

IMPROVING THE APPROACH TO ASSESSING THE ECONOMIC SUSTAINABILITY OF REGIONAL ENTERPRISES

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The results of the analysis of existing approaches to the selection of indicators and criteria for assessing the economic sustainability of regional enterprises show that a large number of different indicator systems are used. However, none of the approaches takes into account the innovation component, despite the growing role of the scientific and technical factor in the activities of regional enterprises. It is proved that the innovative attractiveness of enterprises is an important component of investment attractiveness, since investors associate the prospects of investment with innovations and invest in economically sustainable enterprises. Accordingly, the paper considers the innovation attractiveness of regional enterprises from the perspective of ensuring economic sustainability and defines it, unlike existing approaches, as the ability of an economic entity to ensure and maintain a high level of innovation activity over time. This approach involves the development of an innovation strategy and the implementation of innovative projects, contributes to building up the innovation potential, ensures and maintains high efficiency of innovation activities. To analyze the innovation attractiveness of enterprises, the economic sustainability of activities is structured by the following components – financial, social, production and technical, marketing, innovation, and indicators for their evaluation are proposed. It is proved that the number of indicators required to assess the innovation potential that can ensure the economic sustainability of enterprise activity should be limited by their practical applicability, the cost of development and obtaining information. The allocation of the innovation component ensures not only the fulfillment of complex production tasks in a changing environment of functioning of regional enterprises, but also contributes to the overcoming of the economic crisis with minimal consequences for them, since innovative solutions contribute to the optimization of production and use of resources, provide flexibility in terms of the realities of doing business. The proposed set of quantitative indicators, calculated on the basis of financial and statistical reporting data, allows to determine the economic sustainability of regional enterprises, taking into account their innovative attractiveness.

Key words: enterprise, region, economic sustainability, innovation activity, indicators, evaluation.

JEL Classification: L30, Q56, D04

Formulation of the problem. In the context of the global crisis, ensuring the sustainable development of domestic enterprises is of paramount importance. The study of the parameters of economic sustainability of enterprises is necessary for the formation of directions for improving the process of managing the functioning and development of enterprises under martial law. In modern business conditions of functioning, the issues of developing new concepts, methods and approaches to the strategic management of economic sustainability of an enterprise on the basis of its comprehensive assessment are becoming increasingly relevant. Assessment of economic sustainability consists in forming a set of actions by which it is possible to identify the dynamics and trends in changes over time of the indicators on the basis of which the performance of the enterprise under study is determined. At present, it is advisable, in our opinion, to study the existing methodological support for analyzing the level of economic sustainability of an enterprise, which consists of various tools and algorithms for analytical calculations.

Analysis of recent achievements and publications. In the modern economic literature, there is no clear defini-

tion of the concept of "economic sustainability", and there are different views on the set of indicators that allow it to be determined. These circumstances have led to a certain scientific interest in the study of this problem and its relevance. Many scientific works are devoted to the problems of substantiation of methodological tools and algorithms for assessing the economic sustainability of an enterprise. Thus, A.M. Braginets considers the indicators of economic sustainability as components of the enterprise's solvency [1]. Ulyanchenko O.V. considers its profitability to be a generalized indicator of economic sustainability of an enterprise [2]. Tridid O.M. distinguishes 16 indicators of sustainability, including the effect of financial leverage, financial independence ratios, return on equity, maneuverability of equity, etc. [3]. Dolzhansky I.Z. and Zahorna T.O. propose to define the sustainability of the economic state of an enterprise as the ratio of the value of tangible assets, working capital and the value of own and borrowed sources [6]. Paying tribute to all the analyzed scientific achievements of these economists, it should be noted that the current existing practice of assessing the economic sus-

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tainability of an enterprise requires a more detailed study, comparison and systematization in order to be able to group the methods used to obtain reasonable conclusions regarding the characteristics of the existing tools.

The **purpose** of this article is to develop a comprehensive methodology for assessing the economic sustainability of regional enterprises.

In accordance with this goal, the study sets the following tasks: to consider the need to develop an integrated approach to assessing the economic sustainability of regional enterprises, to substantiate the feasibility of including an innovation component in the system for assessing economic sustainability, to propose a set of necessary indicators for assessing economic sustainability.

Presentation of the main material. The large number of different approaches to assessing economic sustainability creates a lot of problems for analysts who are involved in determining the economic sustainability of an enterprise. The main one is that almost all existing approaches are aimed mainly at determining the creditworthiness of an enterprise rather than its economic sustainability. In addition, their mechanism does not take into account the dynamics of changes in such groups of indicators as profitability and business activity.

