

ASSESSMENT OF THE ECONOMIC COMPONENT OF ENTERPRISE SUSTAINABLE DEVELOPMENT

Oksana Ovsak

Faculty of Transport, Management and Logistics
National Aviation University, Kyiv, Ukraine
<https://orcid.org/0000-0003-1725-8887>
ovsak@i.ua

Bohdan Ovsak

Faculty of Management and Marketing
Igor Sikorsky Kyiv Polytechnic Institute: Kyiv, Ukraine
<https://orcid.org/0000-0002-0361-0205>
ovsak.bohdan@gmail.com

Oleksandra Nazarenko

Faculty of Economics and Business Administration
National Aviation University, Kyiv, Ukraine
<https://orcid.org/0000-0002-7205-2948>
oleksandra.nazarenko@npp.nau.edu.ua

Abstract. The article is devoted to systematization of the methodological tools for assessing the economic component of enterprise sustainable development. The main attention in the study is paid to the methods of evaluation and indicators proposed on the basis of an analysis of the essential characteristics of enterprise development, in particular such as sustainable development. In the article, as a result, several approaches to its interpretation are defined and it is concluded that this is a category that allows to comprehensively characterize changes in the state, the specifics and components of activity, as well as the effectiveness of the activities of economic entities under the influence of time and factors of the internal and external environment. Based on the fact that sustainable development of the enterprise is a complex and multidimensional process that requires the use of an integrated approach and multidimensional vision of the components, the results of the analysis revealed a comprehensive, selective and fragmentary methodological approaches, according to which it is advisable to assess the economic component of sustainable development of the enterprise by such three groups of indicators as indicators that reflect the dynamics of changes in the results of the enterprise's activity with planned or previous periods data; specialized indicators - various coefficients; indicators of qualitative assessment of efficiency, in particular, the results of expert audits. A set of indicators for quantitative and economic evaluation of development efficiency, consisting of three sets, has been proposed. The first includes a list of quantitative indicators of development, economic indicators of development and financial stability, the dynamics of which is informative for drawing conclusions. Two other sets of indicators are designed to assess the effectiveness of management measures for the implementation of environmental conservation projects for the use of „green” resources, as well as the involvement of technologies that use recycling.

Keywords: economic development; sustainable development; economic indicator.

INTRODUCTION

The problem of ensuring the sustainable development of economic systems is in the epicentre of attention of the world scientific community. Great importance is given to this issue, first of all, in the developed countries, in which the implementation of the concept of sustainable development by enterprises is an important condition for belonging to the most progressive market participants.

Management of sustainable development of the enterprise in modern conditions is an extremely relevant direction of scientific research in academic circles and acquires special importance for representatives of the business environment.

As an object of scientific research, the problematic field of enterprise sustainable development attracts attention, first of all, due to its transdisciplinary nature. Its interpretation requires a synthesis of approaches and concepts of various disciplines - from theories of physiology, cybernetics, synergy of self-organization and theory of the firm to the psychology of strategic and corporate management. Among articles published on the issues devoted to issues ensuring enterprise sustainability were Bawono and Rahmana (2021), Bocken et al. (2015), Brychko et al (2015) and Mio et al (2020). The state of scientific knowledge in this subject area today should be recognized as weakly structured, and the synthetic nature of the phenomenon of the enterprise sustainable development and its management determines the existence of various approaches. This is due to the complexity of harmonizing the sustainable development goals set by the UN and adopted in the EU countries and other countries, with the commercial goals of functionalizing and developing business structures.

The purpose of current study is to systematize the methodological tools for assessing the economic component of enterprise sustainable development. The main focus of the study is on assessment methods, as well as performance indicators, which are proposed on the basis of an analysis of the essential characteristics of the development of the enterprise and such a specific type of it as sustainable development. The study of organizational features made it possible to recommend the appropriate sequence of strategic decisions on sustainable development of the enterprise.

