

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Development The Methods For Assessing The Effectiveness Of Business In The Region.

Oksana Viktorovna Takhumova<sup>1\*</sup>, Elena Sergeevna Mezentseva<sup>2</sup>,  
Alla Aleksandrovna Mirokhina<sup>3</sup>, Inna Viktorovna Kushnareva<sup>4</sup>, and  
Anna Anatolievna Gorbacheva<sup>4</sup>.

<sup>1</sup>Kuban State Agrarian University named after I.T. Trubilin, 13 Kalinina str., Krasnodar 350044, Russia.

<sup>2</sup>North-Caucasus Federal University, Pushkin street, 1, Stavropol 355009, Russia.

<sup>3</sup>MIREA - Russian Technological University, branch in Stavropol, Kulakova Avenue, 8, Stavropol 355000, Russia.

<sup>4</sup>Don State Technical University, Institute of Service and Entrepreneurship (branch), Shevchenko str., 147, Rostov Region, Shakhty 346500, Russia.

### ABSTRACT

The dynamism of the business sector, the emergence of new forms of entrepreneurship determine the search for new methodological approaches, allowing for a comprehensive assessment based on a variety of criteria that characterize various areas of business. A system of indicators has been developed, including an assessment of the structure, openness, conditions, and possibilities of functioning, price parameters, the scale and type of market, which made it possible to carry out a comprehensive analysis of the development of entrepreneurship in the consumer segment and to identify areas for further development. The paper substantiates the methodology for assessing the conduct of commercial activities based on indicators of efficiency levels. The results used two criteria for the optimal functioning of trade and costs - elements of the labor process. On the basis of the selected parameters, an integrating indicator of business performance in the region was obtained, which can also be used to evaluate the result of a single commercial enterprise. To determine the level of development of the supporting complex, a classification was made of the objects of the servicing system under investigation, as a result of which three groups with relevant characteristics were identified.

**Keywords:** entrepreneurial activity, efficiency, methodical approach, levels and criteria of efficiency, result.

*\*Corresponding author*

**INTRODUCTION**

In the structure of the existing problems of a transformational nature, an important place is occupied by a study of the functioning of business structures. Modern scientific literature reveals many concepts and theories of their formation, but in the field of regional aspects not enough attention is paid to the problems of organization and increasing their effectiveness in the system of innovation-oriented reproduction. The focus of the study is due to the systemic role of entrepreneurship in the regional economy, the significance of the formation of its innovative model as a condition for the sustainability of the regional system development. Among foreign scientists who conducted research in this area, we can highlight S. Brue, F. Kotler, K. McConnell, I. Schumpeter, A. Smith, G. Halkrou, T. Takayama, and others. Important theoretical statements about the nature and specificity of businesses are contained in the works of L. Abalkin, M. Best, P. Drucker, M. Castells, K. Marx, A. Marshall, G. Mintzberg, E. Toffler, B. Harrison, J. Schumpeter, etc. Entrepreneurship in Russia is reflected in the research of domestic scientists, among which A. Busygina, E. Bukh can be distinguished. Aldo A. Vilna, M. Lapusta, F. Shamkhalova A. Shulus A. Chepurenko.

**MATERIAL AND METHODS**

The central place to assess and analyze the market situation is the study of trends and features of functioning. To determine the vector and speed of development of the market sector, dynamic series of indicators-indicators and indicators of business activity are built. The basic, chain and average growth rates for the period are calculated. It is also advisable to calculate comparative growth rates for interdependent indicators, especially in cases where one indicator changes faster or slower than another.