Therefore, in order to avoid the above problems, the following approach to a comprehensive final assessment of the economic sustainability of an enterprise is proposed.

The proposed final assessment takes into account the most important parameters (indicators) of the financial, economic and production activities of the enterprise, i.e. economic activity in general. In its construction, data on the production potential of an enterprise, profitability of its products, efficiency of use of production and financial resources, condition and allocation of funds, and their sources are used.

The main stages of the proposed approach to a comprehensive assessment of economic sustainability of an enterprise are:

1. Collection and analytical processing of initial information for the period under assessment.
2. Substantiation of the system of indicators used for the final assessment of the economic sustainability of the enterprise, their classification.
3. Evaluation of the economic sustainability of the enterprise on a four-point system: excellent, good, satisfactory, unsatisfactory.

An accurate and objective assessment of economic sustainability cannot be based on an arbitrary set of indicators. Therefore, the selection and justification of the initial indicators of financial and economic activity should be carried out in accordance with the achievements of the theory of enterprise finance, based on the objectives of the assessment, the needs of management entities in analytical assessment.

An analysis of various approaches to assessing the economic sustainability of enterprises [3] shows that their works do not include the innovative component of the economic sustainability of the enterprise. However, the need and importance of taking this component into account is obvious



Figure 1 – Structure of economic sustainability of an enterprise

for the current economic situation in our country. Therefore, for enterprises that introduce innovations in the process of carrying out their activities, it is advisable to supplement the existing components with an innovative one (Figure 1).

The expediency of choosing these components will be justified as follows. Each of these components plays an important role in ensuring the economic sustainability of regional enterprises. At the same time, there are close interrelationships between them, they mutually condition each other. Achieving the equilibrium state of one component is the starting point for the development of the other. For example, financial sustainability complements production and technical sustainability and can be considered as its derivative, and vice versa, only a financially sustainable enterprise has a real opportunity to increase production volumes, upgrade production facilities and pursue a high-quality assortment policy at the expense of its own working capital.

Determining the financial component of the economic sustainability of regional enterprises is important because it characterizes their solvency and the availability of funds for uninterrupted production and further development. The financial component ensures the fulfillment of all obligations of the enterprise to other enterprises, the state and employees of the enterprise itself as a result of the correspondence of its expenses and income. The indicators of the financial component reflect the liquidity and solvency of the enterprise and its independence from creditors.

The social component is appropriate because human resources are the main factor in the reproduction process. Labor resources are the most valuable resources of an enterprise: they create the means of production, set them in motion and constantly improve them. The availability of high-quality labor resources and their efficient use affect the increase in production and the improvement of business performance. Indicators of the social component of the region's enterprises characterize the level of labor organization in the region, as well as the efficiency of labor resources and labor movement.

Production is of paramount importance for the economy of the region's enterprises. Production costs and income from sales of manufactured products form the final

result of the region’s enterprises: profit or loss. In addition, production meets the demand of the population for products. Indicators characterizing the production and technical component should reflect the condition of the company’s fixed assets, the production process itself, the efficiency and rationality of the use of its fixed and current assets.

The innovative activities of the region’s enterprises affect both the economic and social, production and marketing sides of their sustainable development. Innovations in the social sphere of enterprises by improving working conditions and increasing the level of labor safety, activating the human factor, stimulate the creative activity of employees, improve staff qualifications and the level of professional training, and relieve social tension at the enterprise, which, as a result, increases labor efficiency and the interest of employees in the final result of their activities. Peter Drucker, a prominent marketing practitioner, said that there are two basic functions in business that can generate profit-marketing and innovation, and everything else is a cost. All functions in business are subject to two main ones-making money and satisfying customer needs. The concept of innovation marketing is the basis for market research and the search for a competitive strategy for the enterprise. The innovation marketing complex includes the development of an innovation strategy, market analysis and operational marketing. The development and intensification of modern production should be based mainly on new solutions in the fields of technology, engineering, organizational forms and methods of management, so innovation directly affects production activities.

Table 1 – System of indicators of economic sustainability of regional enterprises

Structural component of economic sustainability	Indicators
Financial sustainability	Equity to debt ratio
	Equity to current assets ratio
	Absolute liquidity ratio
	Current ratio (coverage)
	Autonomy (solvency) ratio
	Maneuverability ratio
	Financial stability ratio
Social sustainability	Staff stability ratio
	Labor productivity
	Labor capitalization
	Staff turnover rate
Production and technical sustainability	Capital efficiency
	Material efficiency
	Fixed assets serviceability ratio
	Turnover ratio of all current assets
	Costs per hryvnia of sales
Marketing sustainability	Profitability of production activities
	Profitability of products sold
	Return on equity capital
Innovation sustainability	Share of innovative products sold in total sales
	Innovation cost intensity ratio

Based on this structure (Figure 1), Table 1 proposes the following system of indicators to be used to assess the economic sustainability of regional enterprises.

