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Statistical Analysis of Balancing Threats to Economic Security of Regions

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Statistical Analysis of Balancing Threats to Economic Security of Regions

Jamshid Tukhtabaev [1], [a)], Dinara Abdikarimova [2], Abror Sharipov [3], Kumri Nomozova [4], Maftuna Ermatova [5]

[1] *Graduate School of Business and Entrepreneurship under the Cabinet of Ministers of the Republic of Uzbekistan, Tashkent, Uzbekistan*
[2] *Academy of Banking and Finance of the Republic of Uzbekistan, Tashkent, Uzbekistan*
[3] *Termez Branch of Tashkent Medical Academy, Termez, Uzbekistan*
[4] *Banking and finance academy, Tashkent, Uzbekistan*
[5] *Termiz state university, Termiz, Uzbekistan*

[a)] *Corresponding author: jamshidtukhtabaev@gmail.com*

Abstract. In this article, the authors present an analysis of the development of municipal territory in the context of the direction of aligning threats to the economic security of regions. The main goal of economic reforms is sustainable socio-economic development of the regions, maintaining the unity of citizens, and ensuring socio-political stability. The main goal of the article is theoretical justification,along with the development of methodological and practical recommendations for minimizing threats affecting the economic security of the regions, as well as justifying of the development strategy of municipalities. The municipality of Morshansk (Russia) was chosen as the object of the study. Regional economic security is one of the important areas of national security. The fundamental need of the state, society and the individuals is the need for the economic security of the city. The well-being of the population is formed from the economic security of society, which is manifested in economic stability and efficiency, social justice, socio-economic development, as well as the basic need of a person - security. These situations are explained by the fact that the economy is growing due to investments attracted to the regions, an increase in the gross regional product, and an improvement in the revenue side of the local budget. The article focuses on these issues.

INTRODUCTION

To date, there is no consensus on what is included in the concept of "economic security". Some scientists in Europe and the CIS are trying to link this concept with the international economic system, while others believe that it provides favorable conditions for the functioning of a specific national economy. Many authors are inclined to believe that economic security is closely related to both the security of the region and the industry, enterprise and also the individual.

The main, fundamental need of the state, society and the individual as a whole is the need for municipal economic security. The living conditions of people are formed from municipal economic security, which manifested in economic sustainability and efficiency, social justice, socio-economic development, and the primary need of the individual - security.

In modern economic conditions, one of the most important factors that ensure the stable development of the constituent entities of the Russian Federation is their investment activity. Attracting investments into the economy of the regions has a beneficial effect on their socio-economic development.

The Strategy for the Socioeconomic Development of the Tambov Region until 2035 was developed in accordance with the Federal Law of 28.06.2014 №. 172-FL "On Strategic Planning in the Russian Federation" and the Law of the Tambov Region of 28.12.2015 No. 612-L "On Strategic Planning in the Tambov Region". The main coordinating

body for the development of the Strategy was the Economic Council under the head of the regional administration. The Strategy was developed by the regional administration jointly with experts and scientists from the Tambov State University named after G.R. Derzhavin, Tambov State Technical University, and Michurinsk State Agrarian University. Public and scientific organizations, enterprises and investors, municipalities, and residents of the region participated in the development of the Strategy during public discussions. The Strategy is a document of strategic planning for the Tambov Region, developed within the framework of goal-setting, defining the priorities, goals, objectives, and priority areas for socio-economic development of the Tambov Region, in alignment with the priorities and goals of socio-economic development of the Russian Federation.

MATERIALS AND METHODS

This circumstance is due to the fact that, with the help of attracted investments in the regions, their economy is growing, by increasing the volume of the gross regional product and increasing the revenue side of the local budget. In addition, with the help of these investments, new enterprises were created in the region, and existing production facilities were improved, as a result of which new jobs were additionally created for the population [1], [2]. In this scientific research, scientific logic, statistical observations, analysis of their dynamic changes, methods of grouping, induction and deduction are widely used. Based on the results of the conducted research and analysis, scientific proposals will be developed to ensure the economic security of the regions.

RESULTS AND ANALYSIS

From the data presented in Fig. 1, it can be seen that in the reporting year, investments in fixed assets increased compared to the same period of the previous year. Thus, the value of this indicator in 2021 was 79,396.7 million rubles, which is higher than the value of 2020 by 4,626.6 million rubles or 6.19%, but lower than the value of 2018 and 2019 by 26,833.6 million rubles and 11,322.1 million rubles, respectively, or by 25.3% and 12.5% respectively [3].

