Business process management in the food industry under the conditions of economic transformations

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CHRONICLE	ABSTRACT
	The article highlights the business process management system in food industry. The subject of the research is the theoretical and practical aspects of managing business processes in the food industry. The authors explain the concept of "business process" and methods for achieving its improvement goals. The author's scheme for managing business processes in the food industry in the context of economic transformations was developed and implemented. The introduction of a process approach requires efforts and resources for identifying business processes, their analysis, drawing up models of business processes. The analysis of business processes in the food industry of Ukraine at a macro level is carried out, including: an imperfect tax system; the mechanism imperfection of state and customs tariff regulation of food markets, the low level of financial support from international organizations, the low level of state support for agribusiness entities; decline in employment and rising unemployment; growth in international migration; low competitiveness of Ukrainian food products and barriers to international food trade. Methodical approaches for determining the regional strategic potential of food safety are also proposed. The calculations of the regional potential of food safety are carried out using the data of the Black Sea region in Ukraine as an example. The main prerequisites for the formation of a food safety system have been identified and justified. The organization's transition to clear and efficient processes to achieve the objectives with optimal costs in the food industry; high flexibility and adaptability of the control system, due to the large self-regulation of the system and natural customer orientation; high dynamism of the system and its internal processes, due to the strong vertical integration of resource flows and a common interest in increasing their circulation; simplification of coordination, organization, control procedures and the possibility of deep integrated automation of food production; high motivation in ensuring the production of quality and competitive food is discussed.

1. Introduction

In the 21st century, the global aggravation of the food crisis, which affects the processes of population reproduction, urged the question of the need to rethink the strategic guidelines for the regional development of Ukraine in order to provide food for all segments of the population (Kramarenko et al., 2020). That is why the concept of food supply, closely correlates with the well-being of the population, logically requires a permanent research of key components at the micro, meso and macro

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levels. The solution of the food supply global problem requires local approaches, taking into account the territorial features of economic development. The need to develop the scientific foundations for the formation and management of business processes in the food industry in the context of economic transformations, taking into account global conceptual approaches to food safety, is gaining importance. Given the experience of the world developed countries, this is possible only if the institutional support for the formation of innovative strategic structures of the food sector is developed. Particular attention is required to highlight regional characteristics for economic levers and incentives for the agri-food sector development.

In the context of Ukraine's European integration processes, there is a need to adapt national norms of nutrition and food supply to EU standards, as well as coordination of organizational processes for agricultural production in the framework of regional economic development. Transformational changes in the socio-economic development of Ukraine necessitated changes in the food industry construction, as part of the agricultural business and a factor in ensuring the country's food safety. In addition, the food industry, along with mechanical engineering, an innovative industry, is recognized as one of the priorities in supporting the promotion of national export interests of Ukraine in international cooperation. But, according to the realities of the national economy, the situation in the food industry is characterized by the crisis of the food producer's majority, aging of fixed assets, small volumes of organic products, low level of food production technology, which, in turn, makes it impossible to have a sufficient level of competitiveness of domestic food products in the internal and external food markets. Today, one of the key factors that can help to solve these problems is the formation of process management of food industry enterprises based on business processes. Therefore, the research of the food industry state and the definition of the business processes role in ensuring its effectiveness are important and relevant issues in the context of transformational changes in the national economy at the micro, meso and macro levels. The global mankind problem in the 21st century has become the food crisis. The world population is growing every year and by 2050, according to scientists, it will reach 9 billion people. In such circumstances, there is a need for food safety management. Therefore, the primary task of the global economy is to provide food for all population segments. The solution of this problem is a priority for each state. Only the government is able to create food funds and effectively use mechanisms to support producers of basic food products (Nguyen et al., 2020).

The economy integration of Ukraine and the world makes it necessary to study the food supply of the country's population at the micro-, meso- and macro-levels and to analyze the effectiveness of managing regional economic systems.

2. Literature review

Issues of the food industry functioning and development today is extremely relevant and is considered in terms of ensuring food safety in any country (Tran et al., 2020). Also, the food industry is the basis for the consumer market formation of the food products. It is worth noting that many scientists are now engaged in these issues. If we consider the food industry development in terms of food safety, then Haydutskyi (2004) in his studies based on the foreign experience analysis identified the main prospects for food supply in the country. Ivanyuk (2016) proposed the consumption structure of food industry products by the population as the main part of the food safety formation of the country. She also substantiated that the agricultural sector is a system-forming element of the food industry, and whose task is to provide the consumer market with food products (Ivanyuk, 2015). Kolomiets (2016) in his study revealed the issue of satisfying the consumers' needs in the domestic market of Ukraine, in particular, in high-quality food industry products at affordable prices through changing the mechanism for developing the consumer market. Panukhnyk et al. (2019) studied the consumer market in their research and proved that it is the change in household incomes, consumer price index, total household spending on food and agricultural production per capita that have the greatest impact on the food industry development and general food ensuring the country's consumer market. S. Shults et al. (2017) in constructing a model of consumer buying behaviour in the EU and Ukraine, identified the main approaches used by consumers of a country when buying food products. Nagyová et al. (2016) in their research determined that the use of subsidies provided by EU countries is a very important tool for ensuring the economic sustainability of the food industry, since it is this area that is responsible for the food supply of the population. Bureau and Swinnen (2018) note that food price fluctuations make it possible for a number of countries to decide which they are, either consumer or producer countries, or whether it is exporting or importing food products.

