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# FINANCIAL SECURITY OF ENTERPRISES AS A BASIS FOR FORMING THE COUNTRY'S INVESTMENT ATTRACTIVENESS

## ABSTRACT

The main purpose of the article is to research the financial security of enterprises as a basis for the formation of investment attractiveness at the micro and macro levels. The main indicators of the enterprises' financial security are studied as a basic prerequisite for ensuring investment attractiveness and competitiveness of both enterprises and the country as a whole. The trends of the main markers of the economic climate were analyzed and their impact on the main indicators of the Ukrainian enterprise's activity was assessed. The dynamics of the main financial ratios of the activity financing structure of Ukrainian enterprises by types of economic activity were studied, taking into account their role in ensuring financial security. An indicative scale for the analysis of the structure of activity financing has been substantiated and a model for assessing the enterprises' financial security level has been developed. A zoning matrix of enterprises' investment attractiveness was developed, taking into account the relationship between financial security levels and profitability. As a result of the approbation of the developed methodological toolkit, the financial security level of Ukrainian enterprises by types of economic activity and the justified zoning of their investment attractiveness in the conditions of expected changes in the economic climate in Ukraine were determined.

**Keywords:** financial security of enterprise, financial security level, profitability of activities, country's competitiveness, investment attractiveness

**JEL Classification:** D25, G30, E22, M21

## INTRODUCTION

The gradual joining of countries to the processes of globalization into the world economy is increasingly subject to the influence of external economic factors, which is inherent in all elements of the economic interdependence of countries. The main prerequisites for integration are the comparison of the country's market development levels, the joint solution of common problems, the desire to accelerate market reforms and not remain aloof from the integration processes taking place in the world economy.

Modern competitive relations between countries require an adequate response from national economies and their business entities in order to achieve investment attractiveness and competitive advantages in the international arena. The formation of the country's investment attractiveness and competitiveness depends on the effective internal interaction of business entities and the state, primarily in ensuring financial security. Obviously, the real sector development level of the economy depends on the financial security of enterprises.

Problems of enterprises' financial security affect any branch of the national economy. Therefore, the question of analyzing the external and internal factors of enterprises' financial security becomes especially relevant in view of the importance of its influence on the formation of investment attractiveness at the micro and macro levels.

The improvement of methodical approaches to enterprises' financial security management in the process of forming investment attractiveness is one of the key points in increasing the efficiency of the entire management process and ensuring the competitiveness of the enterprise in modern conditions. In turn, ensuring the enterprise's investment attractiveness is a key to the successful functioning of the economic system

as a whole, a prerequisite for the formation of the country's investment attractiveness, the foundation of its domestic and international competitiveness.

## LITERATURE REVIEW

Many authors analyze various aspects of financial security. Ahmad & Sabri (2014) described financial security as the state of having constant income or other resources to maintain a standard of living now and in the foreseeable future; Han (2018) investigated the relationship between financial internationalization and financial security; Giriuniene et al. (2019) evaluated the relationship between the country's financial and economic security.

The country's financial security considered in works: Reznik et al. (2020) as a component of its national security and as protection of the financial and economic interests against internal and external unlawful threats; Shkolnyk et al. (2020) on the based indicators, that characterize the development level of financial institutions, monetary market, stock market and public finance; Zaichko (2020) taking into account the impact of budget policy in banking, debt, currency, financial security, non-banking financial market, budget and monetary the security levels; Vaitkus & Vasiliauskaite (2022) from the standpoint of legislative regulation, in particular anti-corruption measures.

Delas et al. (2015) to determine the financial security of enterprises as one of major components of the national (economic) security of any country; Gonchar et al. (2020), Hrynyuk et al. (2021), Dokiienko (2021) propose to manage the enterprise's financial security from the point of view of their financial ability to resist possible risks and dangers. Tursunov (2020) also notes that ensuring financial security should be based not on the standpoint of a separate process, but on the system of interconnections of all processes that occur both within the enterprise and outside its boundaries in interaction with the external environment. While Ramskyi & Solonko (2018) consider financial security exclusively as a component of the economic security of the enterprise.

Therefore, today insufficient attention is paid to the assessment of the enterprise's financial security from the point of view of the influence of external and internal threats, as well as its impact on the country's competitiveness and investment attractiveness, which will be taken into account in this article.

The enterprise's financial security is also a determining factor, a prerequisite and a basis for the formation of a country's competitiveness. Country's competitiveness concerns are focused on the works of Mamuti (2013), Baibulekova et al. (2018), Dumitrasco (2018), Ponomarenko et al. (2018), Rusu & Roman (2018), Horbal & Khindiak (2020), Pavliuk & Noda (2020) and other. But, for the most part, these researches are based on the assessment of the country's overall macroeconomic performance and analysis of the components of the Global Competitiveness Index. They don't address the interrelationship and mutual impact of the enterprise's financial security and the competitiveness of national economies.

On the other hand, the financial security level is not only a determining factor in the competitiveness of the real sector of the national economy but also a major component of the external manifestation of a country's international competitiveness – its investment attractiveness. For example, Lyulyov & Moskalenko (2019), Trusova et al. (2020) link the country's investment attractiveness with foreign direct investment; Kostyrko et al. (2019), Ilyash et al. (2020) & Frolova et al. (2021) suggest evaluating the country's investment attractiveness based on the use of global ratings, such as the Global Competitiveness Index, Doing Business, Global Innovation Index and others.

To assess the investment attractiveness of the enterprise, most authors suggest using financial ratios, for example, Hrynyuk & Dokiienko (2021) highlight the financial ratios of financial stability, liquidity and profitability; Ilyash et al. (2020) add to them the financial ratios of business activity and property condition, Binda et al. (2020) add the schedule of break-even achievement.

Therefore, in recent years, studies of financial security from various positions are gaining more and more popularity. However, despite the significant number and diversity of scientific publications, which confirm the relevance of this research, the relationship between the enterprise's financial security and the country's competitiveness and investment attractiveness has not been sufficiently studied.

## AIMS AND OBJECTIVES

The purpose of the article is to research the current trends in enterprises' financial security as a basis for the formation of investment attractiveness at the micro and macro levels.

The main tasks of the research are:

- justification of the values of quantitative and qualitative indicators of the enterprise's financial security level, formed under the influence of two key components: activity financing structure and profitability level;
- development of a mechanism for determining the enterprise's financial security parameters based on mathematical methods of comparative and discriminant analysis;
- development of a system of models and matrices for determining the enterprise's financial security parameters on the scale "level – state – position – zone" as a basis for the formation of national investment attractiveness at the macro and micro levels;
- approbation of the proposed approach to determining the financial security on the example of Ukrainian enterprises by type of economic activity.

## METHODS

This research is based on two hypotheses:

- H1: the enterprise's financial security, which is ensured by the efficiency of its operation and is formed under the influence of two key components: activity financing structure and profitability level, serves as the basis for the formation of its investment attractiveness;
- H2: enterprises' financial security and investment attractiveness are the basis of the competitiveness and country's investment attractiveness formation as a whole.

The basis for assessing the enterprises' financial security level is the calculation of classical financial ratios, which characterize the activity financing structure (Table 1).

