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Service Enterprises' Non-Price Competition Economic Aspects: Macro and Meso Level of Research

Iliyas R. Galiullin ^{1*}, Alexey I. Shinkevich ¹, Aleksandr A. Novikov ^{2,3}, Elena V. Novikova ^{2,4}, Rashad A. Kurbanov ⁵, Ramin A. Gurbanov ⁵, Irina V. Shireva ⁶

¹ Kazan National Research Technological University, RUSSIA
 ² The Russian Presidential Academy of National Economy and Public Administration, RUSSIA
 ³ Gzhel State University, RUSSIA

Moscow Metropolitan Governance University, RUSSIA
 Plekhanov Russian University of Economics, RUSSIA
 Financial University under the Government of the Russian Federation, RUSSIA

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ABSTRACT

The urgency of the problem stated in the paper is due to the fact that competition is the market basic institution, the most important condition for its effectiveness as a form of economic activity organization. The Competition Institute embodies the market's and the state's organic unity, and therefore the state should act as an instrument for its protection. Maintaining a competitive environment is not an end in itself. The competition promotion is a factor for efficiency increasing both at the micro level and at the level of the national economy as a whole. The competition development should become an organic part of institutional and structural transformations. The purpose of the paper is to analyze critically the multiple definitions and definitions, to substantiate and to identify the logical chain of non-price competition's economic advantages at research various levels on the macro and micro environment of the service enterprise. Methods for studying this problem are: a comparative analysis method, generalization and systematization of facts, methods of factor, graphic, financial analysis, and the method of economic and mathematical modeling. Study structure. The paper substantiates the non-price competition economic advantages, identifies the segments of macro and microenvironments competitive advantages in basic system-forming units, and gives the author's interpretation for the concept «the basis (component) of enterprise competitiveness». Practical value is determined by the possibility to use the proposals developed in the course of the study for a comprehensive improvement of economic policy conducted in the Russian Federation.

Keywords: system approach, service sector, methodology, macro environment, resource markets, competitive advantages, product differentiation

INTRODUCTION

In the face of growing competition in the market, approaches to competition between enterprises in different fields of activity, especially in the services market, should be based on a flexible combination of methods and forms of non-price competition. In the current conditions, it is especially important to single out economic aspects in the theory and practice of research on the non-price competition forms and methods, and on this basis to propose a mechanism for choosing such methods that, on the one hand, would correspond to the specifics of a competitive business development, on the other hand –the current market environment and the trends for its development. At the same time, in order to understand the competition mechanism, it is important to identify correctly the causes

^{*} Correspondence: Iliyas R. Galiullin, Kazan National Research Technological University, Kazan, Russia.

that can help to bypass competitors, that is, the competitive advantages' causes and sources. In the practice of service enterprises as a reason, it is customary to allocate non-price factors, as well as the competition types corresponding to them. The theoretical and practical significance of the problems in effective choice of non-price competition methods and forms, as well as its insufficient development in the services sphere for the individuals and legal entities market, predetermined the relevance of the study topic. The current stage in the service market development in the Russian Federation is characterized by a number of strategic trends presence and development that determine the prospects for structural development of this economy sector, which has significant potential and contributes significantly to the national economy of Russia. One of such trends is the formats evolution for the services maintenance, expressed in the emergence and accelerated development of the service quality and warranty service in a regional scale, the efficiency of which exceeds the analogous performance of modern non-network enterprises and enterprises of traditional formats. At the same time, the competitive advantages available the services network structures need a full implementation in the course of specialized marketing activities aimed at the consistent implementation of strategies and the use of competition methods taking into account the specifics of national and local consumer markets.