MATERIALS AND METHODS

To achieve the above-mentioned goal of the study, a list of general and special methods of scientific knowledge was used, namely abstraction, analysis and synthesis, induction and deduction, aggregation and systematization. The methodological basis of the study was the dialectical method of cognition of socio-legal phenomena. In addition, a logical method was used to present all the material, make recommendations and draw final conclusions; systematic approach to study methodological approaches to assessing the effectiveness of sustainable development of the enterprise, including financial and economic indicators. In the context of the study of economic and legal components to ensure the achievement by the enterprise of sustainable development goals. The materials selected for study and analysis methods used were aimed at providing a holistic understanding of the multidimensional category „sustainable development of the enterprise” and the corresponding methodological

support for evaluating efficiency, including groups of indicators that are available to enterprise management and other stakeholders

RESULTS AND DISCUSSION

When considering such a category as „enterprise development,” they usually mean qualitative, quantitative, dynamic, transformational, process, adaptation, combined and complex development of the enterprise (Mio et al., 2020). Some of the presented types can be attributed to those that reveal directly the essence of the development of the enterprise, while others more characterize the consequences, or the results of changes in the activities of the enterprise. The latter include the development of qualitative, quantitative, as well as adaptive, complex and combined. Accordingly, such features as process, transformation and dynamic reveal the essence of the changes that took place in the enterprise (Fig. 1).

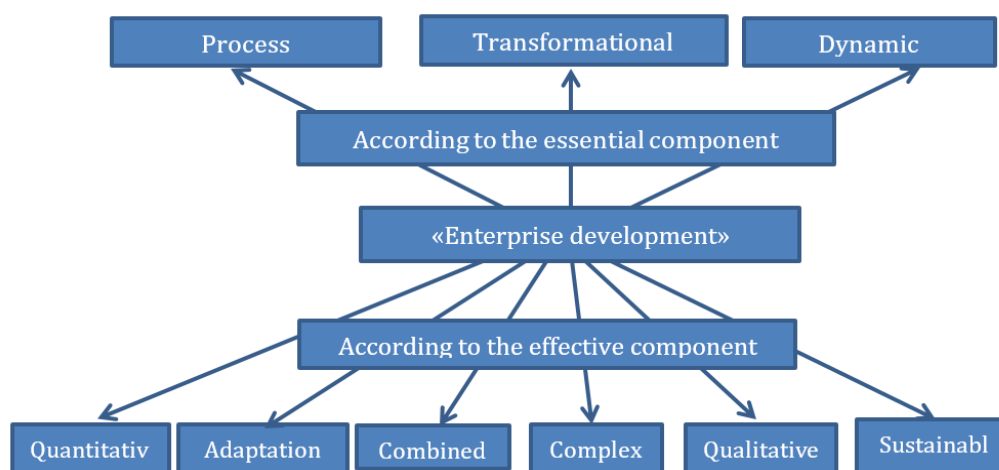


Figure. 1 - Approaches to the interpretation of the category „development of the enterprise”

Qualitative development of the enterprise is a consequence of certain changes in the quality parameters of the enterprise. Among the latter, special attention should be paid to such a qualitative assessment as the impact of the enterprise’s activities on the environment and the enterprise’s contribution to the formation of the opportunity for future generations of society to live in clean environmental conditions. This issue was embodied in the 17 Sustainable Development Goals formulated by the UN (The 17 Goals of Sustainable Development). Therefore, to differentiate types of enterprise’s development it is appropriate to include separately such a qualitative characteristic as sustainable development. In turn, the quantitative characteristics of indicators characterize the quantitative development of such a socio-economic system as an enterprise. Accordingly, combined development is a consequence of changing a number of qualitative and quantitative parameters that characterize the results of the enterprise’s activities.

Sustainable development as category consists of environment, social and economic components, as it has been considered in detail by Bawono and Rahman (2021).

As is was pointed out by Mio et al (2020), the top management of the enterprise must make

a reasonable choice of development strategy. It is important to consider that development strategies naturally carry risks, and during their formation and implementation, attention should be paid to the prevention of negative impact. Factors that can cause negative consequences include the following:

- inconsistency with the external conditions of market development;
- the risk of losses due to devaluation of assets during rapid growth;
- decrease in performance indicators;
- loss of control over risks;
- excessive investments, including their low efficiency;
- inconsistency of the structure of the production system with the potential scale of activity;
- reduction of management capabilities, etc.

