Export Competitiveness of Bulgarian Food and Beverage Industry: Perspectives and Policy Measures

Prof. Dr. DIANA KOPEVA, Assoc. Prof. Dr. PASKAL ZHELEV, Assoc. Prof. Dr. NIKOLAY SHTEREV, Assoc. Prof. Dr. DIMITAR BLAGOEV University of National and World Economy – Sofia, Bulgaria

Summary

Over the last ten years, the international competitiveness of Bulgaria's agro-food industry has significantly increased. It is characterized with high export growth, positive trade balance, increase of world market share, and strengthening of the comparative advantages. The structure of Bulgaria's agro-food exports is very low diversified, and still with high dependence on cereals and oil-seeds.

The aim of the paper is to develop scenarios for future development of export competitiveness, and, on the basis of conducted analysis, to draw policy measures to strengthen the export competitiveness of the Bulgarian agro-food industry.

The analysis is based on international trade data for the 24 groups of agro-food products defined under the HS (chapters 01–24) and its four-digit code breakdown. The trade approach has been most intensively used to evaluate competitiveness at a sectoral level. The following trade indicators are used: export growth; product structure and diversification; market share; and revealed comparative advantage.

Following Gehlhar-Pick (2002) and using unit value difference and trade balance, Bulgaria's foreign trade with food products is disentangled in 4 categories:

- Successful price competition (trade surplus at lower export than import unit value);
- Unsuccessful price competition (trade deficit at lower export than import unit value);
- Successful quality competition (trade surplus at higher export than import unit value);
- Unsuccessful quality competition (trade deficit at higher export than import unit value).

Potential scenarios for future development and respective policy measures are elaborated for each category of food products.

Key words: Competitiveness, Export, Food Industry

Конкурентоспособност на износа на български храни и напитки: перспективи и политически мерки

Проф. д-р ДИАНА КОПЕВА, Доц. д-р ПАСКАЛ ЖЕЛЕВ, Доц. д-р НИКОЛАЙ ЩЕРЕВ, Доц. д-р ДИМИТЪР БЛАГОЕВ

Университет за национално и световно стопанство – София, България

Резюме

През последните 10 години международната конкурентоспособност на хранителната промишленост в България се е повишила значително. Това се характеризира с висок растеж на износа, положителен търговски баланс, увеличаване на дела на световния пазар и засилване на сравнителните предимства. Структурата на българския износ на хранителни и селскостопански продукти е много слабо диверсифицирана и все още силно зависима от зърнените и маслодайни култури.

Целта на доклада е да се развият сценарии за бъдещо развитие на конкурентоспособността на износа и, на базата на проведен анализ, да се очертаят мерки за засилване на конкурентоспособността в българската хранителна промишленост.

Анализът е на базата на международни търговски данни за 24 групи хранителни и селскостопански продукти, определени по HS (глави 01–24) и разбиване на четирицифрен код. Търговският подход е използван интензивно за изчисляване на конкурентоспособността на секторно ниво. Използвани са следните търговски индикатори: растеж на износа; структура и диверсификация на продукта; пазарен дял; разкрити сравнителни предимства.

Следвайки Gehlhar-Pick (2002) и използването на стойностната разлика и търговския баланс, външната търговия на България с хранителни продукти се разделя на 4 категории:

- Успешна ценова конкуренция (търговски излишък при по-ниска стойност на единица износ, отколкото на единица внос);
- **Неуспешна ценова конкуренция** (търговски дефицит при по-ниска стойност на единица износ, отколкото на единица внос);
- Успешна конкуренция по отношение на качеството (търговски излишък при по-висока стойност на единица износ, отколкото на единица внос);
- Неуспешна конкуренция по отношение на качеството (търговски дефицит при по-висока стойност на единица износ, отколкото на единица внос).

Потенциалните сценарии за бъдещо развитие и съответни политически мерки са изработени за всяка категория хранителни продукти.