Table 1. Algorithm for calculating the main financial ratios of the activity financing structure.			
Indicators	Normative value	Equation	Legend
Financial autonomy ratio ( $R_{FA}$ )	>0.5	$C_{FA} = \frac{E}{TC}$	E – equity; TC – total capital; L – liabilities; LTL – long-term liabilities; STL – short-term liabilities; WC – working capital
Debt coverage ratio ( $R_{DC}$ )	>1	$D_C = \frac{E}{L}$	
Financial stability ratio ( $R_{FS}$ )	0.7-1.5	$C_{FS} = \frac{E+LTL}{TC}$	
Current ratio ( $R_C$ )	>2	$C_R = \frac{WC}{STL}$	

Assessment of the influence degree of the financial ratios of the activity financing structure on the components enterprise's financial security was carried out using the economic and statistical method, namely on the basis of determining the distance of the integral indicator of each coefficient of its reference value:

$$d(A_i, A_0) = \sqrt{\sum_{j=1}^m (x_{ij} - x_{0j})^2}, \quad i \in m, \quad (1)$$

where  $(A_i, A_0)$  – a comprehensive measure of the financing structure level of the  $i$ -th enterprise from the reference;  $x_{ij}$  – the value of the  $j$ -th indicator for the  $i$ -th enterprise;  $x_{0j}$  – the normative value of the indicator;  $m$  – the number of enterprises.

To determine the financial security level the authors have developed an indicative scale based on the values of the main financial ratios of the activity financing structure and their possible deviations from the well-known recommended standards:  $R_{FA} \geq 0.5$ ;  $R_{FS} \geq 0.75$ ;  $R_C \geq 2$ , the positive practice of their application is confirmed by the statistical results of numerous scientific studies over a long period. Taking into account the influence of each of the selected indicators of financial stability on the financial security of the enterprise, the nature of the financial situations that determine the degree of the enterprise's financing structure is determined by the sufficiency of the enterprise's own financial resources to meet its external financial liabilities. Deviation of the ratios within the three-component range from the proposed scale determines the financial security level of the enterprise within the range of the "absolute – normal – low" scale.

Two indicators were chosen as components of the assessment of the enterprises' profitability level: profitability of all activities and profitability of operational activities.

The assessment of the impact of an enterprise's financial security levels and profitability on investment attractiveness is based on the method of formalization, which became a fundamental basis in the authors' zoning matrix of investment attractiveness (Figure 1).

Depending on the relative enterprise's financial security levels and profitability, a quadrant is identified, which reflects the location of enterprises in possible areas of investment attractiveness: the positive value of the profitability level, combined with the values of the proposed scale of financial security levels, makes the following areas: zone of absolute investment attractiveness (with absolute FSL), zone of high investment attractiveness (with normal FSL), zone of potential investment attractiveness (with low FSL) and the negative value of profitability combined with the different financial security levels of enterprises determines their location in the following areas: zone of acceptable investment attractiveness (with absolute FSL), zone of satisfactory investment attractiveness (with normal FSL), zone of unfavourable investment unattractiveness (with low FSL).

<b>Model for assessing the enterprise's financial security level</b>			<b>Enterprise's investment attractiveness zones</b>	
			Activity efficiency zone	
The degree of financing structure (DFS <sub>v</sub> )	The content of the financial position (FP)	Financial security level (FSL)	Profitability	Loss
			↓	↓
I degree financing structure	$\begin{cases} R_{FA} > 0.5 \\ R_{FS} > 0.75 \\ R_C > 2 \end{cases}$	Absolute	Zone of absolute investment attractiveness (AB <sub>IA</sub> )	Zone of acceptable investment attractiveness (AC <sub>IA</sub> )
II degree financing structure	$\begin{cases} 0.25 \leq R_{FA} \leq 0.5 \\ 0.5 \leq R_{FS} \leq 0.75 \\ 1 \leq R_C < 2 \end{cases}$	Normal	Zone of high investment attractiveness (H <sub>IA</sub> )	Zone of satisfactory investment attractiveness (S <sub>IA</sub> )
III degree financing structure	$\begin{cases} R_{FA} < 0.25 \\ R_{FS} < 0.5 \\ R_C < 1 \end{cases}$	Low	Zone of potential investment attractiveness (P <sub>IA</sub> )	Zone of unfavourable investment attractiveness (U <sub>IA</sub> )

**Figure 1. Zoning matrix of enterprise's investment attractiveness based on the model for assessing the enterprise's financial security level.**

All enterprises of Ukraine, grouped by the types of economic activity, according to official information of the State Statistics Service of Ukraine, for the period 2013-2022 were selected for testing the proposed model.

## RESULTS

Financial security as an economic category is a complex, multifaceted and multilevel concept that has a significant impact on the defining characteristics of many modern phenomena and events. Financial security is a reflection of the degree of protection of national financial interests as a result of the activities of the State and society as a whole in the sphere of financial relations. Financial security (at the macro and micro levels) is an important prerequisite and a significant component of the competitiveness of the country's economy and its investment attractiveness. In a generalized form, financial security at the macro level is determined by the amount of financial resources and is characterized by the financial capabilities of the State to finance the entire spectrum of state expenditures. The external manifestation of financial security at the state level is the independence of the national financial and monetary system. Unfortunately, macro-financial indicators of Ukraine indicate the presence of long-term disparities in the country's national financial system (Table 2).

**Table 2. Macro-financial indicators of Ukraine in 2013-2022 years.** (Source: compiled by the authors based on [22, 30])

Indicators	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
State debt, UAH billion, total	480.2	947.0	1334.3	1650.8	1833.7	1860.3	1761.3	2259.2	2362.7	3715.1
– domestic debt	256.9	461.0	508.0	670.7	753.4	761.01	829.5	1000.7	1062.6	1389.7
– external debt	223.3	486.0	826.3	980.2	1080.3	1099.2	931.9	1258.5	1300.1	2325.4
State-guaranteed debt, UAH billion, total	104.6	153.8	237.9	278.9	308.1	308.2	236.9	292.7	309.3	357.7
– domestic debt	27.1	27.89	21.5	19.1	13.4	10.4	9.4	32.2	49.0	72.2
– external debt	77.4	125.9	216.5	259.9	294.7	297.8	227.6	260.4	260.3	285.5
State budget deficit, UAH billion	-63.6	-72.0	-30.9	-54.8	-42.1	-67.8	-87.3	-215.5	-197.9	-914.7
GDP nominal, UAH billion	1454.9	1566.7	1979.5	2385.3	2982.9	3558.7	3974.5	4194.1	5459.6	5191.0
GDP real, UAH billion	1410.6	1365.1	1430.3	2034.4	2445.6	3083.5	3675.7	3818.5	4363.6	3865.7
Government debt to GDP, %	40.1	60.0	67.0	69.0	61.0	52.3	44.3	53.9	43.3	78.4

Accordingly, the total state debt of Ukraine has increased almost fivefold in the past decade to a level of UAH 3715.1 billion, of which 62.6% is total external debt. It is worth noting the looming trends in the growth of external debt: over the research period, both the total external debt has increased almost sixfold, the publicly guaranteed external debt has increased almost fourfold, which, unfortunately, indicates a significant increase in the dependence of the country's economic policy on external financing.

The above-mentioned trends are particularly negative when compared to the state's GDP, having grown only 3.6 times, which is 2.9 times lower than the rate of growth of external debts. Structural public debt as a percentage of GDP, fluctuated between 40.1% and 74.8% over most of the analysis period (2014–2022), far exceeding the safe.

At the same time, against the background of increasing trends in the sources of financing of public expenditure, the constant deficit of the state budget, which during the analysis period was quite significant, is particularly negative. Although the structural deficit of the state budget as a proportion of GDP has shown a marked improvement, the pattern of long-term excess of expenditure over income in the state budget is indicative of the existing problems; the existence of imbalances, which in general may reflect the breakdown of the national financial system, poses a real threat to the financial security of Ukraine.

The national economy's financial security correspondingly affects the positioning of Ukraine in the world rankings (Table 3).

