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QUALIMETRY OF FINANCIAL RISKS IN THE SYSTEM OF ECONOMIC SECURITY  
OF AN ENTERPRISE

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**Abstract.** The relevance of the development of enterprises of Ukraine is characterized by the presence of a significant number of factors that negatively affect the enterprises themselves and their functioning as part of the state. These factors include: the national economy, the instability of tax and regulatory legislation, inflation, unavailability of credit, increased competition, the decrease in the level of investment activity of enterprises and regions, the slowdown of the national payment turnover, the growing number of unprofitable enterprises. The effect of these factors appears in the movement of material and financial flows and leads to significant losses, which in turn adversely affects the economic security of enterprises. The **aim** of the research is financial risk qualimetry in the system of economic security of enterprise and the development of proposals to improve economic security by minimizing the financial risks. **Methodology.** In the scientific study following methods were used – analysis (assessing indicators of financial stability and liquidity of the enterprise), synthesis (in determining the impact of components of financial risk in the overall structure of financial risk), Boolean method (in the justification of the main problems associated with the occurrence of financial risk, and its impact on economic security), generalization (in revealing the essence of economic categories “financial risk”, “economic security”). **Results.** An important step of this work is to determine advantages, disadvantages, conditions for minimizing financial risks in the system of economic security of the enterprise. **Conclusions.** In the course of the study, the financial risk assessment of Ilyich Iron and Steel Works and its impact on the economic security of the enterprise were researched. The economic boom of the metallurgical plant, industrial regions and the development of industries that coexist together or depend on the metallurgical business depend on the way the enterprise works today. **The scientific importance** of the article is the possibility to develop enterprise policy to minimize financial risks and ensure economic security. **The value of the research** lies in the fact that it is necessary to pay attention to the system of risk management in the enterprise and to provide human resources, which will conduct assessment of financial risks, as well as develop effective measures to minimize financial risks and ensure economic security in the economic environment.

**Keywords:** economic security, financial risks, investment, potential, method, metallurgical business.

**JEL Classification:** G32; D21.

## INTRODUCTION

The protection of the enterprise from various existing or possible threats forms the system of economic security, which represents the organizational and technical complex of managerial, technical, sensitive, preventive and promotional activities, aimed at high-quality implementation and protection of the interests of the enterprise from internal and external threats.

However, not all economic security risks, which are a condition of any entity, characterized by the presence of a stable income and other resources, with the aim to maintain the standard of living in the moment and in the foreseeable future, can be predicted in advance, and therefore their appearance can be a surprise (M. S. Klapkiv, 2002).

Financial risks management holds a special place in the system of economic security of the enterprise, since they are closely related to the financial relations of enterprises, more than others are exposed to the external environment, which is quite unpredictable. Considering that the financial risks of enterprises are most threatening today, necessitates of their further scientific study must be emphasized.

## LITERATURE REVIEW

The study of the nature and interconnection of the concepts of "financial risk", "danger", "threat", as well as their impact on business activity is the object of the research of both foreign and domestic scientists. In particular, O. Baranovsky, T. Vasyltsev, V. Kuznetsov, D. Zerkalov, M. Zubok, E. Oleynikov, M. Kurkin were engaged in studying these issues.

However, despite the many studies that have been conducted, there is no consensus on the nature and interrelation of relevant economic categories.

## PAPER OBJECTIVE

The purpose of the article is to clarify the essence concepts of financial risk, threats, dangers and the identification of their relationship with the enterprise's economic security system.

## RESULTS AND DISCUSSION

The risk is the action aimed at attractive goal and is associated with the element of danger, the threat of losing or failure.

Entrepreneurial risks represent the likelihood that the entrepreneur will incur losses in the form of additional costs in excess of those foreseen by the forecast, or will receive income below those on which he relied on implementing alternative solutions.

The most common types of entrepreneurial risk include:

- financial risk arising from various kinds of financial transactions;
- production risk associated with the implementation of production activities;
- commercial risk arising from the sale of goods and services;
- market risk associated with fluctuations in market interest rates of the national monetary unit.