Ключови думи: конкурентоспособност, износ, хранителна индустрия

Introduction

The Bulgarian agri-food industry is one of the traditionally developed economic sectors and has been sustainably developing in the last decade. Some social and political changes as the accession of Bulgaria to the European Union helped the Bulgarian food processing to develop as it had to comply with the rules of the EU's intracommunity trade.

The importance of further development of Bulgarian agri-food production as well as further improvement of export competitiveness of food processing products are based on the facts that agri-food sector is the largest EU sector with a turnover of EUR 1.244 trillion and it accounts for 18% of the EU share in global exports. In addition, the agri-food industry in the EU employs 4.2 million people.

The Bulgarian case shows that the Bulgarian turnover of agri-food goods² was EUR 4.7 billion in 2013 with a value added of EUR 0.8 billion. Food industry ranks second in the national economy by number of employees. Furthermore, the share of export of food processing products of the total Bulgarian export was 13.65% in 2013.

According to these preliminary figures it could be summarized that:

- The food industry is the largest manufacturing sector in Bulgaria;
- It has been assigned a major role in Bulgaria's reindustrialization aspirations;
- In the last decade the sector has experienced a tangible increase in its competitiveness.

It is necessary for the analysis to set assess the effects of the EU accession for better understanding the figures for the development of the agrifood industry in Bulgaria. The most significant effect of the accession of Bulgaria to the EU is that the food processing industry products' turnover has greatly increased. The figures³ shows that total export of Bulgarian food products to the EU increased 2.5 times for the period 2007–2010 as well as the share of food industry in Bulgarian exports structure increased from 5.4% to 9.4% and in the EU export structure from 7.0% to 12.9% for 2007–2011.

The overall effect of the development of the Bulgarian agri-food industry could be presented by the dynamics of the Bulgarian total exports and food products exports (Figure 1).

The figures show that the dynamic of Bulgarian food exports is steady increased has been

¹ Data & Trends of the European Food and Drink Industry, 2014-2015 (http://www.fooddrinkeurope.eu)

² NSI, Export-import, 2015 (http://www.nsi.bg)

³ NSI, Export-import, 2015 (http://www.nsi.bg)

steadily increasing over the last decade. Thus, the export of food products was EUR 1.01 billion in 2005 and remarkable increased to the remarkable value of EUR 4.05 bln in 2013. So, the average annual growth rate of Bulgarian food export is 15.6% for 2005–2014 in comparison with 10% annual growth of the total Bulgarian export. Re-

spectively, the share in-of food products in Bulgaria's exports increased from 10.7% in 2005 up to 16.8% in 2014.

Another point of analysis is given by the dynamics of export, import and trade balance of Bulgaria in the exchange of food products (Figure 2).

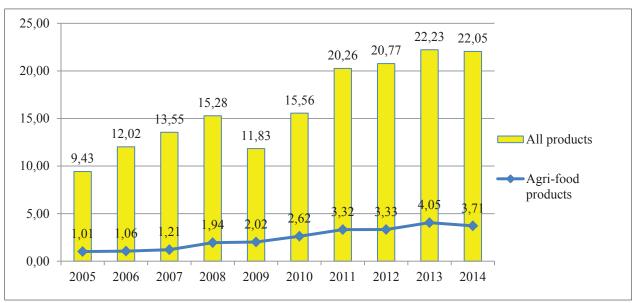


Fig. 1. Dynamics of the Bulgarian total exports and food products exports (2005–2014, bln euro) *Source: UNCTAD.*

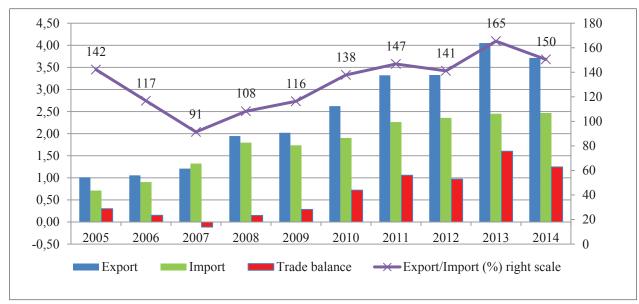


Fig. 2. Dynamics of exports, imports and trade balance of Bulgaria in trade with food products (2005–2014, bln euro)

Source: UNCTAD.

