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Model Of Small Business Development And Its Competitiveness In Conditions Of Institutional Transformations.

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ABSTRACT

The changes in the structure of the Russian economy are reflected in the results of entrepreneurial activity in regional systems. The current situation is ambiguous at the level of individual territorial entities, especially problematic for peripheral regions, with an insufficient level of development of market infrastructure and a complicated geopolitical situation. In this regard, as a main goal in the work selected refinement and expansion of methodological campaigns to assess the competitiveness of small and medium-sized enterprises. The work presents an overview of theoretical scientists on the problem under study, an analysis of existing models of entrepreneurship development is carried out. The differentiation of the country's territories according to development priorities has been carried out, which can help optimize the distribution of regional resources to support business. The rating of territorial structures on the basic social and economic parameters is determined. The methodical approach to an estimation of competitiveness of region in interrelation with an entrepreneurial sector on the basis of a certain system of indicators is specified and expanded. The authors attempted to expand existing ideas on the directions of research on the competitiveness of organizations in the region. As elements of scientific novelty, it is possible to note the justified identification of a group of indicators that include directions for studying the efficiency of using the resources of the territorial system and the level of infrastructure support for the formation of a favorable competitive environment. The theoretical generalizations contained in the work can be used as materials for discussion in a scientific discussion. In addition, they may be of interest to scientific and educational activities.

Keywords: innovation, investments, development, competitiveness, infrastructure

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INTRODUCTION

Modern experience shows that a small sector of the economy is a powerful potential, focused on the formation of a competitive environment, creating innovative activity and performing many functions.

In literary sources and world practice, two models of entrepreneurship are singled out: classical - on the basis of available resources to get the maximum profit; Innovative, focused on the use of new, most effective production and management technologies. Moreover, the latter does not set as its main goal the maximum profit.

Scientific understanding of the theory and practice of the formation of entrepreneurship took place in three stages.

The first, the beginning of the XVIII century is associated with the English banker and economist R. Cantillon, who first put forward a theory and about the risk - as the main functional characteristics of entrepreneurship. According to this provision, the entrepreneur has the foresight and the desire to take the risk with the hope of making a profit.

The next stage is connected with the definition of the definition of "innovation" - as the main distinguishing feature of business. Founder J. Schumpeter has revealed that entrepreneurial activity is a function of using resource combinations, and the entrepreneur is the bearer of this function.

The third is connected with the emergence of a multifunctional business model. Its essence consists in a constant experiment with new technologies and selection of those that are most suitable for use in the economic process with minimal costs.

The modern stage of development of entrepreneurship is connected with shifting the emphasis to managerial functions, in the constant analysis of its activities. Thus, it can be concluded that the development of the theory of entrepreneurship has its own periodicity and characteristic features. Institutional transformation is reflected in the development of this sector of the economy. As of September 2017, 5.7 million SME entities were registered on the territory of the country, including 266,148 small businesses. Small and medium economic sectors more than 19 million citizens. More than 60 percent accounted for construction, agriculture, services, information technology. The specialization of the small sector is based on the sphere of trade and services. For 2016-2017 years. there is a trend of positive growth in the main economic indicators.

MATERIALS AND METHODS

In the era of large-scale institutional transformations, the small and medium-sized business sector has become an important condition for the sustainable development of socio-economic indicators of the region. In this regard, the question arises in an integrated assessment of the competitiveness of entrepreneurship and the regional system.

Based on the work of domestic and foreign researchers, the following components of competitiveness of small and medium-sized organizations in the region can be proposed (Fig. 1).

The basis for the competitiveness of the business sector is the efficiency of resource use and the state of the infrastructure. These are two interrelated and mutually complementary components, including a set of indicators. The effectiveness of the development of the business sector depends on the socio-economic characteristics of the region. Therefore, for a generalized assessment of the competitiveness of regions, it is advisable to use the methodology of rating the level of competitiveness of local units.

At the first stage, it is expedient to obtain initial information on all selected regional systems. In this case, the initial information is compiled in the form of a matrix, in the rows of which the numerical values of the selected indicators (i = 1, 2 ...., n) are inscribed in rows, and the comparable territorial units (j = 1, 2 ....), m).

