

The bakery products market in the globalization economy conditions: institutional changes and trends in the development of consumer behavior and competitive strategies

Kostyuchenko M.N.

Director, Ph.D.

Federal State Autonomous Scientific Institute

Research Institute of Baking Industry

Moscow, Russia

e-mail m.kostyuchenko@gosnihp.ru

Kosovan A.P.

Strategic Development Advisor,

Doctor of Engineering Sciences, Academician of Russian

Academy of Sciences

Federal State Autonomous Scientific Institute

Research Institute of Baking Industry

Moscow, Russia

e-mail apkosovan@mail.ru

Shaposhnikov I.I.

Head of Economic Research and Forecasting

Federal State Autonomous Scientific Institute

Research Institute of Baking Industry

Moscow, Russia

e-mail pit439@mail.ru

Martirosyan V.V.

Deputy Director for Science, Doctor of Technical

Sciences, Federal State Autonomous Scientific Institute

Research Institute of Baking Industry

Moscow, Russia

e-mail: v.martirosyan@gosnihp.ru

Abstract—This research is aimed at studying the institutional changes associated with globalization in the Russian bakery market. To study the dynamics of the market parameters the authors used the theoretical positions of the neoinstitutionalism which is actively used in industry analysis now. It also examined the influence of international legal norms, trends in the consumer demand changes associated with the formation of global regulatory institutions and the application of innovative competitive strategies. The last ones are characterized by the institutional isomorphism. The research shows the data indicating the compliance of the general Russian market development directions to the global trends, primarily in the regional markets of large urban agglomerations. The assortment market structure is changing in the direction of reducing the demand for mass varieties and improving the quality of the assortment. (premiumization). These trends are constrained by the general conservative market character, the preservation of historical institutional values. The spread of legal institutions and innovative competitive strategies is hampered by the low level of domestic companies consolidation, their low susceptibility to organizational and marketing innovations, and the lack of the developed infrastructure for stakeholders interaction.

Keywords—*bakery industry; bakery products; institutes; globalization; innovation.*

I. INTRODUCTION

One of the main features of modern economic development is the globalization, which is rapidly spreading to

the country and industry markets. According to the International Bank the globalization is “the growing integration of economies and societies around the world through the exchange of goods and products, information, knowledge and culture” and “has become much faster and more dramatic because of unprecedented advancements in technology, communications, science, transport and industry” [1].

This process accepts the additional acceleration in the conditions of the fourth industrial revolution (Industry 4.0) which is characterized by the new wave of technological innovations: interconnected collaborative robots; machine learning; Artificial Intelligence; 3D printers connected to digital development software; simulation of interconnected machines; integration of the information flow along the value chain; multidirectional communication between manufacturing processes and products (Internet of Things) [2].

In practice the unified information field is being formed in a global scale which not only contributes to the dissemination of products and services data, but also forms consumer behavior standards including in food markets. As a result of the intensification of information interactions, we have the acceleration of the innovation process, which covers all types of innovations — product, process, marketing and organizational ones [3].

In recent years we have seen the innovations ecosystem concept [4] which comprises according to the USA National Science Foundation (NSF): “The people, institutions, policies, and resources that promote the translation of new ideas into products and processes and services” [6]. This model considers the innovative development as a dynamic interactive process resulting from the interaction of all stakeholders. Such an approach makes it possible to define the ongoing processes as synergistic, organic and taking into account the diversity of each participant that ensures their adaptability to the changing environment, and also makes it possible to create organic internal sources of innovation growth [5].

One of the rapidly developing and prospective areas of economic research, reflecting the dynamic and global nature of the modern economy, is the theory of the new institutionalism. Its occurrence is usually associated with the name of the nobel laureate R. Coase [7]. The important contribution to the development of this theory belongs to another nobel laureate D. North, who gave the fundamental definitions of institutions and a practical example of using this approach in the study of country economies [8,9]. As a separate direction, the organizational institutionalism is being developed. It explores the problems of the development and operation of both commercial and non-commercial organizations [10]. Institutional approach along with economics is used in sociology, psychology, political science. It widely uses the methods of these sciences. There are already examples of this approach application for the study of industry problems. For example, in this research there is [11] an analysis for the stages of formation and the main actors of the e-commerce market in China.