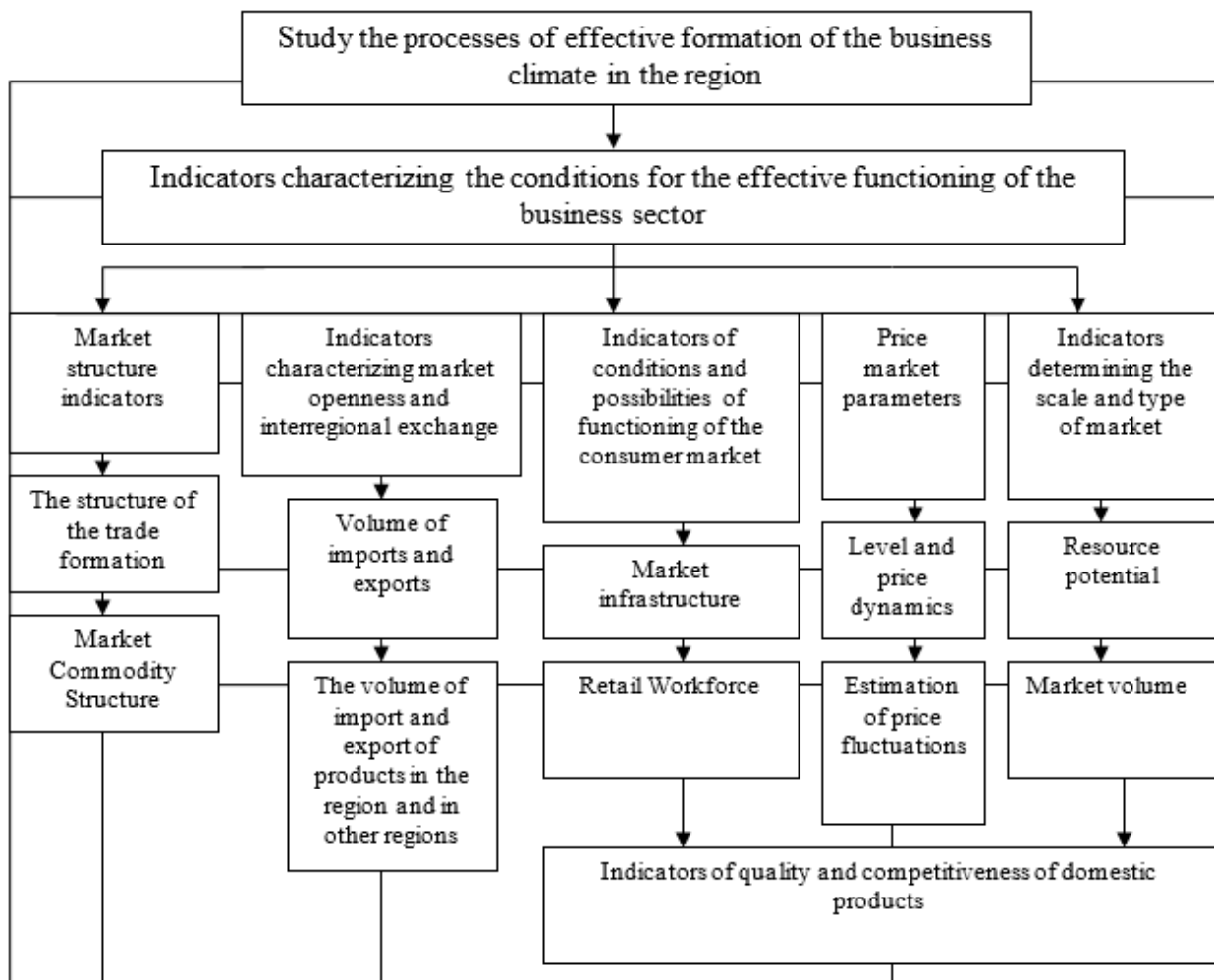
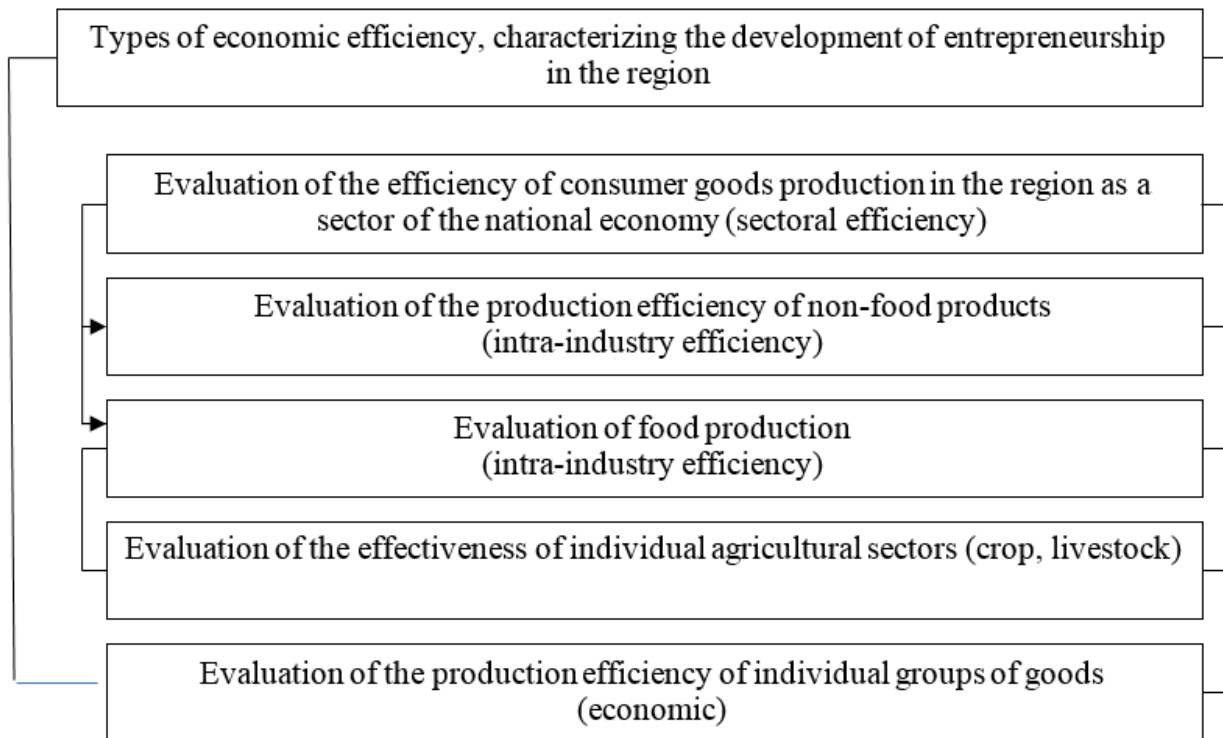