The figures show that the difference between export and import of Bulgarian food products has been systematically growing since 2008. Therefore, the positive foreign trade balance which initially was less than EUR 150 mln increased to EUR 1.2 billion in 2014. Thus, the ratio between export and import in 2014 is 150% and it expressed that Bulgaria exported 1.5 times more food than it imported.

All these data could be interpreted as expressing the competitive advantages of the Bulgarian agri-food industry. And it defines the main aim of the paper: to analyze changes in the export competitiveness of the Bulgarian agro-food industry in the last ten years.

1. State of art and methodology

For analyzing the changes of the export competitiveness of Bulgaria's agro-food industry it is necessary to define the meaning of Export Competitiveness at a sectoral level.

While it is fairly easy to understand what is meant by competitiveness of an individual firm, the notion of competitiveness of an entire sector is more problematic as the definition of a sector is rarely clear cut, and also within any sector there are companies that are extremely competitive and others that are failing. However, recently, there has been a growing tendency to analyze the international competitiveness of an economy based on the performance of its various sectors. It is considered that the most appropriate level at which the factors and sources of competitiveness can be best evaluated is the sectoral one.⁴

Markusen (1992) suggested the following definition of competitiveness on a sectoral level in a free-trade environment:

- An industry loses competitiveness if it has a declining share of total domestic exports or a rising share of total domestic imports deflated by the share of that good in total domestic production or consumption.
- An industry loses competitiveness if it has a declining share of total world exports or [a] rising

share of total world imports of that good deflated (divided by) the country's share of world trade. ⁵

According to (Yaacob, 2007) competitiveness on the mesoeconomic level is observed as the comparative advantage of an industry of a country, and also as the ability of an industry to gain and maintain a share of domestic and export markets.⁶

Competitiveness is a comparative concept by its very nature and is also a complex notion. The most commonly used indicators in the specialized literature that measure the export competitiveness of industries on international markets, reflecting the multidimensionality of the concept are:

- volume and growth of exports;
- comparative advantages;
- diversification of exports;
- degree of processing of exports;
- product quality based on a comparison of average export prices.

The volume and growth of industry export could be analyzed by an index that represents the value of export and the rate of export growth: average annual rate of growth in exports (G_i).

$$\mathbf{G}_{i} = \left(\left(\frac{X_{t2}}{X_{t1}} \right)^{(1/n)} - 1 \right) * 100, \quad (1),$$

where X_{t1} and X_{t2} are the export value respectively in the period t_1 and t_2 , n is the number of years during the analyzed period.

When analyzing the index, the change of the average annual growth rate is between -100% (if exports are terminated) and $+\infty$. When G_i is zero, it means that the value of exports during the period remained constant. Fast growing export values even in small absolute volumes identify product groups for which the country has a certain potential for export.

Another index for sectoral competitiveness analysis is based on the ability of the individual sector to increase its share on international markets in comparison with the same sectors of other

⁴ European Commission, 2007. EU competitiveness report, Luxembourg, p. 87; UNCTAD, (2004) "Trade and Development Report '04", p. 135.

⁵ Markusen, J. R., 1992. Productivity, Competitiveness, Trade Performance, and Real Income, Ottawa: Economic Council of Canada for Minister of Supply and Services Canada, p. 8

⁶ Yaacob, H., 2007. The study of export competitiveness of Malaysian electrical and electronic product, Shah Alam, p. 25.

countries. Such index is Market share (MS) that returns the share of total exports of a given product from the country under study in total world exports of the same product.

$$\mathbf{MS}_{ij} = \left(\frac{X_{ij}}{X_{iw}}\right) * 100 \tag{2},$$

where X_{ij} is the value of export of product i from country j, and X_{iw} is the value of the world export of product i.

