

Food market in the conditions of the new economy: current trends, opportunities and threats

Lyudmila Donskova
Urals State University of Economics
Ekaterinburg, Russia
cafedra@mail.ru

Olga Zueva
Urals State University of Economics
Ekaterinburg, Russia
zuevaon@mail.ru

Nikolay Belyaev
Urals State University of Economics
Ekaterinburg, Russia
nikolaybb1@mail.ru

Abstract —The authors analyze the features of the formation and development of the food market in the conditions of the new economy and note that the current trends are globalization of the market and its innovativeness. The innovativeness of the food market, the authors view through the prism of food innovation. An analytical study of globalization and innovation processes and their impact on the food market revealed both positive and negative aspects. Threats are associated with violations in the field of food safety, in connection with which it has been defined that ensuring the quality and safety of food products remains the current trend and, measures ensuring the declared properties are in a trend. The authors believe that the research results can serve to build an entire theory of market development in the conditions of the new economy and can be useful for the business community as an idea of possible investments.

Keywords—*food market; new economy; globalization; innovation; trends; threats*

I. INTRODUCTION

The food market in the system of sectoral markets of any country occupies one of the central places. Due to the main features of the food market, which consist in providing consumers with vital goods, influencing the development of other markets and the level of economic development in general, including the people's quality of life of a given territory, researchers define it as a priority and strategically important. The food market is the object of research not only of economists, marketers and sociologists, but also falls into the sphere of political, historical and other interests.

The formation of the food market is a dynamic process, the development of which is predetermined by the influence of various factors.

The global trend of the formation and development of modern society is characterized by the transition to the so-called "new economy". The authors note that the issues of

studying the characteristics of the development of the food market in the conditions of the new economy are not sufficiently developed, which predetermined the choice of the direction of the present study.

The purpose of the research, the results of which are reflected in this article, is to examine the trends in the formation of the food market in the conditions of the new economy, identify opportunities and threats to its development.

II. LITERATURE REVIEW

An analytical review of the literature has shown that aspects of markets such as methodology and organization are well studied in theoretical and practical terms in the works of T. Dyson, D. Keynes, A. Marshall, C. Menger, A. Smith, and others. Some aspects and elements of the food market are investigated and reflected in the works of Russian economists: A.I. Altukhova, T.V. Gomelko, G.M. Zinchuk, Revenko L.S. and etc.

The topic of the new industrialization and globalization of the economy and their consequences is considered in the works of Avdokushin EF, Kozjakina P.V., Kudryashova I.A., Ponarinoi N.N., Kasimova, Robertson R., T. Levitt and other authors.

Nevertheless, the problems of the formation and development of the market as a whole and the food market in particular, according to the authors, remain completely unexplored.

III. RESEARCH METHODOLOGY

The bibliographic, axiomatic, analysis and synthesis were used as theoretical methods; applied methods consisted in using quantitative and qualitative research methods, including: economic and statistical analysis, publication research, trend analysis, etc.

IV. PRACTICAL IMPORTANCE OF RESEARCH RESULTS

The practical significance of the received results is in their use in building a holistic theory of the formation of the food market in the conditions of the new economy in order to identify possible directions for its development and prevent threats that may be caused by market processes. In particular, the authors note that such processes as the globalization of the food market and its innovativeness pose threats to food security. For the professional community and the business community, the direction of research and its results may be of interest as a new analytical product that reveals the multi-vector development of the food market.

V. CONCLUSIONS

The main findings of the research are as follows:

1. Being characterized by global scales, the new economy leads to the elimination of the geographical and national boundaries of the economic territory, is the main force of the progressing globalization, which forms the main development trends of all sectors.

2. The globalization of the economy is considered as one of the dominant factors affecting the food market.

3. The main distinctive features of the formation, development and functioning of the food market in the conditions of the new economy are its globalization and innovativeness.

4. The globalization of the food market is associated with a change in the geography of international trade, the rapid growth of world commodity turnover, the volume of capital investment, and the intensification of international labor migration. Globalization processes that have a positive impact on the food market are emerged in the active development and improvement of the efficiency of distribution channels for food products, marketing strategies, network trading, e-commerce and Internet sales, the use of modern trade formats, the formation of transnational companies, etc.

