Original scientific article* UDC: 339.13 : 664.61.001.87 (498)

Victor Manole **
Olimpia Oancea ***
Nicoleta Isac ***

Competitiveness of bakery industry in Romania - case study

Summary: Bakery industry in Romania is a tradition since ancient times. Milling, bakery and farinaceous products industry comprises mills for grinding cereals and factories for producing bread and bakery products. Their object of activity is to produce and trade the following: milling products, bakery and pastry-confectionary products. The products obtained in milling and bakery industry are assortments of wide consumption which, by the content of nutritive substances, hold an important place in human nutrition. Taking into account their importance, the present work shall analyze the competitiveness of bakery industry in Romania as well as its perspectives.

Keywords: bakery industry, competitive organization, customer satisfaction, food safety internal customer, external customer,.

Rezime: Pekarska industrija u Rumuniji ima tradiciju još od antičkog doba. Mlinovi, pekare, industrija i promet prehrambenim proizvodima zadovoljava raznovrsne potrebe za prehrambenim supstancama koje su izuzetno važne u ljudskoj ishrani. Ovaj rad analizira konkurentnost i razvojne perspektive pekarske industrije Rumunije.

Ključne reči: pekarska industrija, konkurentnost, zadovoljstvo potrošača, sigurnost namirnica, unutrašnji kupci, spoljni kupci

1. IMPORTANCE OF BAKERY PRODUCTS IN HUMAN NUTRITION

Bread is one of the most consumed foods by humanity. Traditionally, bread is based on the flour obtained by wheat cereals. Many people consider bread as one of the ancient, and perhaps the most ancient food obtained by people.

The nutrition of each people is usually oriented on a basic food which ensures the daily need of carbohydrates. Whereas the Asian nutrition has as basic food

* Article received October 13, 2009, accepted December 22, 2009.

** Academy of Economic Studies, Faculty of AgroFood and Environmental Economics, Bucharest, Romania

*** University of Pitesti, Faculty of Economic Science, Pitesti, Romania, nicoleta_isac2004@yahoo.com

the rice, the western European nutrition is represented by potatoes. On the other hand, the eastern European nutrition, especially Romanian nutrition, has as basic food bread. We may mention the fact that there is no individual/group/family who has not in his daily nutrition at least one product of the various assortments of bakery products, either we talk about a simple bread or an assortment. So bread and bakery products factories have always formed an essential component of the national economy of each country.

The bread is a basic food, consumed daily by the population, the producing and the making of the whole range of assortments constituting a main preoccupation of Romanian society. The appearance on the market of the small bakery enterprises, much more flexible and modernized from the all points of view, essentially contributed to the restructuration of the production in the sense of diversification, improving the quality with a view to align to standards and requirements imposed by the European Union.

It is more and more felt a very strong demanding of the consumer concerning assortment diversification and the quality level of products. If in the past the consumers "contented themselves" with what the market offered them, as the society evolved, we assist to a much more informed consumer, a consumer who knows very well the market and especially knows the product he is interested in.

At the national level, lately, on the market, is visible, by the majority of producers of bread and bakery products, a diversification of bakery products both by developing local traditions, which take into consideration gram weight, form, recipes, technologies, taste and flavour of products and also by taking and adapting local consumers to some products coming from other countries.

Taking into accounts the efforts made at the level of the European Union relating to promotion of an integrated food politics which aims the whole chain of food security from producer to consumer, we appreciate it as being necessary and having priority for Romania the preoccupation of all bakery units to observe and apply of the full set of legislation relating to consumer protection, by composing recipes and procedures to produce some bakery products which meet the hygiene and food security standards.

2. ANALYSIS OF MILLING, BAKERY AND FARINACEOUS PRODUCTS INDUSTRY ON THREE COORDINATES: THE PERIOD BEFORE 1989, THE PERIOD AFTER 1989 – PRESENT AND IN PERSPECTIVE

2.1 Analysis of milling, bakery and farinaceous products industry after 1989 until present

The transition period, with its difficulties and radical changes, also changed the image of milling and bakery industry in Romania.

After1990, starting from the premise that for obtaining some quality flours is created the possibility of obtaining bakery and farinaceous products having a superior quality, the activity of retooling aimed in the first stage to modernize the mills. So, in the last 10 years, of the total of 12.000 tons/day milling capacity about 5.500 tons/day have been retooled with equipments of last generation from companies such as: Buhler, Ocrim, Golfetto, etc. In this way has been registered small consumption of utilities per tone of product and an increased efficiency of work. Due to the internal overcapacity, it is estimated that in the next years investments must be directed toward flour silos. In the present stage yearly are processed about 2.700.000 tonnes of wheat.