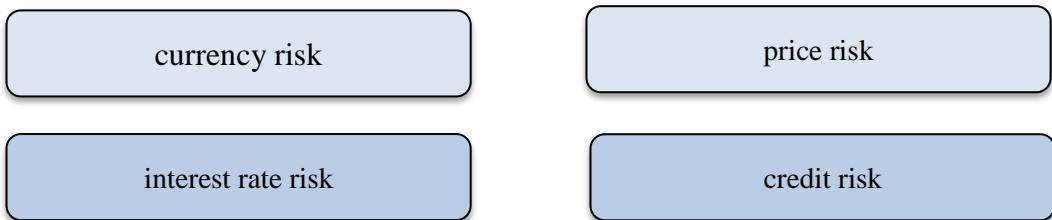
The most common risk of economic security of the enterprise, as well as the main reason for the deviation of the actual development of the enterprise from the strategic plan is financial risk. Financial risk is unpredictable threat to the economic security of the enterprise and its sustainability functioning. Its essence and significance is determined by the structure long-term sources of financing, the higher the leverage ratio capital, the higher is the risk level (M. S. Klapkiv, 2002).

The most important essential characteristics of financial risk include:

- direct connection with the formation of enterprise profits and the occurrence of estimated economic losses;

- the presence and inevitability of the need for choice in making each financial decision;
- the uncertainty of the consequences of occurrence risk, before a situation reflects the achievement or none-achievement of a specific goal.

The main types of financial risk are presented in fig. 1:

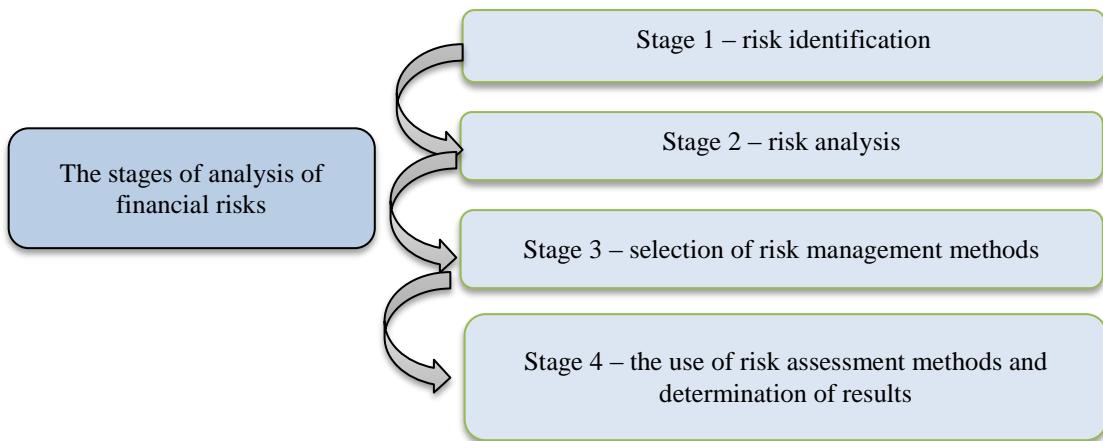


*Figure 1. The main types of financial risk*

*Source: Own compilation*

Thus, the special influence of financial risks in the organization affects the formation of profitability and the threat of crash. Therefore, one of the main challenges faced by the system of ensuring the economic security of the enterprise is such risks management.

The process of financial risk management usually consists of four stages. The first stage is identification of risks enterprises, the second is analyzing and quantitative risk assessment, the third is the selection of particular risk management techniques and the fourth – their implementation in practice, and further assessment of the results achieved (fig.2):



*Figure 2. The stages of the process of financial risk management*

*Source: Own compilation*

The key stage is the second one – risk analysis. It is at this point when the probability of possible damages is determined and the magnitude of the risk reveals.

The analysis is qualitative, quantitative or complex. The qualitative analysis reveals possible risk, examines the factors affecting the degree of risk. The factors are divided into external (political situation in the country, tax system, competition, ecological disaster, etc.) and internal (strategy, organization, qualifications of management, internal procedures and policies of the enterprise, etc.).

In the quantitative analysis the concrete amount of money damage of separate subspecies and financial risk in general are revealed.

Qualitative analysis can be performed by various methods, including the method of using the analogues and the method of expert evaluations (V. V. Kostets'kyj, 2012).