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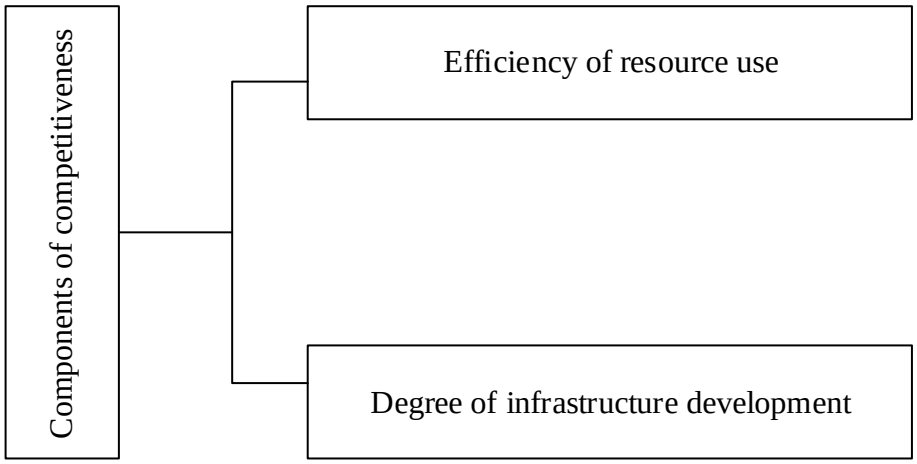

Figure 1: Competitiveness components of the business sector in the region

The initial criteria are correlated with the corresponding indicators of the regions (the best in the industry, the reference one) according to the formula:

$$X_{ij} = \frac{a_{ij}}{a_{ijmax}}.$$

Further, for the analyzed region, the value of the rating estimate at the end of the time period is determined by the formula:

$$R_j = \sqrt[n]{X_1 + X_2 + \cdots + X_n}$$

R_j–rating score for **j** subject;
X_1X_2,.. .X_n–relative indicators of the **j** analyzed enterprise;

Regions are ranked in descending order of the rating. The highest rating is in the region with the best values.

It has long been noted by economist scholars that it is advisable to compare the competitiveness of the business sector in comparison with the competitiveness of the region. It is advisable to do this on the basis of a composite index, which includes the following groups of indicators (Fig 2)

The presented indicators define both the overall socio-economic situation in the region and the competitiveness of the regional system and can serve to assess the effectiveness of the development of the business sector in the region.

RESULTS AND DISCUSSION

The use of rating methods allows taking into account a number of factors and allocating regions that differ the highest result. Thus, the ranking of regions was carried out in the work, reflecting their overall level of competitiveness and economic sustainability of development. The following indicators were included in the sample: c annual average number of employees, thousand; per capita income, thousand; average consumer spending, month/person; wages per worker, rubles; GRP, million rubles.; PF in the economy, million rubles; financial results of organizations, million rubles, investments in fixed capital, million rubles. In the first place in the ranking is the Central Federal District. In general, the rating score for the composite indicator is shown in Fig. 3.

In the aggregate of the most successful regions can be attributed Central (not included in the diagram, since it is characterized by the maximum values of the studied indicators for the entire time interval), North-West, Ural, and Volga federal districts. The average level of indicators includes the Siberian Federal District, the

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Far East. The least indicators are the North Caucasus Federal District. These territorial units are characterized by low per capita incomes, average wages, low capital investment.

