

Qualimetry of financial risks in enterprise activities

Viktoriia Hmyria^{1*}, Shevchuk Nataliia Valentinivna²

¹*Cherkassy State Business College*

²*Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine*

*Corresponding author's e-mail: viktoryagmirya@ukr.net

The protection of the enterprise from various existing or possible threats does 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.

The risk that the action aimed at attractive goal that 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 the implementation of which or from alternative solutions.

The most common types of entrepreneurial risk include:

- financial risk arising from various kinds 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 the risk level. [1]

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

The analysis is qualitative, quantitative or complex. The qualitative analysis revealed 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 revealed the concrete amount of money damage separate subspecies and financial risk in general.

Qualitative analysis can be performed by various methods, including the method of using the analogues and the method of expert evaluations [2].

The method of using the analogues is the application of experience financial manager in dealing with similar issues. The method of analogues is used in the case where the use of other methods any reason impossible. This 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.

Issues of assessing financial risks of business entities and finding ways to manage them in order to minimize or neutralize and ensure economic security 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, namely: which 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, can produce a structure on the example of **Ilyich iron and steel works** (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 the author based on enterprise data [3]

After calculations, we can draw the following conclusions: 1) at the end of 2018, the coefficient of autonomy **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 end of 2018, the value and at the end of 2018, the value of the indicator decreased, which indicates a high proportion of current liabilities, namely satisfactory structure of borrowed capital **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 [3].

The risk of insolvency (risk of unbalanced liquidity) that occurs together with a decrease in the liquidity of current assets, which also causes the imbalance of incoming and outgoing cash flows (table 2).

TABLE 2 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 the author based on enterprise data [3]

The risk of insolvency (risk of unbalanced liquidity) that occurs together with a decrease in the liquidity of current assets, which also causes the imbalance of incoming and outgoing cash flows. Therefore, this type of risk that is present in the enterprise is critical.

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

In the structure of liabilities 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 solutions depending on the objective and subjective circumstances [4].

References

- [1] Klapkiv M S 2002 Insurance of financial risks *Ekonomichna dumka* Ternopil, Ukraine
- [2] Kostets'kyj V V 2012 Problems of insurance protection enterprise from financial risks *Innovatsijna ekonomika* **37** 226-30 (in Ukrainian)
- [3] *Metinvest Official Website (Ilyich iron and steel works)* **E-source:** <https://ilyichsteel.metinvestholding.com/en> (accessed 01/04/2020)
- [4] Hmyria V, Kucherenko V 2020 Qualimetry of financial risks in the system of economic security of an enterprise *Management and Entrepreneurship: Trends of Development* **1**(11) 8-22 **E-source:** <https://doi.org/https://doi.org/10.26661/2522-1566/2020-1/11-01>