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CONCEPTUAL BASES OF STATE REGULATION OF VALUE ADDED IN THE GRAIN PRODUCT SUBCOMPLEX OF UKRAINE

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Abstract. The *purpose* of the article is to analyse the dynamics of the development of the grain product subcomplex and to determine the conceptual foundations of state regulation of value added in this subcomplex of Ukraine. *Methodology.* In the process of research, the following methods were used, such as theoretical generalization, statistical analysis, and system approach. The method of theoretical generalization contributed to the definition of conceptual foundations of state regulation of value added in the grain product subcomplex. Using the method of statistical analysis, the dynamics of production in the subcomplex was determined. The system approach allowed formulating directions for the development of the grain product subcomplex and improvement of the state regulation of value added. The *results* of the study showed that grain production in Ukraine tends to increase. A similar situation is observed with the export of grain, but raw materials are products with low value added. The production and export of most products of processing grain and finished grain products with high added value in Ukraine decrease each year. Getting the maximum of value added in the grain product subcomplex can only be achieved provided the complex development of the subcomplex within the agro-industrial complex of our country and its interaction with other sectors of the economy. A particular attention should be paid to the strengthening of vertical and horizontal integration, development of cooperation in the grain product subcomplex in the state regulation of the process of creation of value added. Also, we believe it is necessary to improve the legislative framework for the creation of clusters, approval of programs for their development at the national and regional levels. *Practical implications.* Improvement of state regulation of value added in grain product subcomplex of Ukraine will ensure its intensive development. The consequence of such regulation will be the transformation of production of raw materials into high value-added production. *Value/originality.* The research will help to understand, which directions of state regulation are most effective in maximizing the value added in Ukraine's grain product subcomplex.

Key words: state regulation, grain product subcomplex, grain processing products, value added, profit.

JEL Classification: E64, O12, Q18

1. Introduction

Grain product subcomplex is the largest in the system of an agroindustrial complex of Ukraine. This subcomplex provides one-fifth of the country's exports and is one of the largest budget generating units. In addition, the grain product subcomplex is technologically linked with many other sectors of the agroindustrial complex of Ukraine and the entire economy as a whole. Given the current state of the national economy, the grain product subcomplex can become the locomotive of its revival. The main problem in this is the lack of comprehensive state development programs for both the agroindustrial production in general and the grain product subcomplex. It is important in the branches of the subcomplex to produce and sell not only raw materials but also products with high value added. This will increase the national food security and fill up the state budget, increase the gross domestic product and national income, and significantly improve the well-being of Ukrainians.

2. Theoretical approaches to the definition of value added

There are several definitions of the concept of "value added". For example, in the Economic Dictionary, this notion is interpreted as the difference between the

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value of manufactured goods and the cost of materials and raw materials used for their production. The value added consists of the salary, interest, and profit, added to the product by the enterprise or industry (Zavadskyi, Osovska, Yushkevych, 2006). The same definition is given by the Great Encyclopaedic Dictionary, indicating that this indicator is used to estimate the volume of production of enterprises and firms (Bolshoy Entsiklopedicheskiy slovar). The foregoing definition coincides with the interpretation of the value added of Samuelson P.A. and Nordhaus W.D. (Samuelson, Nordhaus, 1998). McConnell Campbell R. and Brue Stanley L. defined value added as the market price of the volume of products manufactured by the company, minus the cost of consumed raw materials and materials purchased from suppliers (McConnell, Brue, 1997). Mankiw N. Gregory shows that the added value of a firm is equal to the value of output, less the cost of intermediate goods purchased by it. For the economy as a whole, the value added should be equal to the value of all final goods and services. Consequently, according to the scientist, the gross domestic product (GDP) is the sum of the value added of all firms in the economy (Mankiw, 2000). Thus, value added as one of the most important indicators of economic activity of an enterprise or individual industries can be calculated on gross and net bases, that is, before and after the exclusion of depreciation. In general, in the economy, the gross value added of all enterprises and industries for the reporting period is the gross domestic product.

If from GDP to deduct consumption of fixed capital, then we obtain a net domestic product (Savchenko, 2005), that is, the net product corresponds to the gross product, reduced by the amount of depreciation (Felderer, Homburg, 1998). In other words, the net domestic product is a newly created value in the branches of material production, that is, it is a national income.