**Table 3. Dynamics of Ukraine's position in global rankings in 2013-2022 years.** (Source: compiled by the authors based on [6,14,31,35])

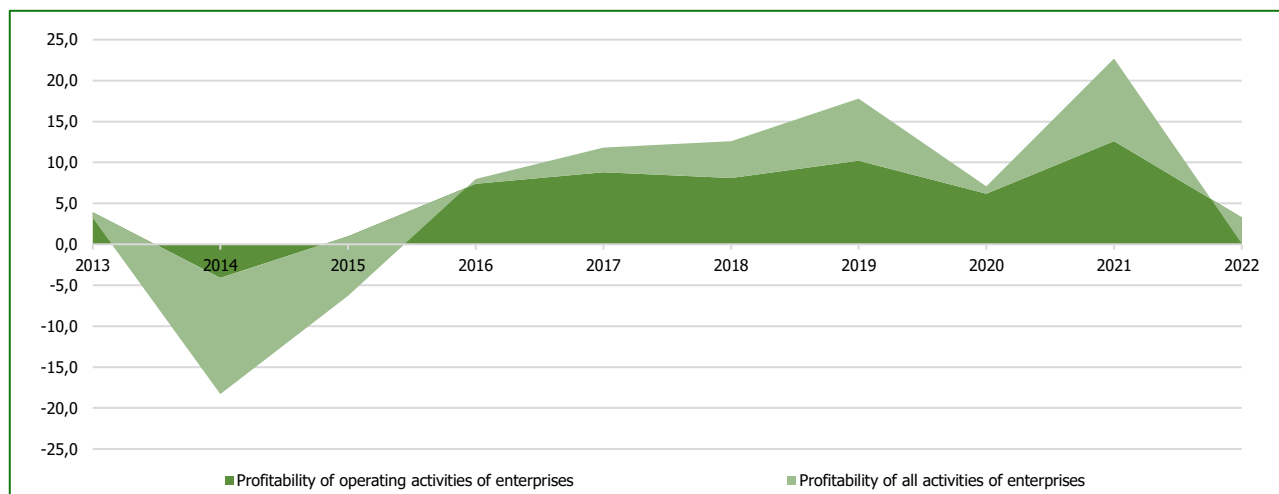
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1. Global Competitiveness Index	73	84	76	79	89	83	85	-	-	-
1.1. Competitiveness Ranking	-	-	-	-	60	59	54	55	54	-
2. Doing Business	140	112	87	81	80	76	71	64	-	-
3. Corruption Perceptions Index	144	142	130	131	130	120	126	117	122	116
4. Index of Economic Freedom	161	155	162	162	166	147	136	134	130	130

The importance of financial security, including the State's financial security level, is reflected in the dynamics of Ukraine's position in the global competitiveness index. Due to the above-mentioned negative trends in the national financial system, Ukraine has been in the second half of the list of countries for the last seven years and its position has fluctuated between 73 and 89 places. At the end of 2019, Ukraine fell to 85th place out of 141 countries, losing 12 positions compared to 2013, indirectly confirming its deteriorating financial security (World Economic Forum, 2019). The predominance of positive trends of other components (legal, law, general economic) has alleviated the negative impact of the state's financial problems, which enabled Ukraine to improve its position in other world rankings in 2020, Ranked 64 out of 190 countries,

2.2 times higher than in 2013 (The Doing Business, 2020) and 130 out of 181 countries in the Index of Economic Freedom, more 1.2 times better than at the beginning of the analysis period (Heritage Foundation, 2021). It is worth noting that the position of the State in the above-mentioned world rankings is not only a peculiar reflection of the place of the country in the modern economic environment but also a reflection of the external conditions of functioning of economic entities, among which one should especially emphasize Ukraine's state of war with Russia.

In turn, the most effective financial and economic interaction between the State and business entities is one of the fundamental principles of forming the foundations of financial security: the country's financial security is one of the main general prerequisites for ensuring the enterprise's financial security, and the effectiveness of financial security management at each level and for each component affects the overall level of national financial security (Dokienko et al., 2021).

The improvement of Ukraine's position in the indices of business conduct and economic freedom has had a corresponding impact on the financial results of enterprises, among which during the research period the share of profitable ones constantly grew: from 65% in 2013 year to 72.9% in 2021 year. However, despite a clear trend in the growth of enterprises that profited from activities, the share of unprofitable enterprises remains quite high: at the end of the 2021 year under analysis, it was 27.1%. It was precisely the increase in the proportion of enterprises that profited from activities that had a positive impact on the profitability of the activities of Ukrainian economic entities at the end of the 2021 year. However, with the beginning of Russia's full-scale military aggression against Ukraine, the situation acquired threatening negative trends, which was appropriately reflected in the above indicators: the share of unprofitable enterprises increased to 34.2%, the profitability of operating activity was 3.3% and all activity was unprofitable -3.2% (Figure 2).



**Figure 2. Profitability of operating and all activities of Ukrainian enterprises in 2013-2022 years, %.** (Source: compiled by the authors based on [30])

Due to the rather sharp increase in the share of profit-making enterprises during 2015-2019, it was during this time period that the relative performance of such enterprises began to increase, and cost-effectiveness indicators for general and operational activities were positive. Despite the almost identical rate of change of the above-mentioned indicators, the overall profitability at the end of 2019 was one-third lower than the operational rate, which is an indirect indication of certain problems with the effectiveness of other activities, which are prerequisites for the enterprise's financial security and the basis for their strategic development. Results of the enterprise's efficiency in 2020-2021 caused by the impact of the COVID-19 pandemic: the foreseeable consequence was a sharp decrease in the above indicators (especially the profitability of operating activities) during 2020. But, in the next 2021, the values of the indicators exceeded the "prior year" results, which is evidence of potential opportunities for increasing the competitiveness of enterprises and ensuring their financial security. The second factor of unforeseen force was the beginning of a full-scale Russian-Ukrainian war, which led to a sharp decrease in indicators at the end of 2022.

The results obtained from the efficiency of the operational activities of Ukrainian enterprises are a cumulative reflection of the corresponding processes in various branches of the national economy (Table 4).



**Table 4. Profitability of operating activities of Ukrainian enterprises by the type of economic activity in 2013-2022 years, %.** (Source: compiled by the authors based on [30])

Type of economic activity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Agriculture, forestry and fishing (Ag)	11.3	20.6	41.7	32.4	22.4	18.3	19.2	18.6	40.3	20.0
Industry (Ind)	3.0	1.6	0.9	4.2	6.8	6.3	5.5	3.9	11.2	0.8
Construction (Con)	-0.01	5.8	-7.6	-0.4	1.6	3.0	4.6	1.3	2.3	-2.4
Wholesale and retail trade; repair of motor vehicles and motorcycles (WRT)	10.2	-12.8	-0.9	15.8	18.8	23.3	25.3	16.2	17.9	17.2
Transportation and storage (T&S)	3.5	-1.7	1.1	5.1	-1.0	-1.6	4.1	4.4	5.8	2.7
Accommodation and food service activities (A&F)	-2.8	-25.8	-17.3	-0.8	7.8	8.6	10.1	-7.9	9.0	-10.0
Information and communication (I&C)	11.8	-1.6	0.5	8.5	13.8	13.1	15.4	14.7	15.6	12.9
Financial and insurance activities (F&I)	5.9	-15.2	-8.9	-4.8	2.8	1.2	7.8	3.5	8.8	-2.7
Real estate activities (REA)	3.1	-46.9	-33.4	-8.1	6.2	16.3	34.7	-6.3	15.5	-17.1
Professional, scientific and technical activities (PS&T)	-1.3	-29.1	-1.1	17.6	19.4	8.9	26.2	2.4	4.1	-10.4
Administrative and support service activities (Adm)	-2.5	-13.6	-11.9	-3.9	2.6	0.1	7.0	5.5	7.1	0.8
Education (E)	8.4	5.5	5.7	5.6	3.7	5.8	11.0	7.1	5.6	2.1
Human health and social work activities (HH)	3.1	-3.7	-0.6	4.5	3.3	3.7	3.0	11.2	-0.01	3.2
Arts, entertainment and recreation (AIR)	-8.0	-11.8	-25.3	-16.5	-15.5	-1.5	1.0	-10.6	-12.5	-10.0
Other service activities (Other)	-0.9	-1.0	7.3	5.1	-0.4	2.7	6.1	3.4	3.5	5.1

