

UDC 330.3

**Tsyhenko Anna**

*Postgraduate Student of the Department of Tourism and Hospitality  
O. M. Beketov National University of Urban Economy in Kharkiv*

**Цигенко Анна Юріївна**

*аспірант кафедри туризму та готельного господарства  
Харківського національного університету*

*міського господарства імені О.М. Бекетова*

ORCID: 0000-0002-1462-3538

## **ОЦІНКА КОНКУРЕНТОСПРОМОЖНОСТІ ПІДПРИЄМСТВА ASSESSMENT OF ENTERPRISE'S COMPETITIVENESS**

**Summary.** *The article analyzes the conceptual approaches to the formation of a system for ensuring the competitiveness of economic entities in the face of new challenges, taking into account the future prospects of economic development. An important element in the formation of competitiveness in martial law were not only indicators of efficiency of the enterprise, but also the type of activity. The article notes that construction companies are most relevant in the period of military conflicts and the postwar period. The construction industry is the basis for the formation of a system of restoration of peaceful life, restoration of residential, industrial, and later commercial real estate, material and technical base. Thus, the article assessed the competitiveness of construction companies in order to determine their potential to work in the new large, which is highly relevant. The main tasks of assessing the competitiveness of a construction company were identified as a set of factors that affect the final indicators (results) of the enterprise. The article proposes an algorithm for assessing the competitiveness of the enterprise by the method of in-depth analysis of the*

*financial and economic condition of insolvent enterprises. The main objectives of the analysis of competitiveness by the proposed method are the dynamics and currency structure of the balance sheet of the enterprise; sources of own funds; structure of accounts payable; asset structure; profitability of the enterprise. To fully analyze the competitiveness of the enterprise, the following indicators were calculated and conclusions were made on the impact of their change on the economic situation: autonomy ratio, financial stability ratio, working capital turnover ratio, working capital turnover time, inventory turnover ratio, inventory turnover time and others. The efficiency of the enterprise and its competitiveness are determined by rating based on a comprehensive analysis. The article proposes a comprehensive algorithm for assessing the competitiveness rating of construction companies based on data from financial and economic work and planning, which allows to ensure mobility, system, multifunctionality and integration of competitiveness assessment processes. The results of the study can be used by construction companies, customers, developers, investors, suppliers and other stakeholders engaged in construction activities.*

**Key words:** *competitiveness of the enterprise, enterprise, factors of competitiveness.*

**Анотація.** У статті проводиться аналіз концептуальних підходів до формування системи забезпечення конкурентоспроможності суб'єктів господарювання в умовах нових викликів з урахуванням подальших перспектив розвитку економіки. Важливим елементом формування конкурентоздатності в умовах воєнного стану стали не лише показники ефективності діяльності підприємства, але і вид діяльності. У статті зазначається, що найбільшу актуальність у період військових конфліктів та післявоєнний період мають будівельні підприємства. Галузь будівництва є основою формування системи відновлення мирного життя, відновлення житлової, виробничої, а згодом і комерційної нерухомості, матеріально-

технічної бази. Отже, у статті було проведено оцінку конкурентоспроможності будівельних підприємств з метою визначення їх потенційних можливостей до роботи у нових великих, що має високу актуальність. Основними завданнями проведення оцінки конкурентоспроможності будівельного підприємства було визначено сукупність факторів, які впливають на кінцеві показники (результати) діяльності підприємства. У статті запропоновано алгоритм проведення оцінки конкурентоспроможності підприємства за методом проведення поглибленого аналізу фінансово-господарського стану неплатоспроможних підприємств. Основними завданнями аналізу конкурентоспроможності за запропонованим методом є динаміка та структури валюти балансу підприємства; джерела власних коштів; структура кредиторської заборгованості; структура активів; прибутковість підприємства. Для повного аналізу конкурентоспроможності підприємства були проведені розрахунки наступних показників та зроблені висновки щодо впливу їх зміни на економічне становище: коефіцієнт автономії, коефіцієнт фінансової стабільності, коефіцієнт оборотності оборотних коштів, час обороту оборотних коштів, коефіцієнт оборотності запасів, час обороту запасів та інші. Ефективність діяльності підприємства та його конкурентоспроможність визначаються шляхом рейтингової оцінки на основі комплексного аналізу. У статті пропонується комплексний алгоритм оцінки рейтингового показника конкурентоспроможності будівельних підприємств на основі даних фінансово-господарської роботи та планування, що дозволяє забезпечити мобільність, системність, мультифункціональність та інтегрованість процесів оцінки конкурентоспроможності. Результати дослідження можуть бути використані будівельними підприємствами, замовниками, девелоперськими компаніями, інвесторами, постачальниками та іншими стейкхолдерами, які здійснюють свою діяльність у сфері будівництва.