The globalization of the food market contributes to the emergence and spread of "new" food sources and the growth of internal product competition of goods.

5. The innovative development of the food market is considered by the authors through the category of "product innovations", the result of which is an innovative food product.

6. The implementation of food innovations is carried out in various directions, while the basic concept, according to the authors, should be the scientific achievements of genetics, microbiology, biotechnology, combinatorics, nutritiology and other scientific sectors, aimed at optimizing the nutrition of both healthy and sick people.

7. Globalization and the innovative direction of the formation and development of the food market in the conditions of the new economy are also threats that are primarily related to the quality and safety of food products.

8. The development of the food market in the conditions of the new economy requires the formulation of new concepts and the use of a wide range of forms, methods and management tools to form and maintain the food market in a state adequate to the new economy.

VI. THE DISCUSSION OF THE RESULTS

A bibliographic study of various approaches to the concept of a food market has allowed it to be defined as a system of organized economic relations and economic and social relations between all of its agents in the sphere of production, exchange, distribution and consumption of food resources and food, with characteristics of integrity and dynamism characteristic of this system [1, 2].

It is well known that the functioning of the food market is carried out under the influence of the dominant factors, which include groups of natural, climatic, economic, political, cultural, moral and socio-demographic factors.

The authors, without pretending to a wide coverage of all aspects of such a global direction as the study of the food market, made an attempt to generalize and systematize the trends of its development in the conditions of in the conditions of the new economy in order to determine the possibilities of its development and identify threats.

The basic meaning of the term "new economy" has not yet been fully formed, however, economists have ascertained its existence and single out a number of features and characteristics that characterize a qualitatively new level of economic development. New economy-the economy of knowledge, new information technologies, high-quality processes allows to ensure the leadership of the subject of management and the competitiveness of manufactured goods and services [3].

The basics of the "new economy", which define its essence and features of functioning, are three components, as points out E.F. Avdokushin: the new economy appears as a system of economic relations based on information and communication technologies (ICT) and, above all, operating within virtual environment-on the Internet. According to the economist, another vivid manifestation of the "new economy" is its financial component, and the third important form of the "new economy" and its essence is international production [4].

Polyubina I.B. emphasizes that the heart of the new economy is information and communication technologies, education, science and intellectual services [5].

Special features of the new economy are also: a reduction in the innovation lag period; increasing the speed of distribution of new types of goods and technologies; constantly emerging new markets for goods, services and technologies in the economic environment; the growing importance of intellectual resources and the intellectual potential of enterprises; the formation of trends in the global market for high-tech products-high integration, servization, software, cluster formation, etc. [6].

The new economy forms the main trends in the development of various sectors of the world economy, and its distinctive features include the globalization of the economy. The term "globalization" was entrenched in the lexicon, thanks to Theodore Levitt's article "Globalization of Markets" just in 1983 [7].

However, the special feature is the absence of fundamental works devoted to the impact of globalization processes on the food market as a whole and on the markets of certain groups of food products. The authors consider globalization as a manifestation of the impact of the new economy on the formation and development of the food market, as an actual

trend of its development, having both positive and negative sides.

FAO / WHO distinguishes several aspects of the impact of globalization processes on the development of the food market, including a significant increase in international trade and changes in the traditional trade structure; expansion and increase in the number of participants in the food market [8]. World food trade, which is a factor determining the development and market conditions [8], has already reached 1.7 trillion. US dollars and will continue to grow, remaining the most important strategic resource in the world [9]. This trend is associated with economic growth (global gross domestic product (GDP) also doubled compared with 2000), population growth, transport development, information and communication technologies, and increased access to markets. Table 1 presents information characterizing the volume of world trade in food products.

TABLE I. VOLUME OF WORLD TRADE OF FOOD IN 2016

Product groups	Volume of World trade	
	million tons	billion dollars
Beef ^a	7,2	38,0
Pork	10,0	38,0
Poultry	13,0	23,0
Fish and seafood	60,0	145,0
Milk products	12,0	57,0
Wheat	163,0	49,0
Oils	68,0	63,0
Sugar	69,0	34,0

made up by sources [10]

The process of globalization has a strong influence on the conjuncture situation in the food market, as there is a strong differentiation in countries and regions according to the natural and economic conditions of the production of food products, the size and structure of consumer demand for them. The growing importance of emerging economies has already led to serious changes in world markets for agricultural products compared with 2000. China's share in global imports increased from 2.3 percent in 2000 to 8.2 percent in 2016, making it third in the ranking of the top 20 importers after the United States of America and the European Union (member organization). Between 2000 and 2016, the combined share of other emerging economies — such as the Russian Federation, India, and Indonesia — in global imports rose from 3.4 percent to 5.2 percent. The share of developed economies, such as the European Union (member organization) and Japan, in the global volume of imports has decreased, although they still occupy high places in the ranking of the 20 largest importers [10].

