# COMPETITIVE CHANGES OF FOOD PRODUCTION IN BULGARIA\*

## Nikolay Sterev

University of National and World Economy in Sofia

**Abstract.** Agri-food sector is one of the traditionally well-developed sectors in Bulgaria. The export picture of Bulgarian food industry has been changed after the full EU membership of the country in 2007. Thus, the food import exceeds the food export more than twice nowadays. The aim of the paper is to reveal why Bulgarian food producers have lost their competitive advantages so fast, what kind of factors drives the food producers to worsen their production in comparison with other food-market players? The analyse showed that the food producers do not use efficiently inter-business competitive factors (technology development and transfer as well as package design and service development). On the sectorial level, the food producers focus on to the resource management and they miss to enlarge their competitiveness by cooperation with suppliers, consumers or other food processors.

**Key words:** food and beverage industry (FBI), food production's competitiveness, agri-food competition

#### INTRODUCTION

Food industry is one of the most important industrial sectors as it is connected to one of primary needs such as hunger. Thus, the world history has shown that nothing is greater than bread. But which is important characteristic of change for the Bulgarian food production for the last few years? The answer is that the most common characteristic of Bulgarian food industry is "decrease". To identify what happens behind the figures of change we had to explore how important food industry for Bulgarian economy is.

#### Why food industry has been declining for the last 5 years?

There are a lot of reasons, but we had to give the most important ones as follows:

1. The food production is dependent on development stage of food resources. The production of basic food resources from agrarian sector has been declining for the last

<sup>\*</sup>This publication is done with financial support of National Scientific Fund of Bulgarian Ministry of Education and Science by project INI DMU 02 – 24/2009. Corresponding author: e-mail: ind.business@unwe.acad.bg

20 years as many Bulgarian agri-food specialists show [Mishev et al. 2003a, Mishev et al. 2003b, Noev 2003, Ivanov 2009]. Therefore, the level of quality and quantity of food resources' supplies continuously drops down as a result of changing agrarian structures in Bulgaria<sup>1</sup>.

- 2. The food producers had to fulfil the increasing requirements of food safety as well as enlarging numbers of food quality standards. It is good for the consumers, but it is not good for producers as they are not prepared for such high standards. Just for example, many producers were pushed up to implement requirements of ISO 9000 as well as HACCP standards in the beginning of 2007. The negative effects (resp. bankruptcy or economic breakdown) of implementation of these standards are most obvious for food specializations as follows [Kopeva et al. 2011]: production of milk and dairy products; production of meat and meet products; and processing vegetables etc.
- 3. Food producers are mostly small and medium enterprises (SMEs) as a result of low entry and exit barriers of the food and beverage industry. Therefore, researchers report on worsening conditions of doing business as in the next:
  - Poor cooperation inside the agri-food sector and respectively between agriculture and food industry in Bulgaria. Many connections between food producers and their basic resources were terminated as results of structural changes in Bulgarian agriculture as well as result of structural changes in Bulgarian food industry;
  - Worsening the logistics of food supplies beside the small size of food producers.
     This is a result of poor cooperation between food producers as a result of worsening the competition in the food sector as many managers reported;
  - The small size of the entities does not allow changing the older investment equipment with newer one. Furthermore, the small size takes out the food producers as beneficent from different investment measures for improving their competitiveness:
  - The small size is a barrier for the consumer markets as the consumer behaviour in Bulgaria has changed during the last 10 years. The most of food purchases are done in the biggest shopping centres. But a small food producer could not meet the requirements of the biggest retail chains. Just for example, as a final result the import of food supplies overlaps the Bulgarian food production twice for 2011.
- 4. At last, but not least, the food producers have to fight with worsen nation infrastructure as follows:
  - worsen structurally and technologically production infrastructure, including worn out and outdated equipment as well as obsolete production technologies;
  - significantly worsen road infrastructure (incl. old vehicles; poor and relatively slow national road system, etc.);
  - slowly increasing labour productivity and hence increasingly lagging wages.