For a better collaboration it was necessary the modernization of flour silos which could allow them to obtain flours and mixtures of ameliorated flours (with vitamins, minerals, etc), necessary for pastry and farinaceous products industry. The tendency is that vitamins and minerals added to flours to be made directly in the mill and not in bread factories.

In Romania, at present, are licensed almost 5000 economic agents for the activity of milling, bakery and farinaceous products, all of them having private capital. Of them, almost 250 affiliated to Romanian Employers of Milling and Bakery Industry (ROMPAN) which reunites the most important producers of milling, bakery, biscuits and farinaceous products, as well as suppliers of auxiliary materials, equipment constructors specific to this sector, researchers, projectors, depositaries, traders and distributors.

Market penetration of small bakery units, more flexible from the technological point of view had a special impact over the reorganization of production in the sense of diversification, assuring an increased quantity of fresh products on the market, which determined the big units to take modernization measures. So, about 12% of the total capacity has been subject to the process of retooling with equipments and installations of small capacity, manufactured in our country or imported from famous companies from abroad. We have to mention that with these modernized capacities is realized 30-35% of the national production of bakery products.

But, the most part of bread and bakery products is made with equipments having reduced efficiency, the existent fitting out has some problems and need modernization in the technological flow for kneading, fermentation, division, pre-moulding and moulding– especially in the continuous lines of 10 and 20 t/24h. In this way the preoccupations of bakery and farinaceous products industry have been directed to cooperation with famous companies, constructors of equipments and technological installations, with a view to increase production efficiency, orienting the efforts of bakery units toward 2 directions:

- Diversification of production by purchasing modules with capacities of 150-400 kg/h, covering about 30% of the production of each unit;
- Modernization of continuous lines by modifying, in the first stage, the segment of preparation, fermentation and dough processing.

At present, there are in progress of implementation modern technologies to make bread, and in order to cope with new realities, producers in food industry, generally re-oriented the production toward assortments required by market. The most significant example, from this point of view, is that of companies within bakery industry which, due to an increased demand, began to produce more sliced bread.

The change of life rhythm and implicitly the habits of purchase and consumption materialized on the bakery products market by increasing the bread demand. Adapting to market tendencies, producers invested in complete automatic production lines, in machines for packing and slicing bread. Besides the assortments of special products packed and sliced, the companies within the same industry introduced the assortment of packed and sliced loaf. At the same time increased the distribution of integral bread, assortment which at present is on an ascending trend.

The food demand, richer and richer, to which is added the rational nutrition and price (a loaf is, on the average, 0,7 – 0,9 lei, and a sliced bread 3,5 – 4,5 lei) made the consumers replace bread with other products. The majority of producers started to diversify their products so that could meet the diversified requirements of consumers.

As for the sales of packed and sliced bread, of specialties of integral bread, graham bread, rye bread, bread with seeds and wheat germs, in the past two years has been noticed an increase of over 30 percents of sales. At present, Romania is situated on the third place in Europe, in respect to bread consumption, with 108-110 kilos per inhabitant per year, after Albania and Bulgaria, whereas the European average is of 78-80 kilos per inhabitant per year.

Lately is has been noticed a diversifications of bakery products both by developing local traditions, in respect to form, gram weights, recipes, technologies, taste and flavour of products, and by taking and adapting to local consumers requirements products from other countries.

The own supply of products in hypermarkets is adapted to the type of consumption of each store, but it is not reduced only to traditional bread, and diversified a category of special products so that, in the last two years, it has been noticed a sophistication of the bakery product supply, especially for the segment of special products. Specialists in the field consider that is a natural trend for a market situated in a stage of qualitative development, required by the more and more exigent consumers, and also by producers who try to distinguish themselves by personalised and innovative supply, both from the product point of view and from the point of view of packing and communication.

As for the investments made in the year 2008 in the milling and bakery sector, these are up to 180 million euros, and the most of them have been made in the area of secondary processing of cereals– bakery, pasta, biscuits, pastry, cereals for breakfast– investments which have as basis the access to European financing.. But for the year 2009, against the background of the financial crisis,