It should be recognized that the competition development between service enterprises, being a universally recognized and tested direction for the intensive development of the consumer markets' domestic segment for consumer goods, has not yet received the appropriate status and recognition. Presented in Russia, the areas of services are approaching the end of extensive growth stage and exhausting the opportunities for using regional expansion as an extensive reserve for increasing the effectiveness of the economy. In the medium term, the transition from the simplest form of competition - the consumer demand competition - to more complex (competition for resources and relations) is predicted, which requires from the largest players in the market the appropriately reorientation of corporate marketing systems, changing their goals, tasks and functionality, development and implementation of competitive activity's complex programs and activities. However, existing scientific developments only partially characterize the strategies', forms' and methods' nature and peculiarities of competition between service enterprises in consumer markets. These circumstances determined the relevance of the problem field, which is characterized in this paper. The works of such scientists as [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11] are devoted to this problem study. Many scholars have been engaged in the study of competition: W. Kingston [12], P. Patel & K. Pavitt [13], S. Metcalfe [14], Y.V. Yakovec [15], B.A. Lundvall, P. Intaracumnerd & J. Vang [16] and others. Kingston notes that "competition is the struggle of independent economic actors for limited economic resources. This is an economic process of interaction, interconnection and struggle between the companies acting on the market in order to provide better sales opportunities for their products, satisfying the diverse needs of customers. There is a constant competition between commodity producers on the world market "[12].

According to B.-A. Lundvall's point of view, "competition refers to uncontrollable factors that affect the organization's activities that cannot be managed by an organization" [16].

By Yu. V. Yakovets's definition, "non-price competition is a competitive struggle method, which is based not on price superiority over competitors, but on achieving goods' and services' higher quality, technical level and technological perfection" [15]. The following authors devoted their works to the theory and methodology of the competition's main types: G. Chesbrough [17], M. Vanhaverbeke, M. Torkkeli & A. Trifilova [18], J. West & S. Gallagher [19], K. Kristensen & E. Skott [20], M. Torkkeli, K. Kok & I. Savickaya [21], D. S. Medovnikov & S. D. Rozmirovich [22], G. Hofstede [23], S. Kudryavtseva et al. [24], F. F. Galimulina et al. [25], I. A. Kapitonov et al. [26], P. Romer [27] and others.

At the same time, despite the many attempts of research from a scientific and practical point of view, the evaluation problem of non-price competition effectiveness, as well as the study of its form, such as product differentiation, personnel differentiation and image differentiation, has not been resolved.

MATERIALS AND METHODS

Theoretical Framework

The study theoretical basis is the fundamental and applied works of foreign and domestic scientists studying non-price competition issues and goods differentiation. The study object is non-price methods of competition as one of the tools for modernizing the Russian economy's innovative development. The study objectives are: to identify the forms, methods and parameters that determine non-price competition; determination of non-price competition economic efficiency by means of a quantitative estimation method; the development of the Dupont model's economy typology on the parametric criteria basis; the development of non-price competition's factors perception map, which makes it possible to quantify the non-price methods effectiveness in the economy.

The Study Methodical Basis

The study basic methods are the method of formalization, analysis and synthesis, the method of economic and mathematical simulation. The study methodical basis is the dialectical method of cognition. These methods application, as well as extensive factual and statistical material's analysis ensured the conclusions objectivity.

The Study Stages

In the study process:

- 1) Russia non-price competition's concepts are systematized;
- 2) non-price competition's forms and methods classification attributes as innovative development in the sphere of service economics were substantiated;
- 3) the non-price competition model typology is developed on the parametric criteria basis;
- 4) non-price competition's factors perception map is presented, which makes it possible to quantify the non-price methods effectiveness in the economy.

Theoretical and Practical Significance of the Study Results

The study theoretical significance is to develop a technology for assessing non-price competition as one of the tools for modernizing the innovative development of the Russian economy. The developed, theoretically grounded and approved methodical aspects of non-price competition deepen the scientific approach to the service enterprises' competitive activity activation. The designed mechanisms for assessing non-price competition are supplemented by theoretical provisions of competition and competitiveness of services, management, and enterprise economics.

The study conclusions and results practical significance: the obtained results and provisions create a technological basis for enterprises' non-price competition management, increase their competitiveness and efficiency in the sphere of services economics; the non-price methods toolkit use is advisable to apply in economy competitive development's federal and regional programs implementation.

