COMPETITIVE POSITIONS OF PRODUCTS FROM UKRAINIAN AGRICULTURAL ENTERPRISES IN EU MARKETS

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Abstract. The article describes the directions for i mproving the competitiveness of the agro-industrial complex. The place of agriculture in the economic system of the country is substantiated. The methodological approach for calculating the level of comparative advantages of agricultural products in the EU markets has been applied. The index of comparative advantages of the products from Ukrainian agricultural enterprises in the European markets was calculated. The classification of agricultural products was carried out according to the level of comparative advantages.

Key words: *products from agricultural enterprises, agricultural sector, comparative advantages, development.*

Introduction

Improving the competitiveness of the national agro-industrial complex involves the sustainable functioning of all its interconnected subsystems: agro-industrial production; food markets; sale, distribution and consumption of food; personnel, financial, logistical, technological, informational and scientific support. However, in modern conditions, the functioning of agricultural enterprises is accompanied by a number of problematic aspects that significantly hinder their forward-looking development. In the context of European integration, there is an objective need for the formation of effective mechanisms to strengthen the competitive position of Ukrainian enterprises, both at the agricultural sector in domestic and foreign markets.

Purpose of the work is to determine the competitive positions of products from Ukrainian agricultural enterprises in EU markets.

Literature review. Many works of domestic and foreign scientists are devoted to the problems of development of agricultural enterprises in the conditions transformations of the agro-industrial complex, in particular L. Abalkin, P. Haidutsky, V. Heitz, F. Gorbonos, M. Zubets, G. Kaletnik, I. Kirilenko, M. Kropivka, M. Malik, M. Pugachev, P. Sabluk, M. Fedorov and others.

Research methodology. In the context of European integration, it is important to determine the competitive position of domestic agricultural products in EU agricultural markets. To calculate the level of comparative advantages of agricultural products, we used the methodological approach proposed by the market analysis sector of the UNCTAD / WTO International Trade Center in the French Research Center for Forecasting and International Information (Fedoryshyn, 2007, p. 6):

$$RCA = \frac{1000}{(X_i+M_i)} * \left(\left(X_{ij} - M_{ij}\right) - \left(X_i - M_i\right) * \frac{(X_{ij}+M_{ij})}{(X_i+M_i)} \right),$$

where X_{ij} – *the volume of exports* by *j*-branch (products of enterprises from the agricultural sector) of the *i*-th country to the EU countries; M_{ij} – volume of imports of*j*-branch (products of enterprises from the agricultural sector) of *i*-th country from EU countries; X_i – *total exports of the i*-th country to the EU; M_i – *the total volume of imports of the i*-th country from the EU.

If, according to the results of the calculations, the Revealed Comparative Advantage (RCA) is bigger than 1, then the country has a competitive advantage over others. The growth of the index confirms the increase in its value in the export structure.

The indicators of foreign economic activity of agricultural enterprises by main types of agricultural products was the basis of the assessment (table. 1).

Table 1.

Foreign economic activity of agricultural enterprises by main types of products

	2013	2014	2015	2016	2017	2018	2019
Exportation (thousand US dollars)							
Meat and edible offal	1116,8	51973,7	66507,4	70190,9	136406,5	237549,5	198164,6
Fish and crustaceans	7215,2	9133,9	8612,5	9091,8	20174,9	18589,1	23709,9
Milk and dairy products, poultry eggs, honey	41864,9	69424,3	84299,1	92401,5	120819,4	116177,9	117573,9
Vegetables	22702,5	23915,4	11890,9	19955,7	35672,6	92281,3	70399,7
Edible fruits and nuts	82451,0	88905,0	87536,6	85190,0	139214,8	152927,8	161463,2
Cereals and grains	1719275,1	1805431,6	1625849,5	1278396,8	1709341,8	2223132	2628520,4
Flour Milling and cereal Industry Products	8293,8	10204,5	14330,8	15759,2	18282,3	25047,6	23678,4
Seeds and fruits of oilseeds	1247637,7	919003,2	645289,0	607027,7	1095171,6	1163531,7	1539434,1
Fats and oils of animal or vegetable origin	500500,1	792967,2	678335,7	1204266,8	1475659,4	1143823,4	1544502,7
Ready-made food products	775925,4	899322,9	762111,2	703422,5	865181,6	908515,4	942493,2
Importation (thousand US dollars)							
Meat and edible offal	305156,4	177826,3	94209,3	78152,8	108367,7	157375,5	146855,9
Fish and crustaceans	106757,8	93974,6	49589,9	67924,9	78284,7	97020,8	117425,6
Milk and dairy products, poultry eggs, honey	133465,3	98735,1	65191,3	55140,1	80158,0	101092	163300,6
Vegetables	62092,5	63802,7	22163,4	23363,7	24024,3	28955,7	60996,2
Edible fruits and nuts	257409,3	172581,9	104864,9	84364,1	95956,1	75315,8	117951,7
Cereals and grains	221259,2	266309,7	103879,1	105630,6	113002,6	117247,7	117688,5
Flour Milling and cereal Industry Products	7815,3	6050,5	4570,0	7191,1	8556,2	10816,6	12457,9
Seeds and fruits of oilseeds	145587,5	119531,5	82665,9	110584,8	128829,3	140755,1	139799

