

# ECONOSCITECH INTEGRATION

ISSUE  
10

INTERNATIONAL SCIENTIFIC  
ELECTRONIC JOURNAL



TASHKENT STATE  
UNIVERSITY OF ECONOMICS



American University  
of Technology

Powered by Arizona State University®

ISSN: 3060-5075



Acceptance of articles  
**PUBLISHED MONTHLY**



ARTICLE CONTRIBUTORS  
**PROFESSORS, SCHOLARS,  
SPECIALISTS, AND RESEARCHERS**



Google  
scholar

OpenAIRE

ISSN

INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
DENMARK

CONTACT:



+998 94 3540880



<https://econoscitech-integration-journal.uz>



2026

**EDITOR-IN-CHIEF:**

**Zufarova Nozima Gulamiddinovna**  
DSc., Dean of Tourism Faculty, TSUE

**DEPUTY EDITOR-IN-CHIEF:**

**Makhmudov Nosir Makhmudovich**  
DSc., Prof., Academician

**DEPUTY EDITOR-IN-CHIEF:**

**Suyunov Dilmurod Xolmurodovich**  
Doctor of Economics (DSc), Professor,

**DEPUTY EDITOR-IN-CHIEF:**

**Allayarov Shamsiddin Amanullayevich**  
doctor of economics (DSC), professor

**RESPONSIBLE SECRETARY:**

**Otaboyev Axmed Maxsudbek o'g'li**  
TSUE independent researcher

THE SCIENTIFIC-POPULAR  
ELECTRONIC JOURNAL  
"ECONOSCITECH-INTEGRATION"  
HAS BEEN REGISTERED UNDER  
THE NUMBER C-5669651 BY THE  
AGENCY FOR INFORMATION AND  
MASS COMMUNICATIONS (AOKA)  
OF THE REPUBLIC OF UZBEKISTAN,  
EFFECTIVE FROM OCTOBER 9, 2024.

In accordance with Resolution No. 384/6 dated April 10, 2026, issued by the Presidium of the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, this journal is included in the list of recommended international scientific publications for publishing the primary research findings of doctoral dissertations in the field of Economic Sciences.

**Partners: Tashkent State University of Economics / American University of Technology in Tashkent (AUT)**

Electronic publication. Issue 10. 500 pages.  
Approved for publication in October 2026.

