

**FINANCIAL ANALYSIS OF THE SUSTAINABLE DEVELOPMENT  
OF A SMALL BUSINESS SUB-INDUSTRY****Panchenko O.M., Kosenko V.V.***National University "Zaporizhzhia Polytechnic"  
Ukraine, 69063, Zaporizhzhia, Zhukovsky str., 64*

kafedra\_oblik@zntu.edu.ua

ORCID 0000-0002-5357-8039, 0000-0002-8069-9784

**Key words:**

financial analysis, the activity of small business entity, financial sustainability, sustainable development, managerial decisions, assumptions about business continuity.

The article deals with the use of financial analysis methods in ensuring the sustainable development of a small business entity. The concept of sustainable development of a small business entity has been described and characterized. The sustainable development of a small business entity has been defined as an interconnected set of mutually agreed changes in the economic, environmental, social and other subsystems of an enterprise due to the influence of various factors of the external and internal environment, taking into account existing and future needs. Three layers of small business entities have been identified: small business against poverty; traditional (stable) small business, tigers of small business. The feasibility of applying different approaches in conducting financial analysis for representatives of different layers of the small business sector depending on the specifics of management has been substantiated. For the first anti-poverty group, the analysis of indicators is crucial, characterizing the growth of the well-being of business owners in monetary and non-monetary form. For the second group, the analysis should focus on the assessment of business activity, taking into account the risks of competitiveness. To analyse the activities of the third group of companies, attention has been paid to indicators that reflect the factors of the impact of innovation on financial sustainability. It has been proposed to analyse the ability of a small business entity to develop sustainably by a group of financial indicators in five stages. The main task of this analysis is to characterize the causes of changes in the financial condition of the studied enterprise in order to create opportunities for change management. Therefore, the result of an analysis of the ability of a small business entity to develop sustainably should be the generation of forward-looking financial statements.

**ФІНАНСОВИЙ АНАЛІЗ У ЗАБЕЗПЕЧЕННІ СТАЛОГО РОЗВИТКУ  
СУБ'ЄКТА МАЛОГО ПІДПРИЄМНИЦТВА****Панченко О.М., Косенко В.В.***Національний університет «Запорізька політехніка»  
Україна, 69063, м. Запоріжжя, вул. Жуковського, 64***Ключові слова:**

фінансовий аналіз, діяльність суб'єкта малого підприємництва, фінансова стійкість, сталий розвиток, управлінські рішення, припущення про безперервність діяльності.

Розглянуто питання використання методів фінансового аналізу в забезпеченні сталого розвитку суб'єкта малого підприємництва. Розкрито та схарактеризовано поняття сталий розвиток суб'єкта малого підприємництва. Сталий розвиток суб'єкта малого підприємництва визначено як взаємопов'язану сукупність узгоджених між собою змін в економічній, екологічній, соціальній та інших підсистемах підприємства, зумовлених впливом різних факторів зовнішнього та внутрішнього середовища з урахуванням існуючих та майбутніх потреб. Виділено три прошарки суб'єктів малого бізнесу: малий бізнес проти бідності, традиційний (стабільний) малий бізнес, «тигри» малого бізнесу. Обґрунтовано доцільність застосування різних підходів при проведенні фінансового аналізу для представників різних прошарків сектора малого підприємництва залежно від специфіки господарювання. Для першої групи «проти бідності» визначальним є аналіз показників, який характеризує приріст добробуту власників бізнесу в грошовій та негрошовій формах. Для другої групи при проведенні аналізу основну увагу слід приділяти оцінці показників ділової активності з урахуванням ризиків конкурентоспроможності. Для аналізу діяльності третьої групи підприємств увагу приділяють показникам, які відображають фактори впливу інновацій на фінансову стійкість. Запропоновано застосовувати аналіз здатності суб'єкта малого підприємництва до сталого розвитку за окремими групами фінансових показників в п'ять етапів. Головним завданням такого аналізу є характеристика тенденцій змін фінансового стану досліджуваного підприємства для створення можливостей для управління змінами. Тому результатом аналізу здатності суб'єкта малого бізнесу до сталого розвитку повинно бути формування прогностичної фінансової звітності.

