated the restructuring of Tyco into four companies, each of which would be quoted independently on the stock exchange. Tyco's shares immediately fell three times, and capitalization decreased by \$80 billion.

At this stage, luck ran out for Kozlowski. On April 26, he announced the cancellation of the partition plan and sent a letter of apology to shareholders, claiming that the rejection of the old strategy was premature. He also indicated that in the second quarter of 2002, Tyco would suffer losses, for the first time in ten years. The company's shares fell by 20% more than expected.

In the summer of 2002, Kozlowski resigned in the midst of scandal, leaving the company in a most pitiable condition. Its stock price fell by 4 times. It held \$28 billion in debt, \$11 billion of which had to be repaid before the end of the year, and there were almost no money on the account. In these circumstances, Edward Breen, former COO of Motorola, accepted an offer to lead Tyco, the "hardest job in corporate America." Breen, 45 years old, became one of the youngest senior executives of a global corporation. At Motorola, he established himself as a strong leader and risk taker. It was the sort of leader a crumbling Tyco needed.

According to experts, the only way out of difficulty at Tyco was to declare bankruptcy. However, the new top management team implemented an aggressive strategy. Tyco was divided into five divisions, corresponding to the main areas of business, and in each of them, the company took a leading position in the world. (The main division retained the name Tyco International.) The ostentatiousness of Kozlowski was replaced with rigid asceticism. The company moved out of its fashionable office in Manhattan to the industrial zone in New Jersey. Within a few months, 980 offices around the world were closed, eliminating leasing costs on nearly 2.5 million square meters of space. Edward Breen and other top managers ate dinners in the workers' cafeteria and even refused their reserved parking places.

However, the new Tyco International was not able to restore the trust of investors completely. In the autumn of 2011, the company was divided again, this time into three parts. The biggest, Tyco, with an annual income of more than \$10 billion, now specializes in the corporate security solutions including fire protection systems, sensors and surveillance cameras and monitoring systems. Two other newly formed companies develop security systems for residential buildings, pipeline valves and control devices. The

restructuring was completed in the autumn of 2012, after which Breen resigned, retaining the post of chairman of Tyco.

According to Breen, a smaller and more focused company may be able to win the recognition of “the sharks” on Wall Street, and finally overcome the reputation of an inefficient conglomerate.

After serving 7 years of his prison sentence in Marcy, New York, 66-year-old Kozlowski was transferred to “work release.” He now works as a financial consultant for a non-profit organization, which helps former prisoners. On weekends, he returns to prison.

In April 2012, Kozlowski filed for parole. He wrote that, as a top manager, he lived “in a bubble” and succumbed to dishonesty and greed. In his defense, Kozlowski said that in prison he teaches inmates, and works in the laundry. He also noted that although he is now broke, he led Tyco to an evaluation that grew five times faster than “the flagship of the U.S. economy”: General Electric (GE). This translated into more than a hundredfold increase in the company's stock prices, and thousands of ordinary investors became wealthy a result of his managerial decisions.

### **Questions:**

- 1. How can the initial, rapid growth of the Tyco's revenues be explained? (Recall the high-tech innovation that created high profitability, and economies of scale through shared laboratory and experimental capacities, and managerial units).*
- 2. How can you explain company policy through the 70s and 80s? (As the number of companies Tyco absorbed increased, it lost control. Moreover, the scale effect was lost, and costs rose faster than income. In these circumstances, a reorganization, which partially corrected the situation, was pursued, and it provided an opportunity to heighten the effectiveness of new acquisitions, enhance diversification and reduce the local markets' risks. This strengthened the company's stability. Therefore, the managerial actions were rational).*
- 3. What is the cause of the company's management collapse in the early 2000s after its triumphant growth in the 1990s under the leadership of Kozlowski? (The company's structure became too complex, its management too inefficient, the pursuit of luxury increased fixed costs, and economies of scale became exhausted).*
- 4. What strategy to save the company was initiated by new CEO Edward Breen? (Austerity on fixed costs, the dividing of the conglomerate into five separate parts in accordance with business directions, and then, the separation of the parent company into more three parts. Thus, the sources of scale economies were restored, and the possibility for further profitable growth for individual enterprises, which had entered into a conglomerate, was provided).*
- 5. What conclusions can be drawn from the causes, sources, possibilities and limits of scale economies in this case study? (Theoretical generalizations, based on evidence, should be presented.)*

## Many are always better than few? The pitfalls of defining competition

Radu Mustescu

Academy of Economic Studies, Bucharest, Romania

The professor is standing still in his chair. He is watching the cover of the file: “*Airtours versus the Commission*”. “This will be a tough decision” he thinks. “But something needs to be clarified.” The professor was invited by a judge from the Court of the First Instance to assess the arguments of the two parties in this rather difficult case. The British tour operator made an appeal at the European Court after the European Commission blocked in 1999 his acquisition of one of its competitors, “*First Choice*”.

Despite the complex issues specific to any competition case, it seems that the decision of the European Commission was an expression of a certain perspective of what competition is and what the role of public authorities in preserving and enforcing competition on the Common Market should be. Fundamentally, the approach was a consequence of the idea that the structure of the market determine a certain type of behavior by competitors.

The economics professor is aware that economics has almost since its beginning differentiated from a point of view of competition between different types of market structures. First of all, monopoly is a market where there is only one seller of a good. An oligopoly is the case when there are a small of producers of the same good, with rather comparable market shares. The third form of market structure is the competitive market where there are a large number of competitors. The core remark is that the structure of a market determines the type of behavior of the competitors. A monopoly will provide incentive for abuse in the form of higher prices and lower output. Or, as modern economists argue, the monopolist will exclude other potential competitors from entering the market. Oligopoly will invite competitors to conclude explicit cartels (fix prices above the competitive level and allocate clients) or tacit collusion and collective dominance. Only competitive markets, it has been argued, will enforce on competitors the competitive pressure that does not allow them to act “*independently*” from the consumer. They are price takers and “*servants*” of consumers to whom they give up the entire value added (surplus) of the production.

So according to this perspective, a market with five competitors is more competitive than a market with four competitors. One with three than one with two. And so on. But professor is pretty sure that this is an abstract and highly simplistic view on the competitive process. And he recalls how several economists – coming from some marginal schools of economic thought – started to question it. Either Chicagoan or Austrian, they claimed something incredibly counterintuitive: the number of competitors on a market – the market structure – does not matter. What does matter is the behavior of the producers on that particular market. And the most radical view was: you can have a market with only one producer which is competitive. As long as entry barriers are zero on that particular market, it means that anyone who is interested on producing that particular good can start a process of production. So, *per a contrario*, the very fact that none of potential new entrants does not start such a process, it means that the organization of production in that particular sector is already optimal. It means that, sometimes, under particular market conditions, only one producer is the optimal allocation of the production factors in that particular industry.

The file in front of the professor actually is about this difference in perspectives: the European Commission noticed that the merger between the two tour operators shrunk the

number of relevant competitors from four to three. So such a transaction of change of control (an economic “*concentration*” of control) must be prevented. Its decision was based on the suspicion that a market with three relevant competitors would allow them to act independently from the consumer. Interestingly, the case even didn’t take into consideration the possibility of tacit coordination that could emerge (the competitors copy the behavior of others and they homogenize their product) which would have been a strong argument in any Court. The product is difficult to homogenize (“*short haul foreign package holidays*”) and, from a skeptic perspective, even to define in a clear cut way. The market is very dynamic, the demand unstable and the barriers to entry are considered very low. Moreover, none of the “*producers*” can protect its “*production*” process through patents or copyrights. In the last instance, any traveler can organize his own “*short haul foreign package holiday*” on his own.

In fact, the entire legislation of merger control (any transaction that translates in a change of hands on the control on factors of productions must be approved by authorities) arguably starts from such a perspective. In short, you prevent an act that could possibly lead to an anti-competitive practice despite the fact that the practice has not happened till that particular moment. The Commission decision spoke about the suspicion that “*the merger would lead to a collective dominant position ... in that it would increase their incentive to restrict capacity and facilitate sustained strategies to do so, by strengthening their interdependency as regards capacity decisions which are crucial to the market outcome*”.