If we consider the formation of value added in the grain product subcomplex of Ukraine, it should be noted that there is some injustice in its distribution between industries. Odintsov M.M. argues that a part of the additional product, created in agriculture, is implemented not in the place of its production, but in the processing industry and trade. From this both agricultural and processing enterprises suffer. The latter loses raw material areas and cannot fully utilize existing production capacities (Odintsov, 2011). Consequently, the isolation of certain sectors of the grain product subcomplex, the inconsistency in pricing, leads to the fact that, due to lack of funds, grain production is unable to fully develop, to introduce advanced crop growing technologies, and to supply the necessary quantity of quality products for processing and into the trading network.

3. Production as a basis for obtaining value added

The basis for the development of the grain product subcomplex is, first of all, the production of grain, which tends to increase (Table 1). In 2016, in comparison with 2012, in general, it increased by 43%, and the highest growth rate was observed in winter barley – by 2.7 times. However, production of oats, buckwheat, and winter rye has slightly decreased.

Such crops, which are promising from the point of view of grain export, are best grown. Accordingly, the volume of production is 68.6% and 61.6% respectively. This year, 4.8 million tons of barley were exported, which is 51.1% of its production (Derzhavna sluzhba statystyky Ukrainy, 2017). Of course, a large share of exports of these crops brings a currency income necessary for our country, but raw materials are products with low value added.

The production of most grain processing products and finished grain products with high added value in Ukraine decreases each year (Table 2). For example, flour production for the period of 2012–2016 has decreased by 20.0%. The same is true for pasta. The production of finished products from grain is also decreasing.

Table 1
Grain Production in Ukraine, thousand tons

	2012	2013	2014	2015	2016	2016 in % to 2012
Grain crops	46216	63051	63859	60126	66088	143,0
including winter wheat	15132	21863	23498	25937	25370	167,7
winter rye	675	633	473	387	390	57,8
winter barley	1325	2881	3345	3281	3637	274,5
spring wheat	631	416	616	595	729	115,5
spring rye	5611	4681	5701	5007	5799	103,4
oats	630	467	613	489	500	79,4
maize for grain	20961	30950	28497	23328	28075	133,9
millet	157	102	178	213	190	121,0
buckwheat	239	179	167	128	176	73,6
leguminous	473	372	481	502	877	185,4

Source: Derzhavna sluzhba statystyky Ukrainy, 2017

Table 2

Production of some products of processing of grain and finished grain products in Ukraine, thousand tons

	2012	2013	2014	2015	2016	2016 in % to 2012
Flour	2605	2565	2358	2211	2085	80,0
Cereals	365	367	350	358	373	102,2
Bread and bakery products short term storage	1686	1561	1357	1232	1160	68,8
Cookies are sweet and waffles	392	388	299	249	249	63,5
Macaronis, noodle and wares of flour similar	106	102	103	89,5	85,3	80,5

Source: Derzhavna sluzhba statystyky Ukrainy, 2017

Not the best terms with the export of grain processing products. Exports of cereals in 2016 amounted to 30.0 thousand tons, bread and bakery products – 83.5 thousand tons, which is, respectively, 8.0% and 7.2% of production (Derzhavna sluzhba statystyky Ukrainy, 2017). Consequently, the situation in the grain product subcomplex does not look very optimistic in terms of obtaining more value added. Therefore, in this case, it is necessary to strengthen the role of the state, attracting more instruments of state regulation.

4. Directions of state regulation of value added

In our opinion, obtaining the maximum value of the added value in the grain product subcomplex can only be provided the comprehensive development of the subcomplex within the agroindustrial complex of our country and its interaction with other sectors of the economy (Figure 1). In state regulation, a special attention should be paid to strengthening vertical and horizontal integration, development of cooperation. This will strengthen the processes of creating added value in the grain product subcomplex.

The cooperative movement is important to develop also among small farms, which, according to scientists, is an integral part of the Ukrainian agro-industrial complex of Ukraine. More than 93% of the proceeds from small farms are formed by the sale of crop production, indicating a high level of specialization in this field (Prylipko, Shevchenko, Hryshchenko, 2016). In addition, most of these farms of producing mainly cereal crops.

