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Development of Modern Entrepreneurship: Competition and Cooperation

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Abstract:
The purpose of the article is to develop the optimal model of development of modern entrepreneurship in Russia from the point of view of the processes of competition and cooperation. The foundation of the methodological apparatus of this research is the method of scenario analysis, which is performed with the help of the tools of the Theory of games.

The authors offer classification of existing market structures in the spheres of economy as to the criterion of ratio of processes of competition and cooperation and develop the proprietary methodology for evaluation of effectiveness of the model of national economy development from the point of view of the processes of competition and cooperation. Because of the research, it is concluded that the offered hypothesis is true, and it is impossible to apply the straightforward approach to creation of market structures in economic spheres of modern Russia due to its ineffectiveness in the modern economic conditions, subject to the influence of the processes of globalization, integration, post-industrialization, liberalization, etc.

The authors analyze the possible scenarios of development of modern entrepreneurship in Russia through the prism of competitive and cooperative processes.

Keywords: *modern entrepreneurship, competition, cooperation.*
JEL-classification codes: *D41, F12, O12, P13.*

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Introduction

The modern stage of development of the global economy could be characterized as transitional, as the old model of pure market economy is deemed ineffective, and a new model is being selected. In these conditions, a problem of selecting the model of development of entrepreneurship appears. The work is built based on hypothetical and deductive principle around the supposition on the necessity for withdrawal from the straightforward approach to creation of market structures in the spheres of the Russian economy due to its ineffectiveness in the modern economic conditions subject to the influence of the processes of globalization, integration, post-industrialization, liberalization, etc.

Global competition, which was viewed as a universal tool for market stimulation of business activity and high effectiveness of economic subjects, leads to ousting the domestic business from internal markets and gradual monopolization of the global economic system. The alternative cooperative model leads to oligopolization of markets, which does not guarantee their high effectiveness. This article seeks for solution to establishment of the balance between competitive and cooperative forces and movements and seeks the goal for development of the optimal model of development of modern entrepreneurship in Russia from the point of view of the processes of competition and cooperation.

Literature Review

The theoretical basis of this research consists of the works of various authors on the issues of competition in the sphere of entrepreneurship in the conditions of market economy, which include (Havlicek *et al.,* 2013; Breckova and Havlicek, 2013; Liu *et al.,* 2017; Mohamad *et al.,* 2017; Piovesan *et al.,* 2016; Crowley and Jordan, 2016; Lynch *et al.,* 2016; Albekov *et al.,* 2017). The work also uses the materials of publication of scholars and experts in the sphere of business cooperation and integration, which include (Pociovalisteanu and Thalassinos, 2008; Bogoviz *et al.,* 2016; Bezrukova *et al.,* 2013; Kravets *et al.,* 2013; Melese *et al.,* 2017; Geldes *et al.,* 2017; Ivanova *et al.,* 2017; Hapsoro and Suryanto, 2017; Akopova and Przhedetskaya, 2016; Medvedeva *et al.,* 2016; Kormishkin *et al.,* 2016).

Methodology

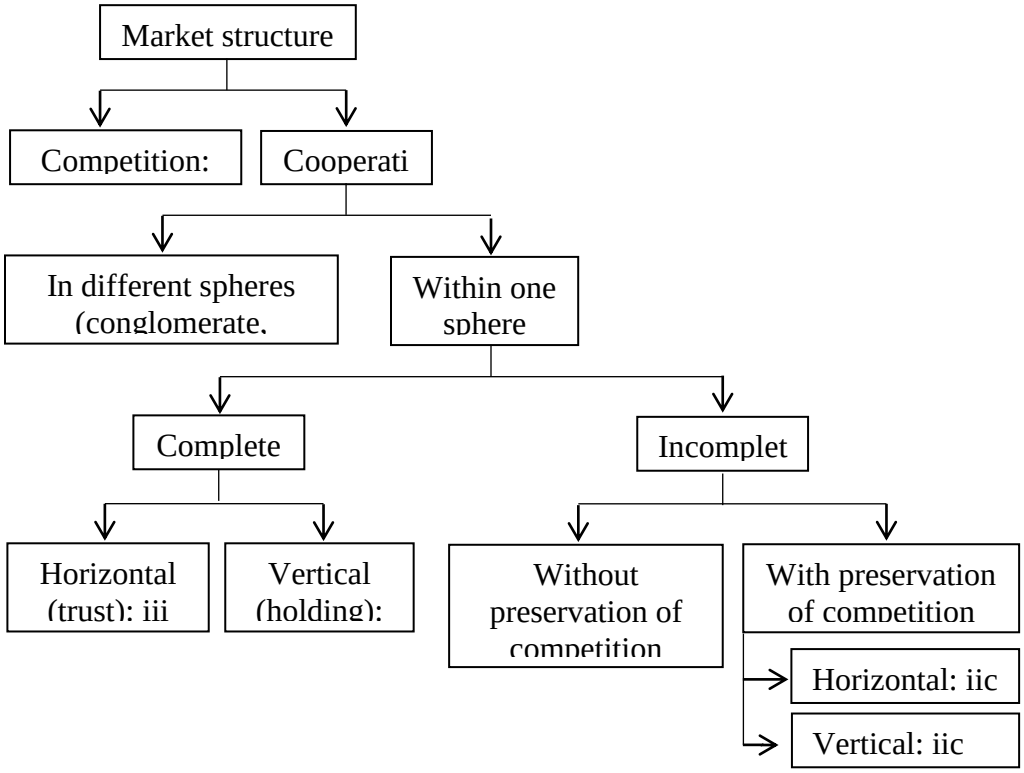
Based on these works, we compiled a classification of existing market structures in the spheres of economy according to the criterion of ratio of the processes of competition and cooperation (Fig. 1). The estimates were assigned to competitive (c) and cooperative (i) processes which take place within these structures in three-dimension aspect.