Effective enterprise' development management can be ensured with the help of various tools, but some of them are especially important for achieving success. Below there are some key aspects of it:

1. Qualitative planning: this includes defining the purpose, strategy and goals of the enterprise, as well as creating an action plan to achieve them.
2. Effective financial management: this means planning, control and analysis of the financial activities of the enterprise, in particular budgeting, cash flow management, optimization of tax obligations and investments.
3. Smart management of resources: this includes the effective use of human, material and financial resources of the enterprise
4. Process management: This means ensuring the efficiency of production, marketing and sales processes, quality assurance and process improvement based on data analysis.
5. Monitoring and analysis: this means constant tracking of the results of the enterprise's activities and their analysis in order to improve processes and achieve higher performance indicators.
6. Development and innovation: this means creating new products and services, attracting new customers and expanding sales markets.
7. Effective communication: This means maintaining open and trusting communication between different levels.

Conducting an assessment of the enterprise development belongs to the category that have to use a comprehensive approach and a multidimensional vision of the components. This is explained by the fact that often, due to the lack of formalized results, it is technically difficult to carry out a quantitative assessment of the effectiveness of management decisions. In addition, categories such as „management“, „performance“ and „development“ have different evaluation dimensions. The assessment of „development“ should be based on such components as the time interval, achievable goals, involved resources, at the same time, the effectiveness of development can be assessed according to certain target areas and areas of activity of the enterprise that have acquired their development.

To assess the effectiveness of enterprise development management, the company's management can apply the following three methodological approaches: complex, selective and fragmentary. In accordance with the integrated approach, the assessment of the

effectiveness of the entity is carried out within a certain set or complex of individual components of the activities of such an enterprise.

In accordance with the above methodological approaches to the organization of the process of enterprise development assessment, we recommend the following groups of indicators to conduct the evaluation:

- indicators that reflect the dynamics of changes in the results of the enterprise's activity, as well as a comparison of actual results with planned or values for previous periods;
- specialized indicators that make it possible to evaluate the effect of implemented measures (various coefficients);
- indicators of efficiency's qualitative assessment, in particular, the results of expert audits.
- systems of balanced indicators, which should be formed depending on the characteristics of the enterprise.

Summarizing the above, Figure 2 systematizes the methodical components of evaluating the economic component of enterprise sustainable development.

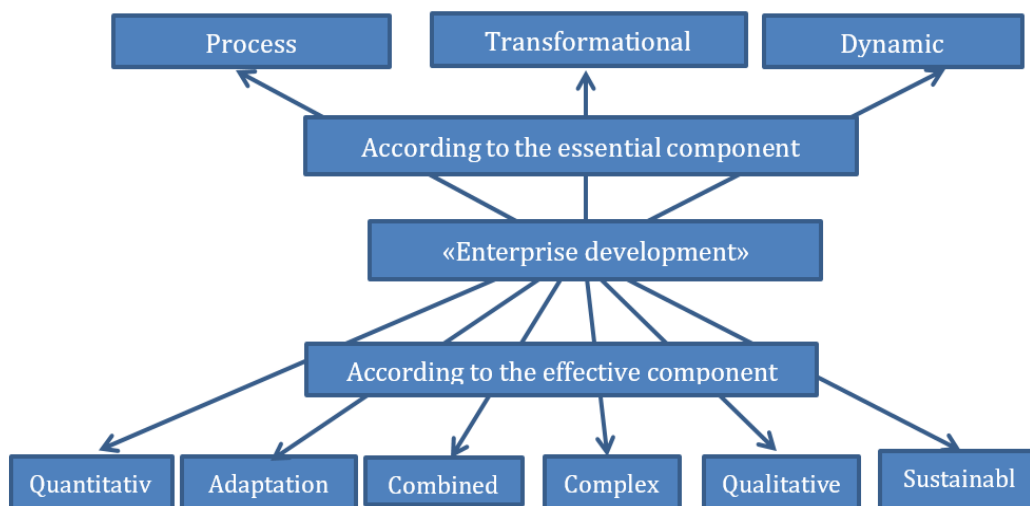


Figure 2 - Methodological components of evaluating the economic component of enterprise sustainable development

It should be noted that the autonomy of economic and social efficiency is relative, as they are interconnected. In ensuring the harmonious functioning and development of the enterprise, they play unequal roles: social efficiency acts as a generalizing, final and main element, while economic efficiency is primary and enters into this process.