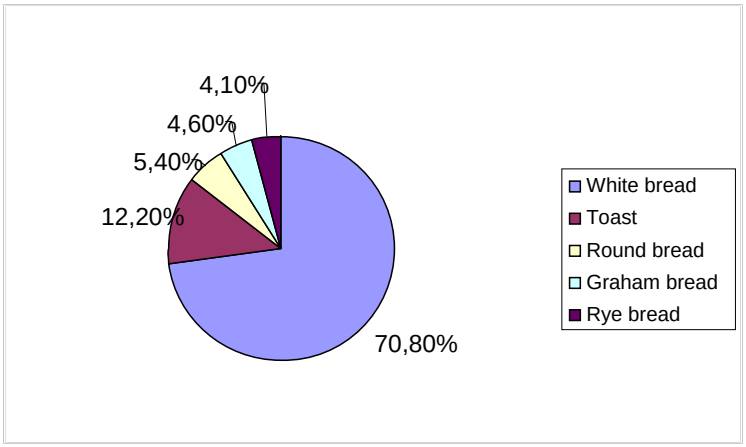
the specialised industry shall be affected, in the sense that access to bank credits for investments shall be restricted.

At the same time, specialised stores for trading bakery products hold a share of only 6% of sales. From the point of view of specialists in the field, the evolution is normal, this fact being frequent in most of developing countries.

Table no. 1: Distribution on selection of bread depinding on market quota and consumption preferences

Assortment	Market quota
White bread	70,8%
Toast	12,2%
Round bread	5,4%
Graham bread	4,6%
Rye bread	4,1%

Source: The **Market journal, No.40, February 2008**



(Source: The Market Journal, No.40, February 2008)

Diagram no.1 Distribution on selection of bread depinding on consumption preferences

From the point of view of consumption preferences, white bread is by far a leader, having a market quota of 70,8% in volume and of 66,9% in value. Graham bread has a quota of only 4,6%, decreasing by two percentage points as compared to the previous period, whereas the rye bread has a market quota of 4,1%. The conclusion is that the Romanians prefer the loaf, product which has a market quota of 80,4% in volume, increasing by 5,7% as compared to August 2006 – July 2007, followed by toast, which decreased its market quota, in

volume from 20,5%, in the previous period, to 12,2% during the period August 2007 – July 2008, and the round bread which increased in volume from 3,6% to 5,4%.

With all this, the branding is still in an incipient phase, and for this there are concerns only in some of the biggest producers. In this moment the offer for bread is in an equilibrium stage, so the supply and demand have been adjusted and there is no oversupply for bread.

In the last two years it has been found an increase of over 30% of consumption of special products packed and sliced, of products made of rye flour, integral flour, graham flour or supplements of bran, seeds and wheat germs.

Although the preference for the bread made of white flour continues to dominate the market, it is noticed an increase of consumption of products made of black flour, semi-white flour, rye flour, graham or integral flour. In the last years too, according to producers in this industry, has increased the demand for sliced and packed products. Therefore, the loaf still holds about 75% of the bread consumption, decreasing in the last two years, which led to the increase of traditional specialties such as Transylvanian bread or international specialties – ciabatta, kornspitz or baguette.

At present, there is an increase of about 10% of consumption of loaf, in parallel with an increase of over 30% of consumption of specialties. Within this context, takes place a refining of consumption, of increasing the preferences for products with fibre supplements and healthy bread, without food additives, antioxidants, preservatives, in other words without E.

The internal market of milling and bakery reached in the year 2008 2 billion Euros, increasing with 15% as compared to 2007. Consumption of bread decreased in Romania in the year 2008 with 1,5 kilos per inhabitant. At the same time, together with the increase of bread consumption has been registered an increase of pastry products.

The value of the Romanian market of milling, bakery and farinaceous products increased in the year 2009 with about 3%, as compared to the value estimated for the year 2008, by approximately two billion Euros. For the year 2009 it is estimated a quantitative increase of products with 2%-3%, one of the causes being the increase of number of consuming population, due to the coming back in the country of the Romanian workers who went abroad.

2.2 Bakery industry in Romania in perspective

Estimated at about 2 billion Euros, the bakery industry in Romania is very fragmented and at the same time affected by the evolution of prices for raw materials, especially for wheat, lately characterised by very high fluctuations. In the future it shall be reached a consolidation of industry, already visible for the milling trade, and the bread producers shall be grouped into two big categories:

industrial producers – with high volumes, strong brands, specialised on a reduced number of products, with national distribution and which will have in portfolio bakery products which dominate the market in the European Union: packed, pre-baked and frozen – and small producers, handicraft, with products sold only at "the opening of the oven", special products and having a high quality.

Bakery industry is opened to new investors and the entrance barriers significantly increased as compared to the years 1990 or the first years after 2000, and the new entrances are most likely by acquisitions and fusions. Food safety conditions, concerning the staff and the technological level, are much harsher now and very difficult in the future.