There are a lot of research papers that warn about the increasing problems in the food industry. But it is important to look out the figures and to made some basic conclusions:

1. The most of the indices show worsening the situation of food production in Bulgaria. The trend of decreasing number of entities as well as decreasing number of employees in food industry for the last 4 years since 2007 is observed.

<sup>&</sup>lt;sup>1</sup>See: MAF, http://www.mzh.government.bg/mzh/Documents/reports.aspx

- 2. The overall number of food producers has gone down with more than 10–15% for 2009 in comparison with 2001. This is a result of the huge drop down of dairy and meet processing entities. But just the last ones bear the connection between Bulgarian food production and Bulgarian agriculture.
- 3. The number of employees has dropped with 8% for the last few years as result of the global crises. But employees' reduction is not equal for all of the food producers as the biggest entities have been reducing their employees less that the SMEs have been doing it. Thus, even though there is a great decrease of number food processors, the number of their employees has not dropped so fast.
- 4. The greatest negative trend is found out for the labour productivity as the indices of the turnover per employee had moved less than the total production value had increased. In addition, the average salary has overlapped the food productivity growth after 2003, since 2010. Thus, the labour force in the food industry had produced less production that the labour costs had enlarged.

#### Why does the growth look like limited?

As the figures of variance of labour productivity shows, Bulgarian food producer has lost some of their competitive advantages that are connected to the cheaper labour force in Bulgaria. Thus, there will be not enough food producers that bring out competitive advantages to push up the growth of Bulgarian food industry [Kopeva et al. 2011, Blagoev et al. 2012].

To answer the question we had to develop deeply the change of Bulgarian food market and respectively to set the competitive changes inside it.

#### STATE OF ART

In the basics of the modern concept of competitiveness stand works of huge number of economists. Considering only on the most popular names among them we can mention: A. Smith, D. Ricardo, J.S. Mill, J. Robinson, J.M. Keynes, J. Shumpeter, P. Heine, F. Hayek, F. Knight, K. McConnell, S. Brew, M. Porter [Porter 1996, McConnell et al. 2011].

For better understanding of the problem of competitiveness and competitive changes we had to give some basic definitions as follows:

- 1. Just from the born of the classical economic theory a necessary to define the competition appears. The basics of this concept can be announced to the thesis of A. Smith [1933, p. 329] that "...In general, if any branch of trade, or any division of labour, be advantageous to the public, the freer and more general the competition, it will always be the more so". Thus, competition is recognized as a major driving force in the market, especially for long periods.
  - Another significant contribution of A. Smith [1933, p. 456] is determining the relative competitive advantages (comparative advantage). He linked these benefits to the costs saying that "...It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than to buy...".

2. Economists from the neo-classical school as D. Ricardo, J. Mill and others developed furthermore the theses about A. Smith's competition. Here we see the main forms of contemporary competition as follows: perfect competition, oligopoly and monopoly. After that the competition is understood as J.M. Keynes defined perfect competition as "a situation in which a single seller cannot influence price" just in terms of demand. Thus, perfect competition is "a situation in which a single seller cannot make more than normal profits" [Robinson 1933].

3. Contemporary importance of competition is presented by M. Porter [1988]. However, Porter [1996] connected competition with the ability to freely enter or exit the market. Thus, according to him, profitable markets yield high returns and they will attract new entities. Unless the entry of new entities can be blocked by incumbents, the abnormal profit rate will trend towards zero (perfect competition). Porter develops the concept of competitive advantage by defining that the basis of competitive advantage is specialization [Warf, Stutz 2007].

In summary, the competitiveness is relative category and has many dimensions:

- potential for intensive sustainable growth with its inherent three pillars economic, social, and environmental;
- productivity of factors of production;
- factor cost per unit of finished product, quality (technical level) of the products, availability of products and services;
- structural characteristics of the economy in the broadest sense;
- imitation and innovation potential of the economy.

