

IDENTIFICATION OF COMMERCIAL ORGANISATION FINANCIAL RISKS AND MECHANISMS TO NEUTRALISE THEM

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Abstract

The article provides an assessment of the financial risks of a poultry company over the last three years. Particular attention was paid to insolvency risk, credit risk and inflation risk. The calculations proved the presence of rather high financial risks in the organization's activity. The company in the first two years of the analyzed period had a high probability of insolvency and therefore the risk of bankruptcy is maximum, in the current year the situation has normalized. An assessment of the credit risk of the company from the perspective of both the borrower and the lender showed that this risk was reduced during the analyzed period. But the organization may face the risk of not securing its liabilities, i.e. a peculiar form of credit risk, since the amount of borrowed capital exceeds equity by 75.3 times. The level of inflation risk in the current period is high due to rising inflation in the country. The authors proposed mechanisms to ensure financial stability of the studied company, which are divided into internal and external. The main types of internal mechanisms of financial recovery of the company were strategic tactical and operational ones.

Key words: commercial organizations, financial risks, mechanism, assessment, company

INTRODUCTION

The main objective of any business activity is considered to be achieving maximum profit at the lowest possible cost of financial resources. In order to achieve this goal it is necessary to compare the amount of resources invested with the financial results obtained. But there is a possibility of financial losses, depending on the size and type of activity of the business entity [10, 11].

In Russia, despite the instability of the economy, which worsens the situation of organizations, insufficient attention is paid to the assessment and integrated management of risks that arise during the operation of enterprises [12].

In this context, the purpose of the paper is to analyze the financial risks in terms of risk of financial stability, credit risk, inflation risk, insolvency risk of an agricultural company dealing with poultry farming specialized in egg production for consumption and recommend what the company has to do to avoid financial risks in the future.

MATERIALS AND METHODS

OAO "Poultry farm "Kolyshleyskaya" (OJSC) is specialized in the production of edible chicken eggs. Currently, the financial position of the studied enterprise is stable and improves every year. But in the process of its activities OAO "Poultry farm "Kolyshleyskaya" bears a variety of financial risks, the main of which include the risk of reduced financial stability, credit risk, inflation risk, the risk of insolvency, etc.

We carried out a detailed analysis of some of risks and assessed the level of their management.

Today there are many methodologies allowing to predict the risk of bankruptcy of an enterprise. These methods suggest assessing the risk of an enterprise on the basis of calculating the degree of its solvency, liquidity and financial stability [6].

RESULTS AND DISCUSSIONS

In order to predict the bankruptcy of OAO "Poultry farm "Kolyshleyskaya" (OJSC)

several Russian methodologies were used (Table 1).

Table 1. Calculation of insolvency indicators for OAO "Poultry farm "Kolysheyskaya" (OJSC) using different methodologies

Indicator	2018	2019	2020
(a) A model by R.S. Saifullin and G.G. Kadykov			
K1 – equity ratio	-1.26	-1.35	-0.62
K2 – current ratio	0.81	0.76	1.20
K3 – the turnover rate of the capital invested	1.64	1.71	1.91
K4 – management ratio	0.01	0.04	0.11
K5 – return on equity	-0.10	-0.32	16.47
R (integral indicator)	-2.40	-2.78	15.55
Financial status	unsatisfactory	unsatisfactory	stable
(b) A model for predicting company bankruptcy of ISEA			
X1	-0.13	-0.16	0.10
X2	-0.06	-0.21	15.95
X3	1.64	1.71	1.91
X4	-0.01	-0.03	-0.12
R-model	-1.04	-1.51	16.84
Probability of bankruptcy	90-100%	90-100%	up to 10%
(c) A model by O.P. Zaitseva for predicting company bankruptcy			
X1	0.00	0.00	0.00
X2	2.98	4.59	5.21
X3	10.14	11.76	6.45
X4	0.00	0.00	0.00
X5	-5.20	-5.13	-10.80
X6	0.61	0.58	0.52
Kfact	1.87	2.36	0.78
$K_n=0.25*0+0.1*1+0.2*0.7+0.25*0+0.1*0.7+0.1*X_6$	1.64	1.63	1.63
Probability of bankruptcy	high	high	company is stable

Source: Compiled by the authors based on the accounting data of an agricultural organization.

Having analyzed the risk of bankruptcy of OAO "Poultry farm "Kolysheyskaya" (OJSC), we could see that this organization in the first two years of the analyzed period had a high probability of insolvency, and, therefore, the risk of bankruptcy was the highest. In the current year the situation has normalized. But the company's management has to use the maximum set of measures to stabilize the situation in the short term in order to consolidate the result.