The system contains a minimum necessary and sufficient set of indicators that are quantifiable. The source of data for the calculation of indicators is financial and statistical reporting, as well as internal reports and technical and production data of the business entity, which ensures the reliability, accuracy and objectivity of the information.

The system of indicators can be supplemented with other indicators, but excessive and unreliable data should be avoided.

This system of indicators contains the minimum necessary and sufficient set of indicators required to assess the economic sustainability of regional enterprises. The main advantages of using these indicators are that they reflect the efficiency of enterprises, it is easy to find information and data for their calculation, they are objective, accessible and understandable. It is advisable to consider these indicators in the dynamics for several years to trace their changes and the ability of enterprises to maintain their value at the desired level throughout their life.

For a preliminary assessment of the economic sustainability of an enterprise, the indicators should be divided into the first and second classes, which have qualitative differences (Table 2).

Thus, the first class includes indicators for which normative values have been determined. We have divided the indicators of the financial component of economic sustainability into two groups: liquidity indicators and financial sustainability indicators. At the same time, both a decrease in the values of the indicators below the normative values and their excess, as well as their movement in one of the above directions should be interpreted as a deterioration in the characteristics of the analyzed enterprise. Summarizing the above, we should distinguish several states of the first class indicators, which are presented in Table 3.

Table 2 – Indicators of preliminary assessment of economic sustainability

Indicators	Recommended value
Liquidity indicators	
1. Absolute liquidity ratio	0,2-0,5
2. Current liquidity ratio	1-2
Financial stability indicators	< 0,7
1. Debt to equity ratio	
2. Equity coverage ratio	0,1-0,8
3. Equity maneuverability ratio	0,2 – 0,5
4. Coefficient of autonomy	0,5 and above
5. Financial stability ratio	<1,0

Table 3 – Status of the first class indicators

Trends	Improvement in values	Values are stable	Deterioration of values
Compliance with regulations	1	2	3
Normal values I	I.1	I.2	I.3
Values do not meet the standards II	II. 1	II.2	II.3

The possible states shown in Table 3 can be characterized as follows:

condition I.1 – the values of the indicators are within the range of recommended normative values (hereinafter referred to as the "corridor"), but at its limits. An analysis of the dynamics of changes in the indicators shows that it is moving towards the most acceptable values (movement from the boundaries to the center of the "corridor"). If the group of indicators of this class is in state I.1, then the corresponding aspect of the financial and economic condition of the enterprise can be rated as "excellent";

condition I.2 – the values of the indicators are within the recommended limits, and the analysis of the dynamics shows their stability. In this case, for this group of indicators, the financial and economic condition of the enterprise can be defined as "excellent" (the values are steadily in the middle of the "corridor") or "good" (the values are at one of the limits of the "corridor");

condition I.3 – the values of the indicators are within the recommended limits, but the analysis of the dynamics indicates their deterioration (movement from the middle of the "corridor" to its limits). The assessment of the financial and economic condition aspect is "good";

condition II.1 – the values of indicators are outside the recommended limits, but there is an improvement trend. In this case, depending on the deviation from the norm and the pace of movement towards it, the financial and economic condition can be characterized as "good" or "satisfactory";

condition II.2 – the values of the indicators are consistently outside the of the recommended "corridor". The grade is "satisfactory" or "unsatisfactory". The choice of the grade is determined by the magnitude of the deviation from the norm and assessments of other aspects of the financial and economic condition;

condition II.3 – the values of indicators are outside the norm and are constantly is deteriorating. The grade is "unsatisfactory".

The second class of indicators includes non-normalized indicators, the values of which cannot be used to assess the efficiency of the enterprise and its financial and economic condition without comparing the values of these indicators with those of enterprises producing products similar to the enterprise's products and having production capacities comparable to the enterprise's capacities, or analyzing trends in the change of these indicators. This group includes indicators of social, production, technical, marketing and innovation components of economic sustainability.

For this group of indicators, it is advisable to rely on the analysis of trends in changes in indicators and identify their deterioration or improvement. Thus, the second group can be characterized only by the following states:

"improvement" – 1;

"stability" – 2;

"deterioration" – 3.