Bread is a food product that is regularly consumed by the majority of the Russian population. That’s why the bakery market is a kind of mirror that reflects the changes in the economic, social and legal institutions in the country.

In this article the authors explore the influence of institutional changes related with integration processes in the global economy in the bakery market and the bakery industry in Russia according to the following areas:

- 1) Identification of the main groups of institutions that influence the bakery market development.
- 2) Analysis of the development trends of the global bakery market and their comparison with the Russian market parameters.
- 3) Determination of the influence mechanisms of institutional changes to the bakery products market.
- 4) Assessment of the feasibility of globalization influence accounting during analyzing and forecasting the industry development.

II. LITERATURE REVIEW

At present there are the main theoretical concepts of market analysis within the neoinstitutionalism. D. North gives sufficiently detailed characteristics of institutions and institutional environment. He explains that the institutions appeared because of the gap between the human competence

in understanding the problem nature and the difficulty in choosing the most preferable alternatives when making decisions. This idea was identified by R. Heiner in 1983. To understand difficulties and indeterminacy people tend to impose regulatory and restrictive principles. In his opinion this indeterminacy is the source of the institutions that are “humanly devised constraints that structure human interaction. They are made up of formal constraints (rules, laws, constitutions), informal constraints (norms of behavior, conventions, and self-imposed codes of conduct), and their enforcement characteristics” [12]. This definition describes the consumer behavior when choosing some goods. It’s an example of the so-called Buridan donkey which is not able to develop any institution and that’s why it is inactive.

D.North identifies formal and informal institutions as well as institutions that determine the features of their application [8]. The researchers working in the field of political science offer three approaches to institutional analysis: the normative approach, when the choice is determined by normative values (these ones depend on belonging to a particular social group); the rational approach corresponds to the general institutional society structure; the historical approach is in accordance with historically established institutional values [13, 14]. W.R. Scott defines three pillars of organizational institutionalism [10]:

- 1) Regulatory — laws and formal rules.
- 2) Normative — moral and ethical standards and rules for achieving aims.
- 3) Cultural-cognitive — cultural visions and individual preferences.

Many researchers examine the influence of the globalization on the institutions formation and changing. D.North notes that the globalization leads to the mutual penetration of institutions and the replacement one institutions (primarily historical ones) with other needs of a specific market in a particular country or field [9]. As a rule such changes are accompanied by innovations transfer. It is noted in the papers [15,16] that the influence of the globalization leads to the emergence of archetypical general models in the formation and functioning of organizations. This phenomenon is called the global isomorphism. The concept of the isomorphism was originally used in the natural sciences. It was introduced into the sociology by A.Hawley in 1968. As a consequence it became widespread in the studies of the organizations behavior [17].

The analysis of the sources allowed us to formulate the following working hypothesis. In the process of the globalization there are changes of the consumer behavior stereotypes. In this process Russia is involved within the regional integration and through international contracts, the acceleration of inter-country information exchange. The consumer behavior is determined by the normative institutions that the differentiated consumers groups have. To successfully adapt to these changes the organizations – market agents have to use the existing global organizational isomorphic institutional models (structure, business models, competitive strategies). Changing the institutional values of an

organization means the changing the paradigm which it enters the market with and overcoming inertial processes. Thus it represents the organizational or marketing innovation. Embedding its own business in the general information field provides additional opportunities for its development by creating new contacts with an unlimited number of potential consumers, suppliers of raw materials and services [18].

III. RESEARCH METHODOLOGY

The research methodology is supposed to use the sectoral analysis, the desk research of open sources, general and customs statistics, marketing research results, and benchmarking. When processing the results, methods of mathematical statistics were used. It was primarily correlation analysis.