The concept of competitiveness is summarized in a number of publications in which competitiveness is connected to extent to which any nation or entity can produce products and services that satisfy the test of foreign competition in the context of an open market, while increasing real GDP. This understanding is the basis of the report of the World Economic Forum [Schwab 2011], which also gives an indication of the competitiveness of the nations.

When the definition of the competitiveness is set to micro-level, respectively individual entity, we could not miss position of M. Porter [1996] that competitiveness is look like an ability of companies, industries, regions and countries to create a relatively high level of income and wages and to be open to international competition.

Diversity in the understanding of competitiveness, as well as various positions for its creation, evaluation and improvement can be represented at Table 1.

The understanding of competitiveness helps us to explore entity's competitiveness as its internal capability to present better than competitors in international markets. This is in the core of the next methodology.

#### METHODOLOGY

For better understanding of competitive changes of Bulgarian food production we need to present two different competitiveness' models respectively at macro- and micro-level. Although, there is no consensus on the classification of the environmental factors that determine the competitiveness, the most widely adopted practice in the classification of the factors of international competitiveness is given by M. Porter:

Table 1. Terms of competitiveness

Authors	Content of "competitiveness of the entity"
P.N. O'Farrell, D.W.N. Hitchens [1988]	Competitiveness of the firm is given by the competitiveness of the products. So, the assessment of competitiveness is done through individual quality indicators or performance indicators of the company, the efficiency of its production, marketing experience and lower administrative costs
W. Skinner [1985], R.H. Hayes, S.C. Wheelwright, K. Clark [1988]	They adopt the definition of O'Farrell and Hitchens as comparison between competitiveness and return on assets
P. Geroski, A. Jacquemin [2001]	They mix the concept of competitiveness of companies and their efficiency and efficiency. Thus, competitiveness is reduced to a single indicator of the economic result in a high return on their assets or high productivity of their resources. All this is provided that the firms' production costs per unit of output are equal to or lower than those of competitors
R. Kaplan, D. Norton [2000]	Competitiveness of the firm is defined as long-term efficiency of their activities
P.B. Crosby, K. Ishikawa in A.R. Martínez-Lorente, F. Dewhurst, B. Dale [1998], J.V. Saraph, P.G. Benson, R.G. Schroeder [1989], and others	Firm competitiveness is assessed by the quality of the overall activities of the company including for total quality management
E.R. Bruning, L. Lockshin [1995], and others	Competitiveness is a complex category that refers to the internal capacity of the company for achieving high performance for a long-term period

Source: Own work on the literature review.

1. The macro-level: Porter [1990] gives a consistent set of factors built on the perception that the competitive advantages of companies and industries depend on the conditions of the country in which they operate their business. Porter also offers a system of factors so-called "the diamond of the determinants of national advantage" (Fig. 1).

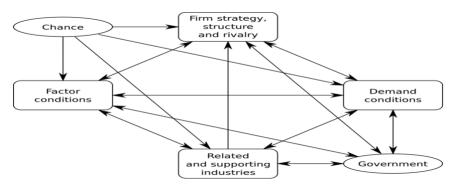


Fig. 1. Porter's diamond of competitive advantagesSource: M.E. Porter 1990. The competitive advantage of nations. Free Press, New York.

The evaluation of these national advantages' factors is connected to the industrial policy in the agri-food sector and it is done with 10-degrees indices that indicate the level of Bulgarian government support as the next:

1 – requires immediately exit of sector; 2 – greatly hamper the agri-food business; 3 – strongly hamper the agri-food business; 4 – little difficult for the agri-food business; 5 – neutral effect; 6 – marginal assist for the agri-food business; 7 – strongly

assist for the agri-food business; 8 – greatly assist for the agri-food business; 9 – slight sector protection; 10 – strongly sector protection.

2. The micro-level, respectively single entity. Porter [1996] considers competitiveness as a collection of assets and processes that successful performance on the open market. This model is well known as the "value chain" (Fig. 2).