A tendency of the actual market of bakery products is the orientation toward traditional, natural and healthy products. This tendency is aligned to the European trend to create a market of ecological products. Due to gifted bakers who practised their profession with a special passion, the Romanian bakery became a real art, its development fully contributing to technical progress too.

The specialist in the field consider that bakery market has tendencies to decrease in volume, but will increase in value and most likely, in the next 7-10 years will be an equal share between fresh bread versus bread packed having a long guarantee of quality, due to some factors such as: development of modern trade, the reduced time available for shopping and cooking, but also the concentration of the market. The yearly increase of bread consumption per inhabitant in the year 2008, under 110 kilos, was due to the fact that the public composed of adolescents has another orientation of consumption, such as snacks, cereals, etc. Secondly, we must take into account that alongside with the integration of Romania in the European Union, this specialised market opened its borders and therefore there are more and more import products. In the third place, it has been created a category of consumers that eat in an elevated style, namely eating less white bread and much more salads, so it is produced a significant change in consumption. Last but not least, we must take into consideration the fact that bread price increased and will have tendencies to increase due to the need to reach the European mean, where a kilo of bread is approximately one Euro.

It is certain that industrial bread shall gain, easily but for sure, significantly higher values as the bread of the small producer will diminish. The tendency of the bakery market is toward known brands, and the selection of bread with graham, rye, whole cereals shall have a higher share from the total of the market. An increase of frozen and refrigerated products shall be noticed too.

The situation on the bread market changed and shall essentially change in the next years. The companies within the bakery industry shall be constrained to take a decision against the background of the increase of sales for sliced bread, with seeds, without preservatives and other specialties but also against the background of consumption decrease.

At present, the share for classical bread is over 90% of consumption, despite the fact that on the market there is a strong increase of consumption of specialties such as sliced bread, baguettes, bread with seeds, etc.

Against the background of increasing the prices in the bakery field and the increased interest for healthy products, Romanians started not to buy bread every day, but weekly or even rarely. On the other hand, consumers prefer more and more sliced bread, packed, with less E and a decreased caloric contribution. As for the habits at shopping, these have changed very much, in the sense that Romanians buy more from supermarkets and hypermarkets and less from shops in the neighbourhood. Bread specialised shops started to lose their role on the market. Statistics show that 70% of buying bakery products is made in hypermarkets and supermarkets, whereas shops hold 6% of sales.

Changes in Romanians consumption habits shall continue to produce and effects will be visible concretely in the shops shelves. This fact will lead to the increase of retail market , in the circumstances in which, at present, exist areas which are not covered by the modern trade.

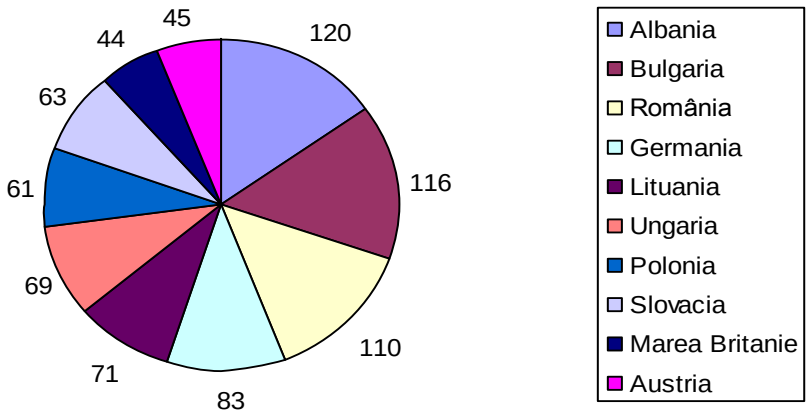
2.3 Bread consumption in Romania. Comparative analysis in Romania – Western and Eastern Europe

From the statistical standpoint, the average bread consumption per inhabitant in different countries in Europe is shown as follows:

Table no. 2: Average bread consumption per inhabitant in Europe

Nr. crt.	Country	Average bread consumption per inhabitant (kg)
1	Albania	120
2	Bulgaria	116
3	Romania	108-110
4	Germany	83
5	Lithuania	71
6	Hungary	69
7	Poland	61
8	Slovakia	63
9	Austria	45
10	Great Britain	44

Source: Daily Business, February 2008



(Source: Daily Business, February 2008)

Diagram no.2 Average bread consumption per inhabitant in Europe (kg)

The means of bread consumption in Europe significantly differ from West to East, as the inhabitants of Western countries have an average bread consumption of 66 kg/year, the consumption increases from East until an average of 83 kg per inhabitant. So, an Englishman or an Austrian consumes approximately 45 kg/year of bread and a German 83 kg, whereas a Romanian consumes every year about 110 kg of bread, and a Bulgarian 116 kg. The reason for which bread consumption is higher both in Romania and in Eastern Europe is explained by the main players in the bakery industry and by the fact that in Western Europe it is tended to a consumption of specialties to the detriment of bread.