Fats and oils of animal or vegetable origin	104499,8	72854,6	47894,5	55982,7	53079,5	59959,2	68899,4
Ready-made food products	1411532,9	1197624,0	777186,7	971449,5	1161883,5	1444842,1	1683983,3

Source: formed according to (Official website of the State Statistical Service of Ukraine; Official Internet Representation of the Ministry of Trade, Agriculture and Agriculture of Ukraine).

Discussion of research results. Despite significant scientific achievements, a number of strategic issues important for the development of agricultural enterprises, in particular related to European integration, remain insufficiently researched challenges of their competitive positions, which determines the relevance of the topic of the article.

Research results. The functioning of the agricultural sector of Ukraine is characterized mainly by positive dynamics, where the following trends are revealed (Table. 1.):

– increase in the number of employed population from 2860.7 thousand people in 2017 to 3010.4 thousand people in 2019 against the background of reducing the number of hired employees from 515 thousand people in 2016 to 463.2 thousand people in 2019;

– the gradually increases in the average monthly salary of employees from 143.7 US dollars in 2015 to 338.1 US dollars in 2019;

– the reduction of capital investments in 2019 (USD 2,265.6 million) after their gradual growth during 2015-2018;

– increasing the volume of gross value added in agriculture from 10,946,6 million USD by 2016 to 13,854 million USD in 2019;

– sharp increase of fixed assets from 8045.6 million US dollars in 2015 to 15458.2 million US dollars in 2019.

Table 2.

Dynamics of the main indicators at the agricultural sector for 2015-2019.

	2015	2016	2017	2018	2019
Number of employed population (thousand people)	2870,6	2866,5	2860,7	2937,6	3010,4
Number of hired employees (thousand people)	502,7	515,0	490,9	481,4	463,2
Average monthly salary of employees (US dollars)	143,7	153,3	216,6	263,5	338,1
Capital investments in agricultural sector (million US dollars)	1341,7	1943,5	2383,8	2391,8	2265,6
Ggross value added (million US dollars)	10977,8	10946,6	11428,1	13278,2	13854,3
Fixed assets (million US dollars)	8045,6	9958,4	12327,1	15458,2	–

Source: calculated according to (Official website of the State Statistical Service of Ukraine; Official Internet Representation of the Ministry of Trade, Agriculture and Agriculture of Ukraine).

The role of the agricultural sector in the country's economy is rising:

– the share of agricultural production in GDP was 10.1% (in 2018);

– the exports of agricultural products reached 18.618,6 billion US dollars (in 2018), which was 39.4% of total exports;

– net profitability of agricultural enterprises has reached 13% (in 2018), while the average level of profitability of enterprises of other types of economic activity was 4,5%;

– labor productivity per 1 person employed in agricultural production was 314 thousand UAH (at constant prices in 2010) in 2018.

Ukraine's place in the world food market is rather high, which is confirmed by the leading positions in many types of agricultural products, in particular: sunflower oil and sunflower seed meal - 1st place; rapeseed - 2nd place; walnuts - 3rd place; corn, barley, rye, honey, sorghum - 4th place; wheat - 5th place; rapeseed flour, butter - 6th place; rapeseed oil, poultry, soybean - 7th

place; oats, milk, soybean oil, soybean meal - 8th place; skimmed milk powder - 9th place; cheese - 10th place [3].

According to the assessment results, 3 groups of agricultural products were set apart, namely: 1) with high level of RCA; 2) with medium and low level of RCA; 3) with no RCA values (table 3).