**Editorial Board Members:**

**Sharipov Kongratbay Avezimbetovich,**  
Doctor of Technical Sciences (DSc), Professor



**Teshabayev To'liqin Zakirovich,**  
Doctor of Economic Sciences (DSc), Professor



**Said Irandoust,**  
Doctor of Chemical Engineering Sciences,  
Professor



**Abdurakhmanova Gulnora Kalandarovna,**  
Doctor of Economic Sciences (DSc), Professor



**Khudoykulov Sadirdin Karimovich,**  
Doctor of Economics, (DSc), Professor



**Tokunaga Masahiro,**  
professor, PhD of Economics of the Faculty of  
Business and Commerce



**Debasis Das,**  
professor Department of Computer Science



**Nitin Goje,**  
professor and Program Lead - Computer Science



**Nargizakhon Shamshieva**  
Doctor of Economic Sciences, Professor



**Rakhmonov Norim Razzakovich,**  
Doctor of Economic Sciences (DSc), Professor

**Bayxonov Bahodirjon Tursunbayevich**  
Doctor of Science (DSc), Professor



**Shomurodov Ravshan Tursunkulovich,**  
PhD, Associate Professor



**Boymuratov Abduraxmat Djumayevich**  
Doctor of Philosophy (PhD) in Economics



**Sharopova Nafosat Radjabovna**  
DSc, Associate Professor



**Sultanova Kamila Mukhtorali Kizi**  
Master of Science

# CONTENTS

|                                                                                                                                                                                                            |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| DEVELOPMENT OF AN IMPROVED METHODOLOGY FOR ASSESSING THE<br>PERFORMANCE OF SMALL BUSINESS ENTITIES .....                                                                                                   | 28 |
| <b>Mavrulov Ravshan Nematjonovich</b>                                                                                                                                                                      |    |
| METHODOLOGICAL ASPECTS OF ASSESSING AND ANALYSING<br>AGGLOMERATION DEVELOPMENT .....                                                                                                                       | 33 |
| <b>Shokhrukh Mardonov</b>                                                                                                                                                                                  |    |
| <b>Nigora Makhmasobirova</b>                                                                                                                                                                               |    |
| <b>Sevara Kulsakhatova</b>                                                                                                                                                                                 |    |
| IMPROVING INTERNAL STANDARDS AND AUDIT QUALITY MANAGEMENT<br>MECHANISMS AT PF MAC ALLIANCE AUDIT ORGANISATION: A PILOT CASE STUDY .....                                                                    | 39 |
| <b>Bobonarova Kamola</b>                                                                                                                                                                                   |    |
| ASSESSING THE LEVEL OF DIGITAL DEVELOPMENT AND DEVELOPING AN<br>ARTIFICIAL INTELLIGENCE-BASED MECHANISM FOR IMPROVING THE<br>EFFICIENCY OF INDUSTRIAL ENTERPRISES .....                                    | 46 |
| <b>Rashidov Hasan Shirinboyevich</b>                                                                                                                                                                       |    |
| REASSESSING CORPORATE FINANCIAL STABILITY IN THE CONTEXT OF<br>SUSTAINABLE ECONOMIC GROWTH: A COMPARATIVE EVALUATION OF ASSESSMENT<br>METHODS AND THEIR APPLICABILITY TO TELECOMMUNICATIONS COMPANIES..... | 52 |
| <b>Odilov Dilshod Qudratilla o'g'li</b>                                                                                                                                                                    |    |

# REASSESSING CORPORATE FINANCIAL STABILITY IN THE CONTEXT OF SUSTAINABLE ECONOMIC GROWTH: A COMPARATIVE EVALUATION OF ASSESSMENT METHODS AND THEIR APPLICABILITY TO TELECOMMUNICATIONS COMPANIES

**Odilov Dilshod Quadratilla o'g'li**

**PhD Researcher at the International School of Finance, Technology and Science**

**E-mail: [wcdilshod@gmail.com](mailto:wcdilshod@gmail.com)**

**ORCID: 0009-0003-7434-3022**

**Scientific Supervisor: Ilxamov Shavkat Islamovich**

**Professor at the International School of Finance, Technology and Science**

**Abstract.** In the context of sustainable economic growth, corporate financial stability requires a broader assessment than reliance solely on balance-sheet ratios at the reporting date. It also reflects a company's ability to service debt from operating cash flows, finance growth while maintaining a sustainable level of leverage, and remain resilient to macroeconomic fluctuations. This article evaluates the principal methods of financial stability assessment against these requirements, with particular attention to capital-intensive telecommunications companies. Based on a structured review of studies published primarily between 2007 and 2024 and a criteria-based comparative evaluation of eight groups of methods against six criteria, the study identifies opportunities for further methodological development. Ratio analysis, absolute indicators, discriminant models, and rating models used in the Commonwealth of Independent States (CIS) predominantly rely on static measures and provide relatively limited coverage of cash flows, sector-specific characteristics, and currency and interest-rate risks; some also employ weights calibrated using data from other economies. Statistical and machine-learning-based financial distress models, in turn, depend on sufficiently comprehensive historical datasets on corporate financial distress and failure events, the availability of which can be further developed in the context of Uzbekistan. Cash-flow and debt-service approaches and composite index methods demonstrate comparatively broader alignment with the selected assessment criteria, although their integrated application remains relatively limited. The article proposes an author-defined concept of financial stability in the context of sustainable economic growth and a six-block indicator framework encompassing capital structure, liquidity, cash flow and debt service, profitability, sector-specific operational efficiency, and macroeconomic risk sensitivity. The proposed framework provides a methodological basis for constructing an integral financial stability index for telecommunications companies, including Uztelecom JSC.

**Keywords.** financial stability, sustainable economic growth, financial analysis, debt-service capacity, financial distress, composite index, telecommunications, Uzbekistan.