The positive impact of globalization processes on the food market is revealed in the active development and improvement of the effectiveness of distribution channels for food products, marketing strategies, the development of network trading, e-commerce and Internet sales, the use of modern trade formats, etc. 22% of respondents in the Asia-Pacific region, 11% in Southeast Asia, and 40% in China and the Republic of Korea regularly bought new products. Live food essentials via the Internet. For comparison, the corresponding global figure is 14% [11].

Globalization is accompanied by an increase in the scale of production through mergers and acquisitions, and its special

feature is the transnationalization associated with the emergence of global value chains in the production process carried out by enterprises located in many countries and covered by one company. The number of such companies reaches several tens of thousands, whose intra-corporate trade exceeds 40% of world trade.

Still T. Levitt, a representative of the theory of globalization, an American scientist and economist, noted that globalization is a merger of markets for individual products produced by large multinational corporations. Globalization has led to the formation of transnational companies and the food market.

The trend of globalization of the Russian market is based on the systematic introduction of transnational companies from raw materials, food industries and trade, and in many ways the main purpose of which is to penetrate and expand into markets with products manufactured by other countries [12]. The attractiveness of the domestic food market is connected with the possibilities of partial control of the purchase prices for agricultural raw materials, its relatively low cost and the large difference in production volumes depending on calendar seasons. In this regard, studies have noted the annual growth of foreign capital in the food industry, which is about 60% and continues to grow steadily [12]. Speaking about the negative consequences of the globalization of the market, it is worth highlighting the weighty advantages of the activities of transnational companies—they determine the dynamics and structure of the food market in Russia, develop and implement products and services that meet strict international standards, thereby stimulating the development and competitiveness of Russian producers. Proximity and rivalry with large corporations allowed some sub-sectors of the food industry to get a sharp leap in development, based on a fundamentally new approach to food production. Positive aspects for the food market are also derived from the achieved level of management and organization, production culture by technological multinational companies.

Thus, globalization has a significant impact on the formation and development of the food market, both in the world and national dimension, and is at the same time a risky component of business activities in this area.

Under the influence of globalization, some risks increase, for example, the risks of instability in the world economy, the risks of increasing international competition, the risks associated with changing climatic conditions, livestock epidemics and others. At the same time, the risks of falling demand for food products, infrastructure risks tend to decrease. Natsubidze A.S. notes that, in general, the risk component in the context of globalization of markets remains quite high [13].

Globalization, being a multifactorial and diverse phenomenon, is not limited to purely economic processes. Joseph Stiglitz, a Nobel Prize winner in economics, a professor at Columbia University (USA), also pointed out the negative effects of globalization, including in the social sphere [14].

The main problem is emphasized in the FAO / WHO report "Globalization and Health"—the process of globalization is not governed by any rules that guarantee fair or balanced distribution of benefits. As it was noted by

the FAO / WHO Commission, those countries and populations that have already had a high level of prosperity, as a rule, receive economic benefits from globalization, with the result that other countries and groups of people are lagging more and more [15].

Globalization carries with it certain threats to the food market. First of all, violations associated with the safety of food products, the threat of the spread of microbiological infections of regions and countries inappropriate for certain territories are associated with globalization. Experts associate the risks of incidents, including the rapid globalization of the food trade. About 75% of new infectious diseases affecting humans over the past 10 years are caused by bacteria, viruses, and other pathogens that develop in animals and animal products. One of the reasons is the widespread availability of new food sources, which are more exotic than new for certain territorial entities. Products from insects, exotic fruits, fruits and vegetables, non-traditional types of vegetable oils, exotic types of meat and fish, this is far from an incomplete list of food sources, which requires the development of research activities in the field of determining their consumer properties, and stricter security controls.