The method of using the analogues is the application of experience financial manager in dealing with similar issues. It is used in the case where the use of other methods for any reason is impossible. It uses a database of similar objects to identify common dependencies and transfer them on the object under study.

The method of expert estimates is the use of complex logical and mathematical-statistical methods and procedures for processing survey results of the expert group, the results of the survey are the only source of information. In this case there is the possibility of using intuition, life and professional experience of survey participants. Method is used when a deficiency or complete lack of information does not allow the use of other features.

A quantitative analysis of financial risks is carried out using mathematical and statistical methods:

- statistical;
- minimize losses;
- mathematical;
- modeling of the "decision tree";
- assessing the likelihood of expected damage;
- analysis of the financial condition of the enterprise.

The statistical method is to determine the probability of occurrence of losses and profits in the enterprise on the basis of statistical data of the previous periods and the establishment of region (zone) of risk, risk ratio, frequency of obtaining a certain result, etc.

Minimizing losses is based on the calculation of possible losses in the choice of a particular solution. There are two types of losses:

- losses caused by inaccuracy of the studied model (object), or the so-called risk of studying. Financial manager for a reason lack of deep knowledge about the object does not have the ability to manage it effectively;

- losses caused by inaccuracy and inefficiency of management, or the risk of action.

This risk is associated with the possibility of making incorrect decisions and the occurrence of losses during the execution of these decisions (O. Yaryshko, 2011).

The mathematical method consists of using the mathematical expectation criterion, the Laplace criterion and the Hurwitz criterion for risk assessment. The main one is the expectation criterion.

The simulation method of "decision tree" is based on the graphic construction of solutions. It is used in phased solutions or in the case of occurring of changes in probabilities when moving from one solution to another.

Decision tree is a way to represent classification rules in a hierarchical and sequential structure.

A method of estimating the probability of expected loss is based on the fact that the risk is defined as the product of the expected loss on the probability that this damage will occur. The best is the solution with a minimum size of the calculated indicator.

Risk assessment based on the analysis of the financial condition is one of the most common and reliable methods for the company and for its partners. Financial condition of the enterprise is characterized by a set of interrelated criteria. The most objective result can be obtained on the basis of use of both absolute and relative evaluation criteria in the analysis.

The analysis of the value of the absolute figures may not show the actual financial condition of the company. For its objective assessment, absolute indicators should be measured in dynamics over several years, which is not always possible in modern conditions – such as in the case of absence of equivalent data for comparison, reduced to a single denominator for past periods.

To assess the level of financial risk the system of relative indicators or financial ratios calculation based on data from the financial statements of the company is of special interest.

The value of the specific factor itself on its own gives little information for analysis. It is necessary to conduct spatial-temporal comparison of these coefficients with the regulations of their importance, as well as similar indicators for the related companies, examine their dynamics over a period.

The most important for the analysis of the financial condition of the enterprise and the prevention of bankruptcy risk are the following financial indicators:

- solvency and liquidity of the enterprise;
- financial stability;
- profitability;
- business activity.

The third stage of the process of financial risk management is the selection of specific methods of management. The main challenge when choosing a method of risk management at this stage is the decrease in the degree of risk to the lowest possible level. In the system of methods of management of financial risks of enterprise, the main role belongs to internal mechanisms of their neutralization. Internal mechanisms to neutralize financial risks represent a system of methods to minimize their negative consequences, selected and implemented within the enterprise (S. M. Neskorodiev, and O. O. Hrachova, 2014).

The system of internal control mechanisms and/or neutralization of financial risks involves the use of a number of methods.

*Risk avoidance method.* This method represents the complete neutralization of risks by a complete refusal by any event that is associated with the risk, and is thus the most radical among all the methods of financial risk management in the enterprise. Highly efficient, this method is limited due to the fact that many financial transactions are associated with the implementation of the main production and business enterprises to ensure regular receipt of incomes and formation of its profit.