**Аннотация.** В условиях устойчивого экономического роста оценка финансовой устойчивости предприятия предполагает более комплексный подход, чем использование исключительно балансовых коэффициентов на отчётную дату. Она также отражает способность предприятия обслуживать долговые обязательства за счёт операционных денежных потоков, финансировать рост при сохранении устойчивого уровня долговой нагрузки и обеспечивать устойчивость к макроэкономическим колебаниям. В статье проведена оценка основных методов анализа финансовой устойчивости с учётом указанных требований, с особым вниманием к капиталоемким телекоммуникационным компаниям. На основе структурированного обзора исследований, опубликованных преимущественно в 2007–2024 гг., и сравнительной оценки восьми групп методов по шести критериям определены направления дальнейшего методологического развития.

Коэффициентный анализ, абсолютные показатели, дискриминантные модели и рейтинговые модели, применяемые в странах Содружества Независимых Государств (СНГ), преимущественно основываются на статических показателях и характеризуются относительно ограниченным учётом денежных потоков, отраслевой специфики, валютных и процентных рисков; в отдельных моделях также используются веса, откалиброванные на данных других экономик. Статистические модели и модели финансовой несостоятельности на основе машинного обучения, в свою очередь, предполагают наличие достаточно комплексных исторических баз данных о случаях финансовых затруднений и несостоятельности предприятий, возможности формирования которых в условиях Узбекистана могут быть дополнительно расширены. Подходы, основанные на денежных потоках и способности обслуживать долг, а также методы интегральных индексов демонстрируют сравнительно более широкое соответствие выбранным критериям оценки, хотя возможности их совместного применения остаются значительными. В статье предложено авторское определение финансовой устойчивости в условиях устойчивого экономического роста и шестиблочная система показателей, охватывающая структуру капитала, ликвидность, денежные потоки и обслуживание долга, рентабельность, отраслевую операционную эффективность и чувствительность к макроэкономическим рискам. Предлагаемая система формирует методологическую основу для построения интегрального индекса финансовой устойчивости телекоммуникационных компаний, включая АО «Узбектелеком».

**Ключевые слова.** финансовая устойчивость, устойчивый экономический рост, финансовый анализ, способность обслуживать долг, финансовая несостоятельность, интегральный индекс, телекоммуникации, Узбекистан.

## INTRODUCTION

Sustainable economic growth requires not only increasing output but also a resilient corporate sector capable of financing investment while maintaining a sustainable level of indebtedness. The 2030 Agenda for Sustainable Development links decent economic growth with resilient infrastructure and innovation (United Nations, 2015, Goals 8 and 9). Strategy (Decree No. PF-6079, 2020)<sup>1</sup>, which emphasise the important role of telecommunications infrastructure in supporting economic modernisation.

Telecommunications operators provide a particularly relevant context for examining the relationship between growth and financial stability. Network modernisation requires substantial and continuous capital expenditure (CAPEX), a significant proportion of which may be financed through long-term borrowing. Such borrowing can be denominated in foreign currencies, particularly where telecommunications equipment is imported, while operating revenues are predominantly generated in the national currency. Consequently, balance-sheet ratios alone may not fully capture a company's capacity to service its debt under changing exchange-rate and interest-rate conditions.

Recent Uzbek studies of corporate financial stability have primarily employed balance-sheet coefficients and absolute indicators (Bauetdinov, 2023; Karakulov et al., 2024), while international research has increasingly incorporated cash-flow measures, market-based approaches, and machine-learning models of financial distress (Campbell et al., 2008; Barboza et al., 2017). This creates an opportunity for further research into the extent to which these methodological approaches are applicable to capital-intensive telecommunications companies operating in the context of sustainable economic growth.

The aim of this article is to evaluate existing methods of financial stability assessment against the requirements of sustainable economic growth and to substantiate directions for their further development and application to telecommunications companies. The objectives are: (1) to clarify the concept of financial stability in the context of sustainable growth; (2) to systematise the theoretical foundations and existing assessment methods; (3) to evaluate these methods against explicitly defined criteria; and (4) to propose a conceptual indicator framework applicable to Uztelecom JSC in subsequent empirical research.