The professor has been convinced even from the start of studying economics that this rather romantic perspective on what are competitive markets is rather difficult to discover in practice. Despite this, capitalism prospered and is manifestly more productive than any other form of economic system. Even the European Union didn’t have a legislation in this field till 1989. But he recalls how antitrust authorities in the United States of America slowly and gradually moved from the same perspective to the perspective of the School of Economics from Chicago.

So, as in other issues related to antitrust, the European legislation is slowing moving to the American “*mode*”. The professor realizes that any decision to be taken by the Court will create a precedent. The competition jurisprudence operates under the principles of the common law where judges, by formulating a verdict on a new issue, will, in fact, formulate a new rule. No other later verdict on a similar case can be different.

### **Questions:**

1. So what should he recommend to the judge?

## There is no perfection in the world

**Yuriy Bilan**

University of Szczecin, Poland

Paul asked his wife during dinner with his family: *What have you been doing in the afternoon? I could not get you through.*

Jeanna: *I have gone to the market. Did you forget? Soon my parents will come. We must invite Yakov's family, I want to have a family dinner. To make everyone feel nice I will prepare a favorite dish for each of us. And I need a lot of different products for that.*

Paul: *Aren't all those products sold in our supermarket?*

Jeanna: *Of course there are all of them there. But they are much cheaper in other markets. When it comes to making big purchases - it is a significant difference.*

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Paul: (At work, referring to a colleague) *Imagine, we are working to have all the products at our supermarket, and my wife drives to a market far from home for purchases?*

Vlad: *Well, that's understandable. We work in the food industry, there are so many suppliers, dealers and sellers that it is very difficult to form a price and trade policy. Not all the products we are selling are cheaper than in other networks. Especially, because we monitor the quality of products and reputation of suppliers.*

Mark: *Sorry for interrupting, I've heard your conversation. Just yesterday at our university there was a seminar on this topic at one of the classes. And it is said to be perfect or ideal competition.*

Paul: *Well, so what the theory says about this?*

Mark: *Features of a perfect market (perfect competition) are the lack of input and output barriers to our goods. This factor is present for our products – tomatoes and onions, for example, can be grown and sold by everybody); there are no restrictions on the number of market participants – the same; uniformity of the same submitted products on the market (tomatoes are tomatoes); free prices, absence of pressure, coercion by some participants in relation to others.*

Vlad: *Theoretically it is simple and clear. In fact, as it usually is in all spheres of life – there is no ideal picture. The fact that we have many producers and many buyers does not mean that the struggle for the buyer between producers, sellers and others will not happen. Generally, if we talk about theory, the competition is a contest of goods and businesses, aimed at mastering the attention of potential consumers.*

Paul: *I think it is still necessary to understand the state of the market of our product. Let's ask Mark to do it. It will be a good practice for him, just to reinforce the theoretical training at the university with the practical life.*

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Evening three days later, Mark talks to his girl-friend in a cafe. *I have got a task from my department to further explore the issue of competition in our industry.*

Anna: *Well, what's the problem then? You are learning all this now, we are just having this issue now.*

Mark: *We have the classical scheme of a perfect competition. But not everything fits it. Each user has its own transport structure, its logistics, approaches to assortment and pricing. In such circumstances, any trading network is hard to please the customers in all respects.*

Anna . *Well, you should consider that more modern view of competition presents competition as as rational behavior. This rational behavior is characterized by a struggle for limited resources. In your case – it's buyers' money. You're working on the food market. On one hand, people will not manage without this product, they cannot refuse to get food in order to produce other goods. But they will always try to optimize their spending on food. They will always try to save money on this.*

Mark: *Well, of course, they will overcome any obstacles, but they will look for the place where they can buy cheaper.*

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In the department. Paul: *So, what will we hear from the modern marketer?*

Mark: *As our market has many aspects and factors, we need to build the competitive strategy based on competition with other sellers. That means we must first of all look for distinctive features in working with buyers and suppliers.*

Paul: *That's if we talk about honest competition, fair, if you stick to the common terminology.*

Vlad: *Are there any suggestions? We can somehow win our competitors in a different way?*

Paul. *Well, you could accidentally at the show, exhibition, or in an interview with the magazine for consumers hint at the poor quality of products which are sold in small stalls or food markets. You can also order sociological survey among customers regarding the core products of our network.*

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The conversation between Paul and Vlad in the cafe. Vlad: *Do you really think seriously to offer struggle with competitors by casting negative information against them?*

Paul. *No, I just talked about it. Despite the apparent simplicity of the steps they are quite dangerous. First, we may be accused of unfair competition, and this fact may be subject to review in court. And such methods may become a boomerang. Declaration of war does not always guarantee victory. They say, smart are not the one who wins the war, but the one who does not announce it. So there must be other methods of competition, or contest as they say now.*

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At the meeting.

Vlad: *I think our problem in the conditions of a market of our products, despite their diversity, is to find our own, our particular achievements in trade and emphasize them competing to the competitors. Well, for example, we can work for the whole day (nonstop), we can give discounts on some groups of perishable goods, we can form a definite strategy with regular customers. The main thing is that it should distinguish us from other supermarkets.*

Paul: *I think that such competitive steps are necessary to expand at the expense of the struggle for quality of consumer products. We need to rely on the quality and reliability of our products. Mark: And a price competition? We need to reduce the prices of standard products and improve only slightly on higher quality products (eco-friendly, low-fat, etc.)*

Vlad: *It is also necessary to expand the scope of services – cooking, tasting, home delivery, etc.*

**Questions:**

1. *Please describe difference between fair and unfair competition?*
2. *What mean for you unfair competition? Can it be prove by realization of economic objective?*
3. *Do you think there is no perfect solution in economics theory? What about real market?*

## Brainstorming

**Yuriy Bilan**

University of Szczecin, Poland

Jan (on the phone) with his classmate Anna: - *Our report on the book market was perceived approvingly at the recent seminar. Moreover, the head of one of the Internet - shops asked to evaluate the market situation for their firm and present the results at the company's mini-seminar. The term of holding it is not specified, but that's in our interest to do it soon. What do you think?*

Anna: *I think we should take this job, it can be possibly considered as the formation of a portfolio. Let's try it. But I am interested to do it quickly, as I also have other plans.*

Jan: *Then you'll determine the expiration date, and I agree.*

Anna: *Let's meet right now.*

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Jan: *Let's define the tasks. The company wants to determine their actions in the long term. Their investor has already invested certain funds into the organization of the Internet - shop. The Internet - shop works, but with a small profit. It is necessary to determine whether it's better to continue supporting it or simply get out of the market?*

Anna: *Let's start with the theory. Can we refer to the book market as a perfect competition?*

Jan: *To some extent – yes. There are many sellers, many buyers, and homogeneous products. Tolstoy is Tolstoy, no matter who sells his works. To have a successful competition on the market any company should first of all have primarily useful detailed and thorough analysis of range of customers and their needs. This is a general rule of competition. What else do you need to know about perfect competition?*

Anna: *A few basic rules:*

- companies should consider the level of the equilibrium price as standard of rational housekeeping;*
- to "trick", as they say, the equilibrium price, the firm sells its products using a general equilibrium price, but trying to spend less resources per unit of product;*
- if you find that the individual price of the company on traded goods is above the equilibrium price because of the high costs per unit of product, you should take aggressive measures to rescue the company. Such measures include modernization ('Update') of engineering and technology, the reconstruction of production (the new ways of its restructuring). If these changes are not provided with the necessary funds, the company will have to close.*

Jan: *Well, and will the methods of price competition help in this case? If you have the funds, you can apply dumping - selling products at very low prices. This can save the company and get some time to have the upgrade and other innovative activities.*