A number of authors devoted their works to the main problems of managing the food industry development in Ukraine, which was reflected in the research of domestic scientists, among which it should be noted: and others. In particular, we can name the work of Kupchak (2009), Pylypenko (2017), Vasyltsiv et al. (2017), Danko and Reznik (2019) and Kalashnikova et al. (2019). The results of studies of business processes and process management in the food industry of Ukraine in the conditions of transformational changes and integration into the European community are considered in the work of Andersen (2003), who defines "business process as a chain of logically related repetitive actions, which the enterprise resources are used to change the object in order to achieve certain measurable results or products to satisfy internal or external consumers". Harrington et al. (2002) investigated the essence of a business process as a logical, consistent, interconnected set of activities that consume the supplier resources, create value and deliver the result to the consumer. Scheer (1999) indicates that it is customary to call a business process a set of repetitive actions (functions) that turn source material or information into a final product in accordance with pre-established rules. Morschenok (2014) and Olshansky (2019) suggest considering the business process as a process management approach and a set of continuous, interconnected actions aimed at achieving the enterprise goals. Management becomes more focused on efficiency, as it focuses on the products (services) customer, and therefore its application allows to achieve the competitive products (services) production.

Based on the foregoing, the aim of the article is to develop theoretical and methodical provisions and submit practical recommendations on managing business processes in the food industry in the context of economic transformations, identifying problems and advantages of using business processes at the micro, meso and macro levels (Vu et al., 2020).

3. Materials and Methods

In the process of conducting the research, the following methods were used: dialectical – to identify patterns and problems of business processes in the food industry, system analysis – to determine the business processes nature, graphical analysis – to schematically display generalized theoretical and practical research results, logical generalization of the results – to justify basic prerequisites for managing business processes in the food industry in the context of economic transformations. As a result of the methods generalization for achieving aims, we have identified methods that are appropriate to use in the business processes management of the food industry (Table 1).

Table 1
Basic methods for achieving the aims of improving business processes in the food industry

Methods	Advantages	Disadvantages
1. Fast Decision Analysis Methody (FAST)	Speed of decision-making, minimum costs for the methody implementing, focus on the client, who largely determines the problem or process as an object of improvement and approves the actions and decisions of the FAST group.	Research is conducted without regard to the relationship and interdependence with other business processes of the enterprise; the consequence is often eradicated, and not the cause, which may be outside the analyzed process; directions for improving the business process can be effective for the short term.
2. Benchmarking Process	The advantages are the short lead time, relatively small costs and efforts associated with improving business processes.	Problems or errors that arise in the building and functioning business processes of "reference" enterprises, hidden by an external form. As a result, there is a high probability of erroneous decisions in the development of business process management.
3. Redesigning Process	When redesigning a process, a simulation model of its current state is developed. The method allows to reduce costs, reduce the process cycle duration, carry out work from 80 to 100 days and reduce the errors number by 30-60%.	Focused on improving business processes that provide certain management functions. Thus, it strengthens the position of traditional functional hierarchical structures without changing their content.
4. Engineering process	The development of all existing operations, the gradual introduction of new technologies.	Does not bring big changes to the enterprise and does not promise instant bright success. Engineering process is essential for a company to be competitive.
5. Reengineering Business Process (BPR)	Provides a new look at the process essence and content, completely ignores the existing process and structure of the enterprise.	Suitable not for all enterprises, namely for companies that are on the verge of bankruptcy, or leading companies that feel the need to remain in first place.

Source: developed by authors

Studies have proven that there is no single methody that allowed to evaluate and calculate the level of a regional potential or its components, especially in the context of a targeted approach. At the same time, consider the rating integrated method used to rank regions, countries, institutions by various criteria to be the most adaptive for researching the achieving potential of the regional food safety goals. Using this approach will allow to determine the potential level and monitor the state of food safety both in the region as a whole and in the context of individual food products, model a food safety strategy, make decisions on the operational impact on food safety in the region during the strategy implementation. Considering the strategic aims of the food safety ensuring, as well as the availability of regulatory values, serve as a guideline for the achieved aims, it is proposed to determine the integrated indicator of food safety potential according to the formula:

$$R_{SPFS} = \sum_{i}^{n} (p_i \times w) \tag{1}$$

where R_{SPFS} – Regional Strategic Food Safety Potential;

P_1 – self-sufficiency of the region with consumer goods of own production;

P_2 – potential sufficiency of goods consumption;

P_3 – potential physical accessibility of consumer goods;

P_4 – potential economic affordability of consumer goods for the population;

w – weight coefficient of the potential component.