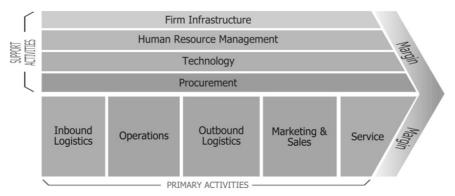


Fig. 2. Value chainSource: M.E. Porter, 1996. What is strategy? Harvard Business Review, November–December, pp. 61–78.

The evaluation of these value chain competitive factors is done by 10-degree indices that indicate the factors implementation as follows:

1 – uses traditionally decision; 2 – follow competitors just in basic decisions; 3 – follow competitors in main decisions; 4 – follow competitors in all decisions; 5 – modify just basic decisions; 6 – modify main market decisions; 7 – modify all decisions; 8 – leads (innovates) in basic decisions; 9 – leads (innovates) in main decisions; 10 – leads (innovates) above customer expectations.

The comparison between these two layers of competitiveness for the Bulgarian food industry is done by data analysis at business level. The analysis is done on two stages: intra-factors correlation analysis and between-factors correlation analysis.

**Intra-factors correlation analysis.** As the correlation refers to independence of any two or more random competitiveness factors (variables), we use it to reveal the relationship between these factors. Thus, we use as parametric correlation (measured by Pearson's correlation coefficient) as well as non-parametric correlation (measured by Spearman's correlation coefficient). For example see Table 2.

**Between-factors correlation analysis.** According to the explanation of correlations, we use to reveal the strength of relationships between different competitiveness factors as parametric correlation (measured by Pearson's correlation coefficient) as well as non-parametric correlation (measured by Spearman's correlation coefficient).

Table 2. Example for correlation between levels of fulfillment of one primary competitiveness factors

Specification	Correlation	Observation fulfillment	Leaders fulfill- ment	Rivals fulfill- ment	Fol- lowers fulfill- ment	Niches fulfill- ment	Con- sumer expected fulfill- ment	Consum- er impor- tance
Observation fulfillment	Pearson Correlation	1	.628**	.561**	.542**	.507**	.440**	0.18
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.114
Leaders fulfillment	Pearson Correlation	.628**	1	.687**	.510**	.386**	.425**	0.099
	Sig. (2-tailed)	0.000		0.000	0.000	0.002	0.000	0.462
Rivals fulfillment	Pearson Correlation	.561**	.687**	1	.671**	.577**	.350**	0.028
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.003	0.830
Followers fulfillment	Pearson Correlation	.542**	.510**	.671**	1	.727**	.444**	-0.103
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.458
Niches fulfillment	Pearson Correlation	.507**	.386**	.577**	.727**	1	.425**	-0.243
	Sig. (2-tailed)	0.000	0.002	0.000	0.000		0.001	0.096
Consumer expected	Pearson Correlation	.440**	.425**	.350**	.444**	.425**	1	-0.016
fulfillment	Sig. (2-tailed)	0.000	0.000	0.003	0.000	0.001		0.894
Consumer importance	Pearson Correlation	0.18	0.099	0.028	-0.103	-0.243	-0.016	1
	Sig. (2-tailed)	0.114	0.462	0.830	0.458	0.096	0.894	

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed).

Legend: strong correlation (Pearson's coefficient > 0.500); moderate correlation (0.499 > Pearson's coefficient > 0.300); poor correlation (0.299 > Pearson's coefficient). The evaluation is done with significance coefficient  $\alpha$  < 0.05.

Source: Own calculation.

To analyse between-factors correlations we transform the intra-factors correlation tables (Table 2) into 4-degree indices of dependency as follows:

++ - high dependency (most of intra-factors variable strongly correlate each other); +- medium dependency (most of intra-factors variable moderate correlate each other); -- partial dependency (few of intra-factors variable moderate or poor correlate each other); -- lack of dependency (few of intra-factors variable poor correlate each other or most of them are independent). For example, the correlation table could be transform to degree high dependency (++) as most of intra-factors variable strongly correlate each other (Table 3).