*The method of limiting concentration risk.* The limitation is no limit, i.e. the limit of the amounts of costs, sales, credits, etc. Limiting is an important method of reducing the degree of risk and is used in enterprises when selling goods on credit, providing loans, determining the amount of capital investment, etc. In this strategy risk is defined by the strategy of the organization. The more aggressive the strategy, the higher may be scheduled the loss limit. It is believed that the limit of losses in an aggressive policy is the capital of the organization, and in a conservative policy – its profit.

*Hedging method.* Hedging is the conclusion of transactions in the derivatives financial markets in order to insure price risks, presented in the form of options purchase, conclusion of futures contracts and other transactions.

Hedging of financial risks through the corresponding operations with derivative securities is a very effective tool to minimize possible financial losses in case of risk case.

*A method of diversification.* The mechanism of risk diversification is primarily used to neutralize the negative financial consequences of nonsystematic (specific) risk. At the same time, it allows to minimize a certain extent certain types of systematic (specific) risks – currency, interest and some others. The principle of operation of this method is based on a different combination of risks by diversifying the financial object of the risks (O. Y. Polyakova and L. A. Goltyaeva, 2013).

Describing the diversification mechanism as a whole, it should be noted that this method has both positive and negative sides – on the one hand, an undoubted effect is provided in neutralizing the complex, portfolio financial risks of an unsystematic (specific) group, and on the other hand, it does not have an effect in neutralizing the overwhelming part of systematic risks (inflation, tax, etc.).

*Method of transfer (distribution) of risks.* This method of financial risk management is based on transferring part of the risk volume to partners for individual financial transactions. At the same

time, risks are distributed in such a way that each partner is transferred that part of the financial risks of the enterprise, according to which they have great opportunities to neutralize their negative consequences and have more effective ways of internal insurance protection.

The advantage of this method is the possibility of completely transferring most of the risks to partners, but the reverse side when this is due to the fact that many suppliers either refuse to accept these risks or impose large costs on the company in the form of re-billing from insurance organizations of suppliers.

*Self-insurance method (internal insurance).* The essence of this method is to divert internal funds to the enterprise in the form of reservation of a part of financial resources that can be used when risk events occur at the enterprise and are aimed at neutralizing negative consequences.

The most difficult and dangerous as to the financial consequences are the risks that cannot be neutralized due to internal mechanisms that are subject to insurance.

*The method of insurance of financial risks* represents the protection of the property interests of the enterprise upon the occurrence of an insured event by special insurance companies (insurers) at the expense of monetary funds formed by them by receiving insurance premiums from insurers.

This method of financial risk management is one of the most reliable in the world and can be used for any type of financial risk. But the disadvantage is that this method is the most expensive among all the methods of financial risk management.

Financial risk management allows to ensure the economic security of the enterprise.

The original concept of financial risk management is the concept of economic security. Under the economic security the qualitative characteristics of economic system that determines its ability to support normal conditions health system, development within the goals set for the system, and in the event of various threats (external and internal), a system that is able to withstand them and restore their performance is understood (O. I. Baranovs'kyj, 2004).

Enterprise economic security is the state of efficient use of resources and existing market opportunities that allows the company to avoid internal and external threats, ensures its long-term survival and sustainable development in accordance with the selected mission (O. I. Baranovs'kyj, 2004).

The main goals of economic security include:

- providing high financial efficiency, financial stability and independence of the company;
- studying partners, clients, competitors, candidates for employment;
- the prevention of penetration of competitors' economic intelligence structures and individuals with unlawful intents;
- detection, prevention and suppression of illegal and other negative activities of employees to the detriment of safety;
- effective organization of personnel security of the enterprise, its capital and property, as well as commercial interests:
- preservation of information constituting commercial secrets of the company;
- the search for the necessary information to make optimal management decisions;
- the formation of a positive opinion of the company among the population and business partners, contributing to the implementation of the core strategy and objectives of the enterprise;
- indemnification of material and moral damages caused by misconduct of organizations and individuals.

To insure economic security, constant analyze of the internal and external environment to identify risks and threats that affect the economic security is needed.

Risks to economic security are classified according to various criteria: according to the source (external and internal threats); the possibility of neutralizing (those which are partially neutralized and those that are not amenable to neutralization); the effect on the components of economic security of enterprise (those that affect all of its components, several components and one component); the time of occurrence (actual and potential); the sphere of origin (legal; economic;

political; environmental; social; scientific and technological; demographic); the nature of events (natural and accidental) (O. V. Orlyk, 2015).