The complexity of the problem of assessing the component of an enterprise sustainable development lies in the multifaceted and polyphonic nature of this concept, which implies a series of words: development, increase, improvement, life, prosperity, sustainable viability. It is necessary to understand each of these concepts, to define the dominant criteria for their presence, to develop evaluation methods that are accessible and understandable at every level of enterprise management. Summarizing the above vision, figure 3 presents the performance indicators of the economic development of the enterprise, which can be used to evaluate the activities of enterprises with different formats of business organization.

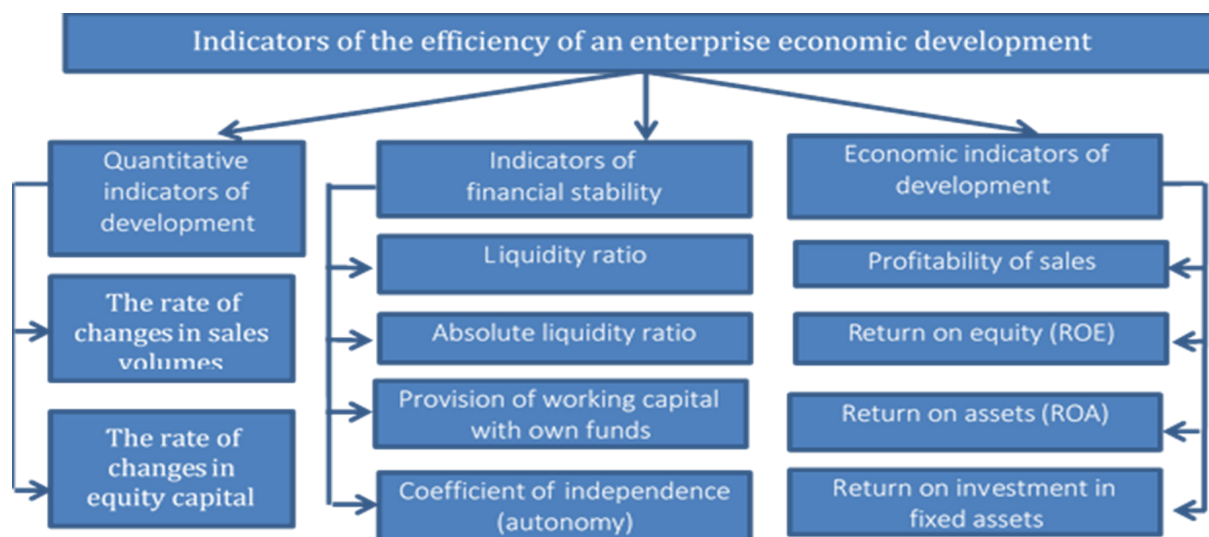


Figure 3 - Performance indicators of the enterprise' economic development

The positive dynamics of indicators for a certain period indicates the effectiveness of making certain managerial decisions on the development of the enterprise. Therefore, in the block of quantitative indicators of the state of development of the enterprise, the rates of changes in sales and in equity are presented. Accordingly, a positive conclusion about the development of the enterprise should be approved when the rate of changes is greater than 1.

The table 1 presents a set of indicators that can be used to assess the level of profitability of the enterprise, the values of which should grow with the positive dynamics of its development. The positive dynamics of liquidity and financial stability indicators confirms the existing stability of the enterprise in terms of performance.

Formulas for calculating a group of indicators, the positive dynamics of which reflect the successful economic development of the enterprise, are presented in the table 1.

The next category of our research is „management of enterprise sustainable development”. It is worth mentioning of paying attention to the peculiarities of management mechanisms, which are aimed specifically at ensuring the development of the enterprise and to identify fundamental differences from the management of the functioning of the enterprise.