RESULTS

Systematization of the Concept of Non-Price Competition in Russia

In the modern world, the non-price competitive struggle methods come first. This does not mean that the price struggle is not used, it exists, but not in such an explicit form. The fact is that the prices struggle in an open form is possible only until the commodity price is reduced to the cost price. In general, price competition in an open form leads to a decrease in the profit rate, the enterprises' financial condition deterioration and, in conclusion, to their bankruptcy. Therefore, producers avoid running price competition in an open form and increasingly resort to forms of non-price competition [17]. Non-price competition is carried out by improving the products quality and the conditions for its sale and marketing. The quality improvement is mainly carried out in two main directions: improving the goods' technical characteristics; improving the goods' adaptability to the consumer needs. Competition for a product is a kind of non-price competition, which is carried out through improving the products quality. This type of competition is based on the desire to seize a part of the industry market by producing new products that can fundamentally differ from the old model, or represent its upgraded version. Non-price competition by improving the products marketing was called competition under the sales terms. Improving customer service is the basis for this type of competition. This includes the impact on the consumer through advertising, improving trade, the establishment benefits for customer service after the goods purchase, that is, in its operation process. Non-price competition is carried out by reducing costs, improving the quality of products and services, reliability, improving payment terms, guarantee and post-warranty service, improving sales methods. Non-price competition minimizes price as a consumer demand factor, allocating goods and services through promotion, packaging, delivery, service, availability and other marketing factors. The more unique the products' offer from the consumers' point of view, the more marketers have the freedom to set prices higher than competing products. Each of the firms performing in the market strives, at least, to maintain that market share that it occupies. The main methods required for this competitive struggle are the technical level and goods' other qualitative indicators, the terms of delivery, terms of payment, the amount and terms of guarantees, the volume and quality of service, advertising and other activities [18].

Currently, many companies prefer to improve their goods' consumer properties while maintaining or even some increase in sales prices. With the appropriate advertising, such a "hidden" discount from the price of the goods causes, as a rule, the modern consumer's positive reaction, which so often associates a low price with goods' unsatisfactory quality. The seizure of the market through penetration into it on the new branded product development basis or the competitors' ousting offering similar goods also occurs with non-price competition. In

the world, the non-price competition success is determined (especially in Europe, North America, Southeast Asia) by the goods' technical level, quality and reliability, confirmed by certification in generally accepted centers, service and after-sales service level, and not by low prices, this indicates a large development of competition's non-price forms. At the present time, marketing research various kinds have received a very large development, the purpose of which is to study the consumers' requests, their attitude to these or other goods. These studies give the manufacturers information that allows them to represent more accurately the future buyers of their products, more clearly represent and predict the market situation as a result of their actions and reduce the risk of failure, etc. Goods that are produced on the marketing research basis have great chances to be in demand on the market. The scientific methods application contributes to the positive results achievement, which the producer plans to obtain. However, not only their compliance with customers' requests and a manufacturer's competent advertising company is necessary [22].

Also important is how the product will compete in the market and its differentiation. Goods' differentiation means a company's some product allocation in the eyes of consumers from other products of this class. Differentiation is represented as a form of non-price competition. The differentiation goal is to make the product distinctive (in comparison with the main competitors' product) properties that can be important to the buyer. By differentiation means, the enterprise seeks to create a situation of monopolistic competition, in which, owing to its special products, it has a significant market power. Differentiation, or in other words, the goods isolation on the market, means the enterprise's ability to provide product's uniqueness and a higher value (in comparison with competitors) for the buyer in terms of quality level, its special characteristics availability, marketing methods, aftersales service [8].

There are several types of differentiation: product differentiation, service differentiation, differentiation of personnel and image's differentiation. Product differentiation is the products supply with characteristics and / or design, better than competitors possess. For standardized products, it is practically impossible to carry out product differentiation. For highly differentiated products, product differentiation is a common occurrence. Service differentiation is the services offer (deliveries speed and reliability, installation, after-sales service, training clients, consulting), accompanying the product and at the level exceeding the competitors services. Personnel differentiation includes their hiring and training, conducting master classes for them, which performs its functions more efficiently than the competitors' personnel. Well-trained staff must meet the following requirements: competence, friendliness, and credibility, reliability, responsibility and communication skills. Image differentiation is the image creation, the image of the organization and / or its products, which, as a rule, distinguish them from the competitors and / or their products. Depending on the products specific features and the organization's capabilities, it can realize simultaneously from one to several differentiation directions [19].

Non-Price Competition's Forms and Methods Classification Features as Innovative Development in the Service Economics Sphere

The non-price competition's basic forms and methods are substantiated (**Figure 1**), while the competition form is understood as a specific method of rivalry development and implementation. Under the competition method is understood the rivalry instruments totality between the entrepreneurial business acting entities.