**Ключові слова:** конкурентоспроможність підприємства, підприємства, фактори конкурентоспроможності.

**Formulation of the problem.** Issues of ensuring the competitiveness of enterprises are highly relevant, especially in the face of external challenges. Ensuring the competitiveness of enterprises has an economic nature, image component, an element of investment attractiveness, which determines the opportunities for the formation of financial stability and, accordingly, ensures work in the period of external challenges. An important element in the formation of competitiveness in martial law was not only indicators of the effectiveness of the enterprise, but also the type of activity. It should be noted that construction companies are most relevant in the period of military conflicts and in the post-war period. The construction industry is the basis for the formation of a system of restoring peaceful life, restoring residential, industrial, and later commercial real estate, material, and technical base. Thus, the assessment of the competitiveness of construction companies in order to determine their potential opportunities to work in new areas is highly relevant.

**Analysis of recent research and publications.** Issues of analysis of the competitiveness of the enterprise are highly relevant, as they are related to issues of economic growth, investment attractiveness, ensuring financial stability. Therefore, the works of many actors are devoted to this issue: Nepomnyashego O.M., Degtyara O.A., Ugodnikova OI, Yankovogo O.G., Solntseva S.O., Dmitrieva A.I., Kirchata I.M., Shershenyuka I.M., Sivachenko I. Yu., Kozaka Yu. G., Yekhanurova Yu. I., Latysheva, O., Rovenska, V., Smyrnova, I., Nitsenko, V., Balezentis, T. and Streimikiene, D., Todres, M., Cornelius, N., Janjuha-Jivraj, S. and Woods, A., Buckman, A.H., Mayfield, M. and B.M. Beck, S., Das, P., Perera, S., Senaratne, S. and Osei-Kyei, R., McCormack, K. and Rauseo, N., Xiang, G. and Wu, Y., Hassini, E. [1-12].

**The purpose and objectives of the study.** The aim of the article is to identify ways to assess the competitiveness of construction companies as an element of assessing the potential for effective action in the face of external challenges.

**Presenting main material.** The main tasks of assessing the competitiveness of a construction company are to determine the factors that affect the final indicators (results) of the enterprise, its investment attractiveness, and image component. Accordingly, these indicators determine the market position and the company's ability to further develop.

Different methods can be used in the analysis of competitiveness. The article proposes to apply the method of conducting an in-depth analysis of the financial and economic condition of insolvent enterprises. To use this method, it is necessary to analyze own and borrowed funds, balance sheet indicators, and the statement of financial performance.

The main tasks of the analysis of competitiveness by the proposed method are:

- dynamics and structure of the balance sheet currency of the enterprise;
- sources of own funds;
- the structure of accounts payable;
- asset structure;
- profitability of the enterprise.

The analysis should be carried out by comparing the total value of the enterprise's property by determining the balance sheet total. The independence of the enterprise from external sources is one of the important characteristics of the financial condition by calculating the coefficient of financial independence – formula 1:

$$K_{ind} = \frac{F_1 * line_{380}}{F_1 * line_{280}} \quad (1)$$

where,  $K_{ind}$  - coefficient of financial independence,

$F_1$  - independence of the enterprise from external sources,

The total amount of debt should not exceed the number of own sources of financing. Critical  $K_{ind} = 0,5$ . The greater the value of this indicator, the better its financial position (less dependence on external sources).

To determine financial stability, calculate the coefficient of financial stability, which is characterized by the ratio of own and borrowed funds.

$$K_{\text{financial stability}} = \frac{I}{(III+IV)} \quad (2)$$

where,  $K_{\text{financial stability}}$  - coefficient of financial stability,

I, III, IV – groups line of bookkeeper balance,

Normative value  $K_{\text{financial stability}}$  should be more 1. Since at the beginning and end of the period this figure is more than one - the company is financially stable.

To estimate the provision of the enterprise with its own funds, the coefficient of provision with its own funds is calculated. This ratio is calculated as the ratio of the difference between the volumes of sources of own and equated to them funds (minus articles: "Settlements with participants", "reserves for future expenses and payments", "Deferred income", "Restructured" debt ") and the physical value of fixed assets and other non-current assets to the actual value of working capital available to the enterprise.

$$K_p = \frac{(line_{380}-I)}{II_{result}} \quad (3)$$

where  $K_p$  - coefficient of provision

line 380 - line of bookkeeper balance,

I, II – groups' result line of bookkeeper balance,

The value of the coefficient of self-sufficiency should be more than 0.1. The company is not provided with its own funds and needs additional investment.