### Statement of the problem

In the current conditions of economic reforms and European integration processes, Ukrainian small business entities need to constantly change their business activities to operate and maintain competitiveness in the domestic and global markets. The impact of changes on the life cycle of an enterprise is no longer considered an exceptional phenomenon. Modern enterprise in a specific period of existence represents a certain balance of processes of change and relative stabilization. Moreover, its ability to adapt to the changing factors of the external and internal environment is seen as a key factor in the development of a modern enterprise. According to X. Wissem [1, pp. 18-19], now a new paradigm - "conservation through development" has come to replace the old concept of "... first conservation, then development".

In the dictionary of synonyms of the Ukrainian language [2] the term "development" is synonymous: development, growth, growth process, swing, flourishing, prosperity, movement, progress, progress. In general, "the development process is directly related to the increase in the degree of efficiency, improvement of business processes or management, resulting in a quantitative or a qualitative increase in the useful result compared to the previous level" [3]. At the same time, the development of the enterprise must be stable, i.e. stable and continuous. "Stability" (from Latin *stabilis*) means "strength, immutability, bringing to a constant, stable state or maintenance of this state, as well as the state of constancy, stability" [4, p.750].

Sustainable development of an enterprise is characterized by an interconnected set of changes in the economic, environmental, social and other subsystems of the enterprise, caused by the influence of various environmental factors, which, firstly, lead to the transition of the enterprise from one relatively stable state to another; secondly, it implies its ability to successfully overcome the manifestations of revolutionary, catastrophic change; thirdly, the volumes of use of resources, resources, directions of investment investments, directions of innovation and technical development and institutional changes are consistent with each other and the needs that are foreseen for the future.

Consequently, the implementation of sustainable development mechanisms for a small business entity in the harsh changing market environment requires consideration of potential economic risks. This is necessary for the proper preparation and implementation of management decisions, in particular by means of a reliable, complete, appropriate assessment of the financial condition of a small business. Such information on performance indicators of the enterprise will be provided by financial analysis. Therefore, the question of finding the optimal system of methods and techniques of financial analysis to create organizational capabilities for managing change, ensuring financial sustainability, is urgent for any enterprise, in particular, small, striving for sustainable development and be competitive.

### Analysis of recent studies and publications

Analysis of a wide range of scientific sources of financial analysis on various aspects of the problem under study

shows that the authors solve it from different scientific positions. Among the most important works of Ukrainian and foreign scientists, to which to some extent some aspects of scientific intelligence on the outlined problem are presented, are the following.

The problems of the use of analytical methods for managing the development of the enterprise are described in the works of such scientists as Penzenteilo [5], O.G. Sokil [6], A. Fatenok-Tkachuk [7] and others. Comparison of methods of analysis of the financial condition and financial stability used in a domestic and foreign practice are described in the works of M.Yu. Averina [8], M.P. Denisenko [9]. Some aspects of the application of the financial state analysis for the formation of the mechanism of sustainable development are described in works by Zamula [10], V.V. Nahaychuk [11]. Directions of analysis of firm stability by means of potential estimation are offered in the joint research of M. Steven, E. Bragg, D. Barton [12]. Methodical bases of estimation of efficiency of activity of the enterprises for revealing of the stability of their development are revealed in the work of A.V. Cherep [13]. At the same time, despite the considerable workload of scientists, the question of building an optimal system of financial analysis methods to provide organizational opportunities for managing changes in the economic activity of a small business entity remains unresolved.

### Objectives of the article

The purpose of the article is to provide scientifically sound proposals for the use of financial analysis methods for assessing the financial soundness to ensure the sustainable development of a small business entity.

### The main material of the research

The concept of financial sustainability is closely related to the principle of business continuity, one of the basic principles of accounting. The content of this principle is the assumption that an entity will continue to operate for the foreseeable future unless it has facts that indicate the intention and/or need for liquidation or the possibility of termination.

The assumption of continuity of activity of a small business entity in terms of accounting and accounting policy has the following consequences:

- a change in the composition of the owners of a small business entity will not entail significant changes in the organization and accounting system;
- the assets, capital, liabilities, income, and expenses of the small business entity must be valued in accordance with the principle of prudence (conservatism, materiality);
- costs that will generate revenue in the future must be capitalized;
- the small business entity must create reserves in accounting;
- the financial results should be distributed over the reporting periods;
- the uncertainty of many facts of the economic life of a small business entity must be taken into account;
- the reporting should be presented in regular and equal periods.

Against this background, before making an assessment of the financial soundness of an entity, it must be ensured that the financial statements and accounting data, as information sources for conducting financial analysis, are reliable and complete. This is accomplished through the continuity audit of the financial statements.