Figure 1: A comprehensive study of the conditions for effective development of the business sector in the region

Determining the efficiency of the business sector in the region will allow assessing the sustainability of market processes, as well as proposing necessary measures to improve it (Fig. 2).



**Figure 2: Economic efficiency levels of business sector development in the region**

The initial step in determining the effectiveness of market processes for any local system is goal setting. The first group of private indicators includes the analysis of the effectiveness of the functioning of trade organizations. As the results of activity, two main criteria for the optimal functioning of trade were used: turnover and profit. Also, costs are taken as the basis - as an element of the labor process (inventory, number of sales staff) and current costs, which characterize the costs of circulation. These indicators are associated with indicators of profitability of turnover for a certain period of time. Using such a system, one can determine the place and influence of each parameter studied in the model and determine the effectiveness of the trade organization.

On the basis of the expressions obtained, it is possible to give a generalized description of the development of the business sector over a certain period, which will generally provide a mechanism for its operation and take timely measures to improve the business model within the industry.

In turn, by combining the expressions presented, one can obtain an indicator that allows one to obtain a general characteristic of the phenomenon being studied. A generalized integrating measure of efficiency can be the geometric mean, determined by the formula:

$$E = \sqrt[6]{\frac{\frac{P(n)}{Ch(n)} \times \frac{P(n)}{I(n)} \times \frac{P(n)}{Z(n)} \times \frac{P(n)}{Pt(n)} \times \frac{P(n)}{I(n)} \times \frac{P(n)}{Of(n)}}{\frac{P(n-1)}{Ch(n-1)} \times \frac{P(n-1)}{I(n-1)} \times \frac{P(n-1)}{Z(n-1)} \times \frac{P(n-1)}{Pt(n-1)} \times \frac{P(n-1)}{I(n-1)} \times \frac{P(n-1)}{Of(n-1)}}$$

E – integrating performance indicator;

n, n-1 – respectively, private indicators for the reporting and previous period.

Substituting the values, you can get the effectiveness of doing business in the region for a certain period. Increased result indicates sustainability of development. This expression can be used to assess the performance of a single enterprise.

**RESULTS AND DISCUSSION**

Analyzing the internal conditions of the formation of modern entrepreneurship in the region, it is necessary to reveal the peculiarities of the state of the infrastructure of the region and assess the impact of its constituent elements on the effectiveness of doing business.

The studies were conducted using the StatSoftInc STATISTICA 10.0 software for statistical analysis and data processing using the example of the Stavropol Territory.

After calculations, the following expressions were obtained, characterizing:

normal level of security:

$$Y = 0,3391x_1 + 0,0012x_2 + 0,1199x_3 - 0,0004x_4 - 13,1842 ; \tag{2}$$

satisfactory level of security:

$$Y = 0,3019x_1 + 0,00037x_2 + 0,06984x_3 - 0,02539x_4 - 4,4385 , \tag{3}$$

low security:

$$Y = 0,0970x_1 + 0,00024x_2 + 0,03352x_3 - 0,0073x_4 - 1,85556 ; \tag{4}$$

- $x_1$  - general warehouses, units;
- $x_2$  - warehouse space, sq.m.;
- $x_3$  - availability of shops (pavilions), units;
- $x_4$  - availability of stalls (kiosks), units.

Using these functions, it is possible to calculate classification values (labels) for newly observed objects, formally substituting the values in the above formulas. The object under study will belong to the group whose classification value is maximum. The results of grouping are presented in table 1.