Using the above indicators, it is possible to obtain comparative assessments of the individual components that increase or decrease the food safety level in the region and can be useful for the reserves determining for improving the situation in a strategic perspective. The calculation of the food safety integral indicator involves the determination of weight coefficients (w) of each potential component, which will determine the degree of their influence or significance in the overall indicator. Weight coefficients are established by experts at the discretion of the strategy developers regarding the priority of individual elements or depending on the analysis aims. Given the equivalence (in our opinion) of all the components, it is proposed to establish the weight coefficient of each integral indicator component at the level of 0.25. In turn, according to the aggregation method, each structural element of the potential includes an established list of the minimum set of food basket goods that are socially significant for the population. Accordingly, each individual component of the potential is calculated by the formula:

$$P_i = \sum_i^n \left(P_{g_i} \times w_i\right) \tag{2}$$

where g_i – partial potential for a separate type of product;

w_i – weight coefficient of the product in the social "food basket".

The calculation of food safety potential indicators is proposed to be carried out according to the formulas that are generalized on the previous studies by (Kondra, 2014; Nikishyna, 2012; Melnyk, 2018) and systematized in Table 2.

Table 2
Indicators for assessing the regional food safety potential

№	Indicators	Calculation formula	Explanation of the formula
1.	Self-sufficiency potential of the region with consumer goods of own production	$P_{1_{gi}} = \dfrac{V_{gi}}{CV_{gi}}$	V_{gi} – production volumes of the i-th product in the region per capita; CV_{gi} – consumption volumes of the i-th product in accordance with established standards
2.	Sufficiency potential of goods consumption by the population of the region	$P_{2_{gi}} = \dfrac{AC_{gi}}{CV_{gi}}$	$ACgi$ – actual consumption of the i-th product in the region per capita
3	Physical accessibility potential of consumer goods	$P_{3_{gi}} = \dfrac{TGP_{gi}}{TGC_{gi}}$	TGP_{gi} – total goods production in the region; TGC_{gi} – total goods consumption in the region
4.	Potential economic affordability of consumer goods for the population	$P_3 = \dfrac{S_n}{S_a}$	S_n – normative share of household expenses on food products; S_a – actual share of household expenses on food products.

Source adapted by authors

To simplify the process of analyzing the individual potential components, on the previous studies (Khaustova, 2017, 2019; Stroyko, 2013, 2015), it is proposed to transfer them to points according to Table 3 adapted for this aim. The use of a point system for evaluating individual indicators can be used to form an interactive model of strategic potential, which will determine its level both at the time of developing strategy and in the process of its implementation. In addition, the use of a 10-point scale simplifies the indicators interpretation at all levels and allows a better presentation of the data. In this case, if the index values for individual groups of goods are exceeded more than 1, points are calculated as the maximum value of this indicator 10, and we consider the percentage of excess as a reserve for the redistribution of this product outside the region and / or export.

Table 3
Points evaluation indicators of the region's strategic potential in the field of food safety

Indicators	Evaluation										
	Anticipatory growth	Threshold value		First level of danger	Threatening		Critical. in which the food situation is considered dangerous				
Index values gi	>1	0.90-0.99	0.80-0.89	0.70-0.79	0.60-0.59	0.50-0.59	0.40-0.49	0.30-0.39	0.20 -0.29	0.1-0.09	0.08-0
Points. Bgi	10	9	8	7	6	5	4	3	2	1	0

Source: developed by authors

4. Results and discussion

The food industry is one of the economic system components, based on the totality of the productive forces elements, due to property relations and includes relations of the micro, meso and macro levels. The food industry development of the country's economy is one of the priority tasks of the Ukrainian national economy. According to the National Report "Sustainable Development Goals: Ukraine", it provides a vision of Ukraine's achievement goals of the Sustainable Development Goals (SDGs), which were approved at the UN Summit on Sustainable Development in 2015. So, the main goals for reproducing the potential of the country's food industry is (Sustainable Development Goals: Ukraine National Report):

– end poverty by expanding targeted social assistance programs for poor people and increasing the resilience of socially vulnerable groups of the population;

– end hunger, promote sustainable agriculture, will ensure accessibility to balanced nutrition to the level of scientifically based standards for all population groups, ensure the development of sustainable food production systems that help maintain ecosystems and use innovative technologies; improving food pricing policy.