In accordance with ISA 570 “Continuity,” business continuity audits should be conducted to assure users that management decisions they make have a sound and objective basis in the form of financial statements. Thus, regular audits of the financial statements of a small business entity are an important factor in ensuring its sustainable development, since conducting financial analysis based on a misrepresented (or negligent, fraudulent) financial statement does not accurately assess the level of its financial soundness.

Regarding methods, a considerable number of scientific and methodological approaches have been developed to carry out financial analysis of an enterprise's activity in order to evaluate its financial stability, in particular, aggregate, coefficient, point, integral, factor, matrix, dynamic, etc. The choice of the specific approach and methods of financial analysis for assessing a small business entity's ability to sustainably depend on the tasks of the analysis. But, first of all, such a choice should be made taking into account the specifics of its economic activity.

Conditionally, there are three layers in the small business sector:

- small business against poverty is a micro-enterprise of small-scale artisans and traders, mostly single or the number of employees is very small;
- traditional (stable) small business are entities of small and medium-sized enterprises are legal entities, whose sustainable business is built in the traditional industries: trade, catering, entertainment, consumer services;
- small businesses, whose business is built on the introduction of new, breakthrough ideas, aimed at the use of high technologies. These SMEs, as a rule, have their own and seek new know-how, sometimes high-risk [14].

Not only are the representatives of these segments of the small business sector engaged in different activities, but they also operate in different market niches, so they need different approaches to assess the ability to sustainability.

For the first group, determining the growth of the well-being and cash flow of business owners, the ability to expand in the future to overcome poverty, will be crucial. Therefore, the focus should be on maintaining the desired level of profitability (profitability) and cash flow analysis.

For the second group, the key objective will be to revitalize business activity, which will increase the profitability of operations, and to control the risks to solvency in the context of fierce competition in traditional sectors of the economy. Research by R. Baumgartner and R. Rauter showed that sustainable business development can affect the efficiency and productivity of the manufacturing process, reduce environmental risks, mitigate negative social impacts, and improve business opportunities. The authors emphasize that maintaining sustainability requires an analysis of the interests (needs) and utility of the consumer company. The benefits of

sustainable development can be manifested in the form of improved economic performance (reduced costs or increased profits) or increased competitiveness [15].

The third group of small business entities is special and therefore the most difficult to assess for their sustainability. The fact is that the use of standard methods of financial analysis is not enough. The specificity of such enterprises in the need to take into account the innovation factor and the significant risks of uncertainty.

The innovation factor as a whole is one of the determining factors for sustainable development. T. Rantal's empirical study on how sustainability assessment affects the implementation of different types of innovation found that the more an entrepreneur appreciates financial (economic) sustainability, the greater the likelihood that he or she will embrace technological innovation, service innovation, and business model innovation. Moreover, a high appreciation of environmental sustainability reduces the contribution needed to drive technological innovation, and the more the entrepreneur appreciates institutional sustainability, the greater the likelihood of innovation in the business model [16].

Studies by S. Santelle and A. Zardini [17] show that there is a correlation between a small business entity's ability to sustainably develop, its financial performance and the social, economic and formal aspects of its activity that has a positive effect on corporate-competitive advantage reputation, customer satisfaction, and organizational commitment. When analysing a small business entity's ability to sustainably develop, it is necessary to apply the following indicators that characterize the relationship of financial performance with other aspects to analyse potential business opportunities.

From a business perspective, sustainable development can be described as “adopting business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, supporting and expanding the human and natural resources that will be needed in the future” [18].

Also, the choice of financial analysis methods depends on to whom the information will be submitted, that is, on the subjects (users) of the financial analysis. Subjects (users) of financial analysis are individuals and legal entities that need information about the activity of the company for decision making. In the results of the financial analysis a wide range of users is interested: business owners (receive dividends on invested equity); management (depending on the successful financial status depends on the share of the profit they receive over a salary); employees (depends on wages, bonuses, social benefits); banks, lending firms (interested in timely repayment of debt and interest payments); partners already dealing with the enterprise (suppliers) to determine for themselves the feasibility of further cooperation, terms of the conclusion of contracts, etc.; the state (the tax administration is interested in the timely payment of taxes in full) [9].