Issues of assessing financial risks of business entities and finding ways to manage them in order to minimize or neutralize and ensure economic security are presented on the example of Ilyich Iron and Steel Works.

The risk of decrease of financial stability (risk of losing financial stability), which occurs for unsatisfactory capital structure of the company, entails significant future cash flows of the company during periods of repayment and payment of interest.

As an example of such an unsatisfactory capital structure, a structure of Ilyich Iron and Steel Works can be given (table 1):

*Table 1*

*Dynamics of indicators of financial stability of Ilyich Iron and Steel Works*

Indicator	Standard	2010	2015	2018	deviation from the norm		
					2010	2015	2018
Autonomy indicator	>0,5	0,63	0,53	0,35	+0,13	+0,03	-0,15
Financial stability ratio	>1	1,73	1,13	0,54	+0,73	+0,13	-0,46
Permanent capital ratio	>0,5	0,64	0,65	0,43	+0,14	+0,15	-0,04
Ratio of capital structure	<1	1,84	0,88	0,46	+0,84	-0,12	-0,56

*Source: Calculated by authors based on enterprise data (Ilyich Iron and Steel Works. Metinvest Official Website, 2020)*

After calculations, we can draw the following conclusions: 1) at the end of 2018, the coefficient of autonomy of Ilyich Iron and Steel Works has a low value, below the standard; values of the indicators of financial dependence and autonomy indicate that the company has a high level of dependence on borrowed sources of financing; 2) the financial stability indicator is within the regulatory limits at the end of 2010 and 2015, therefore, they are satisfactory and at the end of 2018 the indicator was low; 3) the rate of permanent capital at the end of 2010, 2015 is within the standard value, and the value of the indicator decreased by the end of 2018, which indicates a high proportion of current liabilities, namely satisfactory structure of borrowed capital of Ilyich Iron and Steel Works; 4) the ratio of capital structure in 2010 was within the normative value, and at the end of 2015, 2018 decreased, indicating a low level of equity capital at the end of the respective years. Values of indicators of financial stability show a low financial sustainability of the enterprise during the analyzed period.

It is advisable to consider multi-level scheme of a covering of stocks and costs in order to determine the absolute indicators of financial stability. The availability of sources for their formation will be determined by the extent of coverage and cost.

The presence of working capital (WC) is determined by the formula:

$$WC = E + NA \quad (1)$$

where:

E – equity;

NA – non-current assets.

Indicator of own and long-term borrowings (OLTB) is determined by the formula:

$$OLTB = WC + LTL - NA \quad (2)$$

where:

LTL – long-term liabilities.

The total size of main sources of formation of inventories and costs is determined by the formula (MS):

$$MS = WC + LTL + BSTL - NA \quad (3)$$

where:

BSTL – borrowings and short-term loans.

Each of the above variables of sources of formation of inventories and costs must be reduced for the amount of immobilization of current assets within other current assets and debtors.

Three indicators of the availability of sources of formation of inventories and costs correspond to the three indicators of coverage of their formation.

Shortage (-) or surplus (+) of working capital:

$$\pm \Delta WC = WC - IE \quad (4)$$

where:

IE – inventories and expenses.

Lack (-) or surplus (+) of long-term sources of formation of inventories and own working capital (LTSRWC):

$$\pm \Delta LTSRWC = LTSRWC - IE \quad (5)$$

Shortage (-) or surplus (+) of total amount of the main sources of formation of inventories and costs (MSFIC):

$$\pm \Delta MSFIC = MSFIC - IE \quad (6)$$

Using indicators of security of stocks and expenses by sources of their formation determine the financial situation on the degree of stability (table 2):

Table 2

*Assessment of financial stability of Ilyich Iron and Steel Works*

Indicator	2010	2015	2018	deviation	
				2018/2010	2015/2010
1	2	3	4	5	6
Equity	16955797	23207851	26976303	10020506	6252054
Non-current assets	14041177	28459285	32369428	18328251	14418108
Working capital (line 1 – line 2)	2914620	-5251434	-5393125	-8307745	-8166054
Long-term liabilities	1528588	5570401	6715005	4041813	5186417
Availability of own and long-term sources of coverage of reserves (line 3 + line 4)	4443208	318967	1321880	-3121328	-4124241