**Table 1: Classification of districts by the presence of retail space and storage space**

Grouping results	Areas
Normal level	Budyonnovsky, Izobilnensky, Mineralovodsky, Novoaleksandrovsky, Sovietsky, Shpakovsky districts, Nevinnomyssk, Pyatigorsk, Stavropol
Satisfactory level	Apanasenkovsky, Arzgirsky, Georgievsky, Ipatovsky, Petrovsky, Predgorny districts
Low level	Kislovodsk, Lermontov, Yessentuki, Kursk, Krasnogvardeysky, Levokumsky, Neftekumsky, Trunovsky, Turkmensky, Stepnovsky, Grachevsky districts

**Table 2: Rating of regions by main indicators characterizing the efficiency of business development for 2017**

Regions	Rating number	Spot
R. Adygea	0,6	9
R. Ingushetia	0,5	10
R. Kalmykia	0,7	8
Karachay-Cherkess Republic	1,0	6
R. North Ossetia-Alania	0,9	7
Krasnodar region	4,0	1
Stavropol region	1,6	5

Astrakhan region	1,7	4
Volgograd region	2,4	3
Rostov region	3,7	2

The results of the group revealed that the prevailing conditions are favorable for doing business in the region. Thus, more than 50% of districts are characterized by rather high characteristics of infrastructure support. However, studies have shown that only 40% is used for its intended purpose, which certainly affects the efficiency of development of entrepreneurship in the region.

An important prerequisite for the effective conduct of business is the stability of the economic situation. In this regard, we conducted a rating assessment on indicators characterizing the socio-economic situation of the region (the average per capita income of the population, the ratio of wages to the subsistence minimum, the size of the GRP, the number of small businesses and its financial results).

In our case, the significance of the coefficients was assumed to be the same, and therefore all the elements were squared and arranged in columns, and the ratings of each region were determined using the formula:

$$R_{ij} = \sqrt{X_{ij}^2 + X_j^2 + \dots + X_{nj}^2} \quad (5)$$

Comparative evaluation of the data obtained showed that the Krasnodar Territory, Astrakhan, Rostov and Volgograd regions have the highest rating, the Republic of Ingushetia the lowest. The results have brought Stavropol Territory to 5th place. The same situation in terms of socio-economic sustainability is observed in 2017. The results of the rating are given below.

### CONCLUSION

The development of entrepreneurship in modern conditions largely depends on the state of the market environment, which has undergone significant changes over the years of economic reforms and global financial crises. The development of entrepreneurship in modern business conditions has necessitated the use of new methodological approaches in terms of quantitative and qualitative features that characterize the effectiveness of the activities of the subjects of the studied sector. The analysis shows that the region has all the necessary conditions to improve the efficiency of doing business, however, the negative changes manifested in the ineffectiveness of interregional relations and the lack of distribution channels require solving the optimization of the sales process based on improved market infrastructure.

### REFERENCES

- [1] Reznichenko S.M., Takhumova O.V. Methodological aspects of assessing factors affecting the sustainable development of the region. *Modern Journal of Language Teaching Methods (MJLTM)*. 2018; 9(11).
- [2] Takhumova O.V., Ponomarenko M.V., Tokareva G.V. Information And Analytical Support In Assessing The Region Sustainable Development. *RJPBCS*. 2018; 9(6): 1770-1774.
- [3] Vershitskiy A.V., Takhumova O.V. Development Of Entrepreneurial Structures Of Production And Trade Sphere On The Basis Of Integration. *RJPBCS*. 2018; 9(6): 1624-1629.
- [4] Kostyukova E.I., Vakhrushina M.A., Shirobokov V.G., Feskova M.V., Neshchadimova T.A. Improvement cost management system for management accounting. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 2018. T. 9. № 2. P. 775-779.
- [5] Gasparyan A.Y., Kitas G.D., Yessirkepov M., Voronov A.A., Trukhachev V.I., Kostyukova E.I., Gerasimov A.N. Specialist bibliographic databases. *Journal of Korean Medical Science*. 2016. T. 31. № 5. P. 660-673.
- [6] Kulish N.V., Sytnik O.E., Tunin S.A., Frolov A.V., Germanova V.S. Approaches to the valuation of biological assets at fair value. *Research journal of pharmaceutical, biological and chemical sciences*. № 9 (3). 2018. P. 746-750.



- [7] Frolov A.V., Kulish N.V., Sytnik O.E., Tunin S.A., Germanova V.S. The development of environmental auditing in Russia and international practice in market conditions. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 2018. T. 9. № 6. P. 1573-1579.