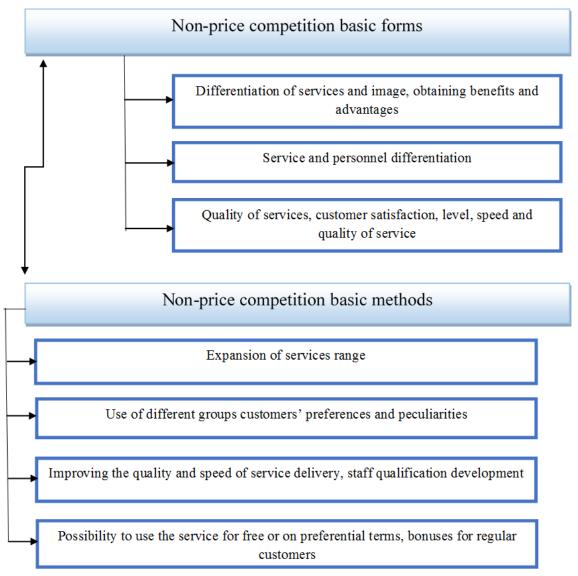


Figure 1. Non-price competition forms and methods [20]

The product quality great role is due to its direct relationship with profitability: improving quality attracts customers and contributes to increased services sales, which is reflected in increased profits and lower average costs and courteous and qualified service is the main criterion for choosing a service for a large number of consumers. Based on the conducted non-price forms and methods classification, as well as conducted experts survey, the main parameters determining non-price competition in the services market are defined (**Table 1**) [21].

Managing the methods and forms of non-price competition, the company achieves an improvement in its services quality, achieving a quality level higher than that its competitors possess.

Table 1. The main parameters that determine non-price competition in the services market

Nº	Non-price competition main parameters
1	Services provided quality
2	Information about services
3	Product boundaries (assortiment)
4	The opportunity to use the service for free or on preferential terms
5	Enterprise location
6	Remote maintenance
7	Possibility of non-cash payments
8	Advertising Support (Direct Marketing)
9	The enterprise's image
10	Trust in the enterprise
11	External design of the enterprise
12	Information construct of the building
13	Graphic symbol (logo)
14	Personnel qualification
15	Service level
16	Service speed
17	Corporate Identity (Brand Name)

Table 2. The technique for assessing the effectiveness of non-price competition activities on the qualitative indicators basis

Stage 1	Non price competition X ₁ - X ₂₃
Stage 2	Research tool – questionnaire
Ctago 2	Factor model:
Stage 3	$Xi=A_UFj+Ai2F2++AimFm+VU$
Stage 4	Based on the plotting of the eigenvalues dependence on the factors number
Stage 5	It is determined on the factors' loads basis (linear correlation between variables and factors)
Stage 6	$F_{lphis} = W_{ll}X_1 + Wi2X_2 + + WikX_k F_{mp} = W_uX_j + W2X_2 + + W_{lk}X_k$
Stage 7	^F corp. t ^F iphis+ ^F iop
Stage 8	^E f ^F corp. t ^{-F} corp. t-1 (^F iphis+ ^F iiop)t — (^F iphis+ ^F iop)t-1
Ctaga O	Based on the procedure of multidimensional scaling in the SPSS program or the factor analysis
Stage 9	procedure in the Minitab program
Stage 10	Conclusions and proposals for improving the management of non-price competition

Non-Price Competition Model Typology Based on Parametric Criteria

Analyzing the theoretical and methodological foundations of non-price competition's parameters, methods and forms on the services market allows us to conclude that none of them can attain the "status of impeccable", in connection with which their further improvement is relevant. In the study course, a technique was developed to assess the effectiveness from implementing measures to manage non-price competition in the services market based on qualitative estimates factor analysis. The proposed technique main steps are presented in **Table 2** [25].

Using the economic efficiency assessment after the activities' implementation in the services market on the qualitative assessments and summary scores of the results bases in the study of non-price competition's parameters perception by legal entities and individuals, a non-price competition model is built through which the enterprise transfers consumer demand in the right direction and successfully allocates its products) among competitors.