## LITERATURE REVIEW

Within the CIS analytical tradition, financial stability is commonly defined through the structure of capital and the extent to which assets are financed by sustainable long-term sources, with the type of financial stability determined by the coverage of inventories through own working capital and long-term liabilities (Sheremet & Negashev, 2008). Uzbek researchers have adapted this approach to sector-specific conditions. Burkhanov et al. (2024) distinguish absolute, normative, and pre-crisis levels of financial stability for construction materials

<sup>1</sup> <https://lex.uz/docs/-5030957>

enterprises, taking into account seasonality and capital intensity, while Kadirov (2023) proposes a system for evaluating the economic sustainability of industrial enterprises.

In corporate finance, financial stability is linked to growth through the sustainable growth rate (SGR), which represents the rate of growth that a company can finance without changing its leverage and payout policy (Higgins et al., 2019). Growth above this level generally requires additional debt or equity financing and therefore increases the importance of maintaining an appropriate balance between expansion and financial stability.

Reviews of empirical capital structure research indicate that a universally optimal leverage level does not apply equally to all firms. Financing decisions are shaped by the trade-off between the tax benefits of debt and financial distress costs, as well as by information asymmetry and agency considerations (Graham & Leary, 2011). Frank and Goyal (2009) find that industry median leverage, asset tangibility, profitability, firm size, and expected inflation are among the most consistently identified determinants of leverage. For the telecommunications sector, Fauzi et al. (2022), using a sample of 205 companies from 62 countries over the period 2010–2020, report an inverse relationship between both long-term and short-term debt ratios and return on assets. These findings suggest that the financial stability of capital-intensive companies can be assessed more comprehensively by considering sector-specific benchmarks together with debt-service capacity, rather than relying exclusively on universal balance-sheet thresholds.

The financial distress prediction literature has evolved from univariate ratio analysis and multiple discriminant analysis towards logit, probit, hazard models, and intelligent computational techniques. Reviews of this literature indicate that predictive accuracy is strongly influenced by the sample, time period, and industry used for model calibration (Bellovary et al., 2007; Kumar & Ravi, 2007; Alaka et al., 2018). Altman et al. (2017) demonstrate in an international setting that the Z-score family retains considerable predictive value, while its accuracy can be further enhanced through re-estimation using country-specific data. Altman (2018) subsequently provides a comprehensive overview of the model's applications over a fifty-year period.

Campbell et al. (2008) demonstrate that hazard models combining accounting and market variables can provide greater predictive performance than models based exclusively on accounting indicators. Barboza et al. (2017) further report that machine-learning models achieve, on average, approximately 10% higher predictive accuracy than discriminant analysis and logistic regression. Within CIS practice, rating models combine a set of financial ratios using expert-assigned weights to generate an integrated score (Sheremet & Negashev, 2008).

Composite indicator methodology provides a broader framework for the normalisation, weighting, aggregation, and robustness assessment of multidimensional indicators (OECD & JRC, 2008; Greco et al., 2019). Within this framework, weights may be determined through expert judgement using the analytic hierarchy process (AHP) (Saaty, 2008) or derived from the information content of the underlying data through the entropy weight method (Zhu et al., 2020). These approaches provide a methodological foundation for integrating multiple dimensions of corporate financial stability into a comprehensive assessment framework.

## RESEARCH METHODOLOGY

The study combines a structured qualitative literature review with a criteria-based comparative evaluation. Sources were selected from peer-reviewed academic journals, international standards, and official documents, with particular emphasis on publications from 2007 to 2024. The assessment methods identified in the literature were classified into eight groups according to their underlying analytical logic (Table 1). Based on the theoretical review and the specific characteristics of telecommunications companies, six evaluation criteria were established:

C1 – Dynamism: whether the method incorporates cash-flow and debt-service indicators rather than relying exclusively on reporting-date balance-sheet measures;

C2 – Sector sensitivity: whether the method reflects sector-specific characteristics, including capital intensity, capital expenditure (CAPEX), and EBITDA-based indicators;

C3 – Macroeconomic risk sensitivity: whether the method incorporates exposure to exchange-rate, inflation, and interest-rate risks;

C4 – Objectivity of weighting and calibration: whether the applied weights and threshold values are appropriately justified for the economy and industry under analysis;

C5 – Data feasibility: whether the method can be implemented using publicly disclosed financial statements and other accessible financial information of Uzbek joint-stock companies;

C6 – Managerial interpretability: whether the assessment results can be effectively translated into practical managerial decisions.