Credit risk is the possibility of incurring losses due to non-payment or delayed payment of the client's financial obligations, i.e. the company would not be able to repay its debts in full and on time. Both the lender (credit institution) and the borrower (enterprise) are exposed to credit risk [3].

Figure 1 shows the data on the sources of financing of OAO "Poultry farm.

"Kolysheyskaya" (OJSC). It shows that the ratio of equity and debt capital in OAO "Poultry farm "Kolysheyskaya" is not optimal. Equity appeared in the organization only in 2020 in the amount of only 1,249 thousand rubles, and in the previous two years it had a negative value due to the presence of an uncovered loss (unprofitable activities in 2010-2012). Borrowed capital decreased by 22.5 % in three years. If we consider the ratio of equity to borrowed capital, borrowed capital in 2020 is 75.3 times higher than equity.

This situation indicates that the organisation may face the risk of not securing its obligations, i.e. a peculiar form of credit risk. In order to determine the possibility of its occurrence, we analysed in more detail the quality of credit liabilities of OAO "Poultry farm "Kolysheyskaya" (Figure 2).

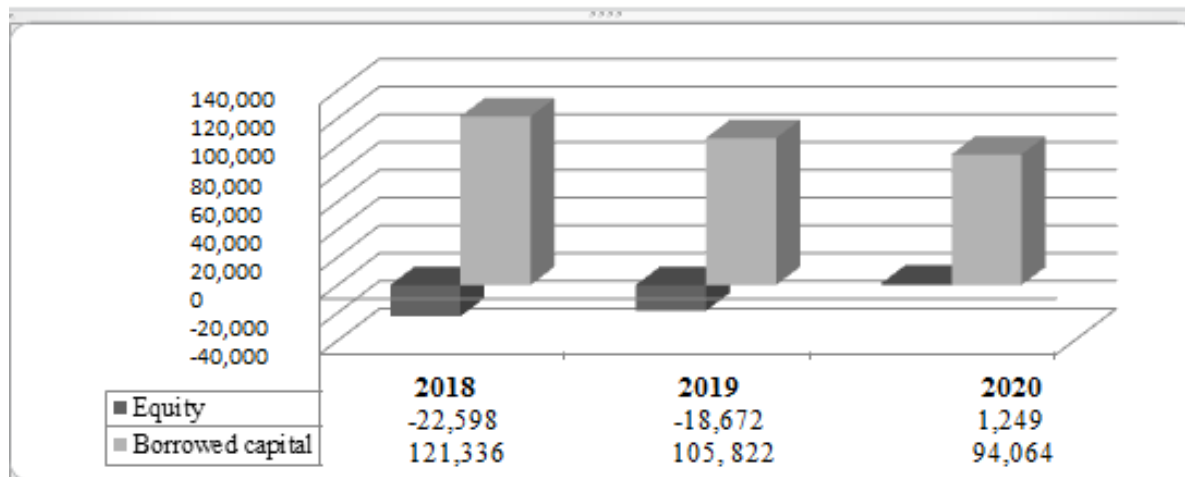


Fig. 1. The ratio of debt to equity at OAO "Poultry farm "Kolyshleyskaya", (Thousand rubles)
 Source: [5].

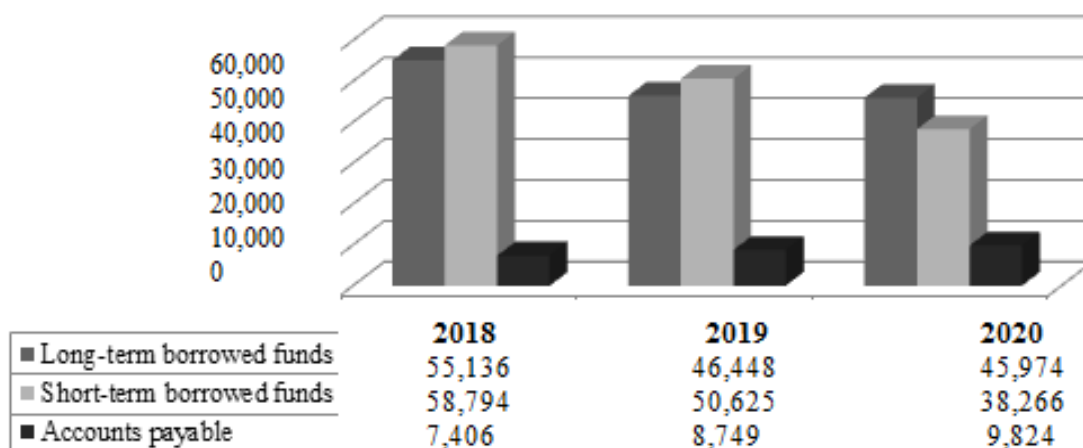


Fig. 2. Dynamics of borrowed funds of OAO "Poultry farm "Kolyshleyskaya", (Thousand rubles)
 Source: [5].