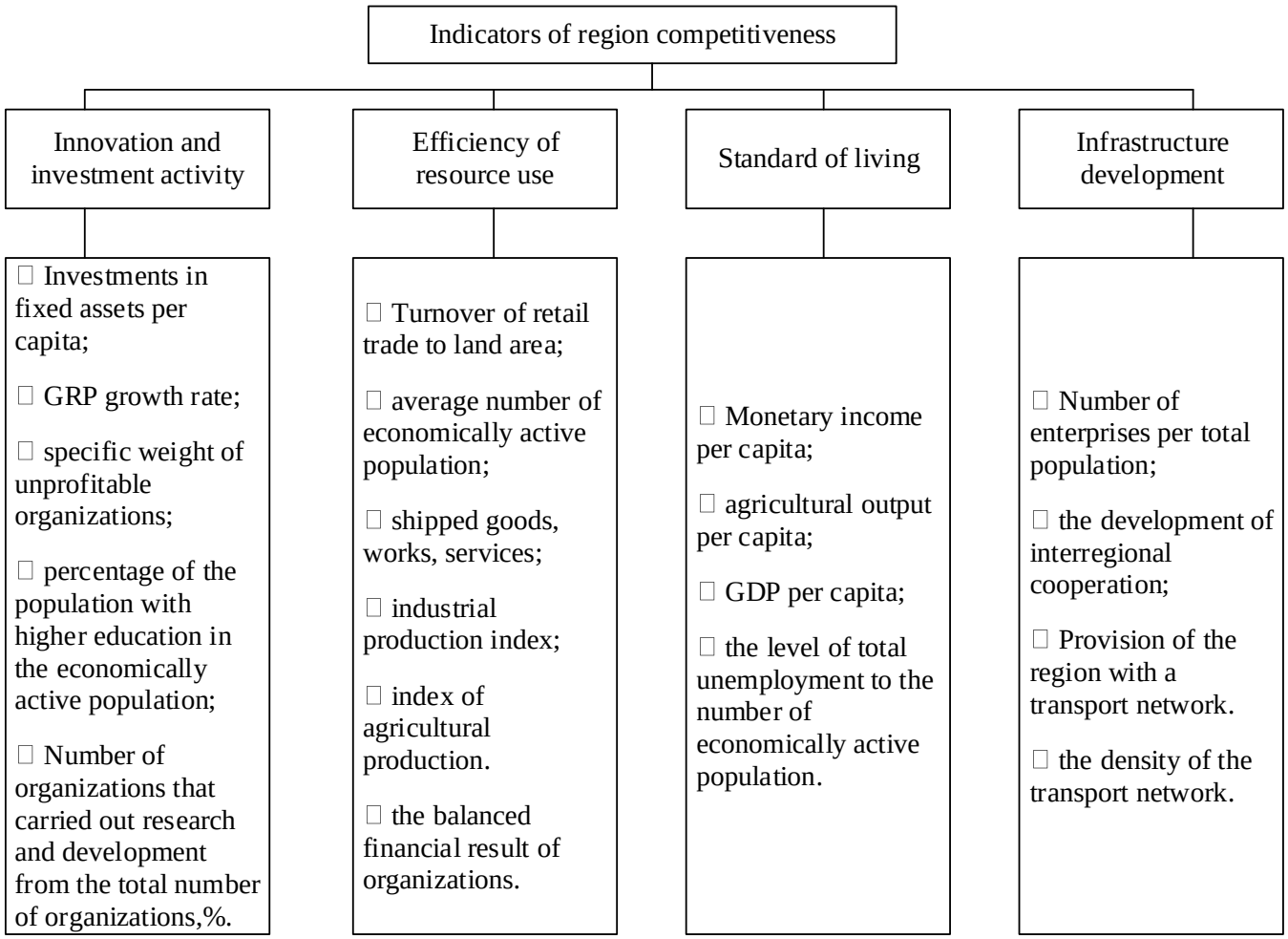

Figure 2: Competitiveness indicators of the regional system

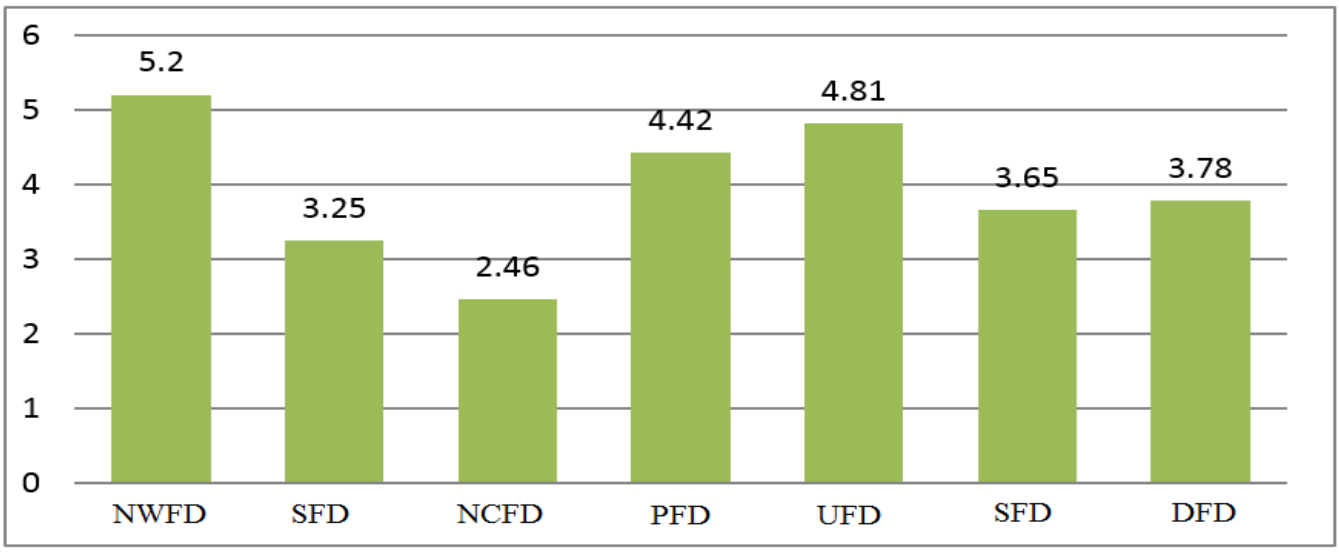

Figure 3: Consolidated index of regional competitiveness indicators for the period 2016-2017.