For verification of the offered hypothesis and achievement of the set goal, this work uses the specially developed proprietary methodology of evaluating the effectiveness

of the model of development of the national economy from the point of view of the processes of competition and cooperation, which is conducted according to the following formulae:

$$E_{nat.ec.} = SES*k+IND*k+AGR*k+INV*k \quad (1)$$

Figure 1. *Classification of existing market structures in the sphere of economy*



Source: *compiled by the authors.*

where $E_{nat.ec.}$ – indicator of effectiveness of the model of development of national economy from the point of view of the processes of competition and cooperation;

SES – effectiveness of the service sphere;
IND – effectiveness of industry;
AGR – effectiveness of agriculture;
INV – effectiveness of high-tech spheres (innovational sphere);
k – coefficient which reflects the level of optimality of the sectorial structure of this sphere of economy in view of its share in GDP.

The value of coefficient k is calculated in two stages. At the first stage, the optimal and factual sectorial structures of the sphere of economy are compared. If they

coincide, the value "2" is taken, if not – "1". At the second stage, the received value is multiplied by the share of this sphere in the structure of GDP. The foundation of the methodological apparatus of this research is the method of scenario analysis which is performed with the help of the tools of the Theory of Games. The effectiveness of the economy's spheres is calculated in the following way:

$$Eff(sphere)=(Effi\text{-}Exp) * (1\text{-}Risk) \quad (2)$$

Eff(sphere) – effectiveness of the sphere of economy;
Effi – efficiency of the sectorial structure of this sphere of economy;
Exp – expenditures of entrepreneurship with each such sectorial structure;
Risk – entrepreneurial risks with such sectorial structure.

The expenditures are evaluated according to the 10-1 scale, where 10 – maximal expenditures (the worst option), 1 – minimal expenditures (best option. Efficiency is evaluated according to the scale 1 - 10, where 1 – minimal efficiency (the worst option), 10 – maximal efficiency (the best option). Risk is evaluated according to the 1.0 – 0.1 scale, where 1.0 – maximal level of risk (the worst option), 0.1 – minimal level of risk (the best result).

For treatment of the received values of the indicator of effectiveness of the development model of the national economy from the point of view of the processes of competition and cooperation ($E_{nat.ec.}$), we offer to use the following scale (Table 1).

Table 1. *Evaluation scale for treatment of the values of the indicators of effectiveness of the model of development of the national economy from the point of view of the processes of competition and cooperation ($E_{nat.ec.}$)*

Intervals of values $E_{nat.ec.}$	$E_{nat.ec.} \leq 0$	$0 < E_{nat.ec.} < 4$	$4 \leq E_{nat.ec.} < 10$	$E_{nat.ec} \geq 10$
Treatment of effectiveness of the economy model	critically low effectiveness	low effectiveness	high effectiveness	very high effectiveness

As is seen from Table 1, we distinguished four intervals of values of the indicator $E_{nat.ec}$. At that, it should be noted that despite its maximal value constituting 64.8, with achievement of the value 4 the effectiveness of the model of development of the national economy from the point of view of the processes of competition and cooperation is high.

This is because achieving the value higher than 4 (let alone 10) is impossible in practice due to economy's unpreparedness for highly effective work due to factors that do not depend on the processes of competition and cooperation – which is a reason for the optimal sectorial structures for its spheres not supposing the achievement of the maximal effectiveness of these spheres.

Results

According to the official statistical information of the Federal State Statistics Service – Rosstat (Rosstat, 2016) – and independent analytical and expert agencies, in particular (RBC Research, 2017), the following sectorial structure for the spheres of economy is peculiar for Russia at present (as of 2016):

- in service sphere - competition;
- in industry – full horizontal cooperation within one sphere (trust);
- in agriculture – competition;
- in innovational entrepreneurship – cooperation in various spheres (technological park – e.g., Skolkovo).

Based on this, the model of development of national economy of modern Russia from the point of view of processes of competition and cooperation could be presented in the following way: model(action)=ccc+iii+ccc+cci. Let us add all estimate value of competitive (c) cooperative (i) processes: 8c+4i. This shows a significant domination of competitive processes over cooperative, which is a reason for imbalance of the national economy.

With the help of the tools of the Theory of games, we performed scenario analysis of development of sectorial structure of the Russian economy, the results of which are shown in Table 2.