Figure 2 shows that both long-term and short-term borrowings are decreasing every year. Accounts payable increase every year, but remain at a rather low level. In this connection, it was concluded that the credit risk in the researched organization is decreasing.

The credit policy of OAO "Poultry farm "Kolyshleyskaya" was further analyzed.

To do this, the dynamics and effectiveness of the use of accounts receivable and accounts payable were considered, as the organization when providing commercial credit to its buyers and customers becomes exposed to the risk of loss of income due to the possibility of non-repayment by the debtors.

Table 2 shows that the value of accounts receivable in the researched enterprise is not high and, moreover, it decreased during the

observed period from 2,482 thousand rubles to 1,885 thousand rubles.

This led to improvement of the efficiency indicators of accounts receivable use.

Thus, the turnover ratio increased by 18.68 for the period, while the receivables turnover period decreased by 1 day and was only 4 days in 2020.

Accounts payable, on the other hand, increased, and its size in 2020 was 9,824 thousand rubles. The turnover period of accounts payable also decreased by one day and its duration is also not great, although it is higher than the duration of accounts receivable.

This indicates that the organization in question is paying its liabilities more slowly than it is receiving funds from its debtors.

Table 2. Efficiency indicators of the use of accounts receivable and accounts payable in OAO "Poultry farm "Kolyshleyskaya"

Indicator	2018	2019	2020	Deviation (+,-) 2020 from 2018
Value of accounts receivable, thousand roubles	2,482	1,906	1,885	-597
Revenue, thousand roubles	162,140	149,452	182,350	20,210
Accounts receivable turnover ratio	77.52	68.12	96.20	18.68
Accounts receivable turnover period, days	5	5	4	-1
Accounts payable	7,406	8,749	9,824	2,418
Accounts payable turnover ratio	19.19	18.50	19.64	0.45
Accounts payable turnover period, days	19	19	18	-1

Source: Compiled by the authors based on the accounting data of the agricultural company [5].

In general, based on the results of the analysis of the credit risk of OAO "Poultry farm "Kolyshleyskaya", we could say that the company reduced the level of the risk for the period under analysis from the borrower's point of view. The assessment of credit risk from the lender's point of view showed that its level in 2020 also decreased. This fact is due to the reduction of the organization's accounts

receivable, however, this risk should be kept under constant control.

The next type of risk that an organization bears as it conducts its business is the risk of inflation. All money-flow processes in the Russian economy are subject to inflation, and to understand how significant this risk is, it is necessary to analyze the dynamics of inflation (Figure 3).

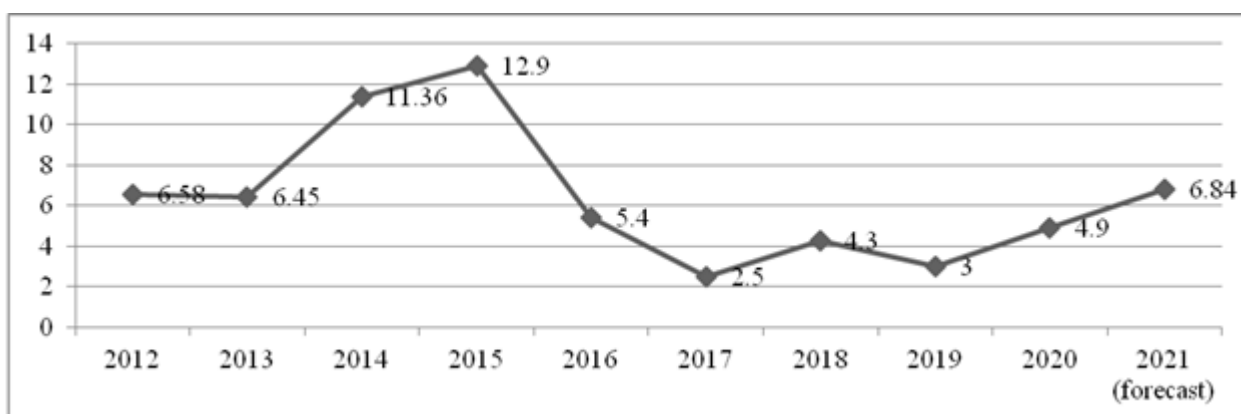


Fig. 3. Inflation in the Russian Federation, %.