During 2013-2021 years the activity of enterprises by certain types of economic activity (wholesale & retail trade; real estate activities; information & telecommunications) was characterized by a rather sharp increase in the corresponding profitability indicators at the end of the research period; adequately reflect the economic processes in the country. The profitability of the operational activities of enterprises of systemically important economic activities (industry; construction; transport & storage) remains rather low. It is necessary to emphasize the positive trends of changes in profitability indicators in the industries and agriculture since this situation is evidence of the potential of internal competitiveness of enterprises in these industries, and, given their significance, accordingly improves the country's international competitiveness level. Remaining within the limits of positive values, indicators of industry profitability; administrative and support service activities decreased more than 10 times. Indicators decreased by almost 2 times in transportation and storage; agriculture, forestry, fishing and education. Negative values of the profitability index for 2022 were: construction; financial and insurance activities (-2.4% and -2.7%), accommodation and food service activities; professional, scientific and technical activities (-10% and -10.4%), real estate activities (-17.1%).

The rather low financial results of the activities of Ukrainian enterprises have led to a substantial limitation of the internal sources of financial resources by economic entities, which were appropriately reflected in the peculiarities of financing their activities (Table 5).

**Table 5. Dynamics of the main ratios of the activity financing structure of Ukrainian enterprises for 2013-2022 years.**

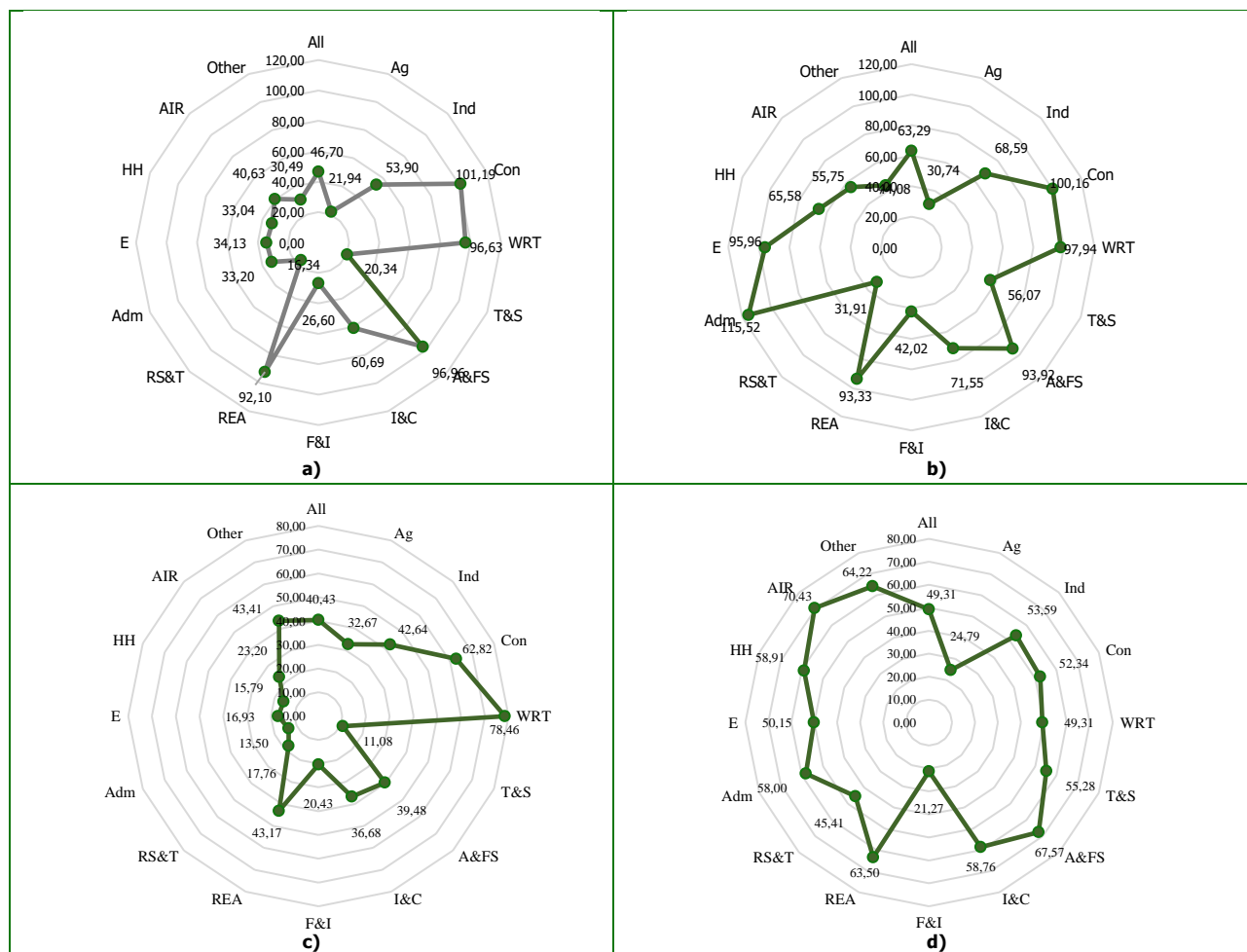
Years	Financial autonomy ratio ( $R_{FA}$ )	Debt coverage ratio ( $R_{Dc}$ )	Financial stability ratio ( $R_{Fs}$ )	Current ratio ( $R_c$ )
<i>Normative value</i>	$>0,5$	$>1$	$0,7-1,5$	$>2$
2013	0.34	0.52	0.53	1.14
2014	0.25	0.33	0.47	1.04
2015	0.28	0.40	0.49	1.00
2016	0.24	0.32	0.41	0.99
2017	0.25	0.33	0.42	0.98
2018	0.25	0.33	0.41	0.98
2019	0.27	0.37	0.41	0.98
2020	0.26	0.36	0.41	0.99
2021	0.29	0.41	0.42	1.04
2022	0.27	0.37	0.41	1.04

So, the values of the main ratios, not only did not conform to the generally accepted normative value, and unfortunately, during 2013-2021 showed a clear downward trend. The main financial security ratios are a clear indicator of an increase

in the already high dependence of enterprises on external financing. For example, at the end of 2022,  $R_{FA}$  was nearly half that of the standard,  $R_{DC}$  was less than 40% of the recommended value, and  $R_{FS}$  was almost four times lower than the recommended upper limit. The established practice of financing the enterprise's operational activities, whose problems are summarized in the trends in the overall  $R_C$ , which with slight variations, was half of the recommended standard, is of particular concern. This situation has a negative impact on the enterprise's financial security, as it results in higher financial value to offset the value of attracting and the risk of the invested funds, correspondingly worsening the enterprise's financial performance. It is worth noting that in 2022, the above-mentioned indicators suffered an additional negative impact as a result of Russia's military aggression against Ukraine.

The dynamics of the main financial security ratios of Ukrainian enterprises are determined by the peculiarities of the relevant processes in the various types of economic activity (Appendix, Table A1). Only some sectors (health; scientific & technical activities etc.) showed positive trends. The situation in the constituent types of economic activity shows negative trends in financial security. Repeated decreases in the values of indicators:  $R_{FA}$  and  $R_{FS}$  (1.5-2 times), and  $R_{DC}$  (3 times) were recorded in enterprises in the construction, information & communication industries and real estate activities. Construction, wholesale & retail trade was critically poor. Only in the agricultural and transport sectors were enterprises relatively stable and closest to the norm of the respective ratios. Similar trends were observed with respect to the financing of operational activities: while the overall  $R_C$  of enterprises for the predominant share of the main types of economic activity declined significantly, wholesale & retail trade alone maintained relative stability (although less than half of the norm).