Higher values of global market share mean higher competitiveness. However, the indicator favors bigger countries that usually export more in absolute terms than the smaller ones.

The analysis of comparative advantages uses indicators based on the value of total export or on the net export (export minus import). The RCA₁ determinates whether the industry possess comparative advantage in the way it is "revealed" in international trade⁷.

$$RCA_{ji} = \frac{Xji}{X_{wt}/X_{jt}}$$
(3),

where Xji and Xjt are values of export of product i of country j and value of total export of country j, and X_{wt} and X_{wt} are world export of product i and total world export.

There are several possible interpretations of the index RCA_{it} .

First, the index allows identifying countries that have a comparative advantage in trade within an industry and those that do not have one;

Second, the index allows to compare one country/industry to another country/industry by giving comparative advantages a quantitative assessment;

Third, the index allows to rank different countries and industries/products in accordance with the specific values of the **RCA**_{ii}.

Another indicator that rests on the notion of revealed comparative advantages is based on the net trade position of countries/industries. It is calculated as a ratio between trade balance of country j with product i and the value of the total trade with the product. It is a relative trade balance (RTB)

$$RTB_{ji} = \frac{\left(X_{ij} - M_{ij}\right)}{\left(X_{ii} + M_{ii}\right)} \tag{4},$$

where X_{ij} and M_{ij} are values of export and import of product i in country j.

RTB measures the degree of imbalance in trade flows of countries with a given product, and its normal distribution makes it a suitable tool for comparative analysis across time, countries, and sectors. High positive values of relative trade balance signify that domestic production is highly competitive on both domestic and international markets

2. Applied results

Many authors (Jushasz, A., H. Wagner, 2013; Gavrilescu, C., D. Voicilas, 2014; Toming, K., 2006)⁸, study the competitiveness of the agrifood industry (food processing) by using statistical data for the first 24 chapters of the Harmonized System for description and coding system (HS). Thus the food sector is considered in a broader sense including Section I "Live animals and animal products" (Chapters 01–05), section II "Vegetable products" (Chapters 06–14), Section III "Fats and oils of vegetable or animal origin" (Chapter 15), section IV "Food, drinks and tobacco" (Chapters 16–24) of the HS.

The temporal scope of the analysis covers the last decade - the period between 2005 and 2014.

As a source of detailed statistics on foreign trade with agri-food products we use the database of the United Nations Conference on Trade and Development (UNCTAD).

⁷ Zhelev, P., 2009. Sravnitelnite predimstva na stranite v mezhdunarodnata targoviya i tyahnoto kolichestveno opredelyane, Biznes posoki, issue 1/2009, pp. 70-78

⁸ Jushasz, A., H. Wagner, 2013. An analysis of Hungarian agri-food export competitiveness, Studies in Agricultural Economics, 11/2013, pp. 150-156; Gavrilescu, C., D. Voicilas, 2014. Changes in the Romanian Agrifood Trade Competitiveness in the Post-accession Period, Management Theory and Studies for Rural Business and Infrastructure Development, Vol. 36. No. 4, pp. 823-834; Toming, K. 2006. Accession to the EU: Did it Boost the Export Competitiveness of the Estonian Food Processing Industry, Tartu University Press.

2.1. Basic indicators

First, the analysis covers the relationship between the basic indicators such as: value of export and import for different products.

By evaluating the impact of global exports (independent variable) on the Bulgarian export (dependent variable) the next results are found:

• There is a significant model of dependence relationship between global exports (independent variable) and Bulgarian export (dependent variable) (Table 1).

The model explains 73.46% of the cases. The coefficient $b_1 = 1,408$ shows that the Bulgarian export is nearly 50% higher following any rise in global food trade.

• There are some exceptions (Figure 3).