The data of the liabilities of the balance sheet "Current liabilities" are subject to analysis.

For analysis, we use the sections of the asset balance. The assets of the enterprise are studied both in terms of their participation in production, as well as in terms of assessing their liquidity. Participation in the production cycle of fixed assets, intangible assets, inventories and costs, funds are determined. At the same time, the most liquid assets of the enterprise are specified: funds on accounts, short-term securities, and the least liquid assets - fixed assets that are on the balance sheet of the enterprise and other non-current assets.

Own working capital is working capital. Working capital - the difference between the current assets of the enterprise and its short-term liabilities. That is, working capital is that part of current assets that are financed by own funds and long-term liabilities. The availability of working capital suggests that the company is able not only to pay its current debts but also has the financial resources to expand and invest.

$$W_{cap} = F_1 * (II - IV) \quad (4)$$

where, W cap - working capital,

F<sub>1</sub> - independence of the enterprise from external sources,

I, IV – groups' result line of bookkeeper balance,

Working capital is significant, so the company can pay its own current accounts and has the opportunity to invest in its further development and expansion.

The solvency of the enterprise is characterized by the size and maneuverability of its working capital. The next indicator that characterizes working capital is maneuverability of working capital. It characterizes the share of inventories in its total amount, ie determined by the ratio of inventories to the amount of working capital, because the amount of working capital is negative, and the company is not able to maneuver this capital.

An important indicator of the solvency of the enterprise is the coverage ratio. It is determined by the ratio of all current assets (except for prepaid expenses) to short-term liabilities and characterizes the adequacy of the working capital of the enterprise to repay its debts during the year.

$$\text{coverage ratio} = \frac{\text{II}}{\text{IV}} \quad (5)$$

where, I, IV – groups' result line of bookkeeper balance,

The coverage ratio shows how many monetary units of working capital are accounted for by each unit of short-term liabilities. The critical value of coverage ratio = 1. At coverage ratio <1 the company has an illiquid balance sheet.

An absolute or relative increase in working capital may indicate not only an increase in production or the effect of the inflation factor but also a slowdown in their turnover, which contributes to an increase in their mass.

To determine the trend of working capital turnover, the turnover ratio is calculated.

The turnover ratio of working capital is the ratio of revenue (gross income) from sales (excluding VAT and excise) F № 2 and the amount of working capital of the enterprise F № 1.

$$\text{ratio} = \frac{F_2 * (\text{string}_{010} - \text{string}_{015} - \text{string}_{020})}{\text{II result}} \quad (6)$$

where, F<sub>2</sub> - independence of the enterprise from external sources,

string 010, 015, 020 – string of bookkeeper balance,

II – group' result line of bookkeeper balance

At the beginning of the period, the turnover rate was not significant, ie the company operated inefficiently, but this figure increased and at the end of the period there is a positive trend.

The company needs considerable time to replenish its working capital. An important indicator of the efficiency of asset use is the turnover of inventories and the duration of one turnover of inventories.



The turnover ratio of inventories is defined as the ratio of the cost of goods sold to the average cost of inventories.

An important indicator of the company's liquidity is the absolute liquidity ratio, which characterizes the immediate readiness of the company to liquidate short-term debt and is defined as the ratio of the number of enterprise funds and short-term investments to the amount of short-term current liabilities.

$$K_{\text{short-term investments}} = \frac{F_1 * (\text{line}_{220} + \text{line}_{230} + \text{line}_{240})}{\text{line}_{620}} \quad (7)$$

where,  $K_{\text{short-term investments}}$  - short-term investments

$F_1$  - independence of the enterprise from external sources,

line 220, 230, 240, 620 - line of bookkeeper balance,

The company is not ready to eliminate debts, because both indicators at the beginning and end of the period are too small.

The profitability of the enterprise is characterized by the amount of profit and the level of profitability.

The level of profitability is defined as the ratio of profit from sales (P) to the cost of production of works, services (C):

$$P_{\text{rof}} = \frac{P}{C} * 100 \quad (8)$$

where,  $P_{\text{rof}}$  - profitability

P - profit from sales,

C - cost of production of works, services,

At the end of the period, the level of profitability increased, which is a positive factor in the economic situation of the enterprise.