Source: Rosstat [9].

The inflation rate trended downwards from 2015 to 2017. In 2020, inflation was the highest since 2016 (5.4%), in 2017 the price increase was only 2.5%, in 2018 - 4.3% and 3.0% in 2019.

The main reason for the acceleration of inflation in the Russian Federation to 4.9% in 2020 was the weakening of the national currency. In 2020, the difficult epidemiological situation in our country prevented a normal rate of development, due to which the purchasing activity of the population decreased.

Inflation in 2021 also appears to be higher than forecast by the Bank of Russia. As of 13 September, annual inflation is estimated to have risen to 6.84%.

According to the above data, we could conclude about the high level of inflation risks for all Russian organizations, including OAO "Poultry farm "Kolyshleyskaya" (OJSC).

The consequence of the inflationary process is the depreciation of available funds, so the financial management of OJSC "Poultry farm "Kolyshleyskaya" could be recommended to use funds as efficiently as possible [2, 8].

Thus, the financial risk management in OAO "Poultry farm "Kolyshleyskaya" requires

some improvement, as the calculations proved the presence of sufficiently high financial risks in the organization's activities.

In order to solve the problems of financial recovery of the company, standard and universal measures are used, forming mechanisms to ensure financial sustainability [1].

There are external mechanisms (with the help of external individuals and legal entities) and internal (within the enterprise itself).

Table 3 shows the main types of internal mechanisms of financial recovery [4].

Figure 4 shows the proposed activities to be included as part of the operational framework for financial recovery.

In order to reduce short-term financial liabilities the organization should use an increase in the maturity of commodity credit, restructuring of the short-term financial credit portfolio, deferral of settlements on some types of internal accounts payable, etc.

The sale of unused equipment, leasing operations are proposed as measures to accelerate the disinvestment of non-current assets of the company [7].

Table 3. Stages and internal mechanisms for company financial recovery

Stages for company financial recovery	Mechanisms for financial recovery		
	Operational	Tactical	Strategic
Insolvency elimination	Ensuring "cutting off the excess"	-	-
Restoring financial sustainability	-	Implementing "enterprise compression"	-
Ensuring a long-term financial equilibrium	-	-	Based on sustainable economic growth

Source: Compiled by the authors based on the accounting data of the agricultural company [5].

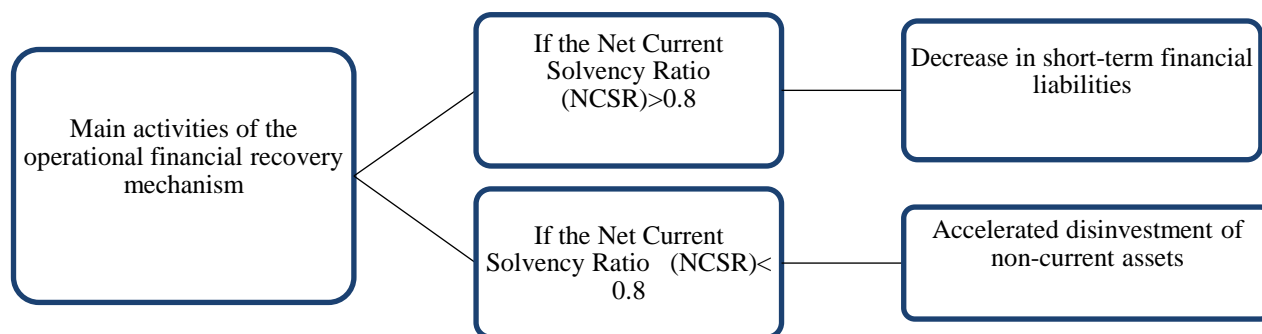


Fig. 4. The main activities of the operational mechanism for the financial recovery of OAO "Poultry farm "Kolysheyskaya".

Source: Compiled by the authors based on the accounting data of the agricultural company [5].