Table 3

The calculations results of the Revealed Comparative Advantages of products from Ukrainian agricultural enterprises in European markets

	2013	2014	2015	2016	2017	2018	2019
High level of RCA							
Cereals and grains	45,09	46,24	58,68	43,65	45,69	52,36	60,45
Seeds and fruits of oilseeds	32,99	23,91	21,95	18,99	27,93	25,70	34,00
Fats and oils of animal or vegetable origin	12,42	21,34	24,33	42,37	40,51	26,95	35,53
Low level of RCA							
Meat and edible offal	-5,35	-2,66	-0,51	0,32	1,28	2,49	1,82
Vegetables	-0,45	-0,80	-0,26	0,06	0,44	1,66	0,47
Edible fruits and nuts	-2,19	-1,46	-0,06	0,69	1,65	2,16	1,52
Flour Milling and cereal Industry Products	0,10	0,15	0,40	0,37	0,31	0,39	0,32
No RCA values							
Fish and crustaceans	-1,68	-1,94	-1,28	-1,62	-1,30	-1,62	-1,76
Milk and dairy products, poultry eggs	-1,16	-0,30	1,10	1,79	1,51	0,70	-0,43
Ready-made food products	-2,79	-1,95	3,90	-2,25	-3,23	-8,54	-10,86

Source: calculated by author

The calculations results of the Revealed comparative advantages for products of 1-st group (cereals; seeds and fruits of oilseeds; fats and oils of animal or vegetable origin) display positive dynamics since 2016 for cereals, as well as seeds and fruits of oilseeds (fig. 1). The highest competitive positions in the EU market are cereals (*RCA* – 60,45).

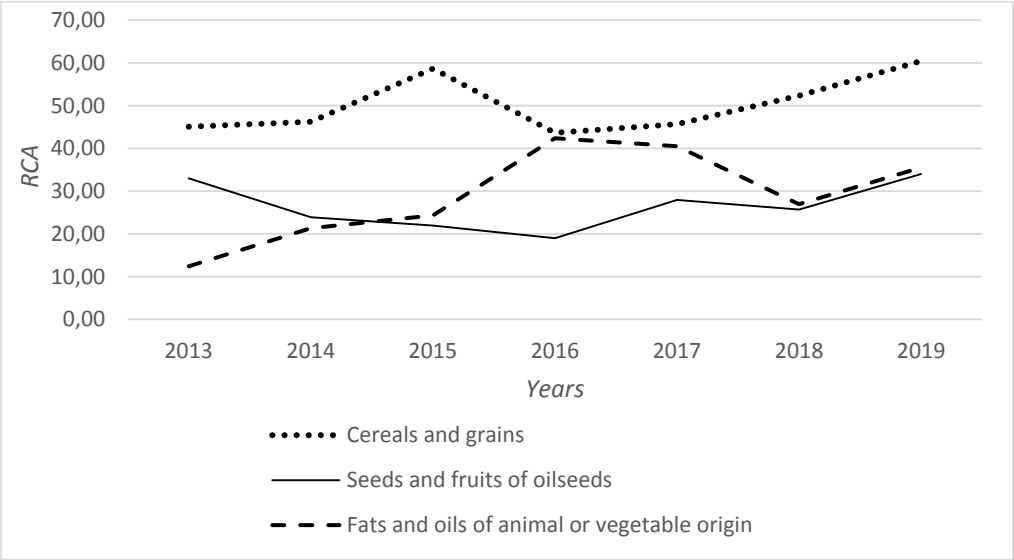

Fig. 1. The calculations results of the Revealed comparative advantages for products of 1-st group
Source: calculated by author

Almost all agricultural products of the second group (meat and edible offal; vegetables; edible fruits and nuts) despite the positive dynamics only since 2016 showed their comparative advantages (RCA> 0) and by 2018 were constantly growing (fig. 2). Products of the flour and mill cereal industry are characterized during 2013-2019 by approximately the same level.