Table 2. *Scenarios of development of modern entrepreneurship in Russia through the prism of competitive and cooperative processes*

Type of market structure		Expenditures	Result	Risk	Effectiveness
competition		10	1	0.7	(1-10)*0.3= -2.7
cooperation	in various spheres (conglomerate, concern)	10	5	0.1	(5-10)*0.9= -4.5
	within one sphere – complete horizontal (trust)	2	5	0.4	(5-2)*0.6=1.8
	within one sphere – complete vertical (holding)	3	5	0.3	(5-3)*0.7=1.4
	within one sphere – incomplete without preservation of competition (cartel, syndicate)	4	5	0.3	(5-4)*0.7=0.7
	within one sphere – incomplete with preservation of competition (cluster – horizontal)	5	8	0.2	(8-5)*0.8=2.4
	within one sphere – incomplete with preservation of competition (cluster – vertical)	6	10	0.2	(10-6)*0.8=3.2

Based on the Concept of long-term socio-economic development of the Russian Federation until 2020, established by the decree of the Government of the Russian Federation dated November 17, 2008, No. 1662-r (Government of the RF, 2008), we determined the following priorities of sectorial development of the Russian economy for the main spheres:

- in service sphere – maximization of effectiveness;
- in industry – minimization of expenditures;
- in agriculture – sustainability (minimization of risk);
- in innovational entrepreneurship – maximization of result.

According to the data of Table 2, the optimal sectorial structure for the Russian service sphere and for innovational entrepreneurship is vertical clustering, for industry – full horizontal cooperation within one sphere (trust), for agriculture – cooperation in different spheres (conglomerate, concern).

Then the optimal model of development of the national economy of modern Russia from the point of view of the processes of competition and cooperation will have the following form: model(optim)=icc+iii+cci+icc. Let us add all estimated values of competitive (c) cooperative (i) processes: 6c+6i. That is, the balance of competitive and cooperative processes in economy is established, and its development becomes well-balanced.

In view of the data of Table 2, let us view effectiveness of the existing model of development of economy of modern Russia from the point of view of the processes of competition and cooperation with the help of the developed methodology:

E_{Russia} = -2.7*(1*0.62) +1.8*(2*0.28)-2.7*(1*0.07)-4.5*(1*0.03) = -0.99.

The received value shows the critically low effectiveness of the existing model of development of modern Russia's economy from the point of view of the processes of competition and cooperation and the necessity for its correction.

Let us assess the offered optimal model of development of modern Russia's economy from the point of view of the processes of competition and cooperation with the help of the developed methodology:

E_{Russia} = 3.2*(2*0.62) +1.8*(2*0.28)-4.5*(2*0.07) +3.2*(2*0.03) = 4.54.

The received value shows high effectiveness of the developed optimal model of development of modern Russia's economy from the point of view of the processes of competition and cooperation and expedience of its usage in practice.

For creation of the developed optimal model of development of modern Russia's economy from the point of view of the processes of competition and cooperation, we

offer the following practical recommendation for transforming its existing model. In the sphere of industry – stabilization of state regulation.

In the service sphere and the sphere of innovational entrepreneurship – stimulation of cluster processes and support for cluster initiatives in entrepreneurship, through consultations and training courses for entrepreneurs on the issues of clustering, social advertising of clusters, simplification of organizational & registration procedures of cluster creation, etc. In the agricultural sphere:

- supporting the diversification of activity of agricultural companies;
- creation of favorable conditions for transfer of companies from other spheres of economy into the sphere of agriculture within the diversification of activity.

In the context of agriculture, it should be noted that formation of the offered optimal sectorial structure in this sphere of the Russian economy will allow solving a whole range of problem that it faces (e.g., low investment attractiveness and low creditability due to strong influence of the factor of seasonality on the financial results of activity, lack of resources for innovational development, etc.) and creating preconditions for its development:

- leveling or eliminating the factor of seasonality due to inter-sectorial diversification of activity which stimulates the increase of investment attractiveness and creditability;
- unification of resources of a range of companies in the process of cooperation which ensures wider possibilities for innovational development, etc.

Conclusion

Because of the research, it is possible to conclude that the offered hypothesis is true. It is impossible to apply the straightforward approach to creation of markets structures in the spheres of economy in Russia due to its ineffectiveness in the modern economic conditions, subject to the influence of the processes of globalization, integration, post-industrialization, liberalization, etc.

Deep analysis of the sectorial structure on the sphere of Russia's economy showed that this structure is optimal only in the industrial sphere. This explains the industrial orientation of modern Russia's economy, despite the government's active measures for its post-industrialization. In other spheres of the national economy, sectorial structures do not correspond to strategic priorities of their development, which is a reason for low effectiveness of the Russian economy on the whole from the point of view of the processes of competition and cooperation.

For solving this problem, we offer the optimal model of development of modern Russia's economy from the point of view of the processes of competition and cooperation. It is interesting from the scientific and theoretical point of view, as it develops conceptual provisions of the theory of state regulation of economy and the theory of sectorial markets. The offered recommendations for implementation of this optimal model in the economic practice of modern Russia have large practical value.

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