As you can see, the proposed system of indicators is based on the data from public reporting of enterprises. This requirement makes the assessment massive and allows all participants in the economic process to moni-

tor changes in the sustainability of the enterprise's economic condition. It also makes it possible to evaluate the effectiveness and objectivity of the integrated assessment methodology itself.

The division of the groups of indicators into two classes is largely arbitrary and is a concession to the insufficient development of the analytical tool under consideration. In order to obtain a more objective assessment of the economic sustainability of the enterprise, it is advisable to compare the states of the indicators of the first and second classes. This comparison is presented in Table 4.

Table 4 – Comparison of the states of the first and second class indicators

Status of first class indicators	Status of the second class indicators	Assessment
I.1 I.2	1	excellent excellent, good
I.3 II. 1	2	good good, satisfactory
II. 2 II.3	3	satisfactory, unsatisfactory unsatisfactory

Using such a comparison, it is possible to obtain both an average integrated assessment and comparable express assessments of the economic sustainability of enterprises in the region by individual groups of indicators.

At the same time, when deriving the final assessment of the economic sustainability of regional enterprises, the analyst should take into account the dynamics of the movement of absolute indicators of financial results, sales, costs, and the availability of reserves for the growth of economic sustainability of the enterprise.

Only after taking into account all of the above factors can we say that the assessment was carried out accurately and objectively.

Conclusions. Thus, the inclusion of the innovation component in a comprehensive approach to assessing economic sustainability is a prerequisite for ensuring the viability of regional enterprises. The variety of approaches to assessing economic sustainability causes certain difficulties in this process. Therefore, further research is needed to determine the indicators and criteria for each component of the economic sustainability of regional enterprises in order to develop an approach to its assessment in order to achieve sustainable development of enterprises in various industries. This area of activity can significantly improve the economic condition of the analyzed enterprises. Therefore, there is a need to develop a model for analyzing the innovation attractiveness in ensuring the economic sustainability of the machine-building enterprise, which will allow management to analyze in detail the innovation attractiveness of the enterprise and focus on investing in this area of activity. The practical benefit of creating the model will be the possibility of predicting the unstable state of the enterprise even before its occurrence with an increase in the volume of innovation costs.

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УДОСКОНАЛЕННЯ ПІДХОДУ ДО ОЦІНЮВАННЯ ЕКОНОМІЧНОЇ СТІЙКОСТІ ПІДПРИЄМСТВ РЕГІОНУ

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Результати аналізу існуючих підходів до вибору показників та критеріїв оцінювання економічної стійкості діяльності підприємств регіону свідчать про використання великої кількості різних систем показників. Проте, жодний з підходів не враховує інноваційний складник, незважаючи на зростаючу роль науково-технічного фактора в діяльності підприємств регіону. Доведено, що інноваційна привабливість підприємств є важливим складником інвестиційної привабливості, тому що інвестори пов'язують перспективи капіталовкладень саме з нововведеннями і здійснюють вкладення в економічно стійкі підприємства. Відповідно до цього в роботі інноваційну привабливість підприємств регіону розглянуто з позиції забезпечення економічної стійкості діяльності і визначено її, на відміну від існуючих підходів, як здібність господарюючого суб'єкта забезпечувати та зберігати у часі високий рівень інноваційної активності. Такий підхід передбачає розробку інноваційної стратегії та реалізацію інноваційних проектів, сприяє нарощуванню інноваційного потенціалу, забезпечує та зберігає високу результативність інноваційної діяльності. Для аналізу інноваційної привабливості підприємств структуровано економічну стійкість діяльності за такими складниками – фінансова, соціальна, виробничо-технічна, маркетингова, інноваційна та запропоновано показники для їх оцінювання. Доведено, що кількість показників, які необхідні для оцінювання інноваційного потенціалу, здатного забезпечити економічну стійкість діяльності підприємства, має обмежуватися їх практичною застосовністю, витратами на розробку та отримання інформації. Виділення інноваційного складника забезпечує не тільки виконання складних виробничих завдань в умовах змінного середовища функціонування підприємств регіону, а й сприяє виходу з економічної кризи із мінімальними наслідками для них, оскільки інноваційні рішення сприяють оптимізації виробництва й використання ресурсів, забезпечують гнучкість із погляду реалії ведення господарської діяльності. Запропонований набір кількісних показників, які розраховані на базі даних фінансової та статистичної звітності, дозволяє визначити економічну стійкість діяльності підприємств регіону з урахуванням їх інноваційної привабливості.

Ключові слова: підприємство, регіон, економічна стійкість, інноваційна діяльність, показники, оцінювання.

Стаття надійшла до редакції 13.11.2023
The article was received November 13, 2023

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