Table 3. Example of dependency matrix of support competitive factors

Specification	Level of fulfill-ment	Manage- ment per- sonnel	Technical staff	Machi- nery and equip- ment	Techno- logies	Funds	Brand name	Custo- mer loyalty
Management personnel	7.31	++						
Technical staff	6.87	++	++					
Machinery and equipment	6.46	+	+	+				
Technologies	5.93		_	+	+			
Funds	5.80		+	+	+	_		
Brand name	6.67			+	+	+	+	
Customer loyalty	7.27	+	+	+	+	_	+	++

Legend: ++ high dependency; + moderate dependency; - partial dependency; - no dependency. Source: Project data and own calculations.

#### **DATA ANALYSIS**

Analysis of competitive changes of Bulgarian food industry is based on business data from 138 food processors. The data is collected by interviews with their executive managers and/or their owners.

The observation<sup>2</sup> sample includes almost 3% of Bulgarian food entities (compared to their number in 2010) in six major food specializations that are very important for Bulgarian food industry as follows: a) processing and preserving of meat and production of meat products; b) manufacture of dairy products; c) manufacture of grain mill products, starches and starch products; d) manufacture of bakery and farinaceous products; e) processing and preserving of fruit and vegetables; f) manufacture of other food products.

The biggest share in observation is given on the most important food products' specializations, such as bakery and confectionery (other food products), as well as on dairy and meet processing entities. The distribution of observation by their food specialization is given in Table 4.

The competitive analysis is done on two stages:

- 1. Factor analysis by identifying competitive profile at two levels:
  - enterprise level: covers basic factors of value chain (Fig. 3);
  - sectorial level: covers basic factors of Porter's diamond (Fig. 2).
- Factor analysis by identifying importance of competitive factors to firms' development.

#### Analysis of profile of enterprise competitiveness

The next analysis reveals what happened behind the firms' strategies. Thus, the importance of intra-firm competitive factors is divided by their relation to the production processes and respectively to basics of consumer behaviour.

<sup>&</sup>lt;sup>2</sup>Data is collected by research on project INI DMU 02 - 24/2009.

Specification	Number of enterprises (for 2010)	Share (%)	Number of enterprises of observation	Share of observation (%)	
Manufacture of food products	4 829	100.0	138	2.9	
Processing and preserving of meat and production of meat products	491	10.2	19	3.9	
Processing and preserving of fruit and vegetables	329	6.8	5	1.5	
Manufacture of dairy products	296	6.1	12	4.1	
Manufacture of grain mill products, starches and starch products	155	3.2	10	6.5	
Manufacture of bakery and farinaceous products	2 652	54.9	48	1.8	
Manufacture of other food products	583	12.1	44	7.5	

Table 4. Number of enterprises and their share in total of observed food processors

Source: Eurostat: SBS, http://epp.eurostat.ec.europa.eu/portal/page/portal/european\_business/data/database and own calculations.

The first group cover 13 primary competitive factors that are directly connected to the primary processes from the value chain as follows: physical characteristics; chemical characteristics; reliability; durability; aesthetics (beauty of design); prestige manufacturer; price of a product; name of the product; packaging design; versatility of the pack; complexity of complementary services; total quality of the main product; total quality of complementary services.

The evaluation of the primary competitiveness factors is done by 2 indices as follows:

- 1. Level of fulfilment that indicate factors' implementation in the next 10 degrees: traditionally decision; [1-2-3-4-5] modified traditional decision; [6-7-8-9-10] innovative (unique) decision.
- 2. Level of importance that indicate the degree of consumers' perception of the factor by value [0; 1] or percentage [0.0%; 100.0%].

There are enough statistical evidences that there is high correlation between level of importance and level of fulfilment for all of these 13 primary factors. Thus, according to enterprise data, these primary factors could be grouped in three groups by their level of importance for the consumers as well as the level of fulfilment:

- very important factors (2): price of product; total quality of the main product;
- average important factors (6): physical characteristics; chemical characteristics; reliability; durability; prestige of manufacturer; aesthetics (beauty of design);
- less important factors (5): the last five factors.

The analysis of the support factor covers seven support competitive factors that are indirectly connected to the management processes from the value chain (Fig. 3) as follows: management personnel; technical staff; machinery and equipment; technologies; funds; brand name; customer loyalty.