Based on the interpretation of the concept of „enterprise development”, the following vision of the concept of „enterprise sustainable development management” should be considered - it is a separate block of general management processes at the enterprise, which, based on such elements as planning, organization and control, form a favourable environment for the accumulation of resource opportunities enterprises for the purpose of implementing improvements, innovations or innovations to increase the efficiency of the enterprise, the final result of which is the transition to a qualitatively new level of enterprise development, which should also be based on minimizing negative effect of the enterprise activity into the environment.

Table 1. Formulas for calculating enterprise performance indicators

Indicators	Calculation formula	Recommended value
The rate of changes in sales volumes	volume of products sold for the period under review / volume of products sold for the previous period	More than 1
The rate of changes in equity capital	equity for the period under review / equity for the previous period	More than 1
Liquidity ratio	Current assets / Short-term liabilities	2 and more
Absolute liquidity ratio	Cash and equity + Short-term finance investments / short-term liabilities	0,2 and more
Own working capital	Equity - Fixed assets	Positive value
Coefficient of security with own working capital	Own current assets / Current assets	More than 0,1
Coefficient of independence (autonomy)	Equity / balance sheet currency	0,5 and more
Return on equity	Net profit / Average annual amount of equity capital	Positive value
Return on assets	Net income / Average value of assets	Positive value
Profitability of sales	Net profit / Net income	Positive value
Return on investment in fixed assets	Net income from sold products / average annual cost of fixed assets	Positive value

This process has a cyclical nature, because at each subsequent level of development, new perspectives and prerequisites for the formation of a new system of goals appear. Various scientists in the context of the theory of enterprise development also paid attention to consideration of such concepts as sustainable, managed, organizational and balanced development. Therefore, by sustainable, we mean such development of the enterprise, which minimizes the negative impact of external and internal factors that affect both the environment and the socio-economic system - the enterprise, and is based on forecasting various market transformations and making timely management decisions. An important characteristic is the fact that over time the company must qualitatively and quantitatively improve its performance in environmental, social and economic components.

Figure 4 presents a diagram reflecting the sequence of strategic decision-making regarding the enterprise' sustainable development decisions.

Concerning stage 1 elements it can be detailed that it is up to top management of the company to determine financial and economic status of the enterprise as well as lists of internal and external factors affecting the enterprise, as well as harmful influences of the enterprise activities into the environment.

As for the identifying the ambitions of the owners and management regarding the sustainable development of the enterprise we can point out that there are also several general directive in force that are adopted to regulate these issues.

Therefore we considered the most important items that form the legal and organizational basis of regulation of sustainable development of enterprises. EU rules require large companies and listed companies to publish regular reports on the social and environmental risks they face, and on how their activities impact people and the environment.

The new EU directive modernizes and strengthens rules about social, environmental and governance information that companies must report. New rules apply to the first batch

of eligible companies from the financial year 2024, with reports to be published in 2025 (Corporate Sustainability Reporting Directive).