Alkali R. defines a new economy as an economy associated with the intensive introduction of innovations and new ways of doing business that affect the growth of labor productivity [16].

In this connection, another aspect of the consideration of the issues of the formation and development of the food market in the conditions of the new economy concerns the innovativeness of the food market.

The essence of innovation development in relation to the food market is its constant updating, introduction of innovative technologies, which is directly related to the goals and objectives of its sustainable operation.

Innovative development of the food market can be expressed in terms of the "product innovations" category, the result of which is an innovative food product. Our research is also devoted to the innovative component of the food product.

Food innovations in the author's understanding are considered as a scientific result, obtained on the basis of a science-based combination of technological, organizational, marketing, economic innovation solutions. This is the production of such types of food products, which are aimed primarily at improving the quality component of nutrition, improving the health of the nation and increasing the national gross domestic product, expanding the range and the most complete satisfaction of consumer demand. From a consumer point of view, innovations in food can mean a genuine novelty or modification of existing products [17, 18].

One of the main directions of product innovation is the use of the achievements of biotechnology. Today, the world community is already dealing with second and third generation GMO products. In addition, the current level of biotechnology development provides a wide range of tools for processing food raw materials and food products. These include nanotechnology, 3D printing for creating small volumes of customized products, non-thermal processing methods such as ionizing radiation, ultrasound, high hydrostatic pressure, etc. [19].

The authors of the article note that the idea of product renewal, enterprises, which in most cases are the initiators of innovations, can go in different ways: using world experience and achievements in the bioindustry, through changes in packaging, extending the shelf life of products, through developing and introducing new formulations food products. At the same time, pursuing commercial goals, the most common approach to the process of improving or creating fundamentally new product formulations, which is quite difficult in modern conditions, is the traditional approach based on the experimental choice of species, quantitative content and ratios of the components in the composition of the food product. Such basic characteristics of a product as its functional purpose, nutritional value are not given due attention, and such innovations are often "cosmetic" and do not solve problems associated with nutrition and health.

At the same time, the problem of nutrition and health remains one of the priorities in the formation and implementation of various international programs under the auspices of the World Health Organization (WHO). According to the WHO, for 2016 it was recorded that about 1.9 billion adults aged 18 years and older are overweight, of which more than 650 million people are obese [20], which are the main risk factors for the development of the whole a number of diseases, including diabetes, cardiovascular diseases and cancer. In addition, according to WHO estimates, every third person in the world suffers from some form of malnutrition [21]. With the impact of global warming, growing food shortages will also begin demographic processes.

In this connection, the development and change of the modern global food market sets before manufacturers the task of finding new technological and product solutions, one of which is the creation of new generation food products "functional products", as well as "specialized purpose" products and enriched [22]. This direction has a number of promising areas: biotechnology to create products with desired properties; the use of new technologies and the creation of a wide range of natural modified products with a given chemical properties; the use of biologically active additives to food, which are concentrates of natural and minor components of food (vitamins, minerals, micronutrients, certain fatty acids, phospholipids, etc.). In the production of bio-products, the use of synthetic dyes, flavor enhancers, preservatives, artificial and natural identical flavors and stabilizers is excluded.

Besides, the main directions in the implementation of food innovations are the implementation of the concept of rational balanced nutrition, the possibility and, in some cases, the need to integrate the accumulated traditions in phytotherapy with the achievements of modern medicine, focus on integrating the ancient Eastern traditions with the scientific and technical achievements of Western medicine, the use of biologically active supplementation, which is an inevitable process of improving primary prevention systems, is rotation and optimization of nutrition of both healthy and sick person.

The directions of food innovation should be harmoniously linked to trends in both the global and national markets. The global desire for a healthy lifestyle, the consumption of natural products contributes to the emergence of new criteria for the

selection of food products: health and wellness, safety, transparency, combined with traditional: price, quality and sensory characteristics.

In the process of using scientific food innovations, some problems will inevitably arise [23]. Lack of knowledge among consumers regarding innovative and emerging food technologies can serve as a major impediment to their acceptance [24].

Thus, food innovations should be based on the principle that nutrition should be of high quality, optimal and safe, and, therefore, be accompanied by a research component [25] aimed at studying the mechanisms and obtaining new knowledge about how to give food products functional and special properties.

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