The evaluation of the support competitive factors is very similar to the evaluation of the primary ones and it is done with indices of the level of fulfilment that indicate factors' implementation in the next 10 degrees: absence; [1-2-3-4] medium for the market; [5-6-7-8] excellent for the market, [9-10] unique for the market.

These support factors could be grouped in three groups by their fulfilment level, according to enterprise data:

- well-developed factors (3): quality of managers; quality of technical staff; customer loyalty;
- average developed factors (2): brand name; machines and equipment;
- not-well-developed important factors (2): technology; funds.

In comparison with market players, there is a great difference in management decisions for the support competitive factors between observed entities and market leaders. The observed sample is too far behind leader(s) by technical support and quality of equipment. Their competitive advantage is just connected to the customer's loyalty.

The analysis of competitiveness at sectorial level starts with analysis of 10 business strategy's competitive factors that are directly connected to the Porter's diamond (Fig. 2) as follows: quality of material resources; favourable geographical location of the entity; technology level; qualification and experience of staff and managers; long-term contracts with suppliers; access to financial resources; long-term agreements with key customers; long-term contracts with distributors; cooperation with research organizations and universities; participation in a cluster.

The evaluation of the business strategy's competitiveness factors is done with indices of level of fulfilment that indicate business strategy's implementation in the next 10 degrees: absence; [2-3-4] medium for the market; [5-6-7-8] excellent for the market; [9-10] unique for the market.

According to the observations' data, these business strategy's factors could be grouped in three groups by their fulfilment level:

- well-developed factors (3): quality of resources; quality of technology; quality of management;
- undeveloped factors (3): agreements with suppliers; agreements with customers;
   agreements with sellers;
- worse-developed factors (2): cooperation with universities; cooperation within competitors (market clusters).

Finally, analysis covers 12 ouside business strategy's competitive factors that are directly connected to the Porter's diamond (Fig. 2). They could be devided into two groups.

The evaluation of the factors of conditions is connected to the industrial policy in the agri-food sector and it is done with indices of level of support that indicate government factors' support in the next 10 degrees: absence; [1-2-3-4] neutral effect; [5-6-7-8] positive effect; [9-10] protection.

These market condition's factors are not well developed as their highest indices value is not upper than 5.52 (from maximum 10). Even more, just four of them are government supported with positive effect (indices value is up 5.00) and the others do not effect of the market as their level of support is neutral (indices value is 3.88).

In summary, we have well-developed firms' management factors as primary ones as well as support factors with average value of fulfilment 6.64–6.93. In controversy, the conditions factors are too worse developed as well as related industries' factors are evaluated with indices of support 4.63–4.69. Between then are stated business strategy's factors with fulfilment level 5.37 (Fig. 3).

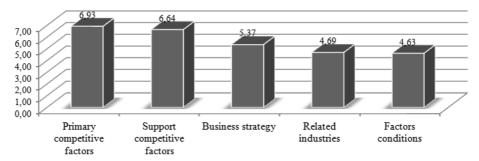


Fig. 3. Competitive factors by their level of fulfilment (support) at observed entities Source: Project data and own calculations.

### **Factor analysis**

The next factors' analysis reveals how different competitive factors related each other. These relations are important for identifying the necessary competitive improvement of food producers in Bulgaria.

The first analysis covers the correlation analysis on the degree of dependency of the observed 13 primary competitive factors. The correlation analysis of the degree of dependency allows identifying three groups of factors as follows:

- Independent factors (insignificant correlation coefficients in  $\alpha > 0.05$ ) (4): durability; name of the product; beauty of product design; package design;
- Partial-dependent factors (significant poor correlation coefficients below 0.300 in  $\alpha < 0.05$ ) (2): complexity of complimentary service; total quality of complimentary service. The correlation is found with factors as prestige of manufacturer, and total quality of the main product;
- Fully-dependent factors (significant strong correlation coefficients upper 0.500 in α < 0.05) (4): price; total quality of main product; physical as well as chemical characteristics.</li>

The second analysis covers the correlation analysis on the degree of dependency of the observed seven support competitive factors. Correlation analysis of data in the dependency matrix allows identifying three groups of support factors as follows:

- personnel factors (2): quality of management; quality of technical staff;
- equipment factors (2): quality of assets; customer loyalty;
- finance factors (3): funds; technology; brand name strengths.
   Groups do not depend on the value of the competitive factors for observed sample.

