



Article

Theoretical Approaches and Indicators for Measuring the Level of Regional Economic Security

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Abstract: This article provides a comprehensive and in-depth analysis of existing scientific and theoretical views on assessing the level of economic security of regions. The author scientifically reveals the essence of the concept of economic security, scientific views on its formation, and its importance in ensuring the economic and social stability of regions in the conditions of modern economic development. The study examines in detail the main factors that create the need for assessing and monitoring economic security. Regional economic security indicators used at the international and national levels are analyzed in detail, and their effectiveness and advantages are revealed in a comparative scientific manner. In particular, the impact of such key indicators as gross regional product, investment volume, employment and unemployment rates, and infrastructure development on economic security is widely discussed. The study also elaborates in detail the criteria for selecting and applying economic security indicators, and scientific and practical recommendations are given to make the indicator system more effective. The proposed methodologies are aimed at expanding the possibilities of objectively and accurately assessing the level of economic security. In addition, practical measures to increase regional economic security and strategic recommendations aimed at increasing the effectiveness of regional policy are put forward. The results of the study are of scientific and practical importance for ensuring the economic security of regions, stimulating economic development, and strengthening social stability.

Keywords: : economic security, regional development, assessment methodology, indicators, theoretical approaches.

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1. Introduction

In modern conditions, ensuring sustainable economic development of regions is one of the urgent tasks. The concept of economic security is widely recognized as one of the main conditions for ensuring the long-term economic development of countries and regions. Currently, the globalization processes observed in the world economy and the frequent occurrence of economic crises increase the need for systematic assessment and monitoring of the state of economic security of regions [1].

There are various approaches to the scientific aspects of the concept of regional economic security, and economic security means not only internal economic stability, but also the ability to protect against the effects of external economic risks. Scientists define economic security as the ability to maintain the economic potential and stability of regions, ensure economic development and resist economic threats [2].

Currently, a number of systems of indicators have been developed to assess economic security, and practical research is being conducted in different countries on their basis. This system of indicators includes economic and social indicators such as gross regional

product, investment volume, employment and unemployment rates, incomes, and the level of infrastructure development. Such a comprehensive approach allows for a deeper and more complete assessment of the economic security of regions [3].

Improving indicators of regional economic security and developing methodologies for their assessment are among the most important scientific and practical tasks. In this regard, there is a need to form an effective and optimal system of indicators through the study of international and national experience and a comparative analysis of existing approaches [4].

From this point of view, this article analyzes the scientific and theoretical foundations of assessing the level of regional economic security, deeply analyzes existing indicators and approaches, and develops proposals for their improvement.

2. Materials and Methods

Literature Analysis On The Topic

Extensive scientific research has been conducted on the topic of regional economic security, with Mamatkulov and Norboyev providing an in-depth analysis of the effectiveness of mechanisms for ensuring the economic security of regions. Researchers have emphasized the role of state policy and economic management mechanisms and have provided practical recommendations [5].

Ayupov studied the system of economic security indicators and conducted a detailed analysis of the practical application of these indicators and their results. He noted that accurate and reliable indicators are important for effective management of regional economic potential [6].

Nazarova showed the need to use innovative and digital technologies in economic security strategies and analyzed strategic approaches to them [7].

Yusupov identified the factors for ensuring economic security and thoroughly analyzed the negative impact of territorial disparities on security [8].

Karimov analyzed international experiences in economic security and developed effective measures that can be applied in Uzbekistan [9].

Rakhimov analyzed the links between economic security and international integration processes and noted the importance of foreign economic relations [10].

Abdulkarimov analyzed the factors threatening economic security and mechanisms for eliminating them and provided practical recommendations [11].

Sobirov and Mirzayev proposed specific guidelines for the development and practical application of methods for the comprehensive assessment of economic security indicators [12].

Research Methodology

Several scientific research methods were widely used in the implementation of this study. The main methodological basis of the study was a systematic approach. This approach allowed for a comprehensive analysis of all aspects of the activities of small business entities. In addition, the following scientific and methodological approaches were used in the research process: a systematic approach, SWOT analysis, comparative statistical and expert assessment methods. The study widely used the financial and economic indicators of the Namangan regional statistics department and small business entities, as well as the results of expert surveys.

Finally, a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) was performed to assess the internal and external factors influencing the development of agricultural networks and their role in reducing regional inequalities. By integrating these methodological approaches, the research provides a comprehensive, multi-dimensional understanding of how strengthening agricultural networks can effectively promote balanced regional development and economic sustainability.