The significant deviation of the indicators from the recommended normative values in enterprises by most types of economic activity also results in a higher risk level of their activities. Increasing the integral measure of the distance of the specific enterprise's financing structure factors from the reference, calculated using the above algorithm (Eq.1), makes it possible to react quickly to changes in the financial security level, as an indication of an increase in the risk level (Figure 3).



**Figure 3. Diagnostics of financial security components of Ukrainian enterprises by the types of economic activity in 2013-2022.** Note: a) Variation of financial autonomy ratio; b) Variation of debt coverage ratio; c) Variation of financial stability ratio; d) Variation of current ratio.



So, the safest types of economic activity to take into account the financing of activities are scientific & technical activities; transportation & storage; agriculture, forestry & fishing. The highest risk level, and hence the low financial security level, is expected from enterprises in the construction; wholesale & retail trade; and real estate activities. The analysis of the main financial security ratios of Ukrainian enterprises makes it possible to establish the impact of the performance of management of the formation of the structure of financial resources on the enterprise's financial security level.

Using the model for assessing the financial security level developed by the authors allows classifying financial situations according to the degree of financing structure, and the results of the diagnostics made it possible to establish a clear trend towards a decrease in the financial security level of Ukrainian enterprises during 2013-2022 (Table 6).

So, enterprises in the real sector of Ukraine in 2013-2015 and in 2021 were characterized by a financial situation of II degree in terms of the financing structure, which was consistent with their normal financial security level. However, during 2016-2020, increased dependence on external sources of financial resources has led to a deterioration in the values of the respective indicators, and a decline to the III degree of the funding structure, which corresponded to the low financial security level. It is worth noting the similarities in the trends of changes in the financial security level of enterprises in the real sector of the national economy and the change in the positioning of Ukraine according to the Global Competitiveness Index, which clearly indicates a direct relationship and a direct impact of the general financial security level of Ukraine on its international competitiveness and investment attractiveness. It should be noted that the Russian-Ukrainian war did not cause a sharp negative impact on indicators of financial security of enterprises by types of economic activity in 2022. It is obvious that the "safety margin" created in the previous period provided a certain financial potential for the functioning of economic entities under the force majeure circumstances of the first year of the war.

**Table 6. Diagnostics results of the financial security level of Ukrainian enterprises by the main types of economic activity in 2013–2022 years.** Note: DFS<sub>t</sub> – degree of financing structure, FS<sub>L</sub> – financial security level.

Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
<b>All Ukrainian enterprises</b>											
Financial position	$\begin{cases} R_{FA}=0.34 \\ R_{FS}=0.53 \\ R_C=1.14 \end{cases}$	$\begin{cases} R_{FA}=0.25 \\ R_{FS}=0.47 \\ R_C=1.04 \end{cases}$	$\begin{cases} R_{FA}=0.28 \\ R_{FS}=0.49 \\ R_C=1.00 \end{cases}$	$\begin{cases} R_{FA}=0.24 \\ R_{FS}=0.41 \\ R_C=0.99 \end{cases}$	$\begin{cases} R_{FA}=0.25 \\ R_{FS}=0.42 \\ R_C=0.98 \end{cases}$	$\begin{cases} R_{FA}=0.25 \\ R_{FS}=0.41 \\ R_C=0.98 \end{cases}$	$\begin{cases} R_{FA}=0.27 \\ R_{FS}=0.41 \\ R_C=0.98 \end{cases}$	$\begin{cases} R_{FA}=0.26 \\ R_{FS}=0.41 \\ R_C=0.99 \end{cases}$	$\begin{cases} R_{FA}=0.29 \\ R_{FS}=0.42 \\ R_C=1.04 \end{cases}$	$\begin{cases} R_{FA}=0.27 \\ R_{FS}=0.41 \\ R_C=1.04 \end{cases}$	
DFS <sub>t</sub>	II degree			III degree				II degree		III degree	
FS <sub>L</sub>	Normal			Low				Normal		Low	
<b>Agriculture, forestry &amp; fishing</b>											
Financial position	$\begin{cases} R_{FA}=0.50 \\ R_{FS}=0.64 \\ R_C=1.72 \end{cases}$	$\begin{cases} R_{FA}=0.42 \\ R_{FS}=0.58 \\ R_C=1.64 \end{cases}$	$\begin{cases} R_{FA}=0.40 \\ R_{FS}=0.50 \\ R_C=1.50 \end{cases}$	$\begin{cases} R_{FA}=0.24 \\ R_{FS}=0.28 \\ R_C=1.19 \end{cases}$	$\begin{cases} R_{FA}=0.48 \\ R_{FS}=0.54 \\ R_C=1.54 \end{cases}$	$\begin{cases} R_{FA}=0.49 \\ R_{FS}=0.57 \\ R_C=1.56 \end{cases}$	$\begin{cases} R_{FA}=0.51 \\ R_{FS}=0.60 \\ R_C=1.55 \end{cases}$	$\begin{cases} R_{FA}=0.54 \\ R_{FS}=0.61 \\ R_C=1.61 \end{cases}$	$\begin{cases} R_{FA}=0.59 \\ R_{FS}=0.66 \\ R_C=1.90 \end{cases}$	$\begin{cases} R_{FA}=0.56 \\ R_{FS}=0.63 \\ R_C=1.84 \end{cases}$	
DFS <sub>t</sub>	II degree			III degree	II degree						
FS <sub>L</sub>	Normal			Low	Normal						
<b>Industry</b>											
Financial position	$\begin{cases} R_{FA}=0.39 \\ R_{FS}=0.58 \\ R_C=1.07 \end{cases}$	$\begin{cases} R_{FA}=0.29 \\ R_{FS}=0.52 \\ R_C=0.98 \end{cases}$	$\begin{cases} R_{FA}=0.20 \\ R_{FS}=0.45 \\ R_C=0.93 \end{cases}$	$\begin{cases} R_{FA}=0.19 \\ R_{FS}=0.39 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.17 \\ R_{FS}=0.36 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.19 \\ R_{FS}=0.36 \\ R_C=0.88 \end{cases}$	$\begin{cases} R_{FA}=0.25 \\ R_{FS}=0.41 \\ R_C=0.87 \end{cases}$	$\begin{cases} R_{FA}=0.21 \\ R_{FS}=0.40 \\ R_C=0.90 \end{cases}$	$\begin{cases} R_{FA}=0.25 \\ R_{FS}=0.41 \\ R_C=0.94 \end{cases}$	$\begin{cases} R_{FA}=0.21 \\ R_{FS}=0.37 \\ R_C=0.94 \end{cases}$	
DFS <sub>t</sub>	II degree			III degree							
FS <sub>L</sub>	Normal			Low							
<b>Construction</b>											
Financial position	$\begin{cases} R_{FA}=0.11 \\ R_{FS}=0.40 \\ R_C=1.07 \end{cases}$	$\begin{cases} R_{FA}=0.01 \\ R_{FS}=0.37 \\ R_C=1.03 \end{cases}$	$\begin{cases} R_{FA}=-0.05 \\ R_{FS}=0.29 \\ R_C=0.96 \end{cases}$	$\begin{cases} R_{FA}=-0.04 \\ R_{FS}=0.29 \\ R_C=0.94 \end{cases}$	$\begin{cases} R_{FA}=-0.05 \\ R_{FS}=0.23 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=-0.02 \\ R_{FS}=0.22 \\ R_C=0.91 \end{cases}$	$\begin{cases} R_{FA}=0.02 \\ R_{FS}=0.18 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.03 \\ R_{FS}=0.17 \\ R_C=0.86 \end{cases}$	$\begin{cases} R_{FA}=0.05 \\ R_{FS}=0.16 \\ R_C=0.91 \end{cases}$	$\begin{cases} R_{FA}=0.02 \\ R_{FS}=0.14 \\ R_C=0.90 \end{cases}$	
DFS <sub>t</sub>	III degree										
FS <sub>L</sub>	Low										
<b>Wholesale &amp; retail trade; repair of motor vehicles &amp; motorcycles</b>											
Financial position	$\begin{cases} R_{FA}=0.08 \\ R_{FS}=0.23 \\ R_C=1.05 \end{cases}$	$\begin{cases} R_{FA}=-0.02 \\ R_{FS}=0.15 \\ R_C=0.97 \end{cases}$	$\begin{cases} R_{FA}=-0.05 \\ R_{FS}=0.13 \\ R_C=0.98 \end{cases}$	$\begin{cases} R_{FA}=-0.02 \\ R_{FS}=0.14 \\ R_C=1.00 \end{cases}$	$\begin{cases} R_{FA}=0.01 \\ R_{FS}=0.16 \\ R_C=1.03 \end{cases}$	$\begin{cases} R_{FA}=0.04 \\ R_{FS}=0.15 \\ R_C=1.03 \end{cases}$	$\begin{cases} R_{FA}=0.08 \\ R_{FS}=0.17 \\ R_C=1.04 \end{cases}$	$\begin{cases} R_{FA}=0.09 \\ R_{FS}=0.18 \\ R_C=1.05 \end{cases}$	$\begin{cases} R_{FA}=0.11 \\ R_{FS}=0.19 \\ R_C=1.07 \end{cases}$	$\begin{cases} R_{FA}=0.11 \\ R_{FS}=0.2 \\ R_C=1.08 \end{cases}$	
DFS <sub>t</sub>	III degree										
FS <sub>L</sub>	Low										
<b>Transportation &amp; storage</b>											
Financial position	$\begin{cases} R_{FA}=0.48 \\ R_{FS}=0.66 \\ R_C=0.99 \end{cases}$	$\begin{cases} R_{FA}=0.41 \\ R_{FS}=0.59 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.68 \\ R_{FS}=0.81 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.64 \\ R_{FS}=0.76 \\ R_C=0.96 \end{cases}$	$\begin{cases} R_{FA}=0.61 \\ R_{FS}=0.75 \\ R_C=0.87 \end{cases}$	$\begin{cases} R_{FA}=0.54 \\ R_{FS}=0.71 \\ R_C=0.87 \end{cases}$	$\begin{cases} R_{FA}=0.50 \\ R_{FS}=0.65 \\ R_C=0.77 \end{cases}$	$\begin{cases} R_{FA}=0.52 \\ R_{FS}=0.67 \\ R_C=0.83 \end{cases}$	$\begin{cases} R_{FA}=0.50 \\ R_{FS}=0.64 \\ R_C=0.85 \end{cases}$	$\begin{cases} R_{FA}=0.51 \\ R_{FS}=0.64 \\ R_C=0.92 \end{cases}$	
DFS <sub>t</sub>	II degree										
FS <sub>L</sub>	Normal										