*Table 2 continuation on the next page*

*Table 2 continuation*

1	2	3	4	5	6
Short-term loans and borrowings	2579848	13864626	42454916	11284778	39875068
The total size of basic sources to cover the reserves (line 5 + line 6)	7023056	14183593	43776796	36753740	7160537
Fund	1952281	3069796	9568444	1117515	7616163
The surplus (+) or shortage (-) of own current assets (line 3- line 8)	962339	-8321230	-14961569	-15923908	-9283569
The surplus (+) or shortage (-) of own funds and long-term loans and loans (line 5 - line 8)	2490927	-2750829	-8246564	-10737491	-5241756
The surplus (+) or shortage (-) key sources of covering the stocks (line 7-line 8)	5070775	11113797	34208352	29137577	6043022
Stability of financial condition, days (рядок11·360/all sources)	86,66219528	91,53101681	160,7112959	74,04910065	4,868821535
The surplus (+) or shortage (-) key sources of coverage for 1 UAH. reserves (line 11/line 8)	2,597359192	3,620369888	3,575121723	0,977762531	1,023010696
The indicators of financial sustainability					
The type of financial stability	Normal financial stability	The unstable financial state	The unstable financial state	-	-

*Source: Calculated by authors based on enterprise data (Ilyich Iron and Steel Works. Metinvest Official Website, 2020)*

Based on the performed calculations above, it was found that acute lack of working capital throughout the study period, determined that of Ilyich Iron and Steel Works, as well as lack of long-term funding sources as of 2015, 2018.

Over the period of analysis of financial stability of Ilyich Iron and Steel Works it deteriorated from normal to the end of 2015 to unstable financial condition at the end of 2015, and 2018.

The risk of insolvency (risk of unbalanced liquidity) occurs together with a decrease in the liquidity of current assets, which also causes the imbalance of incoming and outgoing cash flows (table 3):

*Table 3  
Dynamics of liquidity indicators of Ilyich Iron and Steel Works*

Indicator	Standard	2010	2015	2018	deviation from the norm		
					2010	2015	2018
Absolute liquidity ratio	0,2	0,06	0,03	0,03	-0,17	-0,07	-0,14
Intermediate liquidity ratio	>1	0,91	0,81	0,8	-0,09	-0,19	-0,2
The total coverage ratio	2	1,26	1,02	1,03	+0,14	+0,15	-0,04

*Source: Calculated by authors based on enterprise data (Ilyich Iron and Steel Works. Metinvest Official Website, 2020)*

Table 3 lists the liquidity indicators, which indicate that the company has no absolute, intermediate and current liquidity. Therefore, this type of risk that is presented in the enterprise is critical.

For formation of effective system of financial risk management, the company must first identify and assess quality. The portfolio of financial risks of Ilyich Iron and Steel Works that can occur for the main types of its activities are shown in table 4:

Table 4

*Distribution of portfolio financial risks of Ilyich Iron and Steel Works by types of economic activity*

Types of financial risks	production activities	commercial activities	Activities and financial transactions					there is a risk for Ilyich Iron and Steel Works	
			financial activity						
			investment activity	credit activity	currency transactions	tax transactions	settlement operations		
<b>External risks</b>									
Inflation	+	+	+	+	+	+	+	significant	
Deposit	+	+				+		not significant	
Tax	+					+		significant	
Interest			+	+				significant	
Currency	+	+	+	+	+	+	+	significant	
<b>Internal risks</b>									
The risk of decrease of financial stability	+	+	+	+	+	+	+	significant	
Investment	+	+	+		+	+	+	significant	
Credit				+				not significant	
The risk of loss of profits	+	+	+	+	+	+	+	significant	

*Source: Own compilation*

Thus, the most profound types of risk for Ilyich Iron and Steel Works are defined – they are the risk of replace point and the risk of decrease of financial stability. The results of the analysis of financial risks shown in tables 1-4 revealed that the company has enough low values of the coefficient of autonomy and other indicators of financial stability, as well as a significant reduction in the liquidity of the company (N. A. Pimenov, 2014).