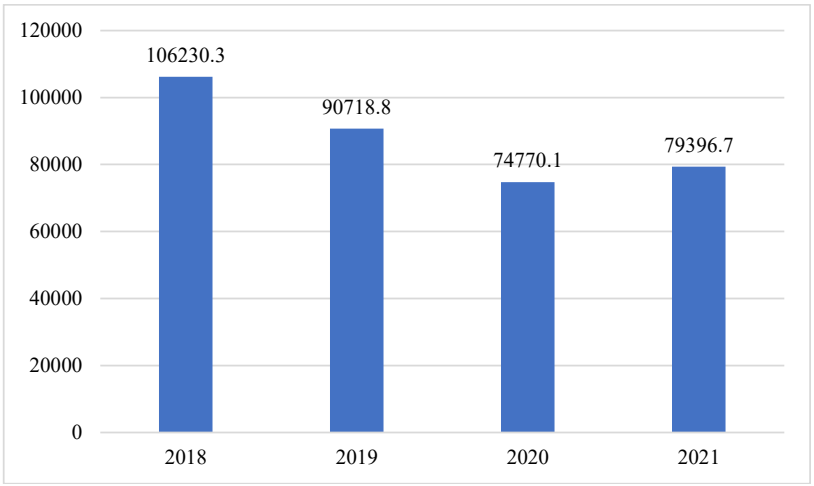

FIGURE 1. Dynamics of investments in fixed capital of the Tambov region for the period 2018-2021

Based on the data below (Tab.1), we will consider the state of socio-economic development, present graphs for analyzing the indicators of large cities in the Tambov region, and then conduct an expert assessment and rank the cities according to their demographic indicators for the period of the Demography program in 2019 – 2020 [4].

TABLE 1. Analysis of demographic indicators for 2019 - 2020, (per 1000 population)

Cities	Total fertility rate, o/oo		Total mortality rate, o/oo		Natural growth rate, o/oo		The general level of marriage, o/oo		Total divorce rate, o/oo	
Years	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Michurinsk	7.3	7.3	14.2	15.7	-6.9	-8.4	5.2	5.0	3.1	3.7
Tambov	8.5	8.3	8.5	15.6	-4.5	-7.3	5.6	4.6	3.5	3.8
Morshansk	7.7	6.7	7.7	19.0	-5.7	-12.3	5.9	5.5	3.5	3.7
Kotovsk	8.3	7.3	8.3	18.9	-6.7	-11.6	7.0	6.4	4.4	4.2
Rasskazovo	9.1	9.0	9.1	15.9	-5.3	-6.9	7.6	5.5	4.0	3.4
Uvarovo	7.9	7.7	19.5	23.5	-11.6	-15.8	5.8	5.2	4.0	4.2
Kirsanov	6.8	7.4	12.6	15.5	-5.8	-8.1	6.5	5.6	2.8	3.2

TABLE 2. Expert assessment of the total birth rate for the cities of the tambov region for 2019 – 2020

Cities	Scores		The sum of points for the entire study period
	2019	2020	
Michurinsk	2	3	5
Tambov	6	6	12
Morshansk	3	1	4
Kotovsk	5	3	8
Rasskazovo	7	7	14
Uvarovo	4	5	9
Kirsanov	1	4	5

TABLE 3. Expert assessment of the overall mortality rate for the cities of the tambov region for 2019 – 2020

Cities	Scores		The sum of points for the entire study period
	2019	2020	
Michurinsk	2	5	7
Tambov	5	6	11
Morshansk	7	2	9
Kotovsk	6	3	9
Rasskazovo	4	4	8
Uvarovo	1	1	2
Kirsanov	3	7	10

TABLE 4. Expert assessment of the natural growth rate for the cities of the tambov region for 2019 – 2020

Cities	Scores		The sum of points for the entire study period
	2019	2020	
Michurinsk	2	4	6
Tambov	7	6	13
Morshansk	5	2	7
Kotovsk	3	3	6
Rasskazovo	6	7	13
Uvarovo	1	1	2
Kirsanov	4	5	9

Next, we will build a graph for the total marriage rate for the cities of the Tambov region for the period 2019 - 2020.