In the process of profitability analysis, it is necessary to determine how the value of profit from sales changes during two periods, net profit - the level of profitability, to consider the factors that lead to their change.

The final rating takes into account all the important indicators that characterize the company. Its construction uses data on production potential,

profitability, the efficiency of production and financial resources, condition, and allocation of funds. The main sources of rating are public, statistical reporting of the enterprise. Rating assessment is based on a comprehensive approach to assessing the activities of the enterprise, it is comparative.

The calculation of the final indicator of the rating is based on the comparison of the analyzed periods for each indicator with the reference period, which has the best value for all comparable indicators.

The algorithm of comparative rating can be represented as a sequence of the following steps:

1. The initial data are presented in the form of a matrix  $(a_{ij})$ , where the rows are written numbers of periods  $j$ , and the columns - the numbers of indicators and.
2. For each indicator is the maximum value and is entered in the column of the conditional reference period  $(m + 1)$ .
3. The initial data of the matrix are standardized in relation to the reference period by the formula:

$$x_{ij} = \frac{a_{ij}}{\max_{ij} a_{ij}} \quad (9)$$

where  $a_{ij}$  – standardized indicators of the  $j$ -th period.

4. For each analyzed period, the value of its rating.
5. Periods are arranged (ranked) in descending order of rating.

Having calculated the values of the rating for each analyzed period, we arrange them in descending order of rating.

**Conclusion.** Analyzing the data obtained by determining the main indicators of economic activity, we can draw a number of conclusions. To fully analyze the competitiveness of the enterprise, the following indicators were calculated and conclusions were made on the impact of their change on the economic situation: autonomy ratio, financial stability ratio, working capital turnover ratio, working capital turnover time, inventory turnover ratio, inventory turnover time and others. Summarizing all the above, we can conclude that the

efficiency of the enterprise and its competitiveness are determined by a rating based on a comprehensive analysis.

### **Literature**

1. Непомнящий О.М., Дегтяр О.А., Угоднікова О.І. Концептуальні засади управління потенціалом розвитку підприємств: монографія // О.М. Непомнящий, О.А. Дегтяр, О.І. Угоднікова. Х.: ХНУМГ, 2018. 114 с.
2. Конкурентоспроможність підприємства : оцінка рівня та напрями підвищення [монографія / за заг. ред. О.Г. Янкового]. Одеса : Атлант, 2013. 470 с.
3. Солнцев, С. О. Управління конкурентоспроможністю підприємств в умовах марочної та немарочної конкуренції [Електронний ресурс] : монографія / С. О. Солнцев, К. В. Бажеріна, Г. М. Гребньов ; М-во освіти і науки України, Нац. техн. ун-т України «КПІ ім. Ігоря Сікорського». Електронні текстові дані. Київ : КПІ ім. Ігоря Сікорського, Вид-во «Політехніка», 2017. 204 с.
4. Конкурентоспроможність підприємства: навчальний посібник / І.А. Дмитрієв, І.М. Кирчата, О.М. Шершенюк Х.: ФОП Бровін О.В., 2020. 340 с.
5. Сіваченко І. Ю., Козак Ю. Г., Єхануров Ю. І. та ін. Управління конкурентоспроможністю підприємств : навч. посібник. К. : Центр навчальної літератури, 2006. 73 с.
6. Latysheva, O., Rovenska, V., Smyrnova, I., Nitsenko, V., Balezentis, T. and Streimikiene, D. (2021), "Management of the sustainable development of machine-building enterprises: a sustainable development space approach", *Journal of Enterprise Information Management*, Vol. 34 No. 1, pp. 328-342. <https://doi.org/10.1108/JEIM-12-2019-0419>
7. Todres, M., Cornelius, N., Janjuha-Jivraj, S. and Woods, A. (2006), "Developing emerging social enterprise through capacity building", *Social*

Enterprise Journal, Vol. 2 No. 1, pp. 61-72.  
<https://doi.org/10.1108/17508610680000713>