3. Result

To assess the state of ensuring regional economic security, an in-depth analysis of the main economic indicators for the period 2020-2025 was conducted using the example of the Namangan region. During the analysis, the volume of gross regional product, the

volume of investments, the level of employment and indicators of infrastructure development were selected as the main indicators. These indicators allow for a comprehensive assessment of regional economic security and reflect the stability of economic development. The dynamics of the indicators listed below, their interdependence and significance in the regional economy were considered in detail, and the factors affecting the change in each indicator were scientifically analyzed. Table 1 provides an overview of regional agricultural productivity levels, highlighting disparities between different regions.

Table 1. Dynamics of gross regional product of Namangan region (billion soums)

Regions	2020	2021	2022	2023	2024	2025 (forecast)
Namangan city.	8654	9254	9867	10534	11243	12000
Chust district	3754	3980	4213	4450	4700	4950
Pop district	3180	3367	3560	3764	3975	4190
Kosonsoy district	2654	2803	2967	3140	3322	3510
Uychi district	2830	2980	3137	3300	3475	3655

Source: Data from the Namangan Regional Department of Statistics, 2025

The table serves as a foundational reference for understanding the baseline conditions of agricultural development. The results of the analysis of the dynamics of the gross regional product (GRP) of the Namangan region show that the regional economy has been experiencing stable and consistent development over the past five years. Such a stable growth trend in the regional economy is explained, first of all, by an increase in the volume of local production, the expansion of service sectors, and the establishment of new enterprises that provide employment. In particular, as a result of the improvement of production infrastructure and the improvement of the local business environment, the volume of investments is increasing. This leads to a steady increase in the gross regional product.

In addition, the city of Namangan is taking a leading position in the development of economic activity in the region. This is primarily due to the high concentration of economic opportunities in the production and service sectors in the regional center. Due to the increasing number of industrial enterprises, trade and service entities located in the city, as well as the high interest of foreign and local investors in the city, the volume of economic activity is significantly higher than in other regions.

Economic development and growth are also observed in the districts, especially in Chust, Pop, Kosonsoy and Uychi districts, diversification of production, development of small businesses and private entrepreneurship are yielding positive results. As a result of the policy implemented in these districts on the effective use of local resources and the development of infrastructure facilities, sustainable growth of the regional economy is ensured.

The effectiveness of economic development policies, improvement of the investment climate and the introduction of innovative technologies in the production and service sectors play an important role in achieving sustainable growth rates of gross regional product. Thus, the economic development of the Namangan region is improving not only quantitatively, but also qualitatively. Table 2 presents the employment distribution across agricultural sectors, demonstrating the contribution of agriculture to rural employment and regional economic stability.

Table 2. Dynamics of investment volume in Namangan region (billion soums)

Regions	2020	2021	2022	2023	2024	2025 (prognoz)
Namangan city.	3540	3765	4010	4285	4560	4860
Chust district	2100	2235	2375	2530	2685	2850
Pop district	1900	2015	2140	2275	2410	2560
Kosonsoy district	1650	1750	1865	1985	2110	2245
Uychi district	1800	1915	2030	2160	2295	2435

Source: Data from the Namangan Regional Department of Statistics, 2025

The increase in the volume of investments in the Namangan region is an important factor in strengthening the economic stability of the regions and increasing the level of economic security. Investments are one of the main mechanisms for stimulating regional economic activity, strengthening production potential, and creating new jobs. In addition, the introduction of new technologies, innovative solutions, and advanced management methods through the entry of foreign and local investors into the regional economy is also significantly increasing the competitiveness of the regional economy.

It is observed that investments are being directed in particular to the city of Namangan and developed districts. This is, on the one hand, due to the existing economic infrastructure and high investment attractiveness of the city and some districts, and on the other hand, it is the result of state policy directed at the regions in order to increase the efficiency of investments. The main goal of this policy is to increase economic activity through the most efficient use of existing resources and to attract more local and international investments.

As a result of investments attracted to the regional center and developed districts, new opportunities are being created in the field of production facilities and services, and the economic power and production potential of the regions are further strengthened. However, there are also opinions that the focus of investments mainly on large cities or developed districts may lead to imbalances in regional economic development. Therefore, in the future, it is necessary to develop mechanisms for equitable and effective distribution of investments in the regional economic development strategy. This, in turn, will serve to improve economic security in the regions of the region and reduce imbalances in development. Table 3 compares regional income levels based on agricultural productivity rates.

Table 3. Dynamics of the employment rate of the population of Namangan region (%)

Regions	2020	2021	2022	2023	2024	2025 (forecast)
Namangan city.	93,5	94,0	94,5	95,0	95,5	96,0
Chust district	88,0	88,5	89,0	89,5	90,0	90,5
Pop district	85,5	86,0	86,5	87,0	87,5	88,0
Kosansoy district	83,0	83,5	84,0	84,5	85,0	85,5
Uychi district	84,5	85,0	85,5	86,0	86,5	87,0

Source: Data from the Namangan Regional Department of Statistics, 2025

It clearly shows how differences in productivity influence socio-economic disparities among regions. An increase in the employment rate of the population is considered one of the main factors in ensuring regional economic security. Stable and consistent growth in employment is of great importance in ensuring economic stability and stimulating socio-economic development. In regions with a high employment rate, the income of the population increases, as a result of which the domestic market becomes more active and the production and service sectors develop. This leads to the overall development of the regional economy, improvement of social infrastructure and an increase in the standard of living of the population.