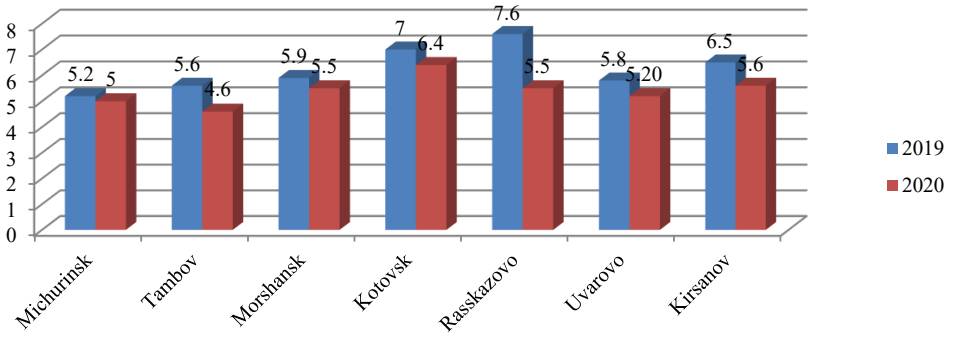

FIGURE 2. Dynamics of the total marriage rate of the cities of the Tambov region for the period 2019 – 2020

Based on Fig.2, we will conduct an expert assessment of the overall marriage rate among the cities of the Tambov region for the period from 2019 to 2020 [4]. The presented cities will be evaluated from the best to the worst indicator for this coefficient, within the maximum score is 7 and the minimum score is 1 [5].

TABLE 5. Expert assessment of the total marriage rate for the cities of the tambov region from 2019 to 2020

Cities	Scores		The sum of points for the entire study period
	2019	2020	
Michurinsk	1	2	3
Tambov	2	1	3
Morshansk	4	5	9
Kotovsk	6	7	13
Rasskazovo	7	5	12
Uvarovo	3	3	6
Kirsanov	5	6	11

Next, we will build a graph of the total divorce rate for the cities of the Tambov region for the period 2019 - 2020.

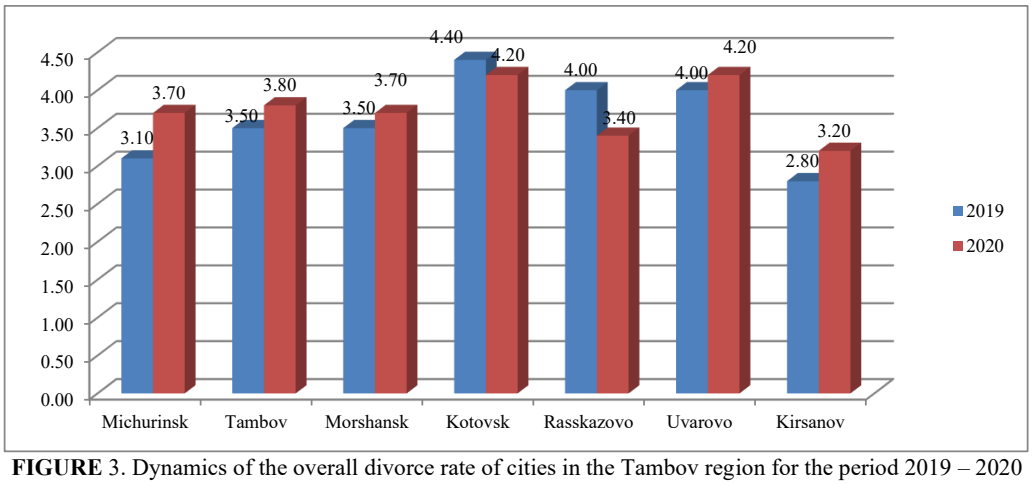

FIGURE 3. Dynamics of the overall divorce rate of cities in the Tambov region for the period 2019 – 2020

TABLE 6. Expert assessment of the overall divorce rate for the cities of the tambov region during 2019 – 2020

Cities	Scores		The sum of points for the entire study period
	2019	2020	
Michurinsk	6	5	11
Tambov	5	3	8
Morshansk	5	5	10
Kotovsk	1	2	3
Rasskazovo	3	6	9
Uvarovo	3	2	5
Kirsanov	7	7	14

After conducting an expert assessment, it is necessary to rank each city for each indicator and assign its place for further assessment (Tab.7).

TABLE 7. Results of the expert assessment for each city of the tambov region for 2019 – 2020

Cities	Total fertility rate	Total mortality rate	Natural growth rate	Total marriage rate	Total divorce rate	Sum of points	Place in the rating
Michurinsk	5	7	6	3	11	32	5
Tambov	12	11	13	3	8	47	3
Morshansk	4	9	7	9	10	39	4
Kotovsk	8	9	6	13	3	39	4
Rasskazovo	14	8	13	12	9	56	1
Uvarovo	9	2	2	6	5	24	6
Kirsanov	5	10	9	11	14	49	2

After analyzing the 7 cities of the Tambov region, namely: the city of Morshansk and other cities of Michurinsk, Tambov, Kotovsk, Rasskazovo, Uvarovo, and Kirsanov, the following conclusions can be drawn:

- based on the above, it turned out that the best city is Rasskazovo. This means that the implementation of the national project “Demography” [7] in this area is more efficient than in other cities of the region;
- the city with the worst demographic situation, compared to other cities of the Tambov region, turned out to be Uvarovo. The highest mortality rate and the highest population decline for the entire study period were observed there, which indicates the insufficient effectiveness of the implementation of the national project "Demography";
- the top three cities with a good demographic situation among the studied cities of the region included Tambov and Kirsanov. They have almost similar demographic indicators, which means that the implementation of the national project "Demography" is approximately on an equal level [8];
- examining the cities of Morshansk and Kotovsk, a common problem was identified :a low coefficient of natural increase (or loss).This indicator did not differ much in these cities and requires special attention from the City Administrations, especially when implementing the national project "Demography";
- in the penultimate place, namely, 5th, was the city of Michurinsk, which indicates the low efficiency of the measures being implemented, in comparison with other cities of the region, to improve the demographic situation of the territory.

Summing up, all the studied cities of the Tambov region face significant problems with the demographic situation in the territory. Due to low natural population growth, there are threats to the economic security of the region. The economy of the city directly depends on the highly skilled working-age population. If the birth rate does not increase and the death rate does not decrease, then soon, in all cities of the Tambov region and not only there will be "Demographic aging", i.e., people aged 65+ will make up the majority of the population. This is detrimental to the economy, meaning that demographic processes directly affect both economic security and the security of the region as a whole.

One of the priority tasks of the development of the social sphere in our country is to ensure a high quality of life for residents of small towns, based on modern medicine equipped with the latest technologies, high-quality and convenient education, and broad opportunities for self-realization [9], [10].

DISCUSSION

Given the above, let us consider the main measures that will help improve the situation in the urban environment:

1. An important direction in maintaining the health and longevity of citizens is the formation of a healthy lifestyle among the population.

2. Increasing the level of consolidation of civil society.

As part of the work to increase social activity and the manifestation of the civic position of the inhabitants of the region and the city of Morshansk, support is required for initiatives, projects, and programs aimed at improving the social situation and life of all residents of the region [11].

3. Active counteraction to crime.

To reduce the level of crime, it is necessary to ensure the interaction of the central executive bodies of state power in the region and federal executive bodies in the framework of protecting the rights and freedoms of citizens, protecting property and public order, preventing crime, countering terrorism, extremism, and corruption.

As the main scenario for the long-term development of the Tambov region, following the parameters of which the quantitative values of the targets laid down in the Strategy are determined, a target (innovative) scenario is proposed based on the introduction of innovations in production, agriculture, housing, communal services, the social sphere, management, etc.

For residents of Morshansk, it will be effective to implement the following areas to improve the economic security of the individual.

In the social sphere, demographics, migration, and employment of the population, it is necessary to solve the following tasks:

1. Improving the regulatory legal framework for social security. Currently, residents are provided with more than 100 types of social support measures, as well as social services in various forms. This is about 20 rubles per month per recipient per type of social support measure, with its even distribution. Such support is ineffective and needs to be improved [12].

2. Reducing informal and shadow employment [13].

3. The creation of an information system for the non-working population of working age will make it possible to determine the real employment of each unemployed person. This will make it possible to develop and implement an effective system of measures for these persons and significantly reduce budget losses [14], [15], [16].

This requires the formation of an appropriate regulatory framework, including amendments to the legislation on personalized accounting, which will allow interdepartmental information exchange.

4. Creation of a competitive environment in the field of employment. Creation of an information system for job search and employment.

At present, the information system (Portal “Work in Russia”) of the Federal Service for Labor and Employment is operating in the system of the state employment service. In the future, it is planned to develop and improve this information system, in which information should be constantly updated and expanded in all areas of activity of employment agencies, including non-working citizens of various categories of working age and available vacancies.

CONCLUSION

It is assumed that the system will automatically provide job seekers with the opportunity to select jobs and monitor the job search process. The system provides registration and re-registration of the unemployed and the process of accrual and payment of unemployment benefits.

Thanks to the implementation of state support measures in the creation of new and expansion of existing industries, a growth trend is predicted for the performance of small and medium-sized enterprises. Thus, when state, regional and municipal authorities apply the proposed measures to improve the economic security of the individuals, the level and quality of life of Morshiansk residents will increase.

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