(continued on next page)

Table 6. Continued

Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Information &amp; communication</b>										
Financial position	$\begin{cases} R_{FA}=0.33 \\ R_{FS}=0.56 \\ R_C=0.97 \end{cases}$	$\begin{cases} R_{FA}=0.04 \\ R_{FS}=0.36 \\ R_C=0.75 \end{cases}$	$\begin{cases} R_{FA}=0.41 \\ R_{FS}=0.63 \\ R_C=0.80 \end{cases}$	$\begin{cases} R_{FA}=0.09 \\ R_{FS}=0.41 \\ R_C=0.86 \end{cases}$	$\begin{cases} R_{FA}=0.19 \\ R_{FS}=0.50 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.23 \\ R_{FS}=0.49 \\ R_C=0.83 \end{cases}$	$\begin{cases} R_{FA}=0.26 \\ R_{FS}=0.47 \\ R_C=0.70 \end{cases}$	$\begin{cases} R_{FA}=0.25 \\ R_{FS}=0.54 \\ R_C=0.95 \end{cases}$	$\begin{cases} R_{FA}=0.35 \\ R_{FS}=0.59 \\ R_C=1.06 \end{cases}$	$\begin{cases} R_{FA}=0.33 \\ R_{FS}=0.54 \\ R_C=1.14 \end{cases}$
DFS <sub>t</sub>	II degree	III degree							II degree	
FS <sub>L</sub>	Normal	Low							Normal	
<b>Real estate activities</b>										
Financial position	$\begin{cases} R_{FA}=0.31 \\ R_{FS}=0.63 \\ R_C=0.89 \end{cases}$	$\begin{cases} R_{FA}=0.09 \\ R_{FS}=0.54 \\ R_C=0.77 \end{cases}$	$\begin{cases} R_{FA}=-0.03 \\ R_{FS}=0.43 \\ R_C=0.72 \end{cases}$	$\begin{cases} R_{FA}=-0.07 \\ R_{FS}=0.36 \\ R_C=0.68 \end{cases}$	$\begin{cases} R_{FA}=-0.04 \\ R_{FS}=0.38 \\ R_C=0.65 \end{cases}$	$\begin{cases} R_{FA}=0.00 \\ R_{FS}=0.37 \\ R_C=0.70 \end{cases}$	$\begin{cases} R_{FA}=0.13 \\ R_{FS}=0.38 \\ R_C=0.72 \end{cases}$	$\begin{cases} R_{FA}=0.10 \\ R_{FS}=0.36 \\ R_C=0.68 \end{cases}$	$\begin{cases} R_{FA}=0.17 \\ R_{FS}=0.41 \\ R_C=0.70 \end{cases}$	$\begin{cases} R_{FA}=0.12 \\ R_{FS}=0.39 \\ R_C=0.68 \end{cases}$
DFS <sub>t</sub>	II degree	III degree								
FS <sub>L</sub>	Normal	Low								

There is no doubt that the cumulative measure of the financial security level of a national economy is determined by the enterprise performance level in the most important types of economic activity, among which the leading ones are in terms of their importance in shaping financial results, are: agriculture, forestry & fishing, industry, construction, wholesale & retail trade, transportation & storage, information & telecommunications, real estate activities.

The enterprises of only two types of economic activity (agriculture, forestry & fishing; transport & storage) throughout the research period had a financing structure, which in terms of indicators corresponded to the II degree, which accordingly affected the normal financial security level. Unfortunately, negative trends affected enterprises in industry, information & communication, and real estate activities: having a normal financial security level only in 2013-2014, most of the analyzed period was characterized by the III degree of the funding structure and low financial security. In 2021, only the enterprises of the information & communication sector managed to change the financing structure to the indicators of the II degree and restore the normal financial security level. The situation was quite tense at the enterprises of construction, wholesale & retail trade, repair of motor vehicles & motorcycles, during the whole research period had the riskiest structure of sources of financial resources, this is reflected in the low financial security level. In general, the predominance of a low financial security level in the most important sectors of the real sector of Ukraine's economy has led to a negative trend in the corresponding aggregate indicator at the macro level.

The financial security level is not only a generalized factor of the impact on the competitiveness of the real sector of the Ukrainian economy but also an outstanding part of the external manifestation of a country's international competitiveness – its investment attractiveness. The country's investment attractiveness is a cumulative reflection of the investment attractiveness of its components (enterprises, industries, regions), which, in general, is determined by the ratio of risk levels and profitability of investing financial resources. A combination of different financial security levels and profitability of enterprise activities within the framework of the authors' matrix of zoning investment attractiveness of enterprises, allows for assessing the unified influence of the above key factors on the investment attractiveness (Table 7).

