DEVELOPMENT OF METHODOLOGICAL APPROACHES TO FINANCIAL AND ECONOMIC SECURITY AND PECULIARITIES OF APPLICATION IN CONSTRUCTION ENTERPRISES
РАЗРАБОТКА МЕТОДОЛОГИЧЕСКИХ ПОДХОДОВ К ФИНАНСОВО-ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ И ОСОБЕННОСТЕЙ ПРИМЕНЕНИЯ НА ПРЕДПРИЯТИЯХ СТРОИТЕЛЬНОЙ ОТРАСЛИ

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Abstract. Financial and economic security is a state of an enterprise when all resources are working to ensure normal functioning of the enterprise and its development. The enterprise, which has reached a high level of security, can react in time and counteract the bad influence of both external and internal factors.

You can talk about the peculiarities of building financial and economic security through its components: financial, production and sales, technical and technological and personnel. The very assessment of the security of the enterprise is important to carry out with the help of quantitative indicators, which in turn are widely used in planning, reporting and analysis of economic activity of the construction enterprise. In consequence, it is proposed to assess the financial and economic security through the main indicators of economic activity, which are freely available.

Key words: Financial and economic security, construction companies, coefficient, indicator, integral approach

Introduction

Financial and economic security is a state of an enterprise when all resources are working to ensure normal functioning of the enterprise and its development. The enterprise, which has reached a high level of security, can react in time and counteract the bad influence of both external and internal factors.

You can talk about the peculiarities of building financial and economic security through its components: financial, production and sales, technical and technological and personnel. The very assessment of the security of the enterprise is important to carry out with the help of quantitative indicators, which in turn are widely used in planning, reporting and analysis of economic activity of the construction enterprise. In consequence, it is proposed to assess the financial and economic security through the main indicators of economic activity, which are freely available.

Presentation of the basic material

The analysis of the literature shows that many interrelated indicators are used for evaluation. There is a problem of interdependence of indicators and, as a consequence, irrationality of determining all indicators, so the main are considered the coefficient of autonomy and the ratio of own funds, indicating the degree of financial independence. Liquidity ratios determine the ability of the company to pay its obligations, which in the current time is very important. Also, much attention should be paid to E. Altman's five-factor model, which shows the probability of bankruptcy of the enterprise.

Assessment of production and sales component of financial and economic security is best carried out on the basis of four indicators: return on sales and assets, which indicate the efficiency of activities, the turnover ratio of current assets, the

ratio of accounts receivable to accounts payable, which demonstrate the rational use of funds.

The technical and technological component is based on the coefficients of return on assets and renewal of fixed assets, which turn investments into a strong and competitive enterprise.

The personnel component plays an important role in security. Salary forms welfare of employees, which in its turn forms coefficient of personnel stability. Low personnel turnover is a guarantee of success of all enterprises and a way of financial stability and development.

The indicators of financial and economic security are presented in Table 1.1.

The weighted average method involves taking into account the weighting coefficients of each of the components of economic security. To determine the weighting coefficients of the functional components of economic security of enterprises in various sectors of the economy, the sum of which should be equal to one, a questionnaire was developed. On the basis of expert evaluation, the average importance of the components of economic security was calculated.

Calculation of average indicators, to determine the composite coefficient of financial and economic security are represented by a small difference, where 3.76% is for agricultural enterprises, 6.24% for construction companies and 6.52% for industry. Since the composite coefficient of financial and economic security by weighted average method gives the same result as the arithmetic average, it is better to use the latter.

As a result the arithmetic average of indicators, for each of the proposed functional components of financial and economic security, is determined by summing the assessments of indicators and dividing by the total number of indicators and as a result the consolidated indicator of financial and economic security of the enterprise is calculated.

The value of the consolidated coefficient of financial and economic security of the enterprise is presented in figure 1.1, which can be used to determine the level of security. It is proposed to identify four levels of economic security of the enterprise: critical, low, average and high. Since the maximum possible value of the coefficient of economic security is - 1, an equal interval with a step of 0.25 was used to determine the boundaries of economic security levels.

At the critical level of economic security of the enterprise we can talk about its crisis state. The low level indicates the non-compliance of most indicators of economic security to the threshold value, may be characterized by low efficiency of production, exhaustion of the technical resource of equipment and space, reduction of staff, etc. At the average level, the enterprise is characterized by a discrepancy of some indicators of economic security to the norms, while there are opportunities to improve the economic condition of the enterprise. High level indicates the effectiveness of financial and economic activities of the enterprise, the fact that the indicators are within the normative values.

Table 1.1.