In the case of the Namangan region, the increase in the employment rate of the population is associated with an increase in the participation of the population in economic activity and an improvement in the business environment. In particular, a steady increase in employment is observed as a result of the creation of new jobs in the production and service sectors, especially as a result of the development of small businesses and private entrepreneurship. This factor, at the same time, reduces the

migration flow of the region's population and helps ensure local economic and social stability.

Also, a high level of employment directly affects economic security. When the employment of the economically active population is high, social problems, in particular, the unemployment rate, decrease, and the risk of economic crimes and social tensions decreases. This, in turn, strengthens the overall economic and social security of society [13]. Therefore, increasing employment is one of the most effective means of ensuring regional economic security. In the future, it will be necessary to develop and implement comprehensive programs to ensure employment in the regions, strengthen the system of vocational training and retraining, as well as improve mechanisms for supporting small businesses and entrepreneurship. These measures will further strengthen the economic security of the regions and create the necessary conditions for sustainable development. Table 4 summarizes infrastructure accessibility in rural regions, focusing on essential services such as irrigation, transportation, and market access.

Table 4. Infrastructure development indicators of Namangan region (in percent)

Indicators	2020	2021	2022	2023	2024	2025 (forecast)
Electricity supply	95,0	95,5	96,0	96,5	97,0	97,5
Drinking water supply	89,0	90,0	91,0	92,0	93,0	94,0
Gas supply	80,0	81,5	83,0	84,5	86,0	87,5
Road quality	75,0	77,0	79,0	81,0	83,0	85,0

Source: Data from the Namangan Regional Department of Statistics, 2025

4. Discussion

This data supports the discussion on how infrastructure development can reduce regional inequalities. Improving infrastructure indicators is one of the main factors that plays an important role in ensuring regional economic security. Improving the quality of infrastructure systems, including electricity, drinking water and gas supply, in addition to meeting the vital needs of the population, plays a decisive role in the development of production and service activities in the region. The stable operation of these infrastructure systems creates the basis for ensuring economic and social stability and significantly increases the standard of living of the population.

In particular, the uninterrupted and high-quality implementation of electricity supply increases production efficiency and ensures the stable operation of enterprises. This, in turn, creates opportunities for creating new jobs, increasing production volumes and strengthening the economic potential of the region [14].

Improving the supply of drinking water is directly related to strengthening the health of the population and improving sanitary and hygienic conditions, and serves to increase the demographic and labor resource potential of the region. In addition, the creation of wide access to clean drinking water will also have a positive impact on the development of tourism and service sectors.

The development of the gas supply system is also an important factor in terms of economic security. High-quality and stable gas supply, in addition to meeting the household needs of the population, will help optimize energy consumption of enterprises, reduce production costs, and increase environmental safety in production processes [15].

Taking into account the above factors, it is recommended to further improve the state policy on infrastructure development, especially the development of programs that comprehensively solve existing problems in the regions and strengthen their financing mechanisms. This, in turn, will be of great importance in increasing the level of economic security and ensuring economic and social stability in the regions.

5. Conclusion

The results of the research made it possible to formulate the following scientifically based conclusions:

Firstly, the dynamics of economic development in the Namangan region is steadily increasing. In particular, the steady growth of the gross regional product indicates the economic security and sustainable development of the region.

Secondly, the increase in the volume of investments is ensuring positive changes in the regional economy and supporting the development of the production and service sectors.

Thirdly, the increase in the level of employment of the population is considered an important factor in strengthening social and economic stability. A high level of employment makes it possible to reduce economic threats.

Fourthly, the level of development of infrastructure plays an important role in ensuring the economic security of the region. Improved electricity, drinking water and gas supply is increasing the standard of living of the population.

Based on these conclusions, the following scientific proposals and practical recommendations are put forward:

It is necessary to further strengthen regional investment policy and improve mechanisms for the equitable distribution of investments across regions.

To increase employment, it is recommended to expand state programs that support the development of small businesses and entrepreneurs in the regions.

It is necessary to widely use public-private partnership mechanisms in the implementation of infrastructure projects, especially focusing on further improving electricity and gas supply.

It is recommended to create a system for regular monitoring of economic security in the regions and improve mechanisms for analyzing indicators.

In order to increase the economic potential of the region, it is necessary to establish regional innovation centers and stimulate innovative activities.

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