

IMPROVEMENT OF THE ANTI-CRISIS MANAGEMENT SYSTEM AT THE ENTERPRISE (ON THE EXAMPLE TENGIZCHEVROIL LLP)

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Abstract. The purpose of this research work is to analyze and identify strategies for improving the anti-crisis management system at Tengizchevroil LLP enterprise. A crisis refers to a situation where an enterprise faces limited capabilities due to various external and internal factors, leading to a decline in solvency and overall financial indicators. During a crisis, many enterprises resort to measures such as asset sales, staff reductions, and layoffs to address the challenges they face. Internal factors contributing to a crisis include organizational inefficiency, an inefficient management system, mass layoffs, production stoppages, and force majeure events, among others. External factors that can lead to a crisis encompass political, economic, social, environmental, natural disasters, financial, and technological aspects. In the event of bankruptcy, the company undergoes liquidation, and the debts owed to creditors are settled. The research work aims to define the concept of a crisis and its role in the socio-economic development of the enterprise while conducting a comprehensive evaluation of the anti-crisis management system at Tengizchevroil LLP.

Keywords: crisis, anti-crisis management, bankruptcy, improvement of the anti-crisis management system.

Introduction

In a market economy, enterprises are constantly evolving, and their competitiveness relies heavily on their financial and economic indicators. Every enterprise engaged in market activities faces numerous political, economic, financial, technical, and social challenges on a daily basis. The financial and economic situation of an enterprise, whether good or bad, is directly influenced by the effectiveness of its existing management system, including anti-crisis management. Implementing preventive measures is crucial to ensuring the economic efficiency of the enterprise.

A crisis occurs when an enterprise faces limited capabilities due to various external and internal factors that lead to a decrease in solvency and overall financial indicators. During a crisis, many enterprises attempt to address the problem by selling assets, reducing personnel, and implementing layoffs. Internal factors contributing to the emergence of a crisis may include organizational inefficiency, an ineffective management system, mass layoffs, production disruptions, and force majeure events. External factors that can trigger a crisis encompass political, economic, social, environmental, natural disasters, financial, and technological factors. In the event of bankruptcy, the enterprise undergoes liquidation,

settling its debts with creditors, and being officially declared bankrupt and recorded in the register.

The main purpose of the research work is to evaluate and analyze the anti-crisis management system of Tengizchevroil LLP, a large company in the oil and gas sector of Kazakhstan. Tengizchevroil is the largest oil- and gas-producing company in Kazakhstan. The company was founded in 1993 on the initiative of the American company Chevron. The object of the study is the anti-crisis management system of Tengizchevroil LLP. Given the ongoing development of a market economy, financial stability, enterprise solvency, and the effective organization of a comprehensive anti-crisis management system hold great significance. The relevance of this research work is justified by these factors.

Literature review

The concept of crisis was defined by the authors as follows:

A crisis is a process of destruction of the equilibrium of a self-regulating system, which is accompanied by the disappearance of stability and may result in a failure or shutdown of the system (Bei Ma, Jing Zhang, 2022).

A crisis is an unforeseen circumstance that threatens the main management system of an enterprise (Belov, 2015).

Crisis – the final aggravation of development; developing risks of liquidation and bankruptcy; inconsistency of economic and financial systems; a turning point in the development process (Coombs W.T., 2015).

A crisis is an unstable and critical situation that threatens radical negative changes (Zakharov V.Y., 2017).

A crisis is a complