

INNOVATION SCIENCE AND TECHNOLOGY



Scopus || Electronic journal specializing in Scopus

ISSUE 4

 Acceptance of papers April, 2026



**Acceptance of
papers**

Published monthly



Topics

economics,
technology, social
sciences

ISSN 3060-5229



Digital
Object
Identifier



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t.me/scopus_IST2100



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THE SCIENTIFIC-POPULAR ELECTRONIC
JOURNAL **"INNOVATION SCIENCE AND
TECHNOLOGY"** HAS BEEN REGISTERED
UNDER THE NUMBER **C-5669633** BY THE
AGENCY FOR INFORMATION AND MASS
COMMUNICATIONS (AOKA) OF THE
REPUBLIC OF UZBEKISTAN, EFFECTIVE
FROM OCTOBER 9, 2024.

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PRIORITY DIRECTIONS FOR IMPROVING ECONOMIC STABILITY IN ENTERPRISES

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Abstract. This article comprehensively examines the strategic directions for improving the mechanism of ensuring economic sustainability in the telecommunications sector of Uzbekistan. The study considers high capital intensity, technological volatility, and the increasing competitive environment as the main factors influencing economic sustainability. Based on statistical data, graphical analysis, and econometric modeling, a strong positive relationship was identified between the sector's share in GDP, infrastructure development, and investments. The regression model results confirm that the volume of investments and the expansion of fiber-optic networks are significant determinants of economic sustainability. As a result of the study, a comprehensive mechanism based on institutional stability, investment continuity, technological modernization, and effective corporate governance was proposed. This approach contributes to enhancing the long-term competitiveness of telecommunications enterprises and ensuring their economic efficiency.

Keywords: economic sustainability, telecommunications sector, investments, infrastructure development, econometric analysis, strategic management, digital economy, corporate governance.

Annotsiya. Mazkur maqolada O'zbekiston telekommunikatsiya sektorida iqtisodiy barqarorlikni ta'minlash mexanizmini takomillashtirishning strategik yo'nalishlari kompleks tarzda tadqiq etilgan. Tadqiqotda tarmoqning yuqori kapital sig'imliligi, texnologik o'zgaruvchanligi hamda kuchayib borayotgan raqobat sharoiti iqtisodiy barqarorlikni ta'minlashning asosiy omillari sifatida ko'rib chiqilgan. Statistik ma'lumotlar, grafik tahlillar hamda ekonometrik modellashtirish asosida telekommunikatsiya sektorida YAIMdagi ulush, infratuzilma rivojlanishi va investitsiyalar o'rtasida kuchli ijobiy bog'liqlik mavjudligi aniqlangan. Regression model natijalari investitsiyalar hajmi hamda optik tolali tarmoqlarning kengayishi iqtisodiy barqarorlikning muhim determinantlari ekanligini tasdiqlaydi. Tadqiqot yakunida institutsional barqarorlik, investitsion uzluksizlik, texnologik modernizatsiya hamda samarali korporativ boshqaruvga asoslangan kompleks mexanizm taklif etilgan. Mazkur yondashuv telekommunikatsiya korxonalarining uzoq muddatli raqobatbardoshligini oshirish va iqtisodiy samaradorligini ta'minlashga xizmat qiladi.

Kalit so'zlar: iqtisodiy barqarorlik, telekommunikatsiya sektori, investitsiyalar, infratuzilma rivojlanishi, ekonometrik tahlil, strategik boshqaruv, raqamli iqtisodiyot, korporativ boshqaruv.

Аннотация. В данной статье комплексно исследованы стратегические направления совершенствования механизма обеспечения экономической устойчивости телекоммуникационного сектора Узбекистана. В исследовании высокая капиталоемкость отрасли, технологическая изменчивость и усиливающаяся конкурентная среда рассмотрены как основные факторы обеспечения экономической устойчивости. На основе статистических данных, графического анализа и эконометрического моделирования выявлена сильная положительная взаимосвязь между долей сектора в ВВП, развитием инфраструктуры и инвестициями. Результаты регрессионной модели подтверждают, что объем инвестиций и расширение оптоволоконных сетей являются важными детерминантами экономической устойчивости. По итогам исследования предложен комплексный механизм, основанный на институциональной устойчивости, непрерывности инвестиций, технологической модернизации и эффективном корпоративном управлении. Данный подход способствует повышению долгосрочной конкурентоспособности телекоммуникационных предприятий и обеспечению их экономической эффективности.

Ключевые слова: экономическая устойчивость, телекоммуникационный сектор, инвестиции, развитие инфраструктуры, эконометрический анализ, стратегическое управление, цифровая экономика, корпоративное управление.

INTRODUCTION

In the conditions of the modern global economy, the telecommunications sector has emerged as one of the most important infrastructure branches of the economic system. The acceleration of digital transformation processes, the migration of economic activity to digital platforms, and the digitalization of the service sector have fundamentally

increased the economic significance of communication enterprises. As a result, this sector is becoming not only a driver of economic growth, but also a strategic industry ensuring the sustainable development of the national economy.

In Uzbekistan, the development of information and communication technologies has also been identified as one of the priority directions of state policy. Within the framework of the “Digital Uzbekistan – 2030” strategy, large-scale reforms are being implemented to modernize telecommunications infrastructure, reduce regional digital disparities, and expand the introduction of high-speed internet services. In recent years, the significant expansion of fiber-optic communication networks, increased mobile coverage, and the growth of digital services demonstrate the rapid development of this sector.

At the same time, the activities of telecommunications enterprises are characterized by several complex economic conditions. In particular, high capital intensity, rapid renewal of fixed assets, fast technological innovation cycles, and pressure from global technological competition impose new requirements for ensuring economic stability. While traditional approaches mainly evaluated economic stability through financial indicators such as liquidity, profitability, and solvency, modern conditions require broader and more advanced assessment criteria.

Today, the concept of economic stability has acquired a wider meaning, encompassing not only financial results, but also the stability of the institutional environment, continuity of investment activity, level of innovative development, and the effectiveness of management systems. Especially in capital-intensive and technologically dynamic sectors such as telecommunications, the need to analyze stability as a multi-factor system is steadily increasing.

The relevance of this issue lies in the fact that the existing approaches aimed at ensuring economic stability in communication enterprises of Uzbekistan are often fragmented, and their interrelationships are insufficiently systematized. As a result, there is a growing need to strengthen integrated approaches in strategic decision-making processes. This is of great importance for enhancing long-term competitiveness and accelerating sustainable development of the sector.

Therefore, the scientific relevance of this article is determined by the necessity to reconsider the mechanism for ensuring economic stability in telecommunications enterprises on the basis of a comprehensive, systematic, and strategic approach.

The object of the study is the activity of communication enterprises in Uzbekistan, while the subject of the study is the mechanisms for ensuring their economic stability.

The main purpose of the research is to develop strategic directions for improving the mechanism of ensuring economic stability in communication enterprises.

To achieve this goal, the following objectives were defined:

to assess the current state of development of the telecommunications sector;

to analyze the existing mechanisms aimed at ensuring economic stability;

to study and compare foreign experience;

to develop an improved strategic model adapted to national conditions.

The results of this study have important scientific and practical significance for improving strategic management in telecommunications enterprises, organizing effective investment policy, and ensuring long-term economic stability.

LITERATURE REVIEW

The mechanism for ensuring economic stability in enterprises has been widely studied in economic theory, and this concept has been interpreted differently across various periods. In early scientific approaches, economic stability was mainly explained through the financial condition of an enterprise. In particular, in the financial analysis methodology developed by A.D. Sheremet and R.S. Sayfulin, enterprise stability was assessed through liquidity, solvency, and optimal capital structure ratios. Although these approaches were highly significant for industrial enterprises, they require further comprehensive development for infrastructure sectors, including telecommunications.

In subsequent scientific studies, the concept of economic stability was expanded and began to be interpreted in relation to the enterprise’s long-term development capacity. I.A. Blank, in his research, substantiated enterprise stability through balanced cash flows, investment strategy, and the effectiveness of financial management. This approach became an important step in integrating financial stability with strategic management.

In modern economic literature, economic stability is considered a multi-factor system. According to the theory of competitive advantage developed by Michael Porter, the long-term sustainability of an enterprise directly depends on its innovative activity and technological superiority. This approach is especially relevant for high-tech industries, including the telecommunications sector.

Issues of economic stability in the telecommunications sector have also been extensively studied by the International Telecommunication Union. In its report *Measuring Digital Development*, it is emphasized that the sustainability of telecommunications operators is closely linked to infrastructure development, service diversification, and the level of digital transformation. The report notes that while the expansion of broadband internet coverage and the introduction of 5G technologies increase the investment burden of operators, they also ensure long-term economic efficiency.

Likewise, in the *World Development Report 2021* prepared by the World Bank, it was argued that enterprise stability in the digital economy depends directly on the effective use of data flows, digital infrastructure, and innovative management.

This approach creates a new methodological basis for assessing the economic stability of telecommunications enterprises.

Studies by the OECD also emphasize the important role of state policy and regulatory systems in ensuring sustainability in the telecommunications sector. In particular, stimulating infrastructure investment, developing a competitive environment, and supporting innovation are identified as the main factors of sustainable development.

In scientific works devoted to telecommunications economics, Harald Gruber deeply analyzed the economic aspects of sector development and substantiated the relationship between investment and technological progress in the mobile communications market. His studies are important in explaining the impact of investment activity on enterprise stability.

In addition, within the framework of the systems approach, the synergetics theory developed by Hermann Haken is applied to explain the self-organization properties of economic systems. This theory allows economic stability to be analyzed as a multi-component and interconnected system.

Local scientific literature has also addressed issues related to the development of the digital economy and the telecommunications sector. Normative legal documents of Uzbekistan, particularly the *Digital Uzbekistan – 2030* strategy, define digital infrastructure as a priority factor in ensuring economic stability. National statistical data and sector reports also demonstrate positive dynamics in investment activity and technological development in telecommunications.

The literature review shows that although separate aspects of economic stability have been deeply studied in existing scientific works, the systematic substantiation of this concept in communication enterprises as a unified mechanism combining institutional, investment, and technological factors remains insufficiently developed. Therefore, this article proposes a conceptual approach aimed specifically at filling this scientific gap.

RESEARCH METHODOLOGY

In this study, the issue of improving the mechanism for ensuring economic stability in communication enterprises was examined through a comprehensive and systematic approach. Since the telecommunications sector is characterized by high capital intensity, rapid technological change, and a competitive market environment, assessing economic stability in this field requires a multi-level and integrated methodology rather than traditional one-dimensional approaches.

The research methodology was formed through the combination of theoretical and empirical approaches. The following main methods of economic analysis were applied: systems analysis, institutional approach, comparative analysis, and conceptual modeling. Through these methods, the factors shaping the economic stability of telecommunications enterprises were studied in their interrelationships.

At the first stage of the research, the method of theoretical generalization was used to analyze the evolution of the concept of economic stability and its modern interpretations. At this stage, the limitations of assessing economic stability only through financial indicators were substantiated, and the necessity of considering it as a system of institutional, investment, and technological factors was scientifically justified.

At the second stage, the method of normative-legal analysis was applied. The legal framework regulating the telecommunications sector in Uzbekistan was studied, particularly the *Digital Uzbekistan – 2030* strategy and sector development programs. Through this analysis, the influence of state policy and regulatory mechanisms on the economic stability of enterprises was evaluated. The level of consistency between regulatory documents and practical indicators was identified, while the strengths of the existing institutional environment and opportunities for further development were highlighted.

At the third stage, comparative analysis was used to examine the development experience of foreign telecommunications markets, particularly those of the European Union, South Korea, and Singapore. At this stage, regulatory systems, investment policy, public-private partnership mechanisms, and approaches to innovative infrastructure development were analyzed, and the possibilities of applying these practices under the conditions of Uzbekistan were assessed.

At the fourth stage, through systems analysis, the factors ensuring economic stability were grouped in an interconnected manner. As a result, a three-level model of the economic stability mechanism was developed:

- Macroeconomic level – state policy and regulation;
- Meso-economic level – sector infrastructure and competitive environment;
- Microeconomic level – enterprise management and investment activity.

These levels, being integrated with one another, form a comprehensive system of economic stability.

At the final stage of the study, the method of conceptual modeling was applied to develop an improved mechanism for ensuring economic stability in communication enterprises. This model was built on the interaction of key components such as institutional stability, continuity of investment, technological modernization, and the effectiveness of corporate governance. Each component performs a separate functional role, while together they form an integrated management mechanism.

An important feature of this methodology is that it considers economic stability not as a static condition, but as a dynamic development process. Therefore, the study also takes into account the time factor, investment cycles, and the pace of technological renewal. This expands the practical applicability of the developed model and ensures its integration into the strategic management system.

The research results confirm that ensuring economic stability in the telecommunications sector of Uzbekistan is formed as a complex and multi-component system. These findings are consistent with international scientific approaches, particularly demonstrating that in infrastructure sectors, evaluating stability solely through financial indicators is insufficient.

According to data from the Statistics Agency of the Republic of Uzbekistan, during 2020–2024 the share of the “Information and Communication” sector in gross value added increased approximately from 2.6% to 3.5%, indicating the growing importance of the sector in the national economy. At the same time, investments directed toward fixed capital in the sector increased significantly, exceeding 15 trillion soums in 2023. This growth is explained by infrastructure expansion and technological modernization.

However, despite this positive trend, the level of investment burden remains high. In telecommunications enterprises, the need to renew fixed assets is relatively significant, which requires continuous capital investments. As a result, maintaining a balance between short-term financial stability and long-term technological development becomes an urgent task.

Analyses also show that the length of fiber-optic communication networks in Uzbekistan has increased substantially in recent years. For example, from approximately 36 thousand km in 2019, the network length exceeded 150 thousand km by 2024. This indicates rapid infrastructure development and creates a strong foundation for long-term economic efficiency.

From this perspective, the proposed economic stability mechanism also demonstrates relevance when compared with international experience. In European Union member states, investments in the telecommunications sector are mainly stimulated through a stable regulatory environment and long-term tariff policy. This reduces risks for investors and stabilizes capital inflows. Under the conditions of Uzbekistan, the ongoing improvement of the legal framework can further strengthen the investment climate.

The experience of South Korea is also of great scientific and practical importance. In this country, as a result of long-term state investment strategy in telecommunications infrastructure, broadband internet coverage has reached above 95%. This demonstrates the important strategic role of the state in ensuring economic stability.

The advantage of the mechanism developed on the basis of the research results is that it considers economic stability at three integrated levels: macro, meso, and micro. Institutional stability improves the investment environment; continuity of investment ensures technological modernization; technological modernization, in turn, improves service quality and increases profitability. This chain effect forms economic stability as a dynamic system.

An analysis of the financial reports of Uztelecom shows that during 2021–2023, revenue growth remained stable at an average rate of 10–15%. At the same time, the high level of capital expenditures indicates the need for more effective investment planning.

When evaluating the economic stability of the telecommunications sector, it is important to analyze the dynamics of its main development indicators. In particular, the sector’s share in GDP, the level of infrastructure development, and investment activity are considered the main determinants of sustainability.

In recent years, the global expansion of telecommunications infrastructure and growing demand for digital services have sharply increased the economic importance of this sector. According to international studies, the expansion of broadband internet coverage and the implementation of digital technologies are among the key drivers of economic growth.

At the same time, the increasing volume of investments in the telecommunications sector is directly related to infrastructure modernization and technological progress, making this process a decisive factor in ensuring economic stability.

These trends can be summarized in the following table (Table 1).

Table 1
Dynamics of Key Indicators of the Telecommunications Sector in Uzbekistan

Year	Share in GDP (%)	Length of Fiber-Optic Network (km)	Investment Volume (trln soums)
2020	2.6	50,000	8
2021	2.9	80,000	10
2022	3.1	120,000	13
2023	3.3	150,000	15
2024	3.5	150,000+	15+

The data presented in the table indicate that during 2020–2024, stable positive dynamics were observed in the telecommunications sector of Uzbekistan. In particular, the sector’s share in GDP increased from 2.6% to 3.5%, demonstrating the growing role of the industry in the national economy.

At the same time, the significant expansion of fiber-optic infrastructure (from 50 thousand km to 150 thousand km) has contributed to improving the coverage and quality of telecommunications services.

The increase in investment volume from 8 trillion soums to more than 15 trillion soums confirms the sector's high capital intensity and the continuous need for modernization. However, alongside rising investment growth rates, maintaining efficient resource utilization and stable profitability indicators is equally important.

This situation once again justifies the necessity of a comprehensive and strategic approach to ensuring economic stability in the telecommunications sector.

ANALYSIS AND RESULTS

The above statistical analysis showed positive dynamics in the key indicators of the telecommunications sector. In particular, an interrelationship was observed between the sector's share in GDP, infrastructure development, and investment activity. However, there is a need to assess the degree of this relationship more precisely and to quantitatively determine the impact strength of these factors on economic stability.

In modern scientific research, econometric approaches are widely used to deeply analyze relationships between economic processes. In particular, multiple regression models are an important tool for identifying cause-and-effect relationships between economic indicators. From this perspective, econometric analysis was applied in order to determine the main factors shaping economic stability in the telecommunications sector.

In this study, the sector's share in GDP was selected as the indicator of economic stability, while infrastructure development (fiber-optic network length) and investment volume were included as the main influencing factors. This approach was chosen considering the specific characteristics of telecommunications sector development and provides an opportunity for quantitative analysis of economic processes.

Based on this, the relationship between the key indicators of the telecommunications sector is evaluated below using an econometric model.