Anna: *It's only in the short term. In this case, the problem is different. We need to answer the question of the investor – what should we do next? We must ask for data on the work volume, income, costs, and prices to be able to evaluate several factors.*

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Anna: *Well, here we have constructed all the curves in the coordinate axes of costs – Sales:*

*fixed costs – they are just a straight line which indicates the level of these costs:*

*variable costs – the growth curve of the costs with sales – obviously, more work – more costs:*

*total costs – the general curve, which takes into account both fixed and variable costs.*

Jan: *So, let us construct the average costs, i.e. costs per unit of product. These curves look different:*

*•average fixed costs are determined by dividing the sum of the fixed costs by the number of products, i.e. it'll be a decreasing curve;*

*•the average variable costs (it is determined by the same division of the total variable costs by the number of products) – a curve shape resembles the Latin letter U, but is not so steep. After a too big increase in the production volume the average variable costs start to increase.*

*Average total costs – a combination of the two previous species, and the shape of the curve is the same as in the case of variable costs.*

Anna: *So what is happening? Is it impossible to increase sales? Is that not the goal of an entrepreneur – to have more volume, more income, more profit?*

Jan: *In this case it is necessary to take into account the law of diminishing returns. Law of diminishing returns describes the phenomenon which includes the following: an increase in variable costs (which is natural while having the growth of sales) after a certain point the profit starts to decrease. Starting from a very small volume of output, companies typically first benefit from increasing efficiency, but the benefits are reduced and production becomes less effective when companies begin to use excessive performance scale.*

Anna: *You need to plot the marginal costs. They are determined by dividing the change in the average costs by the volume of production. The marginal cost curve is represented graphically by a U-shaped curve and reflects increasing and then decreasing efficiency with the simultaneous increase of the output. It means that in a bookstore work becomes less effective after a certain number of services.*

Jan: *So, given the law of diminishing returns, for the Internet-shop to have a prospective future the investor must not only increase investment, but provide the activities securing positive effects of scale.*

Anna: *Yes, the theory in this regard says that the positive effect (the economies) of scale is the result of increased efficiency as the volume of production increases along with corresponding changes in the permanent resources for the better use of existing resources. Economies of scale can be observed only in the long run.*

Jan: *regarding this, we can analyze the curves of marginal and average total costs. Outer boundary of the curves of short-term average total costs can be regarded as long-term costs. These results may be suggested to consider at the seminar and then – draw conclusions.*

*To offer the company to develop such activities that will provide:*

- Job separation and specialization of labor (the effect of minimizing the cost of labor,
- More intensive use of highly qualified personnel (clear allocation and responsibilities). Highly qualified personnel should be exempted from janitorial work. Increase of scale enables doing it:
- More intensive use of capital (for example, by changing the number of shifts),
- Ability to use the by-products rather than throw them out as unnecessary.

**Questions:**

1. What does mean short-run and long-run analysis in economics?
2. Does company behave in different way referred to both time span?
3. Please describe the long-run pricing in perfect competition for the common company. What conclusion you can give after analyzing the picture?
4. What are real-world examples of long-run decision of the companies?

## Three days of a manager's life

Yuriy Bilan

University of Szczecin, Poland

Stefan: (the owner of the company – sale of different types of phones) refers to Max (manager) – *What do you think about the work of our sales points? I think some of them are ineffective for us. They do not create income, and barely making ends meet.*

Max: *they have not created revenue just for the last few months, but so far they are not unprofitable. Why is it necessary to lose our points? Material and information costs are spent. Remember how we used to advertise to have them taken their niche in those areas? These costs we have already recovered. And now we have only the current costs.*

Stefan: *Hey, got an idea. Mark asked me to take two of his students to our practice. He is a high school teacher, my neighbor, sometimes we play chess, communicate, he is a nice person. I could not refuse. So those students have come, but I don't know what to do with them. I've just thought that you might be their tutor. Give them a job, let them think, they would think and give suggestions on what we should do with these sales points. At the same time, you will receive their report on the practice.*

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Jan on the phone with his classmate Anna: *Where have you gone? The chef has woken up, has given us the task and said – it's urgently. Come here in half an hour to have a discussion.*

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Jan. *Chef has instructed us to study the market, the position of our two points on it, both located in residential areas and away from each other, and give a suggestion on what to do with them?*

Anna: *That's annoying, I thought they would never remember about us, I've almost finished my course work.*

Jan: *and I also thought to hide for three-four days to go to the mountains. Let's try to solve this puzzle quickly, perhaps before the end of the practice, so, we will save a few days.*

Anna: *Well, well. Let's start with the theory, what's the point if we go to study these shops in the natural environment?*

Jan: *OK, I agree. Unfortunately, I left my laptop at home. Otherwise, we could begin now.*

Anna: *I have my tablet with me. Let's find a place at the company and start working.*

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Jan: *So, what can we say about the situation? We cannot study the whole microeconomics theory. What is important?*

Anna: *I think we should refer our case to the Section on perfect or pure competition. This will allow us to know the basic factors of influence, and then based on an assessment of the actual situation we would be able to give some suggestions.*

Jan: *All right. Let's find the definition.*

Anna: *Perfect competition is characterized by the fact that none of the companies, neither the consumer is so powerful that their actions have an impact on the market. This is very important.*

Jan: *So what – we do not need to offer anything as it is impossible to influence anyway? Let them “float” as they can.*

Anna: *No. The components of this competition are highlighted:*

*•First, there must be a lot of sellers acting independently. So, we need to assess how the market is to meet this criterion. How independent are the sellers, and this depends on how many of them there are.*

*•Second, how many buyers are there, what are their characteristics, how diverse their needs are, etc.?*

Jan: *I think it is also important how standardized are the products. If all sellers, no matter how many of them may be there, sell some kinds of product, the buyers do not care whom to buy from. If, however, there is some difference, that means every firm can form its own profile even in the conditions of such a market.*

Anna: *Well, let's see financial analyzes tomorrow, reporting documents, and then let's go to the places and see the points, talk to managers, maybe customers.*

Jan: *It is necessary to examine more data and general market handset sales. We can ask our teacher Sobinski for his advice, he seems to do analytical report on the market mobile and computing devices.*

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The next day Stefan said to Max: *Let's Students be students, but we will discuss the situation ourselves.*

Max: *Increasing prices is not a good option, our market share is 10%, products are almost the same. It might be worth to leave the market entirely and switch to another product – more modern, the one that requires a developed service? There are no legislative, technological and regulatory constraints for that. Costs will be needed, of course. But we can become a monopoly for some time, so we will be able to recover the costs in the short term.*

Stefan: *Yes, the investment of capital in an existing business is unlikely to produce a profit. We will not be able to raise the price, and sales are unlikely to increase. Start working on a business plan.*

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Next day the students report on their suggestions.

Jan: *Analysis of phones market and indicators of our company showed the following.*

*•First, the market is close to saturation. Demand for products of this kind is stable, but potential growth is not expected. Buyers tend to migrate to smart phones and other communication devices that provide great opportunities. But the demand for certain types of products, such as GPS, can be sustainable. There still is the demand for the accessories.*

•Secondly, the market share of the company is small, it is impossible to affect the price. So, we have to work on reducing costs.

Anna: Position of sales points' data is that the customer service is uneven both during the day, and during the week. We offer to change the schedule, reduce the number of staff and thus reduce costs.

Jan: The second option is to expand the scope of services. For example, to organize an online store, and the remote points can be used to service the orders of the customers living in those areas. Such work does not need permanent staff, you can use people who are free at this time, and have them postpaid.

Stefan: Thank you. We will consider your offer. In any case, we assume that your practice has benefited both for you and us.

### **Questions:**

1. What are main differences between perfect competition and monopoly?
2. Can these both models observed in the real-world? Give examples if possible.
3. What kind of market model can be implemented if the company own 10% of market share? What additional information you need to answer the question?
4. What is the solution for the case above?