IV. EXPERIMENTAL RESEARCHES RESULTS

The following groups of global institutions were identified. They influence the bakery market formation and development and their global trends:

1) Formal legal institutions (international contracts, documents of international organizations, primarily the Food and Agriculture Organization (FAO), World Health Organization (WHO), documents of regional organizations, primarily the Eurasian Economic Union (EEU) .

The current stage is characterized by a focus on ensuring the nutritional value and healthy properties of food, the ability to satisfy the needs of the differentiated consumers groups. In particular they are people suffering from non-infectious diseases [19].

2) Informal normative group institutions that determine the consumers behavior and the assortment of bakery products (consumer stereotypes, myths, diets, rituals).

The general trend is the spread of food consumption standards that are typical for developed countries in the markets of developing countries, including China and India, with the interpenetration of national products. The trend towards the leveling of consumer behavior is clearly manifested in the so-called Z generation (who was born after 2000) [20].

There are organizational institutions of baking companies foundation and the infrastructure of all market stakeholders interaction — business, government, science, education and other participants in order to create the innovative ecosystem. The current stage is characterized by the creation of new competitive strategies that take into account the digitalization development. It is also characterized by the formation of platform business models, the internationalization of business interaction at the level of regional integration forms, for example, the European Union.

It was studied that the legal regulation in the Russian bakery products market is carried out in accordance with general global trends. But it is non-systemic and it is explained with the lack of the necessary level of interaction between business and government, insufficient activity of industry-specific business associations. In particular, both in Russia and at the level of the EAEU there is no special technical

regulation of the quality and safety of bakery products. It is misleading the consumers in selling certain products and reduces the competitiveness of domestic companies. Under these conditions the formal institutions are being replaced by the informal myths, one of which is the mass media-spread myth about the unleavened bread, which in practice is the bread on sourdough. Developing state measures for reducing salt consumption was carried out without the industry associations participation. It was accepted the variant that does not take into account the industry interests, although the salt amount in the domestic recipes is significantly lower than in many European countries.

Analyzing the influence of the consumer preferences changes in the market the following global trends were studied [21]:

1) Reducing the demand for the bread mass varieties due to their replacement with other types of food. It can be clearly seen in all developed countries and in recent years in Eastern European countries.

2) Increased attention to healthy varieties and individualization of demand – the choice of better-for-you bakery goods.

3) The increase in on-the-go food associated with catering organizations and the increase in the bakery goods volume consumed by this sector. Everything is associated with the life pace acceleration. One of this trend sing is snacking of the assortment.

The results of the analysis show that in the Russian bakery products market these trends are evident. The Rosstat's annual monitoring of food consumption in households shows that in the period from 2010 to 2016 per capita the mass wheat and rye varieties consumption decreased by 20.5% and 19.5%, while the cereals consumption – by 4.9%. At the same time other bakery products consumption increased by 11.4%. Although the dietary bakery production officially remains almost at the 100,000 tons level per year. It demonstrates the increase of better-for-you bakery products consumption. Moreover the bakery products with the high content of dietary fiber (59.9%) and cereals (88.4%) are characterized by the highest growth rates. The last one shows the global trend of increased attention to the wholegrain breads, although in Russia there are no standards for the technical regulation of these products. There is also the increase in the production of snack bakery products – pies and donuts at a rate of 60.4%. The sphere of the public catering is the main driver of the frozen and par-baked production development of different freezing degree. The serious decline in this sector was after the ruble rate falling at the end of 2014 when the decline in real population incomes started. So the growth of the frozen and par-baked production grew by 29.2% from 2010 to 2014, but starting from 2015 it began to fall to its initial level. The similar trend was observed with the import of these products. From 2013 to 2017 it decreased by 74.5%. After the recovery of the population incomes we expect the resumption of the consumption growth in this group. The production growth had already resumed in 2017. The results of the analysis allow to conclude that the global consumer demand changes have the

influence to the Russian bakery products market. It's necessary to note that the global consumer demand changes are caused by the mutual penetration of regulatory institutions and the displacing the historical ones. However, the Russian bakery products market remains conservative. This conclusion is confirmed by the high level of correlation between the population of the Russian Federation regions and the bakery products production. The global trends are especially manifested in the regional markets of large urban agglomerations, primarily in the Moscow region and St. Petersburg. The global consumer values are extended due to the presence of large international companies in the markets, as well as tourist trips and the involvement of an increasing consumers number in global communication networks.