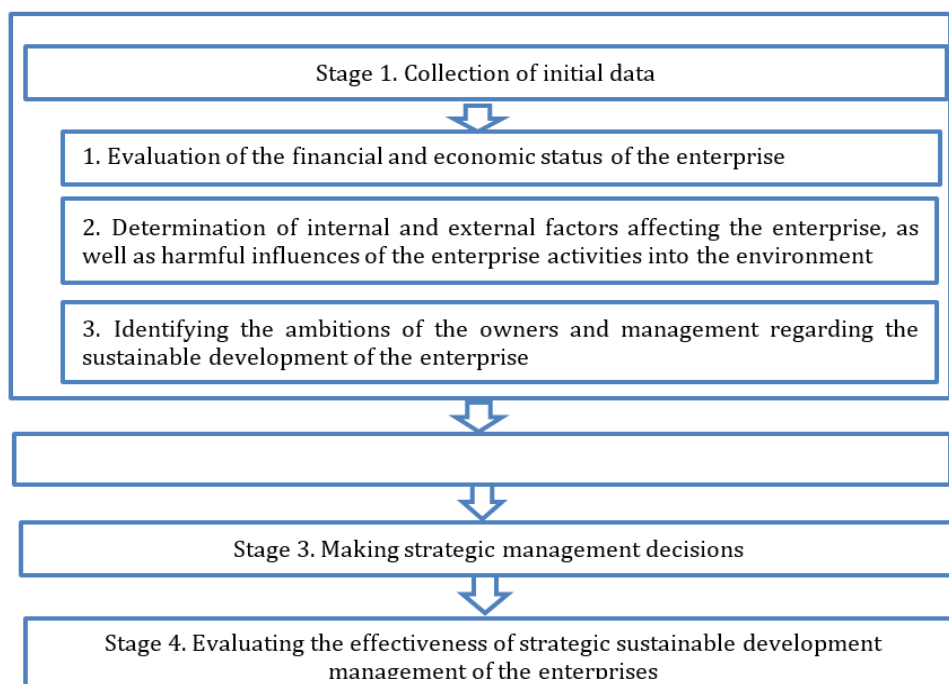


Figure 4. The sequence of making strategic decisions regarding the sustainable development of the enterprise

As for the identifying the ambitions of the owners and management regarding the sustainable development of the enterprise we can point out that there are also several general directive in force that are adopted to regulate these issues. Therefore we considered the most important items that form the legal and organizational basis of regulation of sustainable development of enterprises. EU rules require large companies and listed companies to publish regular reports on the social and environmental risks they face, and on how their activities impact people and the environment. The new EU directive modernizes and strengthens rules about social, environmental and governance information that companies must report. New rules apply to the first batch of eligible companies from the financial year 2024, with reports to be published in 2025 (Corporate Sustainability Reporting Directive).

CONCLUSION

„Enterprise Development“ is a multidimensional category that allows you to comprehensively characterize changes in the state, specifics and components of activity, as well as the effectiveness of the activities of business entities under the influence of time and factors of the internal and external environment. In its turn, sustainable means such development of the enterprise, which minimizes the negative impact of external and internal factors that affect both the environment and the socio-economic system - the enterprise, and is based on forecasting various market transformations and making timely management decisions. An important characteristic is the fact that over time the company must qualitatively and quantitatively improve its performance in environmental, social and

economic components.

Assessing the effectiveness of enterprise development is a complex task, the solution of which requires employing an integrated approach and a multidimensional vision of its components: the external environment, social and economic. To assess the economic component of sustainable development, it is advisable to use such methodological approaches as complex, selective and fragmentary and calculations indicators that 1) reflect the dynamics of changes in the results of the enterprise's activity with planned or previous periods data; 2) specialized indicators - various coefficients; 3) indicators of qualitative assessment of efficiency, in particular, the results of expert audits. The first group of indicators includes a set of quantitative indicators of development, economic indicators of development and financial stability, the dynamics of which is informative for drawing conclusions. Thus, the positive dynamics of quantitative and economic indicators for a certain period of time acknowledges the effectiveness of a certain managerial decisions on the enterprise development. In its turn, the positive dynamics of liquidity and financial stability indicators confirms the existing stability of the enterprise in terms of performance. Two other proposed groups of indicators will be used to assess the effectiveness of management measures to attract environmental conservation projects, namely those that use of „green” resources as well as the involvement of technologies that use recycling.

REFERENCES

- Bawono, A., & Rahmana, F. (2021). Sustainable development toward sustainable enterprise. *Management Science Letters*, 11(2), 657-668. <https://doi.org/10.5267/j.msl.2020.9.001>
- Bocken, N. M. P., Rana, P., & Short, S. W. (2015). Value mapping for sustainable business thinking. *Journal of Industrial and Production Engineering*, 32(1), 1-15. <https://doi.org/10.1080/21681015.2014.1000399>
- Brychko, M., Bilan, Y., Lyeonov, S., & Streimikiene, D. (2015). Do changes in the business environment and sustainable development really matter for enhancing enterprise development? <https://doi.org/10.1002/sd.2410>
- Corporate Sustainability Reporting Directive (CSRD). (n.d.). Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464>
- European Green Deal. (n.d.). Retrieved from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en
- Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. <https://doi.org/10.1002/bse.2568>
- The 17 Goals of Sustainable Development. (n.d.). Retrieved from <https://sdgs.un.org/goals>