Therefore, according to the results of studying a wide range of scientific and methodological sources [5, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, etc.] we propose to analyse the ability of the subject small business to sustainable development in the following stages:

Step 1. Analysis of the dynamics of changes in the size and structure of the assets of the enterprise and sources of their formation for the analysed period, comparison of the obtained results with similar indicators of the main competitors and construction of a forecast of the trend of these indicators for the future;

Step 2. Analysis of the size and factors of changes in the indicators of financial independence, solvency, profitability and business activity of the enterprise during the reporting period, comparison of actual values of indicators with internal normative, average industry values of these indicators and the values of indicators of the main competitors;

Step 3. Use the analysis of the potential of a small business entity to determine at what stage (prosperity, stabilization, decline, crisis) their business is at. This may include monitoring: revenue per employee, analysis of the use of different machines and equipment, selling to one seller or the need for planned capital investments. It is important to check regularly that the organization does not spend too much on excess capacity, instead of maintaining the capacity levels to the maximum possible while maintaining some excess capacity for short-term growth. That is, a break-even analysis should form the basis of any proposal to change the underlying structure of a business;

Step 4. Analysis of indicators of the influence of innovative factor on the development of the enterprise, in particular: increase of income and profit due to the introduction of innovations, the value of cost savings due to innovations;

Step 5. Assessment of bankruptcy probability by selected models (Altman, Beaver, Taffler, etc.) and identification of risks that could threaten the deterioration of the financial situation in the future.

The result of the financial analysis should be the development of forecast financial statements, which

should reflect the expectations of the key financial indicators that characterize the sustainability of the small business entity. The assessment of the forecast is provided in the conclusions before the analysis.

### Conclusions

The concept of sustainable development of a small business entity is characterized, which is an interconnected set of mutually agreed with changes in the economic, environmental, social and other subsystems of an enterprise due to the influence of various factors of the external and internal environment taking into account existing and future needs.

It is reasonable to apply different approaches in conducting financial analysis for representatives of different layers of the small business sector, depending on the specifics of management. For the first anti-poverty group, the analysis of indicators is crucial, characterizing the growth of the well-being of business owners in monetary and non-monetary form. For the second group, which represents a traditional (stable) small business, the analysis should focus on the assessment of business activity, taking into account the risks of competitiveness. In order to analyse the activity of a group of small business tigers, particular attention should be paid to indicators that reflect the impact of innovation on financial sustainability.

The stages of analysing the ability of a small business entity to sustainably by individual groups of financial indicators are proposed. The main task of this analysis is to characterize the causes of changes in the financial condition of the studied enterprise in order to create opportunities for change management. Therefore, the result of an analysis of the ability of a small business entity to develop sustainably should be the generation of forward-looking financial statements.

### References

1. Vyssema, Kh. (2000). *Stratycheskyi menezhment y predprynymatelstvo: vozmozhnosty dlia budushcheho protsvetanyia* [Strategic Management and Entrepreneurship: Opportunities for Future Prosperity]. Moscow: FYNPRESS [in Russian]
2. Karavanskyi, S. (1993). *Praktychnyi slovnyk synonimiv ukrainskoi movy* [Practical Dictionary of Synonyms of Ukrainian Language]. Kyiv. Retrieved from [http://hohlopedia.org.ua/slovnyk\\_synonimiv\\_karavanskogo](http://hohlopedia.org.ua/slovnyk_synonimiv_karavanskogo). [in Ukrainian]
3. Afanasev, N. V., Rohozhyn, V. D., Rudyka, V. Y. (2003). *Upravlenye razvytyem predpriyatiya* [Management of the Enterprise's Development]. Kharkov: YNZhEK [in Ukrainian]
4. *Noveishyi slovar ynostrannykh slov y vyrazheniy* (2003). [The latest dictionary of foreign words and phrases]. Moscow: Sovremenniy lyterator [in Russian]
5. Putsenteilo, P.R. (2015). *Analychne zabezpechennia diialnosti pidpriemstva* [Analytic support of enterprises]. *Stalyi rozvytok ekonomiky - Sustainable development of economy*, 1, 168-174 [in Ukrainian]
6. Sokil, O. H. (2018). *Kontseptsiiia balansovoho metodu oblikovo-analychnoho zabezpechennia zvitnosti pro stalyi rozvytok silskohospodarskykh pidpriemstv* [The balance method' concept of accounting and analytical support of the agricultural enterprises' sustainable development reporting]. *Ekonomika ta derzhava - The economy and the state*, 7, 44 – 49, Retrieved from [http://www.economy.in.ua/pdf/7\\_2018/11.pdf](http://www.economy.in.ua/pdf/7_2018/11.pdf) [in Ukrainian]
7. Fatenok-Tkachuk, A. (2015). *Orhanizatsiia oblikovo-analychnoho zabezpechennia protsesu formuvannia stratehii rozvytku pidpriemstva* [Organization of Accounting and Analytical Support to the Process Development Strategy of the Company], *Ekonomichniy chasopys Skhidnoievropeiskoho natsionalnogo universytetu imeni Lesi Ukrainky - Economic Journal of Lesia Ukrainka Eastern European National University*, 2, 82 – 88, [in Ukrainian]
8. Averina, M. Iu. (2012). *Analiz ta otsinka finansovoho stanu pidpriemstva: shliakhy pokrashchennia* [Analysis and evaluation of the financial state of the enterprise: ways to improve]. *Aktualni problemy ekonomiky – Actual problems of the economy*, 9, 92 – 100 [in Ukrainian]