Achieving such tasks requires the use of a process approach to the food industry enterprises management, which, in comparison with the functional approach, the management object defines business processes as "a set of different types of activities

within which one or more resources are used at the input, and as a result of this activity the output creates a value product to the consumer" (Hammer et al., 1993).

Formation of process management in the food sector will help meet the needs of consumers in food products, the possibilities of a flexible response of food production to the change of internal and external environment. First of all, it is necessary to restore economic stability, sustainable development of the country's food industry, create favorable conditions for the agricultural business as a whole, as an important factor in ensuring food safety. So, food safety is an important component of the national security of the country and, as an economic category, is characterized by the level of continuous access of the population to food in such an amount that would ensure the development of the vital needs of mankind. According to the draft Law of Ukraine "On Food Safety of Ukraine", food safety means such a socio-economic and environmental condition in the state in which all its citizens are provided with stable and guaranteed food in necessary and sufficient for the physical and social development of the individual, ensuring the Ukrainian population health (Verkhovna Rada of Ukraine, 2005).

Analysis and assessment of the main structural trends that determined the change in the potential state of the food industry in Ukraine during the period of market transformation showed its ambiguous dynamics. One of the most important structural trends in the state of production potential is the weakening role of the domestic consumer complex. The potential of the food industry was not used to its full capability, food production decreased on average by 40%, and the economy needs began to grow due to imports, the share of which for certain types of goods increased from 45% to 98%, which indicates a sharp substitution of imported food products sphere of Ukraine (Klimova, & Kudrytska, 2015). The food industry is one of the main activities that ensure the country's economy development. It should be noted that the gross domestic product (GDP) of the processing industry over the past decade has increased by almost 2.3 times. But if we compare the GDP indicator of Ukraine with neighboring countries, it is significantly behind. According to the GDP per capita rating of countries, Ukraine takes 117th place, not only the economically developed countries of the world are in front, but also the nearest neighboring countries, including: Poland (46th place), Bulgaria (65th place) (State Statistical Service of Ukraine, 2019).

According to the analytical information of the State Statistics Service of Ukraine (Fig. 1) in 2018 compared to 2013 the volume of food production, beverages and tobacco products amounted to UAH 585159.1 million and UAH 253439 million, which shows a positive trend in recent years. The volume of sold industrial products is the largest in Dnipropetrovsk (UAH 481.5 billion), Kharkiv (UAH 190.4 billion), Poltava (UAH 186.8 billion), Zaporizhzhia (UAH 211.3 billion) regions (State Statistical Service of Ukraine, 2019).

It should be noted that the industrial production index of the food industry in 2015 reached a critical point of 89.3%, as a result of the difficult financial and economic situation of the Ukrainian economy.