Also, we believe it is necessary to improve the legislative framework for the creation of clusters, approval of programs for their development at the national and regional levels. All these actions by the state should be aimed at stimulating the production of a subcomplex with a higher value added, based on the improvement of the competitiveness of products.

In addition, government control needs to be strengthened both in terms of product quality and production conditions. We agree with the scientists who are proposing to introduce the experience of developed countries when the manufacturer is first certified, and then the products that he produces are controlled and certified. Soils also undergo certification, where the

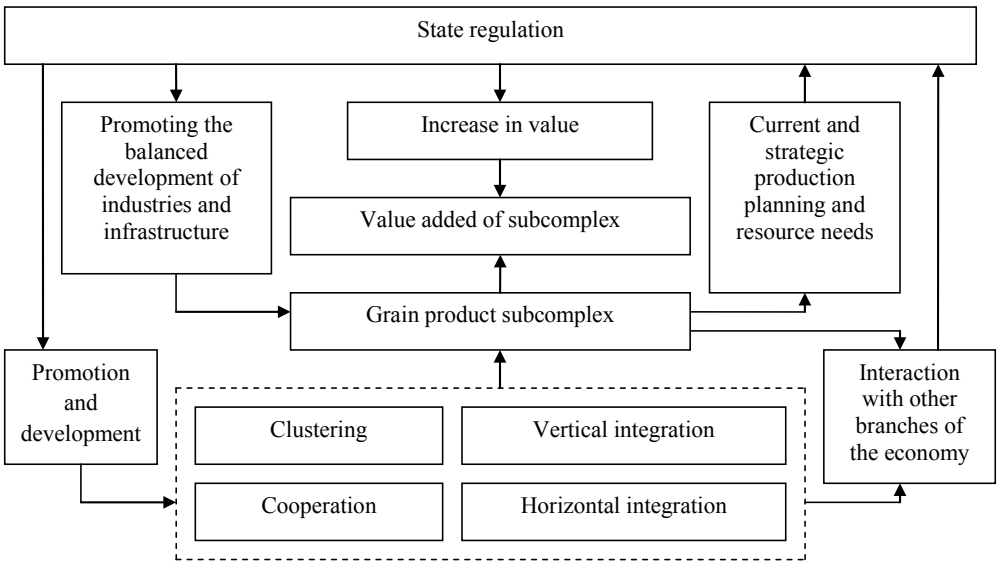

Figure 1. Place of state regulation in the strategy of development of grain product subcomplex and increase of value added

Source: the author's development

raw material is produced (Sidnieva, Kuzminska, 2015). Certificated producer have more chances to export products and realize these products in the internal market on high prices and, thus, to get a greater value added.

Development of organic farming is also promising. Scientists rightly believe that in the future, the demand for safe food will grow not only in Ukraine but also in European food markets (Sychevskyi, Yuzefofych, 2014). Production of such products is one of the important factors in increasing the value added of the grain product subcomplex, as their price is much higher than usual.

It is also important that an analysis of the effectiveness of previously adopted state programs for the development of the agroindustrial complex and its subcomplexes was carried out. For example, in the countries of the EU, an estimation of efficiency of programs of state support for subjects of ménage already for many years is mandatory by an element of the process of making a decision about the expense of state facilities (Bulana, 2014). In addition, domestic scientists argue that it is necessary radically to reform the style and methods of state regulation, to combine regulatory tactics with the development of strategies and promising forecasts (Naymova, Mityay, Galitsky, 2016). In this context, it should be noted that the conceptual foundations of state regulation, in our opinion, should be ensured by the sequence of state programs in strategic development, rather than situational decision-making.

The domestic grain market is not marked by the stability of prices, which leads to losses both in production and in processing industries. There are several reasons for this. First, agreeing with the opinion of some scholars, one can state that the state price influence on the domestic grain market is practically not felt. Other countries introduce cyclical (compensatory) payments, which represent the difference between real market prices and the base guaranteed price. There is also a widespread practice of state support for the income of grain producers not so much by setting grain prices, but by reducing the cost of production (compensation of the share of the cost of equipment, fertilizers, imported fuel) (Burkynskyi, Lysiuk, Nikishyna, 2015). Secondly, in the conditions of the separateness of the grain producers and processing enterprises and the indicative planning, it is not possible at the state level to determine the optimal areas of grain crops and production. This leads to shortages or overproduction of certain products, which increases the price risks for manufacturers.