9. Denysenko, M.P., Zazymko, O.V. (2015). Osnovni aspekty otsinky finansovoho stanu pidpriemstv [The main aspects of evaluation of financial condition of enterprises]. *Ahrosvit - Agro-world*, 10, 52 – 58, Retrieved from [http://www.agrosvit.info/pdf/10\\_2015/10.pdf](http://www.agrosvit.info/pdf/10_2015/10.pdf) [in Ukrainian]
10. Zamula, I.V., Travin, V.V., Radinovych, N.O. (2017). Analiz finansovoho stanu pidpriemstv khlibopekarskoi haluzi yak osnova formuvannia mekhanizmiv yii staloho rozvytku [Analysis of the financial state of the bakery companies as the basis of forming mechanisms for its sustainable development]. *Efektivna ekonomika -Effective Economics*, 12, Retrieved from <http://www.economy.nayka.com.ua/?op=1&z=5960> [in Ukrainian]
11. Nahaichuk, V.V., Kovalchuk, N.Ye. (2017). Analiz finansovoi stiikosti pidpriemstv ta napriamy yii zabezpechennia [Analysis of financial stability of enterprises and directions of its providing]. *Visnyk Natsionalnoho universytetu «Lvivska politehnika». Serii: Menedzhment ta pidpriumnytstvo v Ukraini: etapy stanovlennia i problemy rozvytku - Journal of Lviv Polytechnic National University. Series of Economics and Management Issues*, 875, 71-76 [in Ukrainian]
12. Steven, M., Bragg, E., James, Burton (2012). *Accounting and Finance for Your Small Business*, Second Edition. New York: Wiley [in English]
13. Cherep, A. V., Siniekaieva, O. D. (2014). *Metodychni zasady otsinky efektyvnosti diialnosti pidpriemstv mashynobuduvannia [Methodical basis for evaluating the effectiveness of mechanical engineering enterprises]. Biznes Inform - Business Inform*, 4, 124 – 129 [in Ukrainian]
14. Panchenko, O. (2018). Improvement of the accounting policy of the small business enterprises in its transition to IFRS: investment and innovation aspects. *Technology audit and production reserve*, 5/4, 33-39.
15. Baumgartner, R.J., Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization *Journal of Cleaner Production*, 140, 81-92 [in English]
16. Rantalaa, T., Ukko, J., Saunilaa, M., Havukainenb, J. (2018). The effect of sustainability in the adoption of technological, service, and business model innovations. - *Journal of Cleaner Production*, 172, 46-55 [in English]
17. Cantele, S., Zardini, A. (2018). Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability–financial performance relationship. *Journal of Cleaner Production*, 182, 166-176 [in English]
18. *Business strategy for sustainable development: Leadership and accountability for the '90s*. International Institute for Sustainable Development: IISD, jointly with Deloitte & Touche; Business Council for Sustainable Development, Retrieved from [https://www.iisd.org/sites/default/files/publications/business\\_strategy.pdf](https://www.iisd.org/sites/default/files/publications/business_strategy.pdf) [in English]
19. Savytska, H.V. (2015). *Ekonomichniy analiz diialnosti pidpriemstva [Economic analysis of the enterprise's activity]*. Kyiv: Znannia [in Ukrainian]
20. Humeniuk, O. O. (2016) *Osoblyvosti provedennia analizu finansovoho stanu pidpriemstva [Peculiarities of conducting the analysis of financial condition of the enterprise]*. *Innovatsiina ekonomika - Innovative economy*, 7-8, 147 – 152[in Ukrainian]