Each group of methods was evaluated using a three-point ordinal scale: 2 – the criterion is fully met; 1 – the criterion is partially met; and 0 – the criterion is not met. The assigned scores represent the author's expert

assessment based on the methodological specifications and applications reported in the reviewed literature. Accordingly, the scores are ordinal in nature and are intended to identify systematic methodological strengths and areas for further development rather than to provide a precise ranking of the methods.

Methods of abstraction, comparison, analysis, and synthesis were additionally employed to formulate the conceptual definition of financial stability and to develop the proposed indicator framework.

**Statement on the Use of Artificial Intelligence.** In the preparation of this study, artificial intelligence (AI) tools were used to a limited extent, accounting for approximately 10% of the overall research process. Their use was primarily confined to language refinement, technical editing, and structural support. The selection of research methods, review and analysis of the scientific literature, interpretation of the findings, formulation of scientific conclusions, and development of practical recommendations were carried out and verified by the author.

## ANALYSIS AND RESULTS

The results of the criteria-based comparative evaluation of the eight groups of financial stability assessment methods are presented in Table 1.

**Table 1**  
Comparative evaluation of financial stability assessment methods

| Group of methods (representative sources)                                                  | C1 | C2 | C3 | C4 | C5 | C6 | Total<br>(max 12) |
|--------------------------------------------------------------------------------------------|----|----|----|----|----|----|-------------------|
| 1. Traditional ratio analysis (Karakulov et al., 2024)                                     | 0  | 0  | 0  | 1  | 2  | 2  | 5                 |
| 2. Absolute indicators of stability type (Burkhanov et al., 2024)                          | 0  | 1  | 0  | 1  | 2  | 1  | 5                 |
| 3. Univariate ratio analysis (Bellovary et al., 2007)                                      | 1  | 0  | 0  | 1  | 2  | 1  | 5                 |
| 4. Discriminant models, Z-score family (Altman et al., 2017)                               | 0  | 0  | 0  | 1  | 2  | 1  | 4                 |
| 5. Logit, hazard and machine-learning models (Campbell et al., 2008; Barboza et al., 2017) | 0  | 0  | 1  | 2  | 0  | 0  | 3                 |
| 6. CIS expert rating models (Sheremet & Negashev, 2008)                                    | 0  | 0  | 0  | 0  | 2  | 2  | 4                 |
| 7. Cash-flow and debt-service approach (Higgins et al., 2019)                              | 2  | 1  | 1  | 1  | 1  | 2  | 8                 |
| 8. Composite index methods (OECD & JRC, 2008; Greco et al., 2019)                          | 1  | 1  | 1  | 1  | 1  | 1  | 6                 |

Source: compiled by the author. Scores: 2 – fully met, 1 – partially met, 0 – not met.

Table 1 identifies six areas in which the methods most widely applied in practice (Groups 1–6) provide opportunities for further methodological development. First, these methods are predominantly static, as they primarily describe the financial position at the reporting date and provide limited information on a company's capacity to meet scheduled debt-service obligations throughout the year.

Second, some methods employ universal threshold values, such as a current ratio of at least 2 or an equity ratio of at least 0.5. The applicability of such thresholds may vary across industries. In telecommunications companies, for example, relatively lower current-liquidity ratios may be compatible with financial stability where stable and recurring subscriber cash inflows support short-term obligations.

Third, traditional approaches provide relatively limited coverage of sector-specific characteristics, including capital expenditure (CAPEX) intensity, EBITDA margins, and depreciation. The sectoral adaptation proposed by Burkhanov et al. (2024) represents an important methodological development, although it was designed for a different industry and therefore requires appropriate adaptation before application to telecommunications companies.