Indicators of financial and economic security of the enterprise

№	financial and economic security	Review	Grade (G), depending on the degree of compliance with standard		
			Absolute (grade 1)	Neutral (grade 0,5)	Critical (grade 0)
1	Autonomy coefficient	*Ac*	> 0,5	0,3-0,5	< 0,3
2	Provisioning ratio by our own means	*Xos*	> 0,1	0-0,1	< 0
3	The coefficient of absolute liquidity	*Cal*	> 0,2	0,1-0,2	< 0,1
4	Current ratio liquidity	*Crl*	1,5 – 3	1 - 1,5; or >3	< 1
5	E. Altman's five-factor model	*Ca*	> 2,9	1,23 - 2,89	< 1,23
	Financial component	**Fc**	*Fc= G(Ac+Xos+Cal+Crl+Ca)/ 5*		
6	Profitability ratio sales	*Prs*	> 0,2	0,1-0,2	< 0,1
7	Profitability ratio assets	*Pra*	>0,1	0-0,1	<0
8	Ratio of accounts receivable to accounts payable debts	*Rarapd*	0,9-1	0,5-0,9; или >1	< 0,5
9	Turnover ratio of current assets	*Trca*	Increase in dynamics	Index is non-existent changes	Reduction in dynamics
	Production and sales component	**PSc**	*PSc = G(Prs+Pra+Rarapd+Trca)/4*		
10	Return on assets ratio	*Rar*	Increase in dynamics	Index is non-existent changes	Reduction in dynamics
11	The serviceability ratio of the main funds	*Srmf*	> 0,5	0,3-0,5	< 0,3
12	Renewal rate fixed assets	*Rrfa*	> 0,1	0-0,1	0
	The technical and technological component	**TTc**	*TTc = G(Rar+SrnfRrfa)/3*		
13	Ratio of salary level boards	*Rslb*	> 1	0,5-1	< 0,5
14	Personnel stability coefficient	*Psc*	>1	0,5-1	< 0,5
15	Output ratio per emplotee	*Ore*	Increase in dynamics	Index is non-existent changes	Reduction in dynamics
	Personnel component	**Pc**	*Pc= G(Rslb+Psc+ Ore)/3*		
	Consolidated coefficient	**Cc**	***Cc = (Fc+Psc+TTc+Pc)/4***		

Source: suggested by the author

Table 1.2.
Weighting coefficients of functional components of economic of enterprises of different branches of economy

Sector of economy	Functional components				Sum of weight coefficients
	Financial	Staffing	Techno-technological	Production and sales	
Industry	0.228	0.257	0.266	0.249	1
Agriculture	0.243	0.242	0.262	0.253	1
Building companies	0.260	0.260	0.227	0.253	1

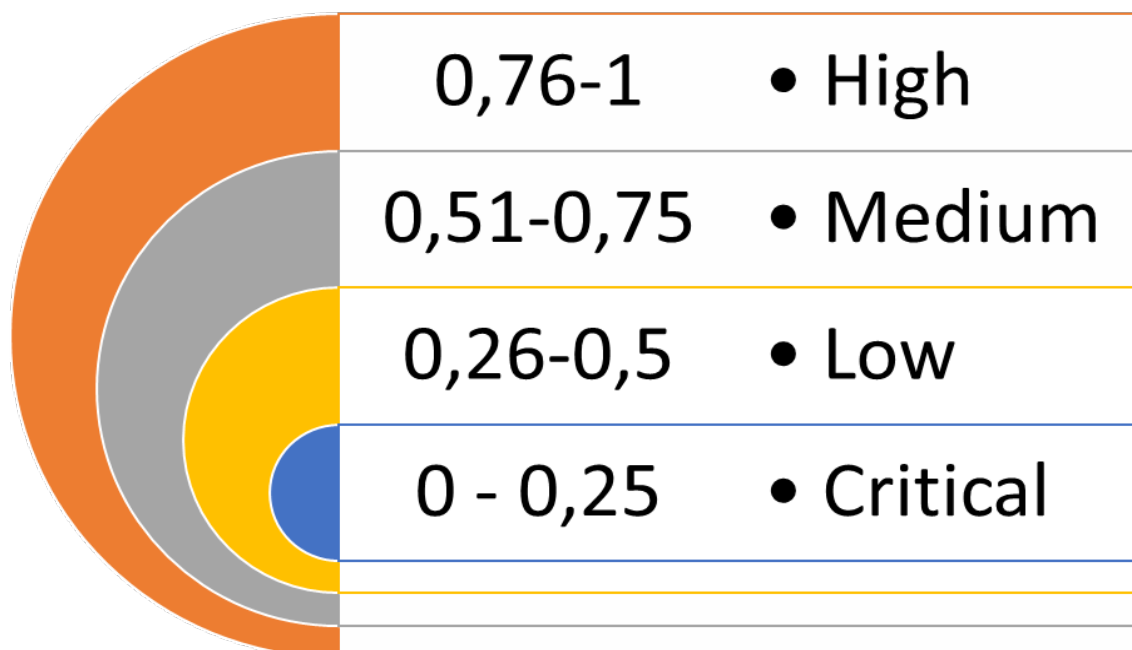Source: compiled on the basis of expert estimates

Fig. 1. levels of economic security of the enterprise.
Source: proposed by the author [1].

Conclusions

The problem of this approach to the assessment of economic security can be highlighted the inaccuracy in the calculations, which appears in the assignment of estimates to each of the indicators. But it should be taken into account that the proposed indicators are not comparable. They should not be used to determine the integral index of financial and economic security of the enterprise by calculating the geometric mean. For example, a high current liquidity ratio (above the norm), may unreasonably overstate the integral index of economic security, while in fact it may indicate an irrational capital structure [2]. This justifies the choice of the proposed approach to assessing economic security. The applied indicators are important for determining the level of economic security, since they allow covering various aspects of the enterprise's activity. This methodology is also convenient because the number of indicators, depending on the specifics of the business, can be changed.

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Анотація. Финансово-экономическая безопасность - это состояние предприятия, когда все ресурсы работают на обеспечение нормального функционирования предприятия и его развития. Предприятие, достигшее высокого уровня безопасности, может своевременно реагировать и противодействовать негативному влиянию как внешних, так и внутренних факторов.

Можно говорить об особенностях построения финансово-экономической безопасности через ее составляющие: финансовую, производственную и сбытовую, техническую и технологическую, кадровую. Саму оценку безопасности предприятия важно проводить с помощью количественных показателей, которые в свою очередь широко используются в планировании, отчетности и анализе хозяйственной деятельности строительного предприятия. Как следствие, предлагается оценивать финансово-экономическую безопасность с помощью основных показателей хозяйственной деятельности, которые находятся в свободном доступе.

Ключові слова: Финансово-экономическая безопасноть, строительные предприятия, коэфициент, индикатор, интегральный подход