In 2018, 15544 enterprises worked in the food industry of Ukraine, which met the growing needs of the domestic market. So, in 2018, large enterprises in this industry decreased by 34 units compared to 2012 (Fig. 2). Also, negative dynamics persist in medium-sized enterprises, starting in 2015, there is a decrease of 670 units in 2018. There is a decrease in small businesses in 2018 by almost 15.5% compared to 2012. The largest share is small business, which is 93% in 2018.
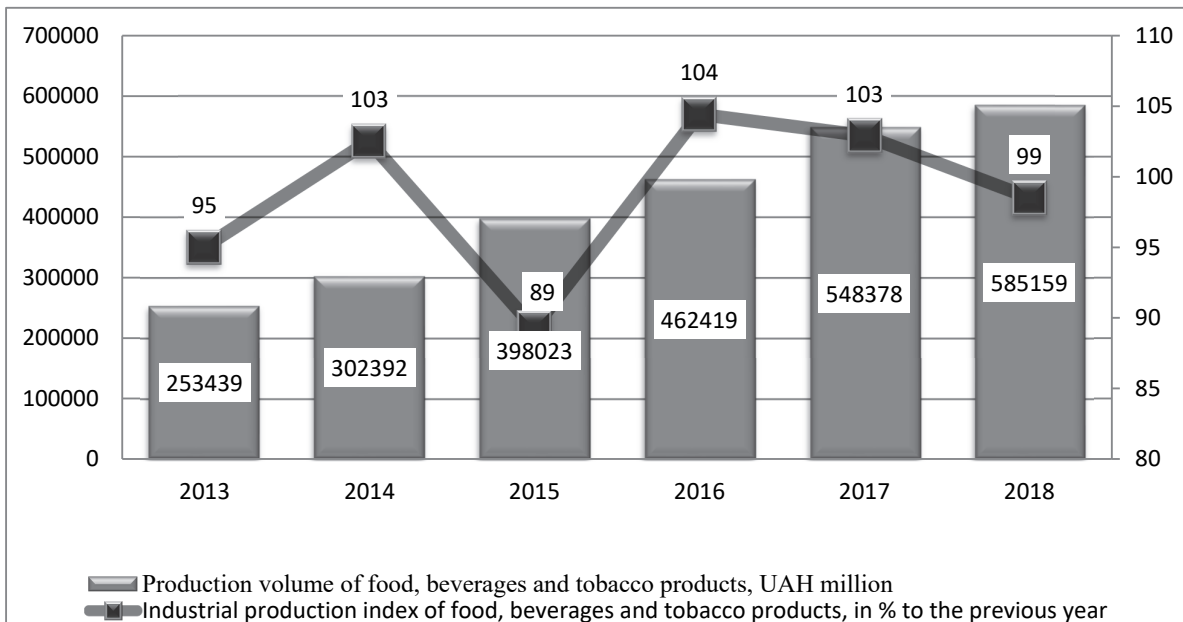
Fig. 1. Dynamics of production and indices of food, beverages and tobacco products in Ukraine.
Source: calculated by authors based on the data (State Statistical Service of Ukraine, 2019)
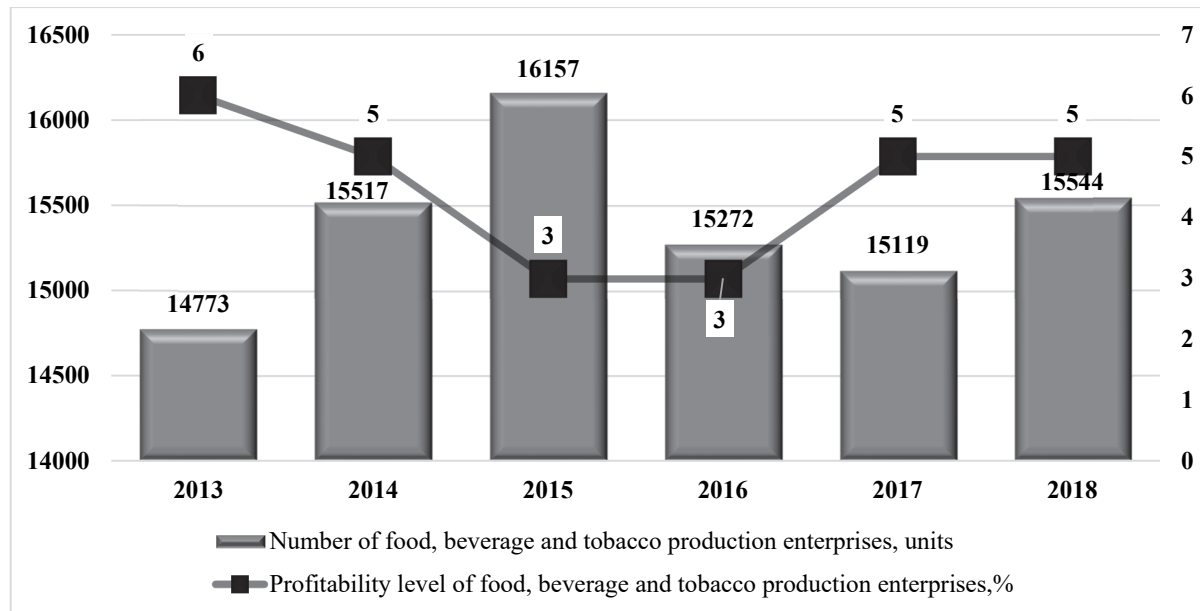
Fig. 2. Business entities dynamics and profitability level of food, beverage and tobacco products in Ukraine
Source: calculated by authors based on the data (State Statistical Service of Ukraine, 2019)

Analyzing the financial condition of the food industry, it is worth noting that the number of unprofitable enterprises in 2018 decreased by 10.2 percentage points compared to 2010. The profitability level of enterprises operating activities since 2017 began to increase and reached 4.9% in 2018, the most unprofitable for the industry was 2015. This trend in recent years indicates the restoration of positive dynamics in the food industry.