So, to the zone of catastrophic risk at Ilyich Iron and Steel Works got two kinds of risk: financial stability and liquidity. It must be stated that the company should focus on them when developing the relevant activities in the context of a strategy to further avoid these types of risk.

To improve the system, manage stated risks, a number of activities should be undertaken, including optimization of capital structure, optimization of structure of assets and liabilities, optimization of structure of receivables, implementation of the system of forecasting of market environment.

Equally important is the formation of the structure of assets and liabilities, which will improve the liquidity of the enterprise, and, accordingly, minimize the risk of insolvency.

In the structure of liabilities it is necessary to reduce the share of the most urgent and current liabilities. To cover a large amount of non-current assets, which are necessary for the efficient functioning and further development, Ilyich Iron and Steel Works should greatly increase the proportion of fixed liabilities. The proposed structure will ensure the stability of the company in the long term.

Measures should be taken to minimize or neutralize financial risks in the future. These include avoidance, diversification, limitation, domestic and foreign insurance. Each risk requires individual solution depending on the objective and subjective circumstances.

## CONCLUSION

Summarizing, we can conclude that the diversity of financial operations and financial risks, to which they are exposed, determine the need for their effective management advice. We can confidently say that there are no common methods of financial risk management for enterprises of different economic activities in the world. There is a set that has been used by various companies and is based on historical experience and mistakes of risk managers in modern conditions, taking into account their personal professionalism in making decisions to form the most effective mechanism of risk management consultation, which in turn guarantees the enterprise the implementation of its strategy and expected profit. Great importance must be attended to the enterprise's type of economic activity, the size of its business qualifications and financial apparatus.

The analysis of risk factors of Ilyich Iron and Steel Works assess the efficiency of financial risk management of the enterprise. The major measure to improve the situation is to enhance the values of sustainability indicators and liquidity by optimizing the structure of assets (in particular, property and receivables) and liabilities (to reduce the volume of loans), etc. Thus, the process of minimizing risk reduces the likelihood of negative financial consequences for the company and ensures the stability of its functioning. The novelty of this work is to study the structure of assets and liabilities of Ilyich Iron and Steel Works and the provision of reasoned recommendations for their optimization for further risk avoidance. The proposed measures can be considered by the administration of the enterprise, that is in a crisis state and the results of the study can be the basis for further scientific research.

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## КВАЛІМЕТРІЯ ФІНАНСОВИХ РИЗИКІВ В СИСТЕМІ ЕКОНОМІЧНОЇ БЕЗПЕКИ ПІДПРИЄМСТВА

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Актуальність розвитку підприємств України характеризується наявністю значної кількості чинників, які негативно впливають на функціонування їх функціонування як з боку держави, так самих підприємств. До таких чинників відносяться: національна економіка, нестабільність податкового і регуляторного законодавства, інфляційні процеси, недоступність кредитних ресурсів, посилення конкуренції, зниження рівня інвестиційної активності як підприємств, так і регіонів, уповільнення національного платіжного обороту, зростання числа збиткових підприємств. Дія цих чинників виникає в русі матеріальних і фінансових потоків та призводить до значних збитків і втрат, що в свою чергу негативно впливає на економічну безпеку підприємств. З огляду на це актуальним напрямком сталого функціонування вітчизняних підприємств є формування системи управління економічною безпекою підприємства.

**Метою** наукового дослідження є кваліметрія фінансових ризиків в системі економічної безпеки підприємства та розробка пропозицій щодо підвищення економічної безпеки шляхом мінімізації фінансових ризиків.

**Матеріали та методи.** В науковому дослідженні використані наступні методи – аналіз (при оцінці показників фінансової стійкості і ліквідності підприємства), синтез (при визначенні впливу складових фінансового ризику в загальній структурі фінансового ризику), логічний метод (при обґрунтуванні основних проблем, які пов’язані з виникненням фінансового ризику, та його впливом на економічну безпеку), узагальнення (при з’ясуванні сутності економічних категорій «фінансовий ризик», «економічна безпека»).