**Table 7. Investment attractiveness zones of Ukrainian enterprises by the main types of economic activity in 2013-2022 years.** Note: H<sub>IA</sub> – zone of high investment attractiveness; P<sub>IA</sub> – zone of potential investment attractiveness; S<sub>IA</sub> – zone of satisfactory investment attractiveness; U<sub>IA</sub> – zone of unfavourable investment attractiveness.

Type of economic activity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Agriculture, forestry and fishing	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	P <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>
Industry	H <sub>IA</sub>	H <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>
Construction	U <sub>IA</sub>	P <sub>IA</sub>	U <sub>IA</sub>	U <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	U <sub>IA</sub>
Wholesale and retail trade; repair of motor vehicles and motorcycles	P <sub>IA</sub>	U <sub>IA</sub>	U <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>
Transportation and storage	H <sub>IA</sub>	S <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	S <sub>IA</sub>	S <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>
Information and communication	H <sub>IA</sub>	U <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	H <sub>IA</sub>	H <sub>IA</sub>
Real estate activities	H <sub>IA</sub>	U <sub>IA</sub>	U <sub>IA</sub>	U <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	P <sub>IA</sub>	U <sub>IA</sub>	P <sub>IA</sub>	U <sub>IA</sub>

So, enterprises of only one type of economic activity – agriculture, forestry & fishing having a normal financial security level and positive values of profitability were in the zone of high investment attractiveness. Instead, the dynamics of

relocation of transportation & storage within the zones of high-satisfactory–high-investment attractiveness was due to the corresponding sharp fluctuations in profitability against the background of a normal financial security level. Enterprises of almost half of the main types of economic activity (industry, information & communications, real estate activities), while in 2013 in a zone of high investment attractiveness, lost their position, it moved to a zone of potential investment attractiveness during the next eight years. It is worth noting that the underlying reason for such zoning changes was the negative dynamics of the financial security level (from normal to low). Only enterprises in the field of information & communication, as a result of the restoration of a normal financial security level, managed to return to the zone of high investment attractiveness in 2021. At the same time, against the background of a constant low financial security level of enterprises in the field of real estate activities during the research period, it was the negative value of the profitability of the activity that caused their position to move from the zone of potential investment attractiveness to the zone of unfavourable investment attractiveness in 2020. The most difficult situation occurred in the construction and wholesale & retail trade, repair of motor vehicles & motorcycles sectors: having a low financial security level, the presence of enterprises in these types of economic activity in areas of unfavourable and potential investment attractiveness (in 2017-2019) was determined by significant fluctuations in profitability. Despite the global negative impact of Russia's military aggression on the economy of Ukraine, the vast majority of economic activities in 2022 maintained their positions of the previous year (except for real estate activities, whose enterprises lost their investment attractiveness compared to 2021).

In general, the predominance of negative trends in the financial security level of enterprises by the main types of economic activity was reflected in the dynamics of the country's positioning in terms of its international investment attractiveness (Figure 4).

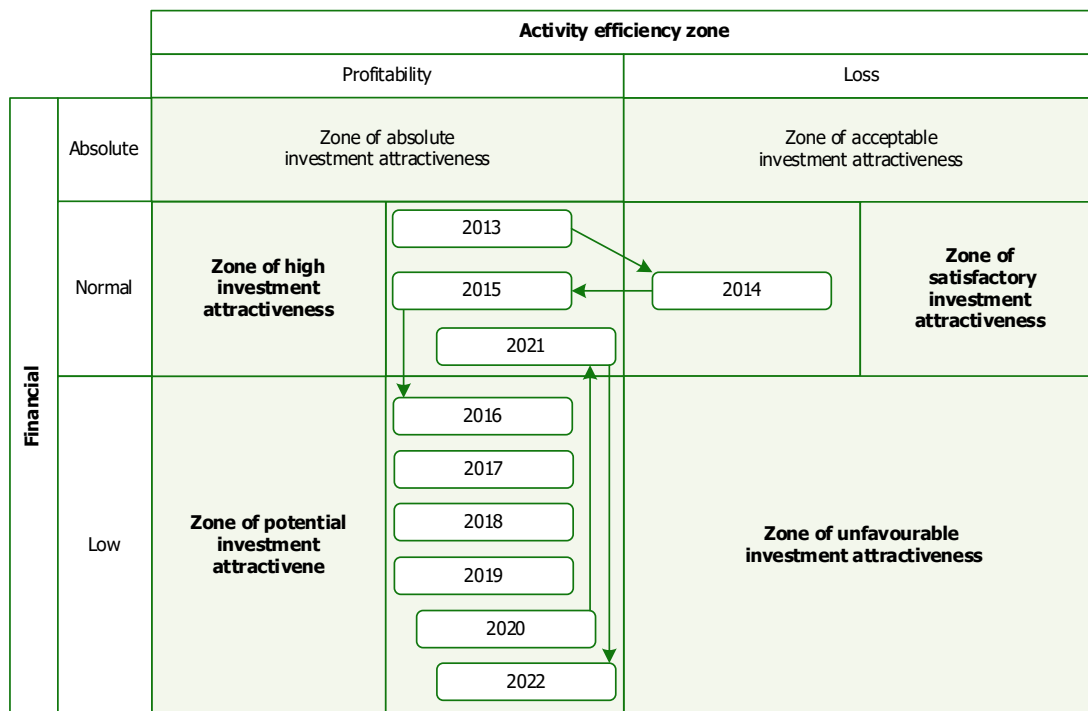


Figure 4. Investment attractiveness zones of all Ukrainian enterprises in 2013-2022 years.

Thus, during 2013, 2015 and 2021, the economy of Ukraine, demonstrating a normal financial security level with positive values of profitability, was located in a zone of high investment attractiveness. Due to the decrease in the financial security level in 2016-2020 and in 2022 (expected as a result of Russia's military aggression) Ukraine is in the zone of potential investment attractiveness.

It should be noted that, despite the decline in the financial security level, a long stay in the zone of potential investment attractiveness became an indirect indication of the existing reserves of the national economy, the implementation of which contributed to the improvement of the economic situation in the country in 2021, will increase its stability and increase international competitiveness. Even without taking into account the negative impact of the Russian-Ukrainian war in 2022, being in the zone of potential investment attractiveness indicates the possibility of revival and development of Ukrainian enterprises in the future.

The performance of Ukraine's credit ratings indicates positive expectations of the world economic community (Table 8).

**Table 8. Dynamics of credit ratings of Ukraine (debt obligations) (2016 - 2022).** Note: Rating monitoring; ↑ ↓ rating/forecast change; \*\*\*\* After the transaction with public debt, the rating agency assigns a rating of the issuer Ukraine in foreign currency. (Source: compiled by the authors based on [22])

Years	Rating of debt obligations in foreign currency				Rating of debt obligations in national currency				Forecast	
	Long-term liabilities		Short-term liabilities		Long-term liabilities		Short-term liabilities			
<i>Standard and Poor's</i>										
2016	B-	↑	B	↑	B-	↑	B	↑	Stable	↑
2017	B-		B		B-		B		Stable	
2018	B-		B		B-		B		Stable	
2019	B	↑	B		B	↑	B		Stable	
2020	B		B		B		B		Stable	
2021	B		B		B		B		Stable	
2022	CCC+		C		CCC+		C		Stable	
<i>Fitch Ratings</i>										
2016	B-	↑	B	↑	B-	↑	B	↑	Stable	↑
2017	B-		B		B-		B		Stable	
2018	B-		B		B-		B		Stable	
2019	B	↑	B		B	↑	B		Positive	↑
2020	B		B		B		B		Stable	
2021	B		B		B		B		Positive	↑
2022	CC		C		CCC-		C		Negative	↓
<i>Rating and Investment Information, Inc.</i>										
2016	CCC-	↑							Stable	↑
2017	CCC****	↑							Stable	
2018	CCC+	↑							Stable	
2019	B	↑							Stable	
2020	B+	↑							Stable	
2021	B+								Stable	
2022	CCC								Stable	
<i>Moody's Investors Service</i>										
2016	Caa3/ Ca	↑			Caa3	↑			Stable	↑
2017	Caa2/ Ca	↑			Caa2	↑			Positive	↑
2018	Caa1/Ca	↑			Caa1	↑			Stable	↓
2019	Caa1/Ca				Caa1				Positive	↑
2020	B3/Ca	↑			B3	↑			Stable	↓
2021	B3				B3				Stable	↑
2022	Caa3				Caa3				Negative	↓