In recent years, Ukraine has seen an employment decrease in almost all industrial areas. Decrease in the number of employed workers in food industry entities from 457.9 thousand people in 2010 up to 365.9 thousand people in 2018. However, this trend took place as a result of the exclusion from the total count of enterprises located in the occupied territory and a significant increase in Ukrainian labour migration to EU countries in recent years. Today, there is an increase in direct investment in the food industry in the Ukrainian economy. According to statistical observations, in 2015, investments began to grow and reached USD 2 758.4 million in 2018, which is 8.7% of total direct investment. It is worth noting that most of the investments relate to the following activities: confectionery, dairy, non-alcoholic and other industries.
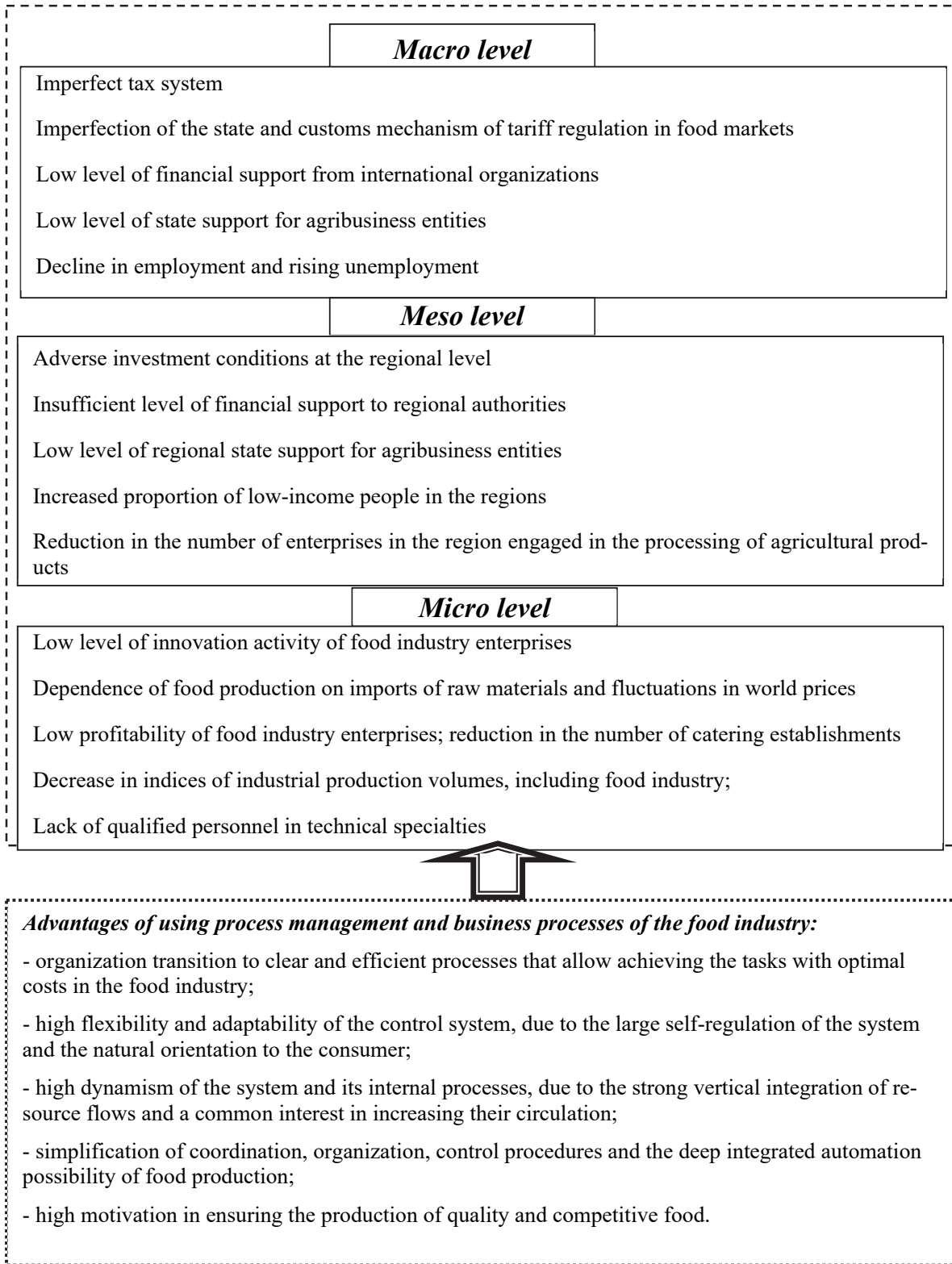
The food industry in Ukraine is characterized by export orientation, as food products are known and competitive in many foreign markets. So, in 2018, Ukraine exported 26% of agricultural and food products. The largest number of food products from Ukraine was exported to countries such as the Netherlands, Spain, Italy, Germany and Poland (Deineko, 2018).

Thus, the realities of the domestic food industry development indicate that this important area of the economic complex does not yet fully meet the needs of consumers in high-quality food products. Among the problems of this situation, it should be noted the low profitability level of food industry enterprises, the growth of food imports, the insufficient competitiveness level of food industry products, as well as the adverse conditions for investments in the modernization and development of enterprises manufacturing such products.