To successfully respond to the consumer demand changes the manufacturing companies create new competitive strategies that are also characterized by institutional isomorphism. The analysis allowed to identify two main types of bakery companies organization:

1) A large multi-product company that is developing due to the expansion into new regional markets through the organic development, mergers and acquisitions, organizational and communication vertical and horizontal integration. This business organization is complemented by the innovations inclusion in the ecosystem. It is made through the creation of subsidiary startups and expansion of communications with consumers. For example, through the creation of subsidiaries in the field of catering, direct marketing, the product distribution system based on Direct Store Delivery system.

2) A company specialized in one or several close assortment groups of bakery products — market growth drivers, which develops due to the expansion of the market in a prospective niche. It concerns a consumers group, distribution channel, for example, the frozen and par-baked production in the vertical integration with the public catering, bakery café format organization. These companies often use the sale of intellectual property through the sale of franchisees.

Modern competitive strategies involve the revolutionary changes in communication system building with the final and intermediate consumers. They also include moving from the traditional B&B and B&C communication channels to defining a company's behavior strategy as a part of the general information field. This implies the active use of information and communication technologies and modern means of communication (social networks, mobile applications).

The synergistic strategies are also being developed to increase the competitiveness and market power by acquiring additional resources. They are combined when the result exceeds their quantitative sum. We can note the products synergy which is manifested as the sale or provision of complementary products and services (for example, sales of the frozen and par-baked products with the equipment for their defrosting and recipes). There is also the brand synergy which is the enhancement of its own brand by attracting advanced associated products brands (for example, cheese pie — a famous cheese brand or snack, used with a well-known coffee

brand). There is also the innovation synergy when the companies (for example, bakery and machine-building ones) create the innovations that allow to promote the sales volume of both partners.

The competitive strategies are also aimed to the deterministic groups that are characterized by homogeneous institutional values: for example, individuals of a certain age group who communicate in the Internet, eat on the go, in a car, suffer certain diseases, use different (including national) diets. Identifying such groups and developing mechanisms for their influence is an important element of modern competitive strategies.

In the sphere of building the infrastructure of all market stakeholders interaction there is the intensification of interaction of the national industry associations at the international level in order to influence international decision-making centers, such as regional integration bodies and international organizations.

The Russian market analysis showed that Russian companies are characterized by a significantly lower level of the consolidation compared to foreign competitors. This is explained by particularities of the privatization which was aimed at the disintegration of large territorial associations, insufficient development of the stock market, insufficient investment potential.

In the USSR there was practically no concept of the intellectual property which led to underdevelopment of licensing and franchise agreements, the absence of national bakery brands. The managers don't understand the importance of the modern competitive strategies so the result is the low interest in adapting the organizational and marketing innovation.

At the same time in the market there are the largest international companies, such as Grupo Bimbo, Gruppo Barilla, Lantmannen Unibake, Fazer Group, Krispy Kreme Donut bakery and other franchisees. They are the main agents of modern competitive strategies adaptation in the Russian market.

The analysis also showed a relatively low activity of industry associations in the relations with national and especially international authorities.

To successfully compete with foreign companies the domestic ones need to pay more attention to studying the global trends of the institutional changes in all considered institutions groups. It's also necessary to take this into account when preparing the strategic development plans and building the relationships with government, consumers, scientific and educational organizations.

V. CONCLUSIONS

1) Institutional changes associated with the globalization affect the Russian citizens consumer behavior, primarily in the regional markets of large urban agglomerations with the developed catering system.

2) The main indicator by which we can assess the impact of the global institutional changes in the bakery market is the dynamics of its assortment structure.