The deviation from the model is observed for the next product specializations:

- HS 03: Fish, crustaceans, molluscs, aquatic invertebrates' nes:
 - HS 10: Cereals
- HS 12: Oil seed, oleagic fruits, grain, seed, fruit, etc., nes;
- HS 24: Tobacco and manufactured tobacco substitutes.

Individual factors such product specializations are shown in Table 2.

The data follows shows that the revival of world trade in tobacco by 1% leads to increased Bulgarian export of tobacco by 2.58%. In trade in cereals this increase is less, by 2.07%.

The dependence between the export/import of food in Bulgaria and price levels permit to construct the corresponding curves of supply. By evaluating the impact of export price (independence)

Table 1. Relationship between global exports (independent variable) and Bulgarian export (dependent variable)

Model Summary and Parameter Estimates

Dependent Variable: EXPORT								
Model Summary						Parameter Estimates		
Equation	R Square	F	df1	df2	Sig.	Constant b ₀	$\mathbf{b}_{_{1}}$	
Power	.735	725.248	1	262	.000	.000	1.408	

The independent variable is WLD EXP.

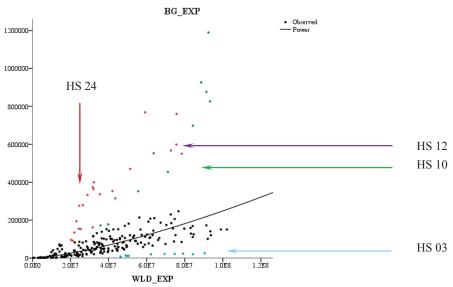


Fig. 3. Model of dependence between Global exports (independent) and Bulgarian export (variable)

Table 2. Individual coefficients of dependence between global exports and Bulgarian export

	*		
			$\mathbf{b}_{_{1}}$
HS 24: Tobacco substitutes	and manuf	actured tobacco	2.562
HS 10: Cereals			2.063
HS 03: Fish, cru invertebrates ne		nolluses, aquatic	1.407
HS 12: Oil seed fruit, etc, nes	l, oleagic fru	nits, grain, seed,	1.342
ALL without H	S 03, 10, 12	, 24	1.385

dent variable) on the Bulgarian export (dependent variable), the next results are found (Figure 4).

The Figure shows the relative concentration of price levels and levels of food export around the lowest levels in two dimensions. With the relative deviation of the curve feature: HS 24: Tobacco and manufactured tobacco substitutes and HS 02: Meat and edible meat offal.

2.2. Model of dependence

To determine the dependence of prices on the export and import of food by a regression anal-

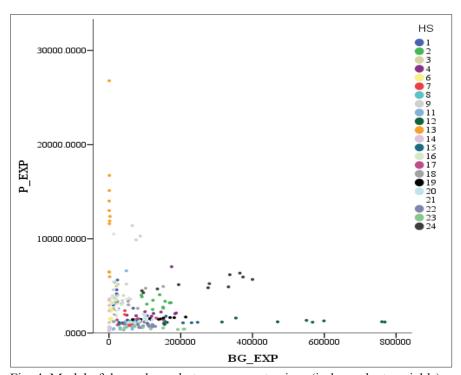


Fig. 4. Model of dependence between export prices (independent variable) on the Bulgarian export (dependent variable)

Table 3. Export price model

Coefficients

	Standardiz	zed Coefficients	df	F	Sig.	
	Beta	Bootstrap (1000) Estimate of Std. E	rror			
P_EXP	014	.122	2	.014	.986	
P_EXP_1	728	.240	2	9.176	.000	
P_EXP_2	.167	.236	1	.497	.481	

Dependent Variable: BG EXP

ysis method for optimal scaling and regression model CARTREG is conducted.

• Export price model (Table 3): the model is:

$$BG_EXP = b_1.P_EXP_t + b_2.P_EXP_{t-1} +$$

$$+ b_3.P_EXP_{t-2}$$

Although the identified factors were not statistically significant due to the fact that the coefficient of reliability $\alpha \ge 0.100$ clearly stands out that the impact of the price in the previous period (t-1) is significantly higher than the impact of the export price of the current (t) and previous (t-2) periods.