It is also necessary to constantly care about raising the material incentives for grain product subcomplex workers since wages are one of the main elements of value added. A well-motivated employee performs his work more qualitatively, which positively affects the performance of the work, that is, profit. In our opinion, it is necessary to raise the prestige of agricultural labour and bring its level to the average level in the economy.

Consequently, to increase the value added in the grain product subcomplex, it is necessary to use all possible instruments of state regulation (Figure 2).

It is important to specify that the provision of soft loans to help grain producers to increase the cost of working capital in the periods before harvest. This stabilizes the financial condition of agricultural enterprises. It is also necessary to restore the special regime of taxation of agricultural producers with the value-added tax. That is, the state needs to leave these funds to producers in full for the purchase of goods and services. Quotas on the export of grain processing products also need to increase. Improvement of the administrative instruments of state regulation provides for the provision of the legal field. In the system of grain products subcomplex is necessary to eliminate the intermediaries, which take away in manufacturers' significant part of the value added in the form of profit.

5. Conclusions

The study determined that in 2012-2016 in Ukraine, grain production tended to increase. During this period, grain processing and production of finished products of grain, on the contrary, decreased. Grain is exported mainly

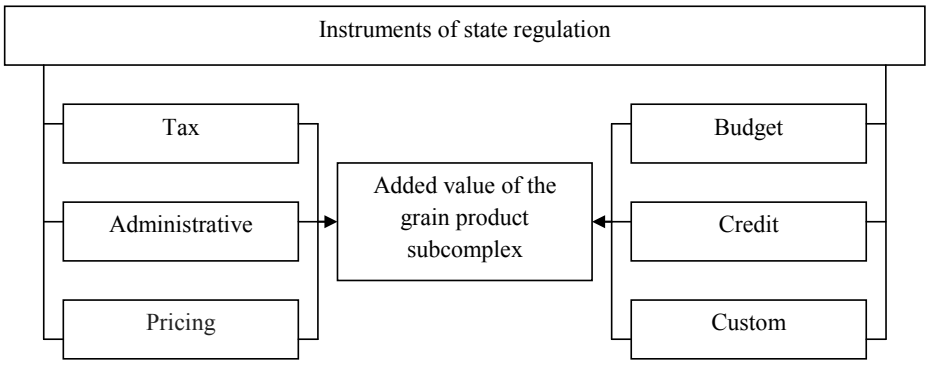

Figure 2. Instruments of state regulation of value added in the subcomplex of grain production

Source: the author's development

as raw material and its processing products in exports have an insignificant share. Grain is a product with low added value. In this case, the budget gets extra revenue, and enterprise of grain products subcomplex – profit.

Getting the maximum of value added in the grain product subcomplex can only be achieved provided the complex development of the subcomplex within the agro-industrial complex of our country and its interaction with other sectors of the economy. The authors define the conceptual foundations of state regulation of value added in the grain product subcomplex. They are determined in the complex application of all instruments of state regulation. In order to increase the value added in the subcomplex, in our opinion, the state should adopt a set of such measures:

1. To conduct an analysis of the efficiency of previously adopted state programs for the development of the agro-industrial complex and its subcomplexes. Ensure the consistency of government programs in strategic development, rather than situational decision-making.

2. Improve the legislative framework for strengthening vertical and horizontal integration, development of cooperation, and the creation of clusters.

3. Stimulate production of subcomplex products with a higher value added.

4. Promote the development of organic agriculture.

5. Carry out certification of producers of grain products.

6. Provide partial compensation for the cost of equipment, fertilizers, imported fuel.

7. Provide preferential loans to enterprises of subcomplex.

8. Restore the special tax treatment of agricultural producers of tax on value added.

9. Achieve an increase in quotas for the export of grain processing products.

10. Bring the level of wages in agriculture, including in the grain product subcomplex, to the average of the economy.

In further research, the authors will study the problem of increasing value added in small enterprises for the production and processing of grain within the grain product subcomplex. In our opinion, strengthening the integration and cooperation of such enterprises will increase the efficiency of resource use and increase the profitability of production.

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