## You cannot avoid making choices

**Radu Mustescu**

Academy of Economic Studies, Bucharest, Romania

Adrian Ionescu is the Chief Executive Officer of “Furniture Art and Distribution” S.R.L. The company is specialized in the production and distribution of home furniture on the Romanian market. One day, he was sitting in his office in uptown North Bucharest. And he is aware that an important decision lies in front of him.

Due to high growth rates of sales on the home market and a production capacity close to 95%, the Board of Directors will take into discussion at the next meeting the building of a new factory. While international expansion is an item on his agenda, for the moment he is convinced that the home market still strongly demands his products. Among the most difficult issues to debate on, the Board has to decide also the location of the new production premises.

Two important locations are considered to be the most interesting by members of his executive team:

- first: a location that would minimize the logistics costs of the product manufactured by the company. This could be the city of Brasov, right in the center of the country;
- second: a location that would have minimized the logistics costs in relation to its most important supplier. That would be in the city of Piatra Neamt, a city in the East of the country.

The logistics manager of the company reported to Adrian that the second location, due to the high ratio of that particular supplier in the overall value of acquisitions as well as the high frequency of deliveries, would mean a significant reduction in the overall logistics costs. So this member of the executive team is pressing into such direction.

But Adrian Ionescu recalls the discussion held at the course of industrial organization, while he was attending an MBA program at the Academy of Economic Studies in Bucharest. An American economist argued that any specific investment (defined as an investment which is useful particularly in a business relationship and leads to cost efficiency in the relation with that particular supplier or client) will mean a “*fundamental transformation*” for any company. That is, it transforms even an *ex ante* purely competitive market (many buyers and many sellers) into an *ex post* bilateral monopoly (or a situation with only one seller and one buyer). That’s because the costs of ending that particular business relationship and relocating the assets towards uses in relation with other supplier / clients would be so high that it could put the company in a competitive disadvantage.

Adrian suspected that the location of the factory near the premises of the main supplier will further allow the latter more power to bargain. That is, knowing that the location will not allow “Furniture Art and Distribution” the ability to realistically switch procurement to other clients, such supplier will potentially raise the prices to a level that will capture the entire cost reduction and even more. Adrian knows and any supplier may realize that the new factory is a real bet of the entire company. If the project fails, the entire company may go bankrupt. So such supplier may squeeze out the entire profit margin of the company.

Adrian realized that the trade-off here is between “*independence*” (or “*strategic flexibility*”) and “*efficiency*” (or cost reduction at the level of “*supply chain*”). The first option would mean however higher prices from suppliers. The second choice would mean dependence on a particular supplier, with independent decision making that could fundamentally engage in an opportunistic behavior.

But Adrian also realized something during his experience as CEO. That “*independence*” and “*strategic flexibility*” are somehow nice in theory but not realistic. Any production process means specific investments. There are no generic capital goods that could be switched always at no cost between lines of production and between business partners. There are no perfectly convertible factors of production. Any production process means choice and a so-called “*path dependence*”. The present is a result of the past and nobody can change that.

“So, Adrian”, he speaks to himself as a strategy builder, you cannot avoid making choices. And you have to try to outsmart the other market participants. Even for a short period of time”.

He realizes that the dependence of his firm on that particular supplier is important but not critical. While the input is generic and with low added value, it is also large volume. Different regulations and environmental standards will most probably translate into the fact that such an input will increase in cost in the foreseeable future.

But another idea springs in his mind: why not try to acquire the supplier? This strategic maneuvering will entirely eliminate his “dependency” on other independent parties you cannot control. It will eliminate uncertainty derived from the decisions of any supplier as well as opportunistic behavior they may engage in. Obviously, a lot of more aspects needs to be clarified but Andrei knows that he has a good relationship with banks due to his enviable financial indicators.

“So”, he thought, *what we have here is a two tier decision-making tree?* The first tier was: should I buy the supplier or not? And the second one: should I locate the new factory in Brasov or in Piatra Neamt?” Which decision would you support? Are they connected?

### **Questions:**

1. Define the concept of “perfect competition”.
2. In what sense real world differ from the world pictured by “perfect competition”.
3. Who is entitled to make decisions in a company? Who is entitled to make decisions which are, in fact, “bets of the entire company”?
4. Please define the choice between “make it or buy it” or, in other words, “buy the producer or buy the product”.

## Eternal battle of a marketing specialist

**Yuriy Bilan**

University of Szczecin, Poland

Mirek (Head of Marketing Department): *I've seen your report on the state of the mobile market during the last month. What can you say about the dynamics of our performance?*

Stefan (Marketing Specialist): *Our indicators (sales, market share) have been stable for the last three months, but I don't see an opportunity to increase sales and increase our market share.*

Mirek: *What are your explanations of that? What are the claims of our customers to the services? What are the things they are not satisfied with? Price? Quality? We've recently upgraded equipment. Maybe the problem is a lack of staff's qualification?*

Stefan: *I cannot express the dissatisfaction with the quality of our work, we have no consumer complaints or services refusal. However, an analysis of the external environment, the mobile services market leads to some reflections. I'm not ready to talk about it right now. We still have to collect data on the companies-competitors. I can only say that, as our services and the services of our competitors belong to the category of similar products on the market, interchangeable, our position depends on the position of our competitors.*

Mirek: *Well, do the necessary research, but later I would like to return to this conversation at a meeting of our department in a week.*

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A week later.

Stefan brought his overview of the market and briefly summarized the results of his research and reflections. *The analysis shows that the mobile market in our city is dominated by five companies, including ours. Two of these companies together have sales about 60%. Among the other three, our company occupies a position in the middle.*

Zbigniew: *I want to say that such a market can be attributed to oligopolistic markets. We can generate significant profits even if a small percentage of our share, first of all, due to the stability of our situation (no additional costs for advertising, for example), and, secondly, - due to the difficulties of new players' entry into the market.*

Mirek: *Why are you so sure? Customers may be interested in these services, especially with the extended format, Internet access, for example. Demand will continue to grow, there may appear new firms or present competitors will provide additional facilities.*

Zbigniew: *Five firms, the main suppliers of these services today and for quite a long time in the future, are able to meet the demand for the entire market. A beginner will need to establish production and services, and have large advertising budget. Therefore, they cannot fight alone with all the firms together. In theory, this is called 'high entry barriers'. Still, oligopoly - is a preferred form of market structure.*

Mirek: *It should be noted, however, that it is preferable for the service providers and not for customers. Pure competition is certainly preferable for customers. But we will use the conditions in which we are now, for our prosperity.*

Stefan: *I quite agree with Zbigniew that our position is quite stable, and with Mirek in the idea that this situation should be used for your advantage. However, we must be attentive to the positions of our competitors. Risks and danger can come from this side. Any of the competitors can reduce the price, and regarding the possibility of providing greater volume of new services, we could lose our market share.*

Mirek: *All right. I ask you to analyze the situation of our competitors. How much are they willing to reduce prices for these products? It is necessary to examine their advertising materials, publications, statistical materials, etc. Let's go back to this issue in a few days.*

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After training in the gym Stefan and Zbigniew met and went together to a bus stop. Zbigniew suddenly said: *I've recently met my classmate; he is working in a related industry and says that he and his group were asked to prepare a business-project. Their firm is going to prepare for the implementation of a new service that will be better than our services in many ways, and, what is the most important, will provide customers with new facilities.*

Stefan: *could you find more detailed information from your friend? And I will read new information materials, work in the patent fund and databases of technological innovations.*

Zbigniew: *It looks not very nice to feel like a spy, it is somehow unethical. But I'll try to talk to him.*

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At a meeting of the department Stefan has reported that now all the competitors adhere to standard pricing policy. Promotional materials do not carry information about a possible price reduction. However, demand is somewhat decreasing. Perhaps the market is getting saturated with this type of service.

Mirek: *What methods of struggle for the supremacy in the market may be used, in your opinion?* Stefan: *Standard method of fighting in an oligopolistic market is to reduce the price of products. Thus, we can beat opponents and increase their share.*

Mirek: *But what can be an obstacle for others to do the same? If we had only two firms in the market, we could agree on the prices, market etc. That is to say, we might conduct a coherent policy. We cannot reduce the price all the time. There is a point at the bottom which we cannot go below.*

Stefan: *I think we should strive for a balance in the market and not fight against everybody. With our market share we can lose this fight. Firms with a larger share will benefit. Especially because there is always a possibility to agree with each other, and coordinate the actions.*

Zbigniew: *I have recently found the description of an oligopolistic market in the literature. When car sales of the Ford company decreased, it calculated that the price could be*

reduced by 10% and thereby sales would be increased. However, we must think about the actions of competitors in an oligopolistic market – the "General Motors" and "Chrysler" companies, which can also introduce the same measures. These firms may have no reaction to it, they may also slightly reduce the price - in this case, Ford will win, and the sales of the Ford company will increase.

If all the three firms reduced their prices at the same level, all three manufacturers would sell more cars, but get less profit.

Stefan: Another option - competitors - "General Motors" and "Chrysler" – might reduce prices more than Ford, i.e. start a price war, leading to a sharp decline in profits of all the three companies.

Mirek: Well, what have these companies finally done?

Zbigniew: In the history of their relations there were different periods and different solutions. I would like to say that we are in a very similar situation. We must take seriously the problem of existence in an oligopolistic market. Let's re-evaluate all the possibilities.

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At lunchtime Stefan and Zbigniew were drinking coffee at a table in a cafe. Stefan asked *Have you talked to your classmate?*

Zbigniew: Yes, I have talked to him and learned that their company is actively looking for new technologies and I going to enter the market with a completely new product. At this stage, they are not our competitors.

Stefan: I agree. But maneuvering among competitors in an oligopolistic market (where it is necessary to agree with everybody) for a long time is not a very reliable policy. In this case we, as a company with a small market share, will have to concede. Or we would be forced to enter into a protracted struggle with all the companies at once. Alternative way is not possible in the market of this type.

Zbigniew Maybe there are other options, but this needs to be addressed attentively. After another discussion, it was decided to focus on the price of the strongest competitor, while controlling expenditure at the same time.

### **Questions:**

1. What is oligopolistic competition?
2. What kind of oligopolistic market can be describe?
3. What kind of market barriers can set the oligopoly?
4. Does tacit collusion matter in oligopoly?

## The Pricing in the Ukrainian tobacco market

**Yeliena Prokhorova**

Kiev National Economic University named after Vadym Hetman, Ukraine

Deputy Minister of Revenue and Duties of Ukraine delayed regular cigarette in the "smoking room" next to the toilet in the Ministry. While in Ukraine the law is banning smoking in public places, many inveterate smokers can not indulge in a cigarette during working hours and in office buildings. A few minutes later the assistant deputy minister joined him.

*My wife insisted me to quit smoking - he began talking. - Soon, the second child have born, it should be protected from breathe of tobacco. Do not know how to quit! I've been smoking since 15 years!*

*Yes, smoking is bad ... - agreed deputy minister. Although, in terms of filling the budget of tobacco products – it's good!*

As you know, the tobacco industry is one of the largest industries in terms of the amount of tax payments to the national budget. For instance, in 2012, the tobacco manufacturers paid to state budget more than 20 billion hryvnias of taxes, including 16.1 billion hryvnias of excise duties. The importance of a legal tobacco industry is confirmed by the fact that the top ten largest taxpayers in Ukraine include three tobacco companies.

*Yes, of course - agreed assistant deputy minister. But we have to do something with the growth in supply of cheap unregistered products. The main trend observed on the Ukrainian market in recent years is a decline in legal production volumes. In January 2013, according to the company AC Nielsen annual market volume declined by more than 7% compared with the same period last year. The same rate of decline had seen a year ago in January 2012.*

The situation when consumption remains stable and the volumes of legal production decrease is a sign that legal products are being substituted by illegal products. The growth in supply of cheap unregistered products is a result of a repeated unpredicted increase in excise duty rates for cigarettes. Ukrainian smokers cannot sustain the constant growth in prices for legal cigarettes and switch to cheaper smuggled and counterfeited products.

*By the way - answered Deputy Minister - as you showed in your last report, the Ukrainian tobacco market is one of the most competitive and dynamic among other regional markets of tobacco products. There are about 100 brand families and more than 350 cigarette names on it, which is a sign of a vast range of offers and a high level of competition. The brand portfolio in Ukraine includes all cigarette formats and price segments in the market.*

The consumption of tobacco products in Ukraine in general remains stable. According to the 2010-2012 consumer survey, 36% of adult Ukrainian citizens in the age of 18-64 are regular smokers (approximately 9.3 million people), consuming on average 17 cigarettes a day. During the last two years, the share of smokers and smoking frequency did not change very much.

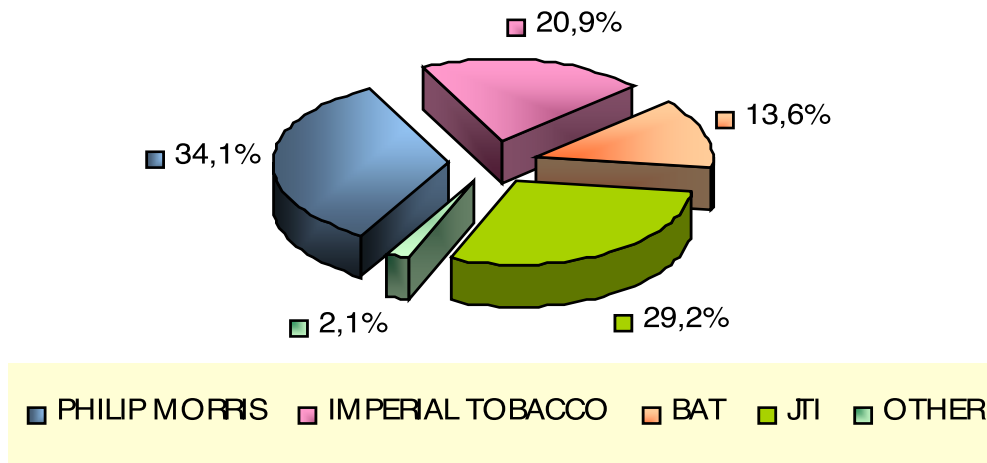
In terms of market segmentation with regard to the strength of cigarettes, there is also a growing demand for cigarettes with relatively lower tar and nicotine content. Ukraine differs from many other European markets because smokers' preferences here are related mostly

to cigarettes of moderate strength with a tar content of 2-8 mg. Such cigarettes account for 66.5 % of the market. The segment of cigarettes with 1 mg of tar occupies 5 % of the market and continues to grow.

Today, more than 60% of all cigarettes sold in Ukraine fall within the low and medium price segments. Their price does not exceed 11 hryvnias per pack.

So - concluded Deputy Minister - *our smokers have an opportunity to choose any kind of cigarettes, at every price segment. And, according to our slogan "Buy Ukrainian, support domestic producers!" our smokers have to buy only legal cigarettes to maintain our tobacco factories and fill the budget of the country!* - *By the way, who are leading manufacturers of cigarettes in Ukraine?*

- *As I recall, at the Ukrainian market leaders formed a group which controls 64% of the manufacture of tobacco products. These are companies that are controlled by multinational corporations: Prylutska Tobacco Factory - British American Tobacco (BAT), Kharkiv Tobacco Factory - Philip Morris, Kremenchug Tobacco Factory – JTI, Kiev Tobacco Factory - Imperial Tobacco Ukraine (ITU). The balance of power in the Ukrainian market is somewhat different from global trends: a stable leading position takes Philip Morris, JTI, which ranks third in the world, in Ukraine very little inferior to the leader, and takes the second position. BAT is now in third place in Ukraine and the Imperial Tobacco Ukraine ranks fourth (Figure 1).*



**Figure 1. Market shares of tobacco companies in Ukraine in 2011.**

The feature of the tobacco products market in Ukraine is that all producers seek to be present in all market segments and price categories (Table 1).

**Table1. Market shares of tobacco companies in Ukraine by segments in 2011**

Producer	Market segments						
	Luxury	Premium	Below premium	Mid-price	Popular	Base	Without filter
BAT	35%	4%	2%	1%	57%	6%	18%
IT	24%	2%	5%	22%	10%	51%	60%
JTI	1%	26%	41%	30%	17%	27%	6%
PM	38%	60%	51%	47%	16%	14%	0%

As to the price policy, from one side, the level of market concentration allows the four producers, which are the leaders, to negotiate about common price policy. From other side, supply of cheap unregistered products pushes prices down. The consumers gain in this situation. But what's about social cost or social benefit?

### **Questions**

- 1. Calculate the concentration ratio on the market of tobacco products in Ukraine. What type of market the value of the coefficient corresponds to?*
- 2. Which of the necessary conditions for the existence of the cartel is not observed in the market of tobacco products in Ukraine? Is it possible to maintain the conditions of functioning of the cartel agreement in this market, and how?*
- 3. What methods of government regulation are necessary on this market of demerit goods?*



## The Problem of journey tariffing on the railway transport in Italy

**Kibuk Tetyana**

Kiev National Economic University named after Vadym Hetman, Ukraine

The report about decrease in profit on passenger traffic by railway transport of Italy was provided recently to Lamberto Cardia, the chairman of Ferrovie dello Stato Italiane S.p.A. - the government-owned holding company that manages infrastructure and service on the Italian rail network, that strongly surprised him. That's why he decided to discuss this problem at the meeting with representatives of two most influential subsidiaries of this organization: Rete Ferroviaria Italiana (RFI) which is responsible for national rail infrastructure management, and Trenitalia which is responsible for passenger and freight rail transport.

The chairman Lamberto Cardia in his speech at meeting expressed concern about such situation and asked for clarification of existing fares on trains in Italy and to provide proposals on changing these tariffs with the aim of increasing sales of railway tickets and thus improve the profitability of passenger transportation.

The representative of Rete Ferroviaria Italiana reported that currently fares on trains depends on the type of the train (the day or night train), as well as the type of the train:

- the ultra-fast trains are the most comfortable trains which move with a speed up to 300 km/h;
- the high-speed trains can cross the whole territory of Italy and even leave the country. They can make a stop only in medium and large cities of Italy;
- the regional trains ply on the territory of the country, however the duration of an average train run does not exceed 3 hours;
- the suburban trains are an intermediary link between city transport and the railroad. By their form they look similar to electric trains and might be connected to the system of the local subway in the cities.

In addition the ticket price is also affected by type of the carriages in which the passenger goes, and now such tariffs are accepted:

- sedentary carriages can be attributed only to the carriages of the second class in Italy. In certain cases they are equipped with the reclining chairs;
- couches carriages look the same as a standard coupe for six people. They charge from 10 to 30 extra euros to the standard price of the ticket of one person for the travelling in such carriages;
- the sleeping carriages have beds in each coupe which can be designed for one, two or three passengers. Thus surcharge for a place in such carriages in Italy makes respectively: up to 200 euros (a single coupe), up to 60 euros (double) and up to 40 euros (triple).

Also the representative of RFI noted that the discount for tickets which are got in advance (in 2 months prior to a trip) is standard. In addition the cost of tickets varies depending on a train class (the first or the second class), and separate trains, such as the Eurostar Italia, Intercity, Eurocity that require registration services, have a higher cost. Also the principle value of the ticket is to be returned to the passenger minus about 15% (collecting) for the unused tickets, whose expiry term makes no more than a year of date of return to the cashier.

The representative of Trenitalia in his report noted that their company applies three types of tickets:

- the base ticket has got much more flexibility. Each passenger can change his ticket free of charge and unlimited times before departure, and also after departure, up to 1 hour free of charge once at train ticket office at the departure station only.
- the economy ticket is available up to train departure, on all trains in 1st and 2nd class and also on all type of carriages. Each passenger can change date and hour of this tickets once up to departure of the train.
- the super economy ticket is available on all trains in 1st and 2nd class and also on all type of carriages. The price of this ticket is starting from 9 euros on all Freccie trains. The number of seats available on this ticket is limited and changeable. The passenger cannot add other reductions including the one for children on this ticket.

In addition the price of economy ticket depends on the type of benefits and discounts that provided to the passenger. So, all children under 4 years of age have the right to get on a train free of charge without granting extra bed. You can purchase a ticket with a discount of 30% of its value for all children being at the age from 4 to 12 years.

There is a possibility for young people aged up to 26 years of age to acquire a preferential travel Green card (Carta Verde), which is valued EUR 40 and gives possibility to purchase train tickets with discount up to 25% the whole year through. There is also the possibility for pensioners aged 60 years to acquire a preferential travel Silver card (Carta d'argento), which is valued 30 EUR (free of charge for passengers over 75 years) and allows saving up to 25% of fare.

There offered incentives for the whole family to the purchase the tickets for. So, you can buy family trip (Italian Kilometric Ticket), which costs about 181 euros, and allows you to get discounts on your journeys, but the total distance is not supposed to be more than 3000 kilometers, and you can't make more than 20 charges.

It is enough profitable for fans of frequent travel throughout Italy to buy a card Amicotreno, which costs 50 Euro and offers a discount of 50% on all regular trains, as well as up to 20% – on the train of Intercity type.

There offered excursion or route discounts in Italy when buying tickets for both directions. Savings on the cost of the ticket are up to 30%. So you can buy two tickets for the cost of one way ticket when you are buying tickets to the same station from which you started your trip and if your trip occurs on your day off.

The purchase of a large number of tickets can also lead to savings on their value. For example, in Italy you have the opportunity to buy 10 tickets just having paid only for 8 of them, on presence of the booklet "Carnet 10 journeys".

When you buy tickets for the whole group the discount depends on the number of people in the group. So, the discount is to be 20% for groups of 10 to 49 people, and 30% for a group of 50 people and more.

Also in Italy, there are time discounts for purchasing tickets. Therefore, when a passenger buys 2 tickets for a Saturday train, the passenger is charged the cost of only one of them. When you buy a ticket on the distinct trains from Monday to Thursday you can save about 30 %.

In addition, the special offers for travel by trains outside of Italy are taken in Trenitalia, among which:

-Smart price for travelling to Europe starting from 15 euros. The offer has limited places. In particular special prices are offered to such cities and countries, as: Paris (from 35 euros), Switzerland (from 19 euros), Munich (from 29 euros), Vienna and Salzburg (from 29 euros).

-Inter rail for residents in Europe. This pass allows for special price get the opportunity to make unlimited number of trips to any of the European residents, who has been living in a European country for at least 6 months.

-Family special offer for families and youngsters. The offer is valid on all trains connecting Italy with Austria and on the night trains to Germany.

With the Family Special offer children over 6 and under 15 who travel with an adult (not necessarily the parent) - holding an Adult or Card fare ticket - pay: 7 euro per 2nd class seat on the trains to Austria and 9 euro for 2nd class seats on the night trains to Germany. At the end of his speech the representative of the Trenitalia suggested to summarize certain discounts to increase the number of tickets purchased by residents of Italy.

After the end of the meeting, the Chairman Lamberto Cardia could not understand whether this proposal will substantially increase profitability of passenger transportation by railway transport in Italy. In addition, remained unsolved question: whether all social groups of passengers were taken into account in the formation of value for railway tickets?