The presented results draw attention to the development of the Southern Federal District, in order to identify regions that contribute to a common understanding of the socio-economic state of the regions.

To assess the competitiveness of the business sector, we will use the method based on the dynamic and maximizing index [5].

The dynamic index (DI) is determined by the formula:

$$DI = \sqrt[n-1]{\frac{i_r}{i_b}}$$

n –number of time slots;
i_r–the value of reporting year' indicator;
i_b–the value of previous year' indicator.

The following formulas are used to calculate the maximizing index (MI):

1) for indicators characterizing the positive dynamics of the development level of the regional system:

$$MI = \frac{i_{act}}{max_i},$$

i_{act}–the value of the actual indicator for an individual subject of the regional system;
max_i –the maximum value of the indicator for the region;

2) for indicators characterizing the negative impact on the dynamics of the level of development of the studied region:

$$MI = \frac{min_i}{i_{act}},$$

min_i–the minimum value of the indicator for the region;
i_{act}–the actual value for the region.

The complex index (CI) of development is proposed to be calculated on the basis of the average geometric:

$$CI = \sqrt[2]{\sum RExLID}$$

The closer the value of the indicator to 5, the higher the level of competitiveness of the region.

Consider the indicators of business development in the regions of the Southern Federal District (Table 1).

Table 1: Main indicators of socio-economic development of business entities

Group	Indicator
Resource efficiency (RE)	? Industrial production index, % (IPI); ? Trade turnover of small enterprises, million rubles. (GS); ? investment in the mainstream. capital (IMC); ? cash income per capita (CI); ? a number of unemployed in the total number of employees (NU).
Level of infrastructure development (LID)	? Number of enterprises per total population (NA) (with a large number of regions, the number of small enterprises is applied); ? the development of interregional cooperation (FT); ? The share of organizations implementing technological innovations in the total number of organizations (IA);

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	⍰ The share of profitable organizations in the total number of organizations (PO), %; ⍰ turnover of goods by road, mln. tons/km (FTR)

In our opinion, the business sector and the level of its development in general, it is necessary to produce on the basis of two groups of indicators: the efficiency of the use of resources and the level of infrastructure development.

For clarity, we will cluster the regions of the Southern Federal District according to the chosen parameters. The consolidation occurred on the basis of the Single Linkage method using the formula:

$$K_\eta([i,j],k) = \left[\frac{(n_i K(i,k)^\eta + (n_j K(j,k)^\eta}{n_i + n_j}\right]^{\frac{1}{\eta}}, -1 \le \eta \le +1$$

[i, j] – group of two clusters, k – j, object with which similarity is sought;

For the convenience of calculations and obtaining reliable information, all values were standardized:

$$\sum_{ij} = \frac{y_{ij} - y_i}{d_i}$$

$\bar{y}_i$ –mean value of the indicatorYi;

$d_i = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(y_{ij} - y_i)^2}$ - standard deviation of the indicatorY_i

The results of the study on average standardized indicators made it possible to identify regional systems with the highest indicators determining the level of competitiveness in the regions of the Southern Federal District.