3) From the organizational changes position the market is characterized by a high level of the conservatism which is associated with the overall low susceptibility of domestic business to innovations, especially marketing and organizational ones. The main agents for promoting these changes are the transnational corporations. The lack of the appropriate infrastructure of the communications market stakeholders difficult their interaction including the government agencies.

4) Accounting for institutional changes associated with the globalization is an essential condition for the success in the competition and the industry moving to an innovative type of the development.

Acknowledgment

The authors thank all the employees of the Research Institute of the baking industry who participated in the study.

References

- [1] Globalization, The growing integration of economies and societies around the world, The World Bank Group (2013) "NYS Common Core ELA & Literacy Curriculum", Draft, Grade 9, Module 4, Unit 1, Lesson Text, unpublished.
- [2] Caruso L. (2018) Digital innovation and the fourth industrial revolution: epochal social changes? *AI & Society*, vol.33, no. 3, pp. 379-392.
- [3] Oslo Manual: Guideline for Collecting and Interpreting Innovation Data, 3th Edition, *OESD Publishing*, pp. 166.
- [4] Jarvi K., Almpantopoulou A., Ritala P. (2018) Knowledge ecosystems: Prefigurative and partial forms, *Research Policy*, vol.47, no. 8, pp. 1523-1537.
- [5] Open Innovation 2.0. Yearbook 2013 (2013) European Commission, Luxembourg: Publications Office of the European Union, p.107.
- [6] The Role of the National Science Foundation in the Innovation Ecosystem, NSF Directorate for Engineering, version 08/25/2010, p.4.
- [7] H. Erbert, H. Ovenkamp Coase, Institutionalism, and the Origins of Law and Economics, *Indiana Law Journal*, vol. 86:499-542.
- [8] Douglas C. (1990) North. Institutions, Institutional Change and Economic Performance, *Cambridge University Press*, pp.52.
- [9] Douglas C. (2005) North. Understanding the Process of Economic Change, *Princeton University Press*, pp.187.
- [10] W. Richard Scott (2014) Institutions and Organizations: Ideas, Interests, and Identities. 4th Edition, *SAGE Publications, Inc*, 2014, pp.360.
- [11] [G. Yang, R.Wang, (2010) The institutionalization of an electronic marketplace in China, *Journal of Product Innovation Management*, no.30(1), pp. 96-109.
- [12] Douglass C. North, Economic Performance Through Time, *Revista Universidad Eafit*, no.93, pp.18.
- [13] B. Guy Peters, Institutional Theory: Problems and Prospects, Reihe Politikwissenschaft, Political Science Series 69, pp.18.
- [14] Peter A. Hall and Rosemary C. R. Taylor. Political Science and The Three New Institutionalism, *MPIFG Discussion Paper 96/6*, pp.32.
- [15] Gili.S.Drori. Institutionalism and Globalization Studies, in The Sage handbook of organizational institutionalism, Royston Greenwood, Christine Oliver, Kerstin Sahlin, and Roy Suddaby (eds.), *Sage Publications*, pp.798-842.
- [16] Markus A. Höllerer, Peter Walgenbach, Gili S. Drori (2006) The Consequence of Globalization for Institutions and Organizations, in The Sage Handbook of Organizational Institutionalism (2nd edition), pp. 214-242.
- [17] DiMaggio P. and W. Powell (1983) The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review*, vol. 48, pp. 147-160.
- [18]] Kosovan A.P., Shaposhnikov I.I. (2017) The Fourth Industrial Revolution and Baking: Challenges and Prospects, *Bakery Products*, No.4, pp.26-29.
- [19] Clapp J. (2015) Food security and international trade, Food and Agriculture Organisation of the United Nations, Rome, pp.42.
- [20] Generation Z set to impact the future of food and drink. Italian Food.net, 7 August 2018, unpublished.
- [21] Kosovan A.P., Shaposhnikov I.I. (2015) Analysis and prospects for the development of the bakery products market in Russia and abroad, *Bakery products*, №7, pp. 8-10.