CONCLUSIONS

The analysis of the state of financial risks of OJSC "Poultry Farm "Kolysheyskaya" in the first two years of the analyzed period has a high probability of insolvency, and, therefore, the risk of bankruptcy is maximum. This year the situation has normalized. According to the ratio of own and borrowed capital, it was concluded that the organization may face the risk of the possibility of failure to secure its obligations, i.e. a form of credit risk. In order to determine the possibility of its occurrence, the quality of credit obligations of OAO

Poultry Farm Kolysheyskaya was analyzed. The next type of risk that an organization bears when carrying out its activities is inflation risk. The situation with accelerating inflation in the last two years has affected the value of the inflation risk of the organization under study, which is increasing. The financial risk management policy of Kolysheyskaya Poultry Farm OJSC requires some improvement, since the calculations performed have proved the presence of fairly high financial risks in the organization's activities. In our opinion, it is necessary not only to reasonably assess the level of the

corresponding risks, but also to introduce at the enterprise under study some methodology for their more detailed identification in the long and short term. In this regard, it would be justified to use an in-depth methodology for scoring the financial risk of an organization's insolvency with the calculation of the final coefficient.

The paper proposed the main directions to reduce or eliminate some of the risks. The internal elements of financial risk management of Kolyshleyskaya Poultry Farm OJSC should be formed at the operational, tactical and strategic levels.

The main content of the operational mechanism for reducing the risks of the threat of insolvency is to ensure the balance of monetary assets and short-term financial liabilities of the enterprise.

As directions for eliminating the problem of insolvency, one should choose the reduction of liabilities through the prolongation and restructuring of loans, the postponement of certain types of accounts payable, the increase in the terms of commodity credit, etc. Non-current assets of the company are financed by only long-term liabilities, which is not quite an adequate situation in the current environment.

Therefore, it is advisable to optimize the capital structure by increasing the amount of own funds. This can be achieved through the use of a depreciation premium. At the same time, it is inappropriate to use only non-linear methods with decreasing coefficients, since they not only do not provide tax benefits, but also significantly reduce the amount of depreciation.

Combining the existing depreciation methods allows us to develop a more efficient depreciation policy aimed at updating fixed production assets. As measures for the accelerated deinvestment of non-current assets of the company, it is proposed to sell unused equipment, rent fixed assets instead of buying, leasing operations. The implementation of the proposed measures to eliminate, avoid or control financial risks would allow Kolyshleyskaya Poultry Farm OJSC to significantly reduce the threats to its financial stability.

REFERENCES

- [1]Batkovsky, M., Bulava, I., Mingaliev, K., 2009, Analysis of enterprise financial condition and internal mechanisms of its recovery Economic analysis: theory and practice. 31. 18-25.
- [2]Bondina, N., Bondin, I., Pavlova, I., 2021, Methodological justification and analytical support for cash flow forecasting Scientific Papers-Series Management Economic Engineering in Agriculture and Rural Development, Vol. 2 (2), 111-117.
- [3]Kinev, Y., 2011, Assessment of financial and economic activity risks of enterprises at the stage of managerial decision-making. Management in Russia and abroad. Vol. 5. 57- 60.
- [4]Mingaliev, K., Batkovsky, A., Batkovsky, M., Bulava, I., Bozhko, V., Pustovitova, T., Traiger, E., Yaroshuk, M., 2010, Financial recovery of enterprises in conditions of recession and post-crisis development of Russian economy (theory and tools) (Moscow: MAOK). p. 339.
- [5]OAO "Poultry farm "Kolyshleyskaya, Balance sheet and profit and loss account.
- [6]Nosov, A., Fedotova, M., Tagirova, O., Novichkova, O., Boryaeva, T., Grishin, G., 2016, Financial Management: Experience of Russian Agroindustrial Complex Organizations (Penza: PSAA Publishing House) p. 263.
- [7]Nosov, A., Tagirova, O., Novichkova, O., Boryaeva, T., 2016, Financial mechanism for sustainable development of the agrarian sector of the region (Penza: PSAA Publishing House). p. 189.
- [8]Nosov, A., Tagirova, O., Fedotova, M., Novichkova, O., 2021, Forecasting as a way to reduce the risks of a cash flow deficit in agricultural organizations Scientific Papers-Series Management Economic Engineering in Agriculture and Rural Development, 21 (2), 417-424.
- [9]Rosstat, 2022, Inflation rate.
- [10]Samygin, D., Baryshnikov, N., 2015, Scenarios of agricultural business development in Penza oblast: Forecast and risk estimate Studies on Russian Economic Development Vol. 26(1), 59-62.
- [11]Samygin, D.Y., Baryshnikov, N.G., Mizjurkina, L.A., 2019, Models of Scenario Forecasting of the Region's Agriculture Development Ekonomika regiona-economy of region Vol. 15 (3), 865-879.
- [12]Tagirova, O., Novichkova, O., Nosov, A., Fedotova, M., Boryaeva, T., 2017, Financial risks of agricultural organizations: classification, assessment, management (Penza: PSAU Publishing House). p. 184.