Hmyria, V. and Kucherenko, V. (2020), "Qualimetry of financial risks in the system of economic security of an enterprise", *Management and entrepreneurship: trends of development*, Vol. 1, Issue 11, pp. 8-22, DOI: <https://doi.org/10.26661/2522-1566/2020-1/11-01>

**Результати.** Важливим етапом роботи було визначення переваг, недоліків, умов для мінімізації фінансового ризику в системі економічної безпеки підприємства.

**Висновки.** В ході дослідження проведено оцінку фінансового ризику ММК ім.Ілліча та його вплив на економічну безпеку підприємства. Від того, яким шляхом сьогодні буде працювати підприємство, залежить економічний підйом металургійного комбінату, промислових регіонів, та розвиток галузей, які співіснують разом або залежать від металургійного бізнесу.

**Наукова значущість роботи** полягає в тому, що на основі проведених досліджень можливо вдосконалювати політику підприємства стосовно мінімізації фінансових ризиків та забезпечення економічної безпеки.

**Цінність проведеного дослідження** полягає в тому, що все більше необхідно приділяти уваги системі ризик-менеджменту на підприємстві, забезпечувати кадровий потенціал, який буде проводити своєчасну оцінку фінансових ризиків, а також розробляти ефективні заходи щодо мінімізації фінансових ризиків та забезпечення економічної безпеки в умовах господарювання.

**Ключові слова:** економічна безпека, фінансові ризики, інвестування, потенціал, метод, металургійний бізнес.

## КВАЛИМЕТРИЯ ФИНАНСОВЫХ РИСКОВ В СИСТЕМЕ ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ ПРЕДПРИЯТИЯ

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Актуальность развития предприятий Украины характеризуется наличием значительного количества факторов, которые негативно влияют на функционирование их функционирования как со стороны государства, так и самих предприятий. К таким факторам относятся: национальная экономика, нестабильность налогового и регуляторного законодательства, инфляционные процессы, недоступность кредитных ресурсов, усиление конкуренции, снижение уровня инвестиционной активности как предприятий, так и регионов, замедление национального платежного оборота, рост числа убыточных предприятий. Действие этих факторов возникает в движении материальных и финансовых потоков и приводит к значительным убыткам и потерям, что в свою очередь негативно влияет на экономическую безопасность предприятий. Учитывая это, актуальным направлением устойчивого функционирования отечественных предприятий является формирование системы управления экономической безопасностью предприятия на основе минимизации финансовых рисков.

**Целью** научного исследования является квалиметрия финансовых рисков в системе экономической безопасности предприятия и разработка предложений по повышению экономической безопасности путем минимизации финансовых рисков.

**Материалы и методы.** В научном исследовании использованы следующие методы – анализ (при оценке показателей финансовой устойчивости и ликвидности предприятия), синтез (при определении влияния составляющих финансового риска в общей структуре финансового риска), логический метод (при обосновании основных проблем, связанных с возникновением финансового риска, и его влиянием на экономическую безопасность), обобщение (при выяснении сущности экономических категорий «финансовый риск», «экономическая безопасность»).

**Результаты.** Важным этапом работы было определение преимуществ, недостатков, условий для минимизации финансового риска в системе экономической безопасности предприятия.

**Выводы.** В ходе исследования проведена оценка финансового риска ММК им. Ильича и его влияние на экономическую безопасность предприятия. От того, каким путем сегодня будет работать предприятие, зависит экономический подъем металлургического комбината, промышленных регионов, и развитие отраслей, которые сосуществуют вместе или зависят от металлургического бизнеса. Научная значимость работы заключается в том, что на основе проведенных исследований возможно совершенствовать политику предприятия по минимизации финансовых рисков и обеспечения экономической безопасности.

**Ценность проведенного исследования** заключается в том, что все больше необходимо уделять внимание системе риск-менеджмента на предприятии, обеспечивать кадровый потенциал, который будет проводить своевременную оценку финансовых рисков, а также разрабатывать эффективные меры по минимизации финансовых рисков и обеспечения экономической безопасности в условиях хозяйствования.

**Ключевые слова:** экономическая безопасность, финансовые риски, инвестирование, потенциал, метод, металлургический бизнес.