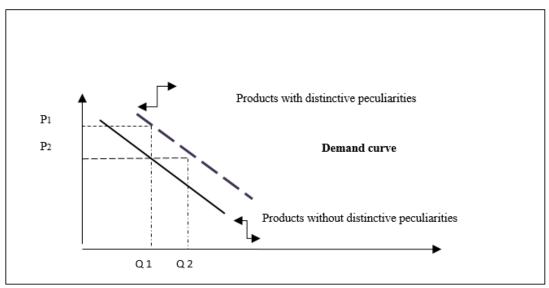


Figure 2. Model of non-price competition [4]

Table 3. Estimation of economic efficiency based on qualitative estimates

The obtained estimates of the economic evaluation on the basis of qualitative estimates

Flnon-pr/phis -1=0,117*7,80+ 0,181*3,52+0,174*4,86+ +0,289*3,19+0,152*4,73+ 0,164*3,51= 3,94 F2non-pr/phis -1=0,176*8,23+0,155*6,13+0,164*6,45++0,170*7,86+0,328*9,98+0,189*8,72=9,72

Flnon-pr/phis t=0,117 *7,80+ 0,181*3,52+0,174*4,86+ +0,289*4,15+0,152*4,73+ 0,164*3,81= 4,90 F2non-pr/phis t=0,176 *8,23+0,155 *7,97+0,164*6,45+ +0,170*7,86+0,328*9,98+0,189*8,72=11,56

Fi pr/or t-i=0,102*8,70+ 0,094***4,51**+0,095*5,70+ +0,106*7,83+ 0,096 *9,20+0,091 *8,17=3,45 F2 pr/or -1=0,320***4,26**+ 0,330*9,20=4,40

Fi pr/or t-i=0,102*8,70+0,094***6,25**+0,095*5,70++0,106*7,83+0,096*9,20+0,091*8,17=4,89 F2 pr/or t-i=0,320***5,54**+0,330*9,20=5,68

Fgen t -i = 35,36

Fgen t = 46,04

Ef = 46.04 - 35.36 = 10.68

Based on the models obtained, the effectiveness of measures implementation was assessed (Table 3).

Having created a marketing service that focuses on the consumer, and having conducted a set of measures to ensure competitive advantages, the company can achieve high results. The non-price competition's factors perception analysis in the market of individuals shows, expanding the range of services provided, and improving the quality of services, the company achieves good results.

A Map of Non-Price Competition's Factors Perception, Which Makes it Possible to Quantify the Non-Price Methods Effectiveness in the Economy Based on the "Effect of Counter-Rates."

The service companies' real competitiveness is manifested not only through efforts to strengthen competitive capacity, but also by comparing their own capabilities with those of competitors that are also objects of dynamic change. It turns out that the less competitive one or another representative of the company's strategic external environment is, the more competitive almost automatically becomes the company itself. And, conversely, the more competitive the company's environment, the less its own strategic competitiveness looks. Such interdependence of competitors, as A.Yu. Yudanov defines [1], is called "the effect of counter-rates" (Figure 3).

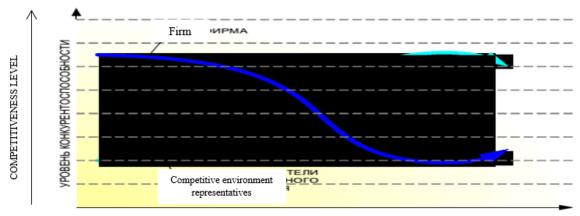


Figure 3. "The counter-rates effect" in non-price competition [1]

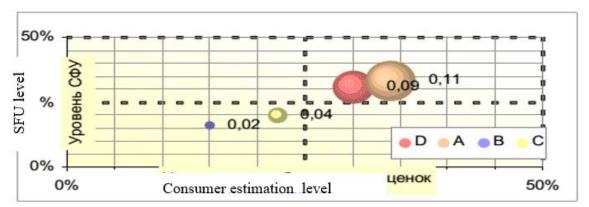


Figure 4. Non-price competition map [2]

Today, competition among representatives of small and medium-sized businesses often resembles a blind fight. The lack of reliable market information makes the assessment of competitive positions extremely difficult. In fact, the "market share" category assumes, at a minimum, knowledge of the total market volume for a given type of product. For a modern economy with a huge shadow sector, it is not possible to obtain such information from available official sources, and conducting in-house field research will require exorbitant costs. Data on the market share of the nearest competitors is extremely difficult to access. In order to track changes in a timely manner, a simple and effective system for monitoring the competitiveness of all market participants is needed. The enterprise will possess high achievements in the market if it can achieve competitive advantages, relying on the main factors of success in its industry. To determine the enterprises' competitiveness level, one more parameter is needed: an assessment of consumer preferences' rating in the market. The actions sequence in assessing consumer preferences is as follows: first, we need to identify weight coefficients for various factors that influence the consumer choice, and then use them to correct the data obtained in the course of marketing research. The indicators calculated in Table 3 are the main ones for constructing a competition map, on which it is possible to identify typical strategic positions of the enterprise (Figure 4).