In our opinion, one of the important prerequisites for solving the problems of the functioning and development of food industry enterprises is the formation and implementation of a process approach as a progressive stage in the development of any enterprise in ensuring its effective operation. In modern conditions, business processes and management based on business processes play an increasing role in the overall efficiency of enterprises and contribute to solving the problems of food industry development (Fig. 3). In turn, the introduction of a process approach requires efforts and resources for identifying business processes, their analysis, compiling models of business processes, conducting their optimization under the influence of changes in the internal and external functioning environment. It should be noted that the identification of enterprise business processes and their modelling is an important tool in process management, with which you can build models of all processes in the enterprise, obtain information for their design, possible optimization or reengineering.

In order to improve the business processes management in the food sector at the regional level, the calculation of indicators for the food safety potential in the context of the Black Sea regions was carried out. Table 4 shows the production volumes of basic consumer goods in accordance with the list of the Ministry of Health of Ukraine.

In order to determine the self-sufficiency potential, the production indices and consumption rates of the main products types in the Black Sea region were calculated by regions and on average. The calculation results are presented in Table 5.

Macro level

Imperfect tax system

Imperfection of the state and customs mechanism of tariff regulation in food markets

Low level of financial support from international organizations

Low level of state support for agribusiness entities

Decline in employment and rising unemployment

Meso level

Adverse investment conditions at the regional level

Insufficient level of financial support to regional authorities

Low level of regional state support for agribusiness entities

Increased proportion of low-income people in the regions

Reduction in the number of enterprises in the region engaged in the processing of agricultural products

Micro level

Low level of innovation activity of food industry enterprises

Dependence of food production on imports of raw materials and fluctuations in world prices

Low profitability of food industry enterprises; reduction in the number of catering establishments

Decrease in indices of industrial production volumes, including food industry;

Lack of qualified personnel in technical specialties

Advantages of using process management and business processes of the food industry:

- organization transition to clear and efficient processes that allow achieving the tasks with optimal costs in the food industry;

- high flexibility and adaptability of the control system, due to the large self-regulation of the system and the natural orientation to the consumer;

- high dynamism of the system and its internal processes, due to the strong vertical integration of resource flows and a common interest in increasing their circulation;

- simplification of coordination, organization, control procedures and the deep integrated automation possibility of food production;

- high motivation in ensuring the production of quality and competitive food.

Fig. 3 The role of food industry business processes in the context of economic transformations
Source: developed by authors

Table 4
Average annual production of socially significant food products in the Black Sea region of Ukraine

Name of main products, gi,	Production volumes, $TGPg_i$					
	Odesa region	incl. per capita, kg (Vgi)	Mykolaiv region	incl. per capita, kg (Vgi)	Kherson region	incl. per capita, kg (Vgi)
Bread and bakery products in terms of flour, tons	1071000	450.5	45600	38.9	89700	84.4
Potatoes, tons	494600	208.0	196100	167.2	13800	13.0
Vegetables and melons, tons	436500	183.6	483000	411.8	1251500	1177.9
Fruits, berries, grapes, tons	84900	35.7	356000	303.5	64700	60.9
Sugar, confectionery products, tons	6904000	2904.1	70675000	60256.6	[1]	-
Oil, tons	529200	222.6	255400	217.8	201500	189.6
Meat and meat products in terms of meat, tons	48800	20.5	32600	27.8	48900	46.0
Fish, fish products, tons	22245	9.4	1934	1.6	4530	4.3
Milk and dairy products in terms of milk, tons	385300	162.1	343800	293.1	300000	282.4
Eggs, thousand pieces	355000	149.3	284100	242.2	1577800	1485.0

Source: calculated by authors based on the data (State Statistical Service of Ukraine, 2019)

The calculated coefficients indicate that for most positions the Black Sea region is provided with goods of its own production, and the production volumes of certain types of products are several times higher than the established norms. These products include, first of all: oil (the production of which is 16 times higher than the volumes necessary to ensure the region's security), vegetables and melons (almost 3 times) and flour (almost three times), eggs (more than 60%). This indicates a significant role of the Black Sea region in the system of ensuring national security for these product groups. In addition, the sale of these goods outside the region or for export ensures the growth of gross regional product. But the weak positions in self-sufficiency are sugar production (volumes are so small that they are not even reflected in statistics), meat (self-sufficiency level of 30%), milk and dairy products (80%). In addition, despite the availability of all areas in marine resources, the catch of fish by only 30% meets the needs of the region. If we consider the Black Sea region as a single industrial and economic space, it can be argued that due to the lack of trade barriers and the geographical proximity of production, this region is completely autonomous in providing bread and bakery products, potatoes, vegetables and fruits, butter and 80% dairy products (Fig. 4).