Additionally, the significance of the model is checked (Table 4).

All dependencies expressed by factors b₁ fall within the confidence interval. At this The price from the previous period works towards increasing the amount of exports, while the price of this the current period exerts more influence in the direction of reducing exports.

• Import price model (Table 5): the model is:

$$BG_IMP = b_1.P_IMP_t + b_2.P_IMP_{t-1} + b_3.P_IMP_{t-2}$$
$$+ b_3.P_IMP_{t-2}$$

Notwithstanding the coefficients of statistical reliability $\alpha \ge 0.100$, it is confirmed the-that the influence over imports of the food prices from previous years is stronger than that in the current year.

Additionally, the significance of the model is checked (Table 6).

The data confirmed that the impact of the prices of the preceding year (t-1) in the formation of imports was more than 2 times greater than that influencing the prices of imports from the current year t.

2.3. Relative indices

The dynamics of the two most commonly used competitiveness indicators (Index of revealed comparative advantage – RCA and index

Table 4. Linear regression of Export price model

Model		Unstandardized	Unstandardized Coefficients		t	Sig.
		В	Std. Error	Beta	_	C
	(Constant)	139,807.136	14,315.075		9.766	0.000
1	P_EXP	-7.613	4.060	-0.279	-1.875	0.062
	P_EXP_1	3.824	2.740	0.275	1.395	0.164
	P_EXP_2	-2.629	1.510	-0.204	-1.741	0.083

a. Dependent Variable: BG_EXP

 Table 5. Import price model

Coefficients

	Standardized Coefficients		df	F	Sig.
	Beta	Bootstrap (1000) Estimate of Std. Error			
P_IMP	149	.291	2	.262	.770
P_IMP_1	199	.298	1	.445	.506
P_IMP_2	233	.258	1	.816	.367

Dependent Variable: BG IMP

of relative trade balance – RTB) follow a similar trend and show a gradual increase of sectoral competitiveness (Figure 5).

During the analyzed period, the RCA for Bulgarian agri-food products has always had values higher than 1, which indicates the existence of comparative advantages of the country on the global market. After the EU accession of Bulgaria in 2007, RCA has risen and constantly exceeded 2 since then.

The same conclusions could be made by observing the dynamics of the index RTB. RTB was at its maximum in 2013 when its value was

0.25, and for the past five years it constantly exceeded 0.15.

After checking the model of dependency, the following values are found:

$$RCA = b_0. (MS)^{0.983}$$

 $RTB = b_0 + 0.313. \ln MS$

The coefficient of increase in the *RCA* model is 0.983, which is less than 1.00. Thus, with increasing market share by 1% the rise in the index RCA is 0.98%. The model is significant within the 99% of the cases.

Table 6. Linear regression of Import price model Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	106,227.801	6,514.256		16.307	0.000
	P_IMP	-1.461	3.575	-0.072	-0.409	0.683
	P_IMP_1	-3.379	3.824	-0.153	-0.884	0.378
	P_IMP_2	-1.551	3.829	-0.063	-0.405	0.686

a. Dependent Variable: BG IMP

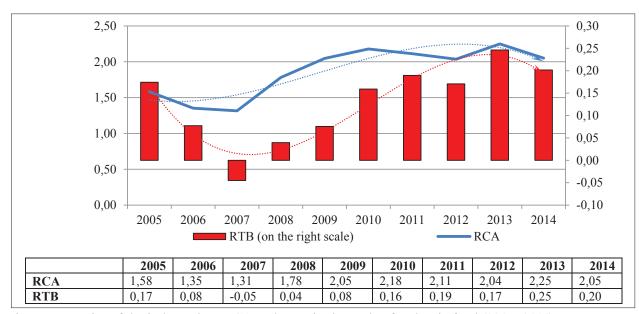


Fig. 5. Dynamics of the index values RCA and RTB in the trade of Bulgaria food (2005–2014)

Source: UNCTAD.