Fourth, conventional balance-sheet approaches provide limited incorporation of macroeconomic risk sensitivity. For example, the leverage of a company with foreign-currency-denominated debt is generally measured using the exchange rate prevailing at the reporting date. Consequently, the potential effect of subsequent exchange-rate movements on debt-service capacity may not be fully reflected in the resulting assessment.

Fifth, some rating models rely on expert-assigned weights, making the final assessment partly dependent on the selected weighting assumptions. This creates an opportunity to strengthen the methodological framework through more transparent, empirically justified, or data-driven weighting procedures.

Sixth, the applicability of discriminant, statistical, and machine-learning models depends substantially on the data used for their calibration. Models originally estimated using samples from other economies may

require recalibration to reflect country- and sector-specific conditions. In Uzbekistan, the further development of comprehensive publicly accessible datasets on corporate financial distress, failure events, and market prices would create additional opportunities for the local estimation and validation of advanced statistical and machine-learning models.

Groups 7 and 8 demonstrate comparatively broader alignment with the selected evaluation criteria. The cash-flow and debt-service approach captures the dynamic dimension of financial stability and is directly relevant to borrowing and investment decisions; however, it generally produces a set of individual indicators rather than a single integrated assessment. Composite index methods, in turn, provide a transparent framework for indicator normalisation, weighting, aggregation, and robustness testing (Greco et al., 2019), while their analytical value depends substantially on the relevance and quality of the indicators included.

The comparative evaluation therefore indicates that these two approaches can be considered complementary. An enhanced methodology can integrate cash-flow, sector-specific, and macroeconomic risk indicators within a composite index supported by transparent and appropriately justified weighting procedures.

Based on the analysis, the author proposes the following definition: financial stability of a company in the context of sustainable economic growth is its capacity to meet debt-service obligations on time from operating cash flows under changing macroeconomic and sector-specific conditions, while maintaining an appropriate capital structure and financing a sustainable rate of growth.

Compared with definitions based predominantly on balance-sheet measures, the proposed definition incorporates three measurable dimensions: debt-service capacity from operating cash flows, resilience to macroeconomic and sector-specific changes, and the capacity to finance sustainable growth.

The growth dimension can be operationalised through the sustainable growth rate (SGR):

$$\text{SGR} = \text{ROE} \times b,$$

where:

(ROE) – return on equity; (b) – retention ratio, representing the proportion of net profit reinvested in the company (Higgins et al., 2019).

Where actual revenue growth persistently exceeds the sustainable growth rate, the additional financing requirement may increasingly be met through external sources, including additional debt. This relationship can therefore serve as an early indicator of increasing financing requirements and the need for closer monitoring of financial stability. For a state-owned company that distributes dividends to the state budget, the retention ratio (b) also provides a direct analytical link between dividend policy and the company's capacity to finance growth from internally generated resources.

To address the methodological development areas identified in Table 1, the author proposes a six-block indicator framework, presented in Table 2. Blocks B1–B4 and B6 are applicable to capital-intensive companies more broadly, whereas Block B5 captures characteristics specific to the telecommunications sector. The framework therefore has the potential to be adapted to other industries by replacing or modifying the sector-specific indicators included in Block B5 (Table 2).

Table 2

Proposed indicator framework for assessing the financial stability of a telecommunications company

| Block                            | Key indicators                                                                                 | Limitation addressed                         |
|----------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------|
| B1. Capital structure            | Equity ratio; debt-to-equity; coverage of non-current assets by long-term sources              | Retained from traditional analysis as a base |
| B2. Liquidity                    | Current and quick ratios against sector benchmarks; net working capital                        | Universal thresholds                         |
| B3. Cash flow and debt service   | OCF/total debt; DSCR; interest coverage; net debt/EBITDA; free cash flow margin                | Static character                             |
| B4. Profitability and efficiency | EBITDA margin; ROA; ROE; asset turnover                                                        | Distortion of profit by depreciation         |
| B5. Sector-operational           | CAPEX/revenue; OCF/CAPEX; real growth of revenue and ARPU                                      | Ignoring sector specifics                    |
| B6. Macro-risk sensitivity       | Share of foreign-currency debt; currency-adjusted leverage; equity buffer against depreciation | Ignoring macroeconomic risks                 |

Source: developed by the author.