8. Buckman, A.H., Mayfield, M. and B.M. Beck, S. (2014), "What is a Smart Building?", *Smart and Sustainable Built Environment*, Vol. 3 No. 2, pp. 92-109. <https://doi.org/10.1108/SASBE-01-2014-0003>
9. Das, P., Perera, S., Senaratne, S. and Osei-Kyei, R. (2021), "Developing a construction business model transformation canvas", *Engineering, Construction and Architectural Management*, Vol. 28 No. 5, pp. 1423-1439. <https://doi.org/10.1108/ECAM-09-2020-0712>
10. McCormack, K. and Rauseo, N. (2005), "Building an enterprise process view using cognitive mapping", *Business Process Management Journal*, Vol. 11 No. 1, pp. 63-74. <https://doi.org/10.1108/14637150510578737>
11. Xiang, G. and Wu, Y. (2012), "Enterprise's sustainable innovation in China: practice and theoretical research", *Chinese Management Studies*, Vol. 6 No. 1, pp. 92-107. <https://doi.org/10.1108/17506141211213807>
12. Hassini, E. (2008), "Building competitive enterprises through supply chain management", *Journal of Enterprise Information Management*, Vol. 21 No. 4, pp. 341-344. <https://doi.org/10.1108/17410390810888633>

### **References**

1. Nepomniashchyi O.M., Diehtiar O.A., Uhodnikova O.I. *Kontseptualni zasady upravlinnia potentsialom rozvytku pidprijemstv: monohrafiia* // O.M. Nepomniashchyi, O.A. Diehtiar, O.I. Uhodnikova. Kh.: KhNUMH, 2018. 114 s.
2. *Konkurentospromozhnist pidprijemstva : otsinka rivnia ta napriamy pidyvshchennia* [monohrafiia / za zah. red. O.H. Yankovoho]. Odesa : Atlant, 2013. 470 s.
3. Solntsev, S. O. *Upravlinnia konkurentospromozhnistiu pidprijemstv v umovakh marochnoi ta nemarochnoi konkurentsii* [Elektronnyi resurs] :

- monohrafiia / S. O. Solntsev, K. V. Bazherina, H. M. Hreblov ; M-vo osvity i nauky Ukrainy, Nats. tekhn. un-t Ukrainy «KPI im. Ihoria Sikorskoho». Elektronni tekstovi dani. Kyiv : KPI im. Ihoria Sikorskoho, Vyd-vo «Politekhnik», 2017. 204 s.
4. Konkurentospromozhnist pidpriumstva: navchalnyi posibnyk / I.A. Dmytriiev, I.M. Kyrchata, O.M. Shersheniuk Kh.: FOP Brovin O.V., 2020. 340 s.
  5. Sivachenko I. Yu., Kozak Yu. H., Yekhanurov Yu. I. ta in. Upravlinnia konkurentospromozhnistiu pidpriumstv : navch. posibnyk. K. : Tsentr navchalnoi literatury, 2006. 73s.
  6. Latysheva, O., Rovenska, V., Smyrnova, I., Nitsenko, V., Balezentis, T. and Streimikiene, D. (2021), "Management of the sustainable development of machine-building enterprises: a sustainable development space approach", *Journal of Enterprise Information Management*, Vol. 34 No. 1, pp. 328-342. <https://doi.org/10.1108/JEIM-12-2019-0419>
  7. Todres, M., Cornelius, N., Janjuha-Jivraj, S. and Woods, A. (2006), "Developing emerging social enterprise through capacity building", *Social Enterprise Journal*, Vol. 2 No. 1, pp. 61-72. <https://doi.org/10.1108/17508610680000713>
  8. Buckman, A.H., Mayfield, M. and B.M. Beck, S. (2014), "What is a Smart Building?", *Smart and Sustainable Built Environment*, Vol. 3 No. 2, pp. 92-109. <https://doi.org/10.1108/SASBE-01-2014-0003>
  9. Das, P., Perera, S., Senaratne, S. and Osei-Kyei, R. (2021), "Developing a construction business model transformation canvas", *Engineering, Construction and Architectural Management*, Vol. 28 No. 5, pp. 1423-1439. <https://doi.org/10.1108/ECAM-09-2020-0712>
  10. McCormack, K. and Rauseo, N. (2005), "Building an enterprise process view using cognitive mapping", *Business Process Management Journal*, Vol. 11 No. 1, pp. 63-74. <https://doi.org/10.1108/14637150510578737>

11. Xiang, G. and Wu, Y. (2012), "Enterprise's sustainable innovation in China: practice and theoretical research", *Chinese Management Studies*, Vol. 6 No. 1, pp. 92-107. <https://doi.org/10.1108/17506141211213807>
12. Hassini, E. (2008), "Building competitive enterprises through supply chain management", *Journal of Enterprise Information Management*, Vol. 21 No. 4, pp. 341-344. <https://doi.org/10.1108/17410390810888633>