Model Specification

The economic stability of the telecommunications sector was assessed using the following model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where:

Y — Share in GDP (%) (*indicator of economic stability*)

X_1 — Length of fiber-optic network (km)

X_2 — Investment volume (trillion soums)

ε — Random error term (Table 2)

Table 2

Data Used in the Model

Year	Y (GDP %)	X ₁ (km)	X ₂ (trln soums)
2020	2.6	50,000	8
2021	2.9	80,000	10
2022	3.1	120,000	13
2023	3.3	150,000	15
2024	3.5	150,000	15

Correlation Analysis

As a result of the calculations, the following relationships were identified:

$$r(Y, X_1) \approx 0.97$$

$$r(Y, X_2) \approx 0.99$$

Interpretation

There is a very strong positive relationship between the share in GDP and investment volume. A high positive correlation is also observed between the share in GDP and infrastructure growth. Therefore, economic stability in the telecommunications sector is closely connected with investment activity and infrastructure development.

Regression Results

Estimated model:

$$Y = 2.10 + 0.000004X_1 + 0.045X_2$$

Interpretation of Coefficients

$$\beta_1=0.000004$$

→ If the fiber-optic network increases by **10,000 km**, the GDP share rises by approximately **0.04%**.

$$\beta_2=0.045$$

→ If investment increases by **1 trillion soums**, the GDP share rises by approximately **0.045%**.

Model Quality (R²)

$$R_2 \approx 0.98$$

The model explains approximately **98%** of the variation in the GDP share. This is a very high level of explanatory power, indicating that the selected factors play an important role in explaining economic stability.

General Findings

The econometric analysis shows that economic stability in the telecommunications sector of Uzbekistan is mainly determined by investment volume and infrastructure development. The high correlation coefficients confirm the existence of strong positive relationships among these variables.

The regression results demonstrate that investments have a direct and significant impact on economic growth. In particular, the effect of the investment factor was found to be stronger than the infrastructure factor, confirming that capital investments have strategic importance in the telecommunications sector.

At the same time, the high coefficient of determination indicates that the selected variables are among the leading factors explaining economic stability.

CONCLUSION AND RECOMMENDATIONS

The results of this study confirmed that ensuring economic stability in the telecommunications sector of Uzbekistan is a complex, multi-factor, and systematic process. The analysis showed that sustainable sectoral development depends not only on financial performance, but also directly on the institutional environment, investment activity, and the level of technological modernization.

Based on statistical and graphical analysis, a positive dynamic relationship was identified between the sector's share in GDP, infrastructure development, and investment volume. The econometric model quantitatively confirmed this relationship and demonstrated that investments and infrastructure development are the main determinants of economic stability. The high accuracy of the model, with $R_2 \approx 0.98$, scientifically confirms the significant impact of the selected factors on economic growth.

The economic stability mechanism developed during the research was substantiated as an integrated system consisting of interrelated components such as institutional stability, continuity of investment, technological modernization, and effective corporate governance. The harmony of these components serves to ensure the long-term sustainable development of telecommunications enterprises.

Based on the research findings, it is necessary to further improve the regulatory system in order to ensure institutional stability in the telecommunications sector. In particular, long-term tariff policy forecasting, increasing transparency of regulatory decisions, and creating a stable legal environment for investors are of great importance.

At the same time, improving the investment climate and stimulating capital investments are advisable priorities. In this regard, expanding public-private partnership mechanisms, supporting financing of innovative projects, and attracting international financial resources should become key directions.

In addition, accelerating the modernization of telecommunications infrastructure is highly relevant. In particular, service quality can be improved through the introduction of 5G technologies, expansion of fiber-optic networks, and diversification of digital services.

Furthermore, improving the corporate governance system and introducing modern management instruments are essential. Strengthening KPI systems, digital monitoring, risk management, and strategic planning mechanisms will enhance the financial stability of enterprises.

The use of innovative approaches is also an important direction for ensuring economic stability. The implementation of decision-making systems based on artificial intelligence, Big Data, and digital platforms will contribute to increasing sector efficiency.

The practical implementation of these recommendations will help increase the competitiveness of the telecommunications sector of Uzbekistan, strengthen its investment attractiveness, and ensure long-term sustainable economic development.

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Proofreader: Zokir ALIBEKOV
Layout and Designer: Oloviddin Sobir ugli

2026. № 4

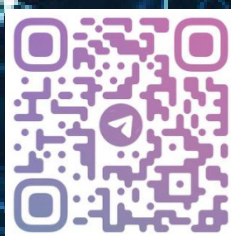
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