Debt service capacity, the central element of block B3, is measured by the debt service coverage ratio:

$$\text{DSCR} = (\text{Operating cash flow} + \text{Interest paid}) / (\text{Interest payments} + \text{Principal repayments}).$$

Financial distress models from the Z-score family are not incorporated directly into the proposed framework but are retained as external benchmarks for validating the integral index (Altman et al., 2017). The indicators are intended to be normalised against relevant sector benchmarks rather than against the minimum and maximum values derived from a relatively short company-specific time series. Indicator weights are proposed to be determined by combining expert-based weights obtained through the analytic hierarchy process (AHP) (Saaty, 2008) with objective weights derived using the entropy weight method (Zhu et al., 2020), followed by robustness testing (Greco et al., 2019). This combined approach enhances the transparency and methodological justification of the weighting procedure (C4), while remaining applicable where the analysis is based on the available data of a single company (C5).

For Uztelecom JSC, the proposed framework implies that the analysis for the period 2019–2025 should begin with an assessment of the relationships among EBITDA, operating cash flow, capital expenditure (CAPEX), and debt-service capacity, complemented by an explicit sensitivity analysis of leverage under changes in exchange rates. These relationships and assumptions are intended to be examined empirically at the subsequent stage of the research using the company's published financial statements.

## CONCLUSIONS AND RECOMMENDATIONS

First, in the context of sustainable economic growth, financial stability can be understood as a company's dynamic capacity to service debt from operating cash flows, remain resilient under changing macroeconomic and sector-specific conditions, and finance a sustainable rate of growth. The author's proposed definition operationalises these dimensions and provides a broader analytical perspective than an assessment based exclusively on reporting-date balance-sheet indicators.

Second, the comparative evaluation of eight groups of methods against six criteria identifies six areas in which the methods most widely applied in practice provide opportunities for further methodological development: their predominantly static nature, the application of universal thresholds, relatively limited incorporation of sector-specific characteristics and macroeconomic risks, reliance on expert-assigned weights, and the use of models calibrated using samples from other economies. Advanced statistical and machine-learning approaches additionally require sufficiently comprehensive historical datasets for reliable local estimation and validation; the continued development of such datasets in Uzbekistan would expand opportunities for their application.

Third, the cash-flow and debt-service approach and composite index methods demonstrate complementary methodological characteristics. Their integrated application therefore provides a basis for developing a more comprehensive financial stability assessment methodology that combines dynamic financial indicators, sector-specific characteristics, macroeconomic risk sensitivity, and an integral evaluation framework.

Based on these findings, the following recommendations are proposed:

1. Apply the six-block indicator framework when assessing the financial stability of capital-intensive companies, with Block B5 incorporating indicators tailored to the characteristics of the relevant industry.
2. Evaluate liquidity and leverage in relation to appropriate sector-specific benchmarks, complementing conventional universal threshold values.
3. Use the debt service coverage ratio (DSCR) and net debt/EBITDA as key indicators of debt-service capacity and financial stability in telecommunications companies.
4. Incorporate exchange-rate-adjusted leverage and sensitivity analysis when assessing companies with foreign-currency-denominated debt.
5. Aggregate the selected indicators into an integral financial stability index using a combination of expert-based and objective weighting methods, while employing financial distress models as external validation benchmarks.

Future research will focus on constructing and empirically validating the proposed integral financial stability index using the published financial statements of Uztelecom JSC for the period 2019–2025. This subsequent empirical stage will provide an opportunity to assess the practical applicability of the proposed framework and further refine its sector-specific parameters.