The competition map is a field on the axes of which the non-price factors' level values and the level of consumer evaluations of competing firms are postponed. The position of the firm on the map is determined by the corresponding coordinates. The firm on the map is depicted as a circle whose radius corresponds to the value of its competitiveness index. The competition map allows relatively accurately determining the forces correlation in the market and identifying marketing tasks for positioning the firm in a particular matrix cell, identifying current and prospective competitors, and outlining recommendations for choosing a strategy for competition. For a correct understanding of the competition map content, it is necessary to make some explanations. The boundary values of both map axes are generally 50%. This is the extreme point in which several firms simultaneous presence is possible, between which there are likely to be competitive clashes. This state of affairs is due to the previously discussed effect of "counter-rates". Its essence is that the competitiveness level of a particular firm is determined on the comparison basis with rivals indicators, so strengthening the competitive positions of one of the market players automatically leads to a decrease in the competitiveness of the rest. Since the probability of a collision between firms decreases as the gap between their competitiveness levels increases, in the model we are considering a firm that has SFU and consumer estimation indicators in excess of 50% does not need the main competitors

identification (the firm is a monopolist or there are only 2 players on the market), or the competitiveness level is much higher than that of competitors (for 3 or more market participants) and competitive encounters with them are unlikely [24].

DISCUSSIONS

Yudanova A. Yu. [1] highlighted the following benefits of non-price competition development:

- 1. Price fights are disastrous for all market participants only the consumer wins from them. Price competition can lead to monopoly and the industry crisis the fact is that the larger the company, the more money it has, which means that the longer it is able to sell products at lower prices. Small and medium-sized businesses are doomed to defeat in the fight against industry leaders.
- 2. Successful differentiation is a more effective competition method than dumping. For a suitable product, the consumer will pay the amount assigned by the seller.
- 3. With the right approach, non-price competition will be less costly than price competition. For example, a successful advertising video film can be shot "for pennies" with an original and interesting idea. The same can be applied to the characteristics of the product: even a slight improvement in design can give it a much more attractive look.

With non-price competition, the company's toolkit is incomparably wider: it is possible to achieve an advantage through any good idea.

However, there are some disadvantages of non-price competition, noted by other researchers [3, 4, 1, 10, 11]:

- 1. The company deliberately refuses from the consumers' part who put the price first.
- 2. Many companies use illegal methods of non-price competition, which include industrial espionage, enticement of core specialists, and production of counterfeits.
- 3. Managers and ordinary employees high qualification is required, which would enable them to develop an effective competition strategy and regularly assess the real situation conformity to the planned one.

CONCLUSION

The paper substantiates the economic advantages of non-price competition, identifies the competitive advantages segments of macro and micro-environments in basic system-forming units, gives the author's interpretation of the concept "the basis (component) of enterprise competitiveness". In the result of the conducted research it was revealed that non-price competition in comparison with price one is the most important component in the competitive struggle. Many enterprises understand this, and try to compete only by non-price methods, so now they are becoming more important in the eyes of consumers. They help easily to evaluate the goods all advantages and disadvantages. The price cannot give such definition, therefore its criterion of goods value reflects only materials cost which were used at the goods manufacture.

It has been established that non-price competition is a competitive struggle method, based not on price superiority over competitors, but on achieving the goods' and services' higher quality, technical level, technological perfection. This kind of competition is based on the desire to seize a part of the market by issuing new products that either fundamentally differ from the old version, or represent its upgraded version.