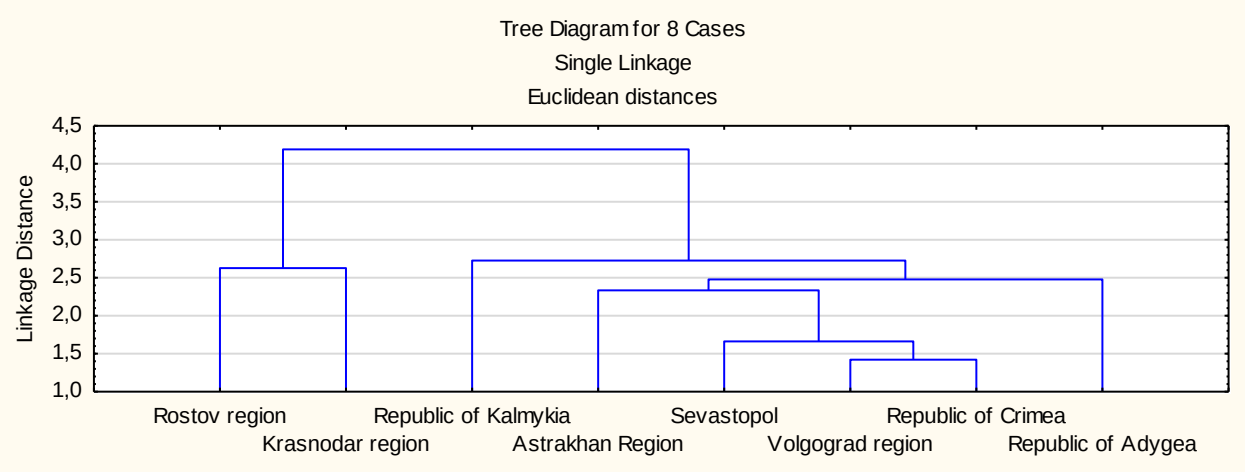

Figure 4: Dendrogram of regional distribution for clusters per first half of 2018.

The conducted researches made it possible to identify three clusters.

The best competitive regions are characterized by the Krasnodar Territory and the Rostov Region. The second cluster - R. Kalmykia, Astrakhan region, Sevastopol and Volgograd. The smallest numerical parameters differ between R. Adygea and R. Kalmykia (Table 2).

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Table 2: Distance matrix based on the Euclidean metric

	Republic of Adygea	Republic of Kalmykia	Republic of Crimea	Krasnodar region	Astrakhan region	Volgograd region	Rostov region	Sevastopol
Republic of Adygea	0,00	2,73	2,79	6,21	3,70	2,48	5,42	3,28
Republic of Kalmykia	2,73	0,00	3,42	7,78	4,41	3,33	6,61	4,35
Republic of Crimea	2,79	3,42	0,00	6,17	2,50	1,42	5,05	1,66
Krasnodar region	6,21	7,78	6,17	0,00	6,42	5,35	2,63	6,50
Astrakhan region	3,70	4,41	2,50	6,42	0,00	2,97	4,98	2,33
Volgograd region	2,48	3,33	1,42	5,35	2,97	0,00	4,19	2,19
Rostov region	5,42	6,61	5,05	2,63	4,98	4,19	0,00	5,09
Sevastopol	3,28	4,35	1,66	6,50	2,33	2,19	5,09	0,00

We will also analyze the competitiveness of the regions of the Southern Federal District on the basis of a composite index, including two groups of indicators: the efficiency of resource use and the level of infrastructure provision (Table 3).

Table 3: Integral assessment of competitiveness of the regions of the SFD, 2018 (1st half-year)

	Efficiency of resource use					Level of infrastructure development					Composite index
	IPI	GS	IMC	CI	NU	NA	FT	IA	PO	FTR	
Republic of Adygea	0,75	0,05	0,07	0,82	0,47	0,01	0,006	0,52	1,00	0,07	1,9
Republic of Kalmykia	0,74	0,008	0,004	0,47	0,38	0,06	0,00	0,21	0,99	0,001	1,5
Republic of Crimea	0,79	0,15	0,28	0,68	0,71	0,03	0,006	0,31	0,76	0,04	1,7
Krasnodar region	0,83	1,00	1,00	1,00	0,84	1,00	1,00	1,00	0,93	1,00	4,8
Astrakhan region	1,00	0,07	0,04	0,70	0,57	0,15	0,03	0,63	0,70	0,04	1,9
Volgograd region	0,82	0,25	0,16	0,67	0,78	0,36	0,23	0,34	0,89	0,41	2,4
Rostov region	0,80	0,76	0,95	0,85	0,87	0,77	0,82	0,67	0,95	0,93	4,1
Sevastopol	0,89	0,05	0,04	0,81	1,00	0,06	0,001	0,26	0,77	0,003	1,7

Thus, it can be noted that the most competitive business sector is the Krasnodar Territory and the Rostov Region, less - R. Adygea and the Republic of Kalmykia. The conducted researches have allowed allocating two groups of indicators which will help to give an estimation of a condition of enterprise sector and an opportunity to be competitive in the market of the goods and services.

CONCLUSION

When carrying out the analysis, it is necessary to define indicators when developing the directions for the development of competitive entrepreneurship. The set goals are dictated by the economic interests of economic entities and are expressed through the efficiency of the use of resources and the degree of development of the regional market infrastructure.

The results indicate that the socio-economic development of the business sector is uneven, which indicates the need to improve its competitiveness. This is possible under a number of conditions, but modern institutional transformations, in addition to everything, dictate the need to shift to an innovative development model.

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