Over the past six years, the rating of different types of debt liabilities of Ukraine, according to the estimation of the world's leading rating agencies, has fluctuated in the range from "C" to "B" (depending on the characteristics of different rating scales: S&P, Fitch, R&I, Moody's). The forecast of Ukrainian credit ratings within the limits of the expected position "stable-positive" confirms the acceptability of the relationship between the level of financial security and the economic return of investments in the Ukrainian economy. It is clear that the beginning of Russia's military aggression has a negative effect

on the above-mentioned indices, but the preservation of most of them within pre-war positions indicates positive expectations and the availability of Ukraine's reserves for future development.

## DISCUSSION

In the conditions of the increasing internationalization of economic activity, the question of guaranteeing the enterprise's financial security as the main subject of market relations and the main object of international investment attractiveness is gaining special relevance, which determined the topic of the article. The research of factors and criteria for ensuring a high enterprise financial security level, as the economy's primary link, allows the protection of the economic interests of the State in the conditions of globalization of the world economy and creates prerequisites for increasing its investment attractiveness and competitiveness in the global economic space.

According to the authors, the financial security of the enterprise is determined by an integrated set of components and factors that determine the main aspects of its financial independence and operational efficiency. Taking into account the complex impact of all factors determines the relevance of further improvement of approaches to assessing the enterprise's financial security as a basis for forming its investment attractiveness. The basis of assessing the enterprise's financial security level should be the definition of interdependence and mutual influence of its main components on the scale "level – state – position – zone" as a foundation for the formation of national investment attractiveness at the macro and macro levels.

Indicators of an enterprise's financial security must meet the following main features: measurability, reasonableness, stability and availability. The choice of the right indicators should also be consistent with the features of the enterprise's functioning: meet strategic goals; take into account the peculiarities of the composition and structure of funding sources, reflect the specifics of the industry and the individual level of profitability. Estimating the parameters of the enterprise's financial security should contribute to determining the position of the enterprise's financial security based on the main performance indicators and the localization of the investment attractiveness zone depending on the influence of the main factors.

On the basis of official statistical data on the activity of Ukrainian enterprises by type of economic activity, the key financial indicators of the proposed models were calculated and the parameters of their financial security over the past 10 years were determined. As a result of the study, the decisive influence on the financial security of enterprises of the features of the financing structure of their activities and the level of profitability was confirmed.

The main limitations of the study are primarily related to the geographical and temporal coverage of the country's enterprises. Also, the results are determined by the differences in the performance indicators of enterprises by the main types of economic activity.

The practical use of the proposed approach proves that it is a convenient, understandable and informative tool for determining the parameters of the company's financial security as a basis for forming its investment attractiveness. The use of the proposed approach to assessing the enterprise's financial security can serve not only as an informative tool for factor analysis but also as one of the indicators of the international competitiveness of economic entities.

## CONCLUSIONS

Financial security (at the macro and micro levels) is an important prerequisite and a significant component of the country's investment attractiveness. One of the fundamental principles of the formation of the financial security foundations is the interdependence of the interaction of subjects at all levels: the financial security level of the state is one of the main general prerequisites for ensuring the financial security of its constituents, primarily economic entities, and, conversely, the effectiveness of financial security management at each level and each component affects, on the one hand, the general state of national financial security, and, on the other hand, forms the investment attractiveness of enterprises in the micro- and macro-environment.

In the conditions of the increasing internationalization of economic activity, the question of guaranteeing the enterprise's financial security as the main subject of market relations and the main object of international investment attractiveness is gaining special relevance, which determined the topic of the article. The research of factors and criteria for ensuring a high enterprise financial security level, as the economy's primary link, allows to ensure the protection of the economic interests of the State in the conditions of globalization of the world economy and to create prerequisites for increasing its investment attractiveness and competitiveness in the global economic space.

Using the ratios approach, the authors substantiated an indicative scale for evaluating the activity financing structure based on key financial stability and liquidity indicators. Within the three-component indicator, a classification of financial situations depending on the activity financing structure is proposed and a model for assessing the enterprise's financial security level is developed.

Taking into account the relationship between financial security levels and profitability, a zoning matrix of enterprises' investment attractiveness was developed for the first time. The proposed clustering of the enterprise's investment attractiveness zones depends on the positive/negative profitability level within the limits of "absolute – high – potential" and "acceptable – satisfactory – unattractive". The developed model has practical significance from the point of view of forming the country's investment attractiveness and competitiveness.

On the basis of determining the correlation of trends in profitability indicators and the main financial ratios of the activity financing structure of Ukrainian enterprises, the decisive influence of the low enterprise's financial security level of most important types of economic activity on the negative trend of changes in the corresponding aggregate was confirmed indicator at the macro level. The test results proved that the predominance of negative trends in changes in the financial security level of enterprises by the main types of economic activity of Ukraine, respectively, was reflected not only in the enterprise's investment attractiveness but also in the dynamics of one of the main components of the external manifestation of the country's international competitiveness – investment attractiveness. Thus, both proposed hypotheses are proven.

The comprehensive use of the methodical approach proposed by the authors to assess the enterprise's financial security level will make it possible to ensure the effectiveness of the forming investment attractiveness process at the micro and macro levels, to forecast the prospects of the country's investment development, and will also serve as a basis for further research and development in this direction.

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## ADDITIONAL INFORMATION

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### AUTHOR CONTRIBUTIONS

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## ФІНАНСОВА БЕЗПЕКА ПІДПРИЄМСТВ ЯК ОСНОВА ФОРМУВАННЯ ІНВЕСТИЦІЙНОЇ ПРИВАБЛИВОСТІ КРАЇНИ

Основною метою дослідження є вивчення фінансової безпеки підприємств як основи формування інвестиційної привабливості на мікро- та макrorівнях. Досліджено основні показники фінансової безпеки підприємства як базової передумови забезпечення інвестиційної привабливості та конкурентоспроможності й підприємства, і країни в цілому. Проаналізовано тренди основних маркерів економічного клімату та оцінено їхній вплив на основні показники діяльності українських підприємств. Досліджено динаміку основних фінансових показників структури фінансування діяльності підприємств України за видами економічної діяльності з урахуванням їхньої ролі в забезпеченні фінансової безпеки. Обґрунтовано індикативну шкалу для аналізу структури фінансування діяльності та розроблено модель оцінки рівня фінансової безпеки підприємства. Розроблено матрицю зонування інвестиційної привабливості підприємств з урахуванням зв'язку між рівнями фінансової безпеки та прибутковістю. У результаті апробації розробленого методичного інструментарію визначено рівень фінансової безпеки українських підприємств за видами економічної діяльності та обґрунтоване зонування їхньої інвестиційної привабливості в умовах очікуваних змін економічного клімату в Україні.

**Ключові слова:** фінансова безпека підприємства, рівень фінансової безпеки, прибутковість діяльності, конкурентоспроможність країни, інвестиційна привабливість

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