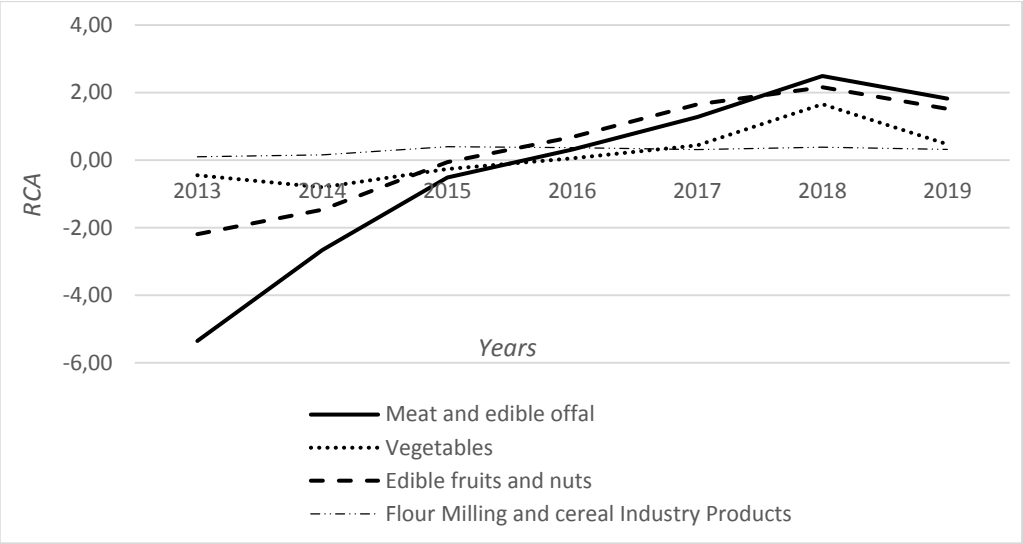

Fig. 2. The calculations results of the Revealed comparative advantages for products of 2-nd group
Source: calculated by author

The 3-rd group of agricultural products (fish and shellfish; milk and dairy products, poultry eggs; Ready-made food products) is characterized by lack of competitive advantages and negative dynamics (fig. 3).

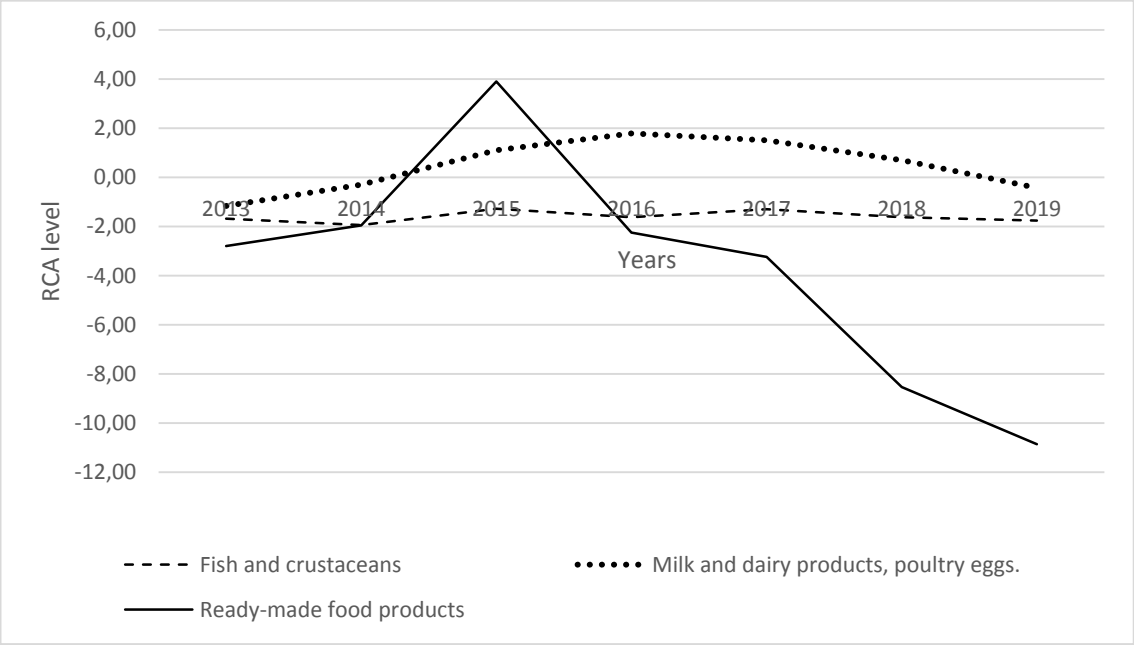

Fig. 3. The calculations results of the Revealed comparative advantages for products of 3-rd group
Source: calculated by author

Conclusions

Summarizing the calculations results, we admit that the high competitive advantages are mainly agricultural raw materials and primary processing products. Despite the high potential of natural resources, the development of enterprises of the agro-industrial complex of Ukraine should be based on the balance of resources; technologies adapted to local conditions, which will minimize material and monetary costs and maximize production and economic results; as well as a balanced institutional framework adapted to EU requirements and standards, which would promote microeconomic organizational, economic and industrial diversity and freedom of enterprise. It must be developed in strict accordance with objective economic laws and principles, while taking into account the laws of biological development.

We consider further research to be a promising area features of foreign experience in the functioning of agricultural enterprises in the context of European integration processes.

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