**Questions:**

- 1. What kind of market structure is the Italian market for rail passenger traffic associated with (referred to)?*
- 2. Can we say that there exists the price discrimination when establishing the prices for railway tickets? Explain your reasoning.*
- 3. What kinds and types of price discrimination are used on the Railways of Italy?*
- 4. Is the establishment an absolute price discrimination on railway tickets possible? Explain your reasoning.*
- 5. What are the advantages and disadvantages of these types of price discrimination for society you can find using the examples from this case?*

## Where to find intellectual "labor" or freelancing as a new model of the labor market

**Olena Grebeshkova, Aleksey Grebeshkov**

Kiev National Economic University named after Vadym Hetman, Ukraine

In October 2013 two Ukrainian entrepreneurs Andrei Petrenko and Dmitrij Koval started a new business – a small web development firm *Panoramic Studio*. Very soon, in middle of January 2014, they received an order from a large international retail company to perform an urgent project: they needed a promotional website for a new smartphone line. But *Panoramic* was opened recently and had a lack of professional staff. To run the project it was necessary to urgently find advertising specialist, who speaks French, secretary with knowledge of English, a PHP/MySQL developer and a web-designer.

*What do we do? We need to find three high-qualified specialists within 24 hours or our client will find another studio. They need our answer as soon as possible.* – said Andrei to his partner. He was excited and worried.

Dmitrij replied in a calm manner: *It usually takes weeks to find and hire such specialists and of such a high qualification. But why don't we hire freelancers?*

Dmitrij took his laptop and did the search. He used oDesk website – the largest freelancers exchange on the web. Today it has records of more than 1 million people, and this figure is growing by 100% per year.

Within 40 minutes he had positive replies from all of the three new members of the *Panoramic Studio* team. It turned out that the new project team members live on different continents. Advertiser Paul lives in France. Secretary Pauline studies economics in the U.S. Alex, the developer, is working for several years in the IT industry in Singapore. Web-designer Jessica develops website designs in Australia. All of them are young people aged 19 to 35 years. And they are all freelancers. All the necessary specialists were found within an hour. *Panoramic Studio* decided to run the project with the team of freelancers, despite the fact that Andrei and Dmitrij never had such an experience.

Realizing that for nearest months it will be often necessary to refer to this form of attracting employees, Andrei decided to learn more about the motives that guide the members of his new project team.

Pre-interview with Paul revealed that for him the most valuable in freelance is the opportunity to choose and engage in interesting projects for him.

Web-designer Jessica noted that it is important for her to be free from the stationary workplace. In addition, she recently became a mother, so the freedom to manage time by herself is very important to her.

For the developer, Alex the opportunity not to depend on colleagues responsible for the result is most attractive in freelance.

For student Pauline freelancing is a source of new contacts in the business environment and the additional earnings. She believes that it is a good way to accumulate social capital, which in the future can be used to build her own career.

The team of freelancers was successfully approved by the partners and completed the project successfully and in a timely manner. The customer was pleased with the result *Panoramic Studio* provided. On the final meeting with Dmitrij devoted to this project Andrei made several important conclusions for the future. He stated to Dmitrij:

*Freelancers are difficult to control. The project programmer Alex didn't communicate with me at the appointed time for several times and it made me worry. Moreover, freelancers are very ambitious. Pauline has repeatedly tried to impose her views on the project, insisting that "by holding the correspondence with key stakeholders in her hands" she "feels the situation better".*

After a short pause he continued: *Freelancers are not very picky in terms of payment for their work and poorly versed in the legal aspects of the interaction with the employer. Among all the members of the team only Paul insisted on signing a contract before the execution of works.*

Dmitrij shook his head and said: *As long as I see, in general freelancing was a successful solution for our company. We were able to quickly find experts with the necessary competencies and acceptable conditions of their remuneration. In this case there was no need to "introduce" new people to the small staff of the company that is often fraught with various difficulties. And to sum up, the final evaluation of the project showed that Panoramic Studio received an additional 20% of monthly income, and labor costs increased annual total costs of the company by only 12%.*

*How do you think?, asked Andrei, Could we increase the profits of the firm by attracting freelancers as a factor of production? What are the "pros" and "cons" of such decision?*

**Questions:**

- 1. Whether to use outsourcing in their business?*
- 2. In what circumstances it is advisable to attract outsourcing?*
- 3. What are explicit and implicit benefits and losses they can derive from the use of outsourcing in their business?*

## Stock exchange madness

**Tomasz Bernat**

University of Szczecin, Poland

Jacek Herk a respected stock market analyst, spread his morning newspapers on the desk and started skimming through texts concerning the condition of economy, functioning of companies, markets operation, investment relationships and international relationships. He has been preparing recommendations for the clients of one of the biggest investment banks for a few years. As long as the works so far were relatively easy because of the stability of the Polish economy and its good perspectives for development – published in reports of national and international reports, the recent days have been causing more and more anxiety and confusion. It all began with disturbing events in Ukraine. The pro-European revolution at Majdan was only an unimportant point in relationship to its influence on the stock exchange. However, consecutive uncontrolled events related to the Crimea being annexed by Russia and the following events caused a disturbance in the relatively stable environment. It triggered hectic movements on Warsaw Stock Exchange.

His mind was gradually gathering momentum. Not only was it due to drinking strong morning coffee, but chiefly by analyzing more and more information. A part of it was irrelevant from the perspective of the stock market functioning – or even the whole capital market, while some part of it was an important factor. Jacek reading a headline after headline started to leave the articles that interested him most on the desk. Having flicked through all the material he glanced at the texts he had left: Well, I'll start from them! He gasped. He started reading them.

The first text was about the stock market profits and the Russian – Ukrainian conflict affecting them. According to the article, the experts' estimates assumed that the Warsaw Stock Exchange will earn around 33,5 m PLN. The main reason was an increase in exchange dealings which were higher among other things because of the conflict between Russia and Ukraine. A part of investors were selling shares fearing the tension escalation. Investment funds outflow was visible because of that. This significant activity of the players suited the stock exchange, because it made profits on the commissions from buy and sell transactions. (BŁĄD ORG) Simultaneously, the Warsaw Stock Exchange was cutting costs – it made sure the rents nor employees' salaries did not rise.

The next text was about suspending the companies trading on the stock market. It mainly concerned the Ukrainian companies. The trading on the Warsaw Stock Exchange must regularly share information with shareholders. On Friday, when the majority of investors were relaxing during the May long weekend, Polish Financial Supervision Authority demanded that the stock market suspends trading of certain companies shares. As it was said in the announcement, periodic reports are key source of financial information about companies indexed on the regulated market for investors. The suspension was caused by a failure to publicize in time the unit and consolidated annual reports for the financial year 2013. There were among others, companies including three from Ukraine: Sadovaya – mining coal, agricultural KSG Agro, and Westa ISIC producing batteries. Reinhold – a Swedish office, trade centers and warehouses developer operating on the Polish market since 2005 also felt ill at ease. The investors will be able to buy and sell these companies shares as soon as they publicize their annual reports for the last financial year and explain the reason for the delay. The suspension will last till the end of the session day following

the day of publicizing exhaustive information regarding the causes of not publishing in time the CEO report and explain the causes of this state.

Another text is about substantial stock appreciations after a declaration of the Russian President Vladimir Putin. He called the pro-Russian separatists in Eastern Ukraine to postpone the referendum on autonomy. This speech made the Russian RTS stock indicator rise nearly 6 % on Wednesday.

Having read this article he came across another one, concerning the US president Barack Obama. As the headline reported, a tense situation between Washington and Moscow affected the stock exchange. President Barack Obama, through his spokesman, appealed to investors for not buying Russian shares. Moreover, the White House is preparing the next sanctions, which are supposed to harm the Russian economy. It was reported as an interesting fact that one of the richest Russians Aliszer Usmanow reacted to such actions by selling his shares in Apple and Facebook.