Finally, the analysis covers the strength of relations between different competitive factors. It is done by parametric correlation analysis (measured by Pearson's correlation coefficient) as well as by non-parametric correlation (measured by Spearman's correlation coefficient). According to the correlation matrices, the next conclusions could be done:

1. Three of support factors could directly enlarge competitiveness if they are improved as follows: managerial staff, technology and machinery. Thus, the food production

could perform better when improve quality of its managerial staff and used techniques and technologies.

- 2. The most effective used business strategies are connected to the resources as material resources, financial access, and managerial and technical staff. But the strategies that could bring better competitiveness are the next ones: long-term agreements with key customers or with distributors as well as cooperation with research organizations and universities or cooperation in a market cluster.
- 3. The EU-membership of the country is not enough used to enlarge the competitiveness of the food business, but the admission of production factors, such as financial system, research system as well as infrastructure, are the most important factors conditions.

#### CONCLUSIONS

Bulgarian food industry becomes weaker and weaker years by years in the last decade in comparison with other EU-countries. It is a result of not enough good management as well as the factors conditions of Bulgarian food industry and Bulgaria as a whole.

Some main reasons had to be marked:

- Food producers do not use efficiently inter-business competitive factors. As the analysis shows, the Bulgarian food processors rely on product quality and price, and also on the quality of their managerial staff as the prime competitive factors. The less developed competitive factors are as follows: technology development and transfer as well as package design and service development;
- On the sectorial level, the focus on the food producers is set to the resource management and they miss to enlarge their competitiveness by cooperation with suppliers, consumers or other food processors. Furthermore, the conditions factors are not well developed and it is very pity that the most undeveloped factors are factors of related industries;
- In addition, the qualitative primary competitive factors do not rely on development
  of business strategies or even more to development of conditions factors. Thus, these
  qualitative factors as product name as well as product and package design could be
  found as factors with competitive potential;
- The most important support competitive factors are personnel factors as well as technology equipment factors. But they are not equally developed. The factors conditions are oriented to develop staff factors but business strategies are needed to be developed equipment factors. In addition, the cooperation with research institutes as well as national innovation support is one of the most undeveloped factors conditions.

Finally, the process of decreasing competitiveness of Bulgarian food production could be stopped just in cooperation between business entities and government. There is a lack of national support instruments that develop food producers' competitiveness and the final result is a weak Bulgarian food industry on the European scene.