The coefficient of increase in the RTB logarithmic model is 0.313, which is not so great. The model explains 65.4% of the cases.

The graphic models of the given *RCA* and RTB models are as follows (Figure 6 and Figure 7).

There are no product specializations observed for which there is a serious deviation from the RCA model.

In the RTB model there are three product specializations that deviate from the given model:

- HS 10: Cereals:
- HS 12: Oil seed, oleagic fruits, grain, seed, fruit, etc, nes;
- HS 24: Tobacco and manufactured tobacco substitutes.

2.4. Growth model

The growth model is calculated as the average growth in agri-food products' trade for 3 consecutive years. The variables are: export growth and import growth. The export-import growth model has to fit in a spiral model (Figure 8).

The figure shows an interesting result: the export and import did not increase and develop but registered a decrease and downturn of the Bulgarian agri-food production.

2.5. Competitive group model

Following Gehlhar-Pick (2002), the competitive group model analysis uses the unit value difference and trade balance in 4 categories:

- successful price competition (trade surplus at lower export than import unit value);
- unsuccessful price competition (trade deficit at lower export than import unit value);

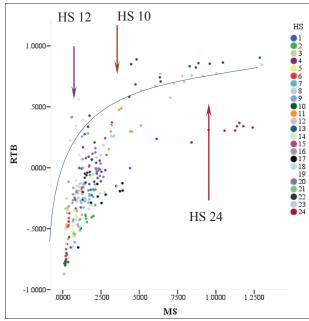


Fig. 7. RTB model

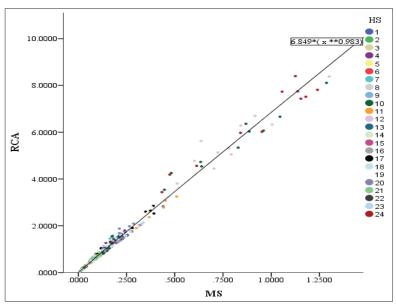


Fig. 6. RCA model

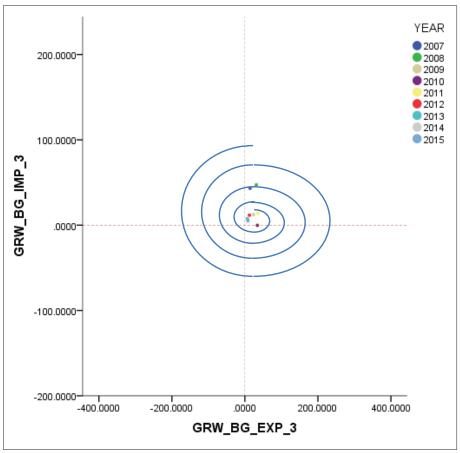


Fig. 8. Growth model

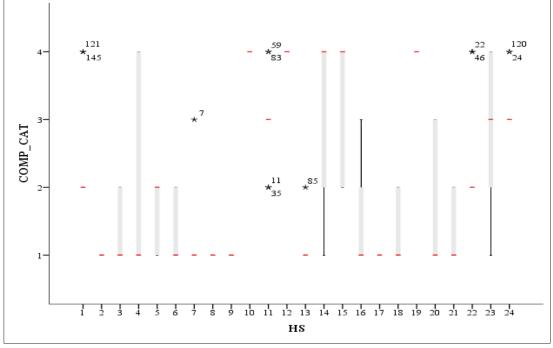


Fig. 9. Competitive group model

- successful quality competition (trade surplus at higher export than import unit value);
- unsuccessful quality competition (trade deficit at higher export than import unit value.

The distribution of indicators of competitiveness by product category is shown but on the following Figure 9.