## REFERENCES

1. O'zbekiston Respublikasi Prezidentining 05.10.2020-yildagi "Raqamli O'zbekiston — 2030" strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to'g'risidagi PF-6079-sonli Farmoni, <https://lex.uz/docs/-5030957>

2. Alaka H.A., Oyedele L.O., Owolabi H.A., Kumar V., Ajayi S.O., Akinade O.O., Bilal M. Systematic review of bankruptcy prediction models: Towards a framework for tool selection / H.A. Alaka, L.O. Oyedele, H.A. Owolabi, V. Kumar, S.O. Ajayi, O.O. Akinade, M. Bilal // *Expert Systems with Applications*. – 2018. – Vol. 94. – P. 164–184.
3. Altman E.I. Applications of distress prediction models: What have we learned after 50 years from the Z-score models? / E.I. Altman // *International Journal of Financial Studies*. – 2018. – Vol. 6. – № 3. – Art. 70.
4. Altman E.I., Iwanicz-Drozowska M., Laitinen E.K., Suvas A. Financial distress prediction in an international context: A review and empirical analysis of Altman's Z-score model / E.I. Altman, M. Iwanicz-Drozowska, E.K. Laitinen, A. Suvas // *Journal of International Financial Management & Accounting*. – 2017. – Vol. 28. – № 2. – P. 131–171.
5. Barboza F., Kimura H., Altman E. Machine learning models and bankruptcy prediction / F. Barboza, H. Kimura, E. Altman // *Expert Systems with Applications*. – 2017. – Vol. 83. – P. 405–417.
6. Bauetdinov M. Ensuring financial stability of economic entities in the Republic of Uzbekistan / M. Bauetdinov // *Economics and Innovative Technologies*. – 2023. – Vol. 11. – № 5. – DOI: 10.55439/EIT/vol11\_iss5/a2.
7. Bellovary J.L., Giacomino D.E., Akers M.D. A review of bankruptcy prediction studies: 1930 to present / J.L. Bellovary, D.E. Giacomino, M.D. Akers // *Journal of Financial Education*. – 2007. – Vol. 33. – P. 1–42.
8. Burkhanov A.U., Kurbonbekova M.T., Usmonov B., Nizomiddinov J.Z. Assessment of the financial sustainability of enterprises: The case of Uzbekistan / A.U. Burkhanov, M.T. Kurbonbekova, B. Usmonov, J.Z. Nizomiddinov // [Book title to be verified]. – Leeds: Emerald Publishing, 2024. – Vol. 33B. – P. 215–223. – DOI: 10.1108/S1877-63612024000033B027.
9. Campbell J.Y., Hilscher J., Szilagyi J. In search of distress risk / J.Y. Campbell, J. Hilscher, J. Szilagyi // *The Journal of Finance*. – 2008. – Vol. 63. – № 6. – P. 2899–2939.
10. Fauzi R.A., Achsani N.A., Andati T., Anggaraeni L. Pengaruh struktur modal terhadap kinerja perusahaan telekomunikasi dunia [The effect of capital structure on the performance of world telecommunications companies] / R.A. Fauzi, N.A. Achsani, T. Andati, L. Anggaraeni // *Jurnal Aplikasi Bisnis dan Manajemen*. – 2022. – Vol. 8. – № 2. – P. 470. – DOI: 10.17358/jabm.8.2.470.
11. Frank M.Z., Goyal V.K. Capital structure decisions: Which factors are reliably important? / M.Z. Frank, V.K. Goyal // *Financial Management*. – 2009. – Vol. 38. – № 1. – P. 1–37.
12. Graham J.R., Leary M.T. A review of empirical capital structure research and directions for the future / J.R. Graham, M.T. Leary // *Annual Review of Financial Economics*. – 2011. – Vol. 3. – P. 309–345.

**Proofreader:** Xondamir Ismoilov  
**Layout and Designer:** Hasan Maqsudov

---

## 2026. № 10

---

© When materials are reproduced, the ECONOSCITECH-INTEGRATION journal must be cited as the source. Authors are responsible for the accuracy of the information in materials and advertisements published in the journal. Editorial opinions may not always align with those of the authors. Submitted materials will not be returned to the editorial office.

To publish articles in this journal, you may submit articles, advertisements, stories, and other creative materials through the following links. Materials and advertisements are published on a paid basis.

You may subscribe to the journal at any time using the following details. Once subscribed, please send a screenshot or photo of your payment confirmation to our Telegram page @iqtisodiyot\_77. Based on this, we will send the latest issue of the journal to your address each month.

**Our address:** Tashkent city, Yunusobod district, 19th block, House 17.