As for the consumption preferences, in Germany is consumed more the black bread, in France is much appreciated white bread, type baguette, whereas the majority of Romanians prefer white bread (approximately 90% of them), lately being noticed a slight increase of bread demand for black and graham bread.

In the top of bread consumers in Europe, Romania is situated on the third place, with a yearly average consumption per inhabitant of approximately 108 – 110 kilos, after Albania and Bulgaria.

Considering the fact that in the European Union the consumption is of 78 – 80 kg/capita/year, it is clear the fact that bread remains the main element in eastern-Europeans, so Albania, Bulgaria and Romania remain leaders for bread consumption per inhabitant .

As for Romania, the increased consumption of bread has many roots. First of all, it is about a very strong habit adapted, taking into consideration the fact that Romania is a highly agricultural country, with a numerous population living in the countryside. Another determinant factor of the increased bread consumption is poverty.

The difference between the consumption average media in EU and Romania may be explained by the fact that in our country bread still represents the basic food, the yearly consumption per inhabitant exceeding with about 40 % the European average.

3. CONCLUSIONS

Bakery, respectively the field related to bread obtaining and bakery products represented one of the most ancient occupations in Romania, constituting one of the major components of food production.

By modernizing and retooling the bakery sector in Romania, there are sufficient qualities which can assure the internal necessary, as well as considerable amounts for export, under qualitative conditions aligned to European level. Intern and foreign investors may find a multitude of opportunities in one of the most successful and dynamic Romanian industries.

The structure of bakery industry, as well as consumers' tastes, are in a transition period, passing from a market type commodity, to one that accentuates the concept of design, packing methods, and the products has the tendency to focus upon specific target public.

Together with the increase of consumer preoccupation for brand, in the latest years has been felt a series of changes on the market, passing gradually from an unspecialised market to a market where the packing and labelling play extremely important roles.

Taking into account the European experience, it is possible too that in Romania the share of sliced bread to increase, and that of traditional bread, type loaf, to decrease. Studies show that consumers' habits of Romanians changed very much in the last ten years. So bread began to decrease as importance in Romanian consumer preferences.

REFERENCES:

1. Agenda, Informative Gazette, No. 3/2007.

2. Andreea Săseanu, *Concerns and trends in the market of bakery products in the European Union, with implications on the Romanian market of bakery products*, Amphitheater Economic, Nr. 17 April 2005
3. Bruhn, M., *Marketing - Getting to study and practice*, Economic Publishing House, Bucharest, 1999, p. 59
4. Business daily Business Standard, 27 June 2008
5. Cauvain, Stanley, P., Young, Linda, S., *Technology of Breadmaking*, Second Edition, Publisher Springer US, Subject Collection *Chemistry and Materials Science,* 2007
6. Journal Square / nr.40 February 2008, Aurel Popescu, President ROMPAN
7. Journal Square, Nr. 24 October 2006, Mona Tufeanu, Director of PR and communication Vel Pitar
8. Kotler, Ph., *Marketing Management*, first edition reprint, Publisher Teora, 1999, p. 342
9. Magazine Market/ nr.40, Alin Giurea, President Pambac, february 2008
10. Magazine Market/40, Otilia Stanciu, PR Manager Dobrogea Grup, february 2008
11. National Association of Industries for Milling and Bakery in Romania, ANAMOB, 2008
12. Popescu, A., „Romanian actualities and perspectives in bakery industry", www.agriculturaromaniei.ro
13. Purcaro, G., Moret, S., Conte, L., S., *HS – SPME – GC aplied to rancidity assessment bakery foods,* Journal Article *European Food Research and Technology*, Publisher Springer Berlin/Heidelberg, Volume 227, Number 1, May 2007, Subject Collection *Chemistry and Materials Science*
14. Review electronic of Milling and Bakery, 2008
15. Romanian Employers' Federation of Food Industry - The Romanian Food Industry Federation, ROMALIMENTA, 2008
16. Săseanu S., „*Management strategies in bakery*", Matrix Rom, Bucureşti, 2005
17. SMART financial, Cătălin Vulpe, sales&marketing manager Dobrogea Grup, december 2007
18. The Romanian Food Industry Federation, 2008
19. Wall - Street, 27 February 2007
20. ***"The quality grains by annual recolt" in The grains catalog, 2003, www.bioresurse.ro

21. ***"The standards and protectione by consumers" www.maap.ro