REFERENCES

- 1. Yudanov, A. Yu. (2013). Competition: theory and practice. Science and Public Policy, 29(2), 115-128.
- 2. Porter, M. (1990). The Competitive Advantage of Nations. New York: The Free Press.
- 3. Maksimova, V. F. (2013). Microeconomics in the regional development of Great Britain, the USA and Russia. *Innovations*, *4*, 43-46.
- 4. Galperin, V. M. (2014). *Institutional environment of the globalized economy: development of network interactions.* Moscow: Institute of Economics, Russian Academy of Sciences.
- 5. Chamberlain, E. (1990) Theory of monopolistic competition. *The economy*, 16, 351-367.
- 6. Shinkevich, A. I., & Kudryavtseva, S. S. (2014). *Management of open national innovation systems in the knowledge economy*. Kazan: Kazan national research technological university.
- Yadgarov, Ya. S. (2012). Problems of integrating science and production in modern conditions. Bulletin of Leningrad University, 5, 111-113.
- 8. Zhukovskaya, I. V., Shinkevich, A. I., Ostanin, L. M., Yalunina, E. N., Lushchik, I. V., Zhukova, M. A., & Mokhova, G. V. (2016). Features of economic zones' regulation in terms of economic instability. *International Journal of Environmental and Science Education*, 11(18), 155-168.

- 9. Zhukovskaya, I. V. (2016). Technology Platforms as an Efficient Tool to Modernize Russia's Economy. *International Journal of Economics and Financial Issues*, 6(1), 163-168.
- 10. Sidorovich, A. V. (2011). Integration of science, education and production: synergistic effect. *Philosophy of Education*, 1, 26-31.
- 11. Agapova, I. I. (2011). State, science and business in the innovation system of Russia. IETP. Moscow: Institute for the Economy in Transition.
- 12. Kingston, W. (1984). The Political Economy of Innovation. New York: Springer.
- 13. Patel, P., & Pavitt, K. (1994). The Nature and Economic Importance of National Innovation Systems. *STI Review*, 14, 363-378.
- 14. Metcalfe, S. (1995). The Economic Foundations of Technology Policy: Equilibrium and Evolutionary Perspectives, in P. Stoneman (ed.). Cambridge: Blackwell Publishers.
- 15. Yakovec, Y. V. (2004). Epochal innovations of the XXI century. Moscow: Economics.
- 16. Lundvall, B. A., Intaracumnerd, P., &Vang, J. (2006). *Asia'a innovation system in transition*. Northampton: Edward Elgar.
- 17. Chesbrough, H. (2007). Open innovation: creating profitable technologies. Moscow: Generation.
- 18. Vanhaverbeke, V., Torkkeli, M., & Trifilova, A. (2010). Open innovation. Innovations, 7, 35.
- 19. West, J., & Gallagher, S. (2006). Challenges of open innovation: the paradox of firm investment in open-source software. *R&D Management*, 36(3), 319-331.
- 20. Kristensen, K., & Skott, E. (2008). What is the next? Theory of innovation as a tool for the prediction of industry changes. Moscow: Alpina business book.
- 21. Torkkeli, M., Kok, K., & Savickaya, I. (2009). Innovation management in Russia and concept of «Open innovation»: the first results of the study. *Innovations*, 11, 89-95.
- 22. Medovnikov, D. S., & Rozmirovich, S. D. (2011). Technological corridors in the industry of consumer's goods and servises. *Foresight*, *5*(1), 26-39.
- 23. Hofstede, G. (2008). Culture's consequences: International differences in work-related values. Beverly Hills: Sage Publications.
- 24. Kudryavtseva, S., Shinkevich, A., Pavlova, A., Chudnovskiy, A., Nikolayeva, A., Garipova, G., Doronina, F., & Ishmuradova, I. (2016). Econometric Methods for Evaluating of Open National Innovative Systems. *International Journal of Economics and Financial Issues*, 6(2), 640-645.
- 25. Galimulina, F. F., Zhukovskaya, I. V., Komissarova, I. P., Shinkevich, A. I., Mayorova, A. N., Astafyeva, I. A., Klimova, N. V., & Nabiullina, K. R. (2016). Technology Platforms as an Efficient Tool to Modernize Russia's Economy. *International Journal of Economics and Financial Issues*, 6(1), 163-168.
- 26. Kapitonov, I. A., Zhukovskaya, I. V., Voloshin, V. I., Shulus, A. A. (2017). Small and medium-sized enterprises as a driver of innovative development of the Russian fuel and energy complex. *International Journal of Energy Economics and Policy*, 7(3), 231-239.
- 27. Romer, P. (1992). Increasing Returns and New Developments in the Theory of Growth. *NBER Working paper*, 27, 30-98.

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