Another portion of news concerned the stock market again. According to analysts, the deterioration of our Eastern neighbor's situation, despite affecting the pricing of the Ukrainian companies indexed on Warsaw Stock Exchange, is not evoking significant anxieties among the investors at the moment. Declines of the Ukrainian companies pricings are a result of the situation beyond our Eastern border. Further escalation of the crisis in recent days worsened the insecurities concerning the further development of this situation. What's even worse, the falls in the Ukrainian companies pricings do not have to be coming to an end. (ZDANIE ZBĘDNE). Analysts add, that they can be stopped by positive information from the Ukraine. However, the conflict is spiraling out of control at the moment. It is advised to wait for the global leaders reactions. Maybe the European Union will positively influence the Russian decision-makers who seem to be in charge of the Ukrainian events.

Another piece of news concerned the functioning of the financial market. It reported, the European Investment Bank (EIB) suspended its operations in Ukraine. The EIB boss, Werner Hoyer emphasized he was not going to cooperate with Ukraine "until bloody violence ceases there." In addition, he said on Wednesday that he ceased the credit help in Ukraine. He added that the bank is going to wait until the situation in this country becomes stable. Now the situation is so cruel that it would be a bad message but also an irresponsibility towards the people we ask for doing the job, to be active in business in Ukraine.

The last text he had left at the side was screaming with its headline: Ukraine hits Warsaw Stock Exchange. He continued reading: Drops on Warsaw Stock Exchange. The biggest companies lose even over 3,5%. Kernel is the record holder at WIG20. This Ukrainian company has lost nearly 20% today. WIG-Ukraine index is also quoted on WSE. At 3.15 p.m. it recorded a fall of 16% and the biggest one day drop since September last year was mostly influenced by two companies PGNiG and Kernel. Kernel shares dropped by 25,52% at the worst moment and lowered the trading of Polish WIG20 by 1,4%. A national gas monopolist PGNiG contributed to the scale of falls with its 8% drop. It had thrice bigger influence on the indexes trading than a crash on proportionally much smaller Kernel. WIG-Ukraine is an index comprising companies listed on WSE, whose headquarters or center is situated in Ukraine, or whose operations are chiefly run in this country. We have 11 such companies on WSE.

*Well then!* he exclaimed to himself, *now I must quickly make a list of the determinants influencing the condition of the stock market condition in Poland to the greatest extent.* He swiftly sketched a rough drawing representing the balance on the market and then he drafted a table:

Demand		Supply	
Factor	Strength of influence	Factor	Strength of influence

*Well, now I'm going to list demand and supply determinants their strength of influence and then I'll try to create a small rank of them. It'll help me in creating recommendations for my clients. It's interesting how the market will react to these determinants. I must prepare a couple of market changes variations and their influence on the market. Let's get down to work!*, he concluded his interior monologue.

**Questions:**

1. *Please describe what is stock exchange market.*
2. *If you implement perfect competition model to stock exchange market – how it should work?*
3. *What are determinants of market demand and supply in the case?*
4. *What determinants in both market size are the most important in the case?*



## Stefan's dilemma

**Yuriy Bilan**

University of Szczecin, Poland

Marat: *Stefan wants to lease/rent the land, now his financial position allows him to develop business. He can buy equipment, the necessary funds. He wants to expand the cultivation of fodder crops, as there is the demand for them.*

Anna: *What's the problem? He wants to order a marketing research? We can do it.*

Marat: *No, he wants you to give advice. Stefan has no special economic education, he is an agronomist. It is difficult to decide - what is more profitable - to go with the money to the bank and earn interest or lease the land, when in this case he pays himself, but can win on the impact on sales?*

Anna: *This question refers to the sphere of the market of production factors. I will have to read him a short lecture.*

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Stefan: *Do you want to euthanize me with theories, calculations and graphs?*

Anna: *No. I will not give you a theory. But you need to learn the basic concepts.*

*•First, it is necessary to know that money and resources, and land and labor are the factors of production, they are the components of production. Without the use of these means the production is impossible, they are production resources.*

*•Second, resource markets operate under the same laws as the commodities markets.*

Stefan: *If talking about the market, I understand that it will be more about pricing and competition?*

Anna: *You are right. As well as in the product markets, in the resource markets the competition may be perfect and imperfect. Resource market of perfect competition is characterized by a large number of customers of production factor, a small share of their purchases in the total supply and the impossibility of a single buyer to influence the price. Resource market of imperfect competition is characterized by a small number of customers and the ability of them to dictate prices.*

Stefan: *But the price of a resource is the cost of production for the company, and for the seller it is income. Prices in this market determine income of the resources sellers.*

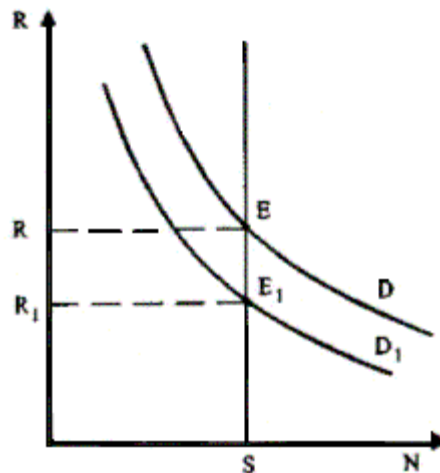
Anna: *This is the feature and the importance of resource markets. However, the prices of resources depend on the ratio of demand and supply, and demand, in turn, depends on the marginal productivity of the resource, i.e. in a market economy there is the principle of factorial (functional) income distribution - the distribution of income in accordance with the marginal productivity of the invested factors of production.*

Stefan: *Yeah, I need to learn more about the land market.*

Stefan: You know, the land market has its own peculiarities. You should distinguish between the terms of land and land services. The first term refers to the definition of land rents. The second refers to the definition of the price of land as a capital asset. Land supply is perfectly inelastic, and therefore the price of land services (rent) is entirely determined by the demand for land.

Marat: Demand for land (just like other resource) depends on the performance (productivity) of land and the demand for manufactured products using the land. For you it is important to determine the value of land rent, which depends on the market conditions, changes in the demand for land.

Stefan: I understand that. So I built such curves in the coordinates: land - rent. Look please:



N – land  
D, D<sub>1</sub> – demand for land  
S – land supply  
R, R<sub>1</sub> – land rent

N – земля  
D, D<sub>1</sub> – спрос на землю  
S – предложение земли  
R, R<sub>1</sub> – арендная плата  
E, E<sub>1</sub> – равновесная цена

It is obvious that the ground rent is determined solely by demand for services of land. If a derived demand for the land decreased, then, consequently, the land rent reduced. It is shown graphically that the demand reduction from D to D<sub>1</sub> will change the balance in the market of production factors from the point E to point E<sub>1</sub>. Accordingly the rent decreases.

Marat: Well, you see, you figured everything out. And maybe you should buy a plot of land? Stefan: I would like Anna to find out how to calculate the value of the land.

Anna: **price of the plot is determined by two factors.** First, the price of land is directly proportional to the land rent. Secondly, the price of land is inversely proportional to the rate of interest on loans. The use of loan interest rates is necessary because you buy the right to receive a regular income for a very long period of time. Owner of a certain amount of money can put it in the bank and earn an income as a percentage. But he may spend the money for the purchase of land plot. Consequently, the price of land is the discounted price. It is calculated by analogy with the acquisition of physical capital for income, the formula for determining the current value of future income, look:

$$PV = \frac{FV}{(1+r)^t}$$

As  $t$  approaches infinity, the discount factor  $\frac{1}{(1+r)^t}$  becomes less and less with the growth of  $t$ . Thus, the price of land is the present value determined by the formula:

$$PV = \frac{R}{r}$$

- $PV$  — the present value of future amounts of money;
- $R$  — the annual amount of land rent;
- $r$  — market rate of interest.

Anna continued: *The economic meaning of this formula is that the landowner who has sold the land, have received income from the sum of money in the form of bank interest equal to the rent of land.*

Stefan: *And I go back to the problem again? Give money to the bank for interest or purchase land and lease it?*

**Questions:**

1. *Can land be treat as a normal market product? Give arguments for the discussion.*
2. *What factors determine the price of land in theory and practice?*
3. *Can land be treat as an long term invest? Please make a comparison with other long term possibilities of invest.*