From all 24 HS product specializations it is established that 2/3^{rds} of the food specializations are competing successfully in the global food market. For most cases, success is a result of lower prices, but for the following 3 product groups it is due to non-price factors:

- HS11: Milling products, malt, starches, inulin, wheat gluten;
- HS23: Residues, wastes of food industry, animal fodder;
- HS24: Tobacco and manufactured tobacco substitutes.

Competition troubles are found for 1/3rd of the agri-food production specializations in Bulgaria. Three product groups are unsuccessful in the competition based on lower price:

- HS01: Live animals;
- HS05: Products of animal origin, nes;
- HS22: Beverages, spirits and vinegar.

Non-price factors do not lead to competitive success of the following food specializations of Bulgaria:

- HS10: Cereals:
- HS12: Oil seed, oleagic fruits, grain, seed, fruit, etc., nes;
- HS14: Vegetable plaiting materials, vegetable products nes;

- HS15: Animal, vegetable fats and oils, cleavage products, etc.;
- HS19: Cereal, flour, starch, milk preparations and products.

In summary, the distribution of all 24 HS product specializations in the four competitiveness groups is given in Figure 10.

3. Policy impact

The general goal of the state's policy for fostering competitiveness should be to stimulate a higher-degree of processing of the Bulgarian agro-food products through creation of local value chains and facilitation of networking between various local producers. Specific policy and business strategy measures need to be adopted for the different product groups according to the categories of competition:

- For successful quality competitiveness:
- Increasing the quality of the raw materials from agriculture;
- Setting strict requirements for sanitary and hygienic conditions;
- Production in small batches of high quality differentiated agri-food products.
 - For successful price competitiveness:
- Provision of information for trade opportunities offers, market analyses, national and specialized exhibitions, shows and fairs;
- Exchange of information of good practices in the agri-food industry;
- Establishing linkages between local producers at both horizontal and vertical level.

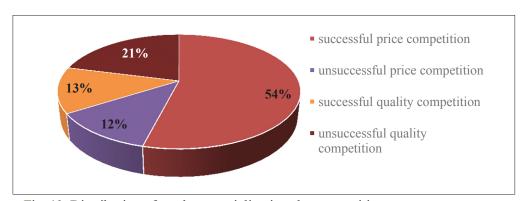


Fig. 10. Distribution of product specializations by competitiveness group

- For unsuccessful quality competitiveness:
- Support for obtaining international certificates;
- Promote the establishment and development of export oriented clusters;
- Assist participation in specialized fairs and exhibitions.
 - For unsuccessful price competitiveness:
- Support increasing of productivity through technological modernization of production by participation in projects funded by the EU funds:
- Differentiation of products and finding of a niche on the market.

REFERENCES

Gavrilescu, C., D. Voicilas, 2014. Changes in the Romanian Agrifood Trade Competitiveness in the Postaccession Period, Management Theory and Studies for Rural Business and Infrastructure, 4/2014, pp. 823-834

Jushasz, A., H. Wagner, 2013. An analysis of Hungarian agri-food export competitiveness. Studies in Agricultural Economics, 11/2013, pp. 150-156

Markusen, J. R., 1992. Productivity, Competitiveness, Trade Performance, and Real Income, Ottawa: Economic Council of Canada for Minister of Supply and Services Canada, p. 8.

Toming, K., 2006. Accession to the EU: Did it Boost the Export Competitiveness of the Estonian Food Processing Industry, Tartu University Press.

Yaacob, H., 2007. The study of export competitiveness of Malaysian electrical and electronic product, Shah Alam.

Zhelev, P., 2009. Sravnitelnite predimstva na stranite v mezhdunarodnata targoviya i tyahnoto kolichestveno opredelyane. Biznes posoki, issue 1/2009, pp. 70-78

Data & Trends of the European Food and Drink Industry, 2014–2015 (http://www.fooddrinkeurope.eu)

European Commission (2007), EU competitiveness report, Luxembourg.

National Statistical Institute of Bulgaria (http://www.nsi.bg)

UNCTAD, 2004. "Trade and Development Report '04", Geneva.