#### REFERENCES

- Blagoev D., Kopeva D., Shterev N., 2012. Industrial Dynamics in Bulgaria the Connection between Past and Future. 11th Comparative Analysis of Enterprise Data & COST Conference 2012, 26-28 April 2012, Nuremberg, Germany, http://doku.iab.de/fdz/events/2012/Kopeva.pdf [on-line document].
- Bruning E. R., Lockshin L., 1995. Fundamental Elements in the Definition of Organizational Competitiveness.
- Geroski P., Jacquemin A., 2001. Barriers to Entry and Strategic Competition. Taylor & Francis, IJK
- Hayes R.H., Wheelwright S.C., Clark K., 1988. Dynamic Manufacturing. New York: The Free Press.
- Ivanov B., 2009. An Assessment of the Competitiveness of the Dairy Food Chain in Bulgaria. Enlargement Network for Agripolicy Analysis, Study 1, http://www.euroqualityfiles.net//AgriPolicy/Report%202.1/Bulgaria%20Agripolicy%20D2-1.pdf [on-line document].
- Kaplan R., Norton D. 2000. The Strategy Focused Organization. HBS Press, USA.
- Kopeva D., Blagoev D., Sterev N., 2011. Bulgarian Food Industry Growth and Trade with BRIC Countries. Acta Scientarum Polonorum, Oeconomia 10(3), 13–24.
- Martínez-Lorente A.R., Dewhurst F., Dale B., 1998. Total Quality Management: Origins and Evolution of the Term, http://repositorio.bib.upct.es/dspace/bitstream/10317/441/1/tqm2.pdf [on-line document].
- McConnell C., Brue St.L., Flynn S.M., 2011. Economics: Principles, Problems, and Policies. The McGraw-Hill Series in Economics.
- Mishev P., Ivanova N., Davidova S., 2003a. Key Developments in the Agri-Food Chain and on Restructuring and Privatisation in the CEE Candidate Countries, 2003, Institute of Agricultural Development in Central and Eastern Europe, http://ec.europa.eu/agriculture/publi/reports/agrifoodchain/2002 en.pdf [on-line document].
- Mishev P., Ivanova N., Mergos G., Stoforos C., 2003b. Recent Agricultural Policy Developments and Opportunities for Bulgaria, 2003, http://ressources.ciheam.org/om/pdf/c44/00800089. pdf [on-line document].
- Noev N., 2003. Restructuring and FDI in the Bulgarian Wine Industry, 2003, http://www.vdqs.net/documents/2003Buda/papiers/noev.pdf [on-line document].
- O'Farell P.N., Hitchis D.W.N., 1988. The Relative Competitiveness and Performance of Small Manufacturing Firms in Scotland and the Mid-west Ireland: An Analysis of Matched Pairs. Regional Studies 22, 399.
- Porter M.E., 1988. Competitive Advantage: Creating and Sustaining Superior Performance.
- Porter M.E., 1990. The competitive advantage of nations. Free Press, New York.
- Porter M.E., 1996. What is strategy? Harvard Business Review, November–December, 61–78.
- Robinson J., 1933. The Economics of Imperfect Competition. Macmillan, London.
- Saraph J.V., Benson P.G., Schroeder R.G., 1989. An Instrument for Measuring the Critical Factors of Quality Management. Decision Sciences 20 (4) 810–829.
- Schwab K. (ed.), 2011. The Global Competitiveness Report 2011-2012.
- Skinner W., 1985. Manufacturing: The Formidable Competitive Weapon. Wiley, New York.
- Smith A., 1933. The Wealth of Nations. http://www.bibliomania.com/2/1/65/112/frameset.html [on-line document].
- Warf F., Stutz B., 2007. The World Economy: Resources, Location, Trade and Development (5th ed.). Pearson, Upper Saddle River.

N. Sterey

## PRZEMIANY W SYTUACJI KONKURENCYJNEJ PRODUKCJI ŻYWNOŚCI W BUŁGARII

Streszczenie. Sektor rolno-żywnościowy jest jednym z tradycyjnie dobrze rozwiniętych sektorów w Bułgarii. Obraz eksportu bułgarskiego przemysłu żywnościowego zmienił się po uzyskaniu pełnego członkostwa kraju w UE w 2007 roku. Celem niniejszego artykułu jest odkrycie, dlaczego bułgarscy producenci żywności stracili tak szybko swoje przewagi konkurencyjne, jakie czynniki spowodowały pogorszenie się produkcji producentów żywności w porównaniu z innymi uczestnikami rynku żywnościowego? Z przeprowadzonej analizy wynika, że producenci żywności nie stosują efektywnie takich środków poprawy konkurencyjności, jak rozwój i transfer technologii, rozwój wzornictwa opakowań czy usług. Na poziomie sektora producenci skupiają się na zarządzaniu zasobami, a nie dostrzegają możliwości poprawy konkurencyjności poprzez współpracę z dostawcami, konsumentami czy innym przetwórcami.

**Słowa kluczowe:** produkcja żywności i napojów, konkurencyjność produkcji żywności, konkurencyjność rolno-spożywcza

Accepted for print – Zaakceptowano do druku: 15.12.2013