Table 5
Self-sufficiency coefficients of the Black Sea region with basic food products in 2018

Name of main products, gi,	Average consumption volume per person per year, kg CVi	Self-sufficiency potential of the region with consumer goods of own production, P_{1gi}			
		Odesa region	Mykolaiv region	Kherson region	in the region as a whole
Bread and bakery products in terms of flour	101	1.70	0.61	1.09	2.88
Potatoes	124	1.68	1.35	0.10	1.23
Vegetables and melons	161	1.14	2.56	7.32	2.92
Fruits, berries, grapes	90	0.40	3.37	0.68	1.22
Sugar, confectionery products	38	0.00	0.00	0.00	0.00
Oil	13	17.12	16.75	14.59	16.44
Meat and meat products in terms of meat	83	0.25	0.33	0.55	0.34
Fish, fish products	20	0.47	0.08	0.21	0.31
Milk and dairy products in terms of milk	380	0.58	1.05	1.01	0.80
Eggs (pieces)	290	0.51	0.84	5.12	1.66

Source: calculated by authors based on the data (State Statistical Service of Ukraine, 2019)
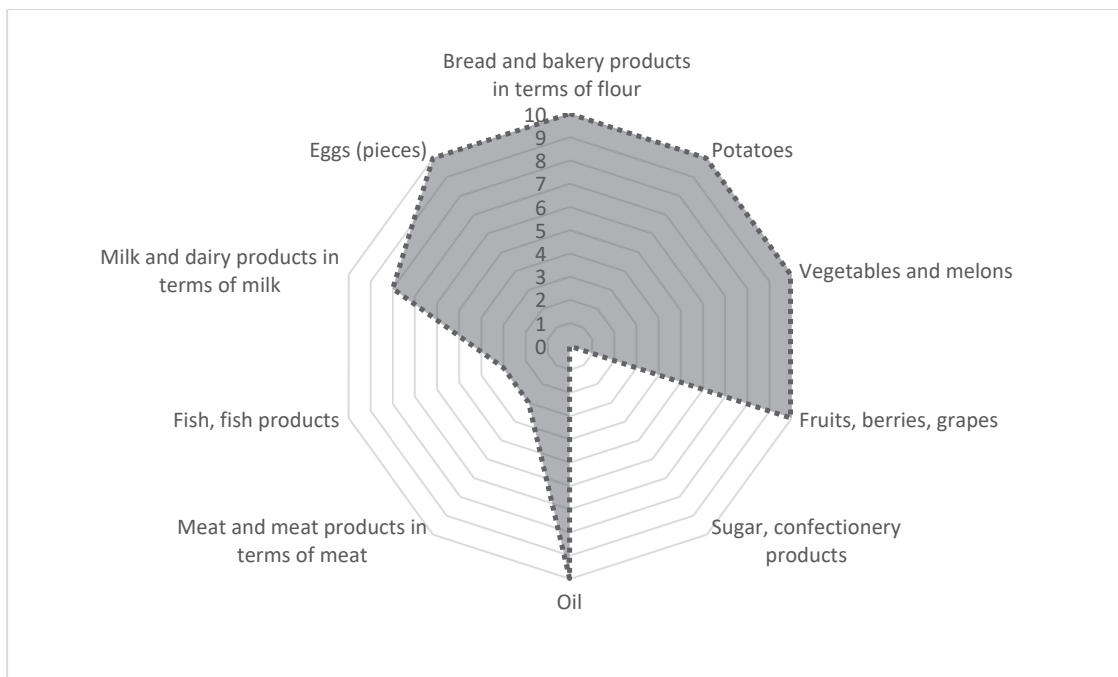
Fig. 4. Food independence potential of the Black Sea region in terms of basic food products

Source: calculated by authors based on the data (State Statistical Service of Ukraine, 2019)

Despite the rather high potential for growing sugar beets, livestock and access to the Black Sea, the most critical is the potential for providing the population with sugar, fish products and meat. Considering the results obtained, we consider the priority direction to increase the potential for food safety due to the growth in the production of these goods and the construction of processing plants in the Black Sea region of Ukraine.

5. Conclusion

By the example of analysis of the food independence potential of the Black Sea region in Ukraine in the context of the main food products, it has been established that the priority direction for increasing the food safety potential of this region should be to increase the production of sugar, fish products, meat and the construction of processing plants in the Black Sea region of Ukraine. So, we can conclude that the effective functioning and development of the food industry is an important prerequisite for ensuring the food safety of the country and contributes to promoting the export interests of Ukraine in international cooperation. Increasing the competitiveness of domestic food producers, strengthening their positions in the domestic and foreign food markets, introducing resource-saving technologies, and reducing costs make it necessary to use process management. Clear and effective business processes, as a targeted set of successive interrelated activities to transform the enterprise's resources into the desired result, will allow achieving the set production goals with optimal costs in the food industry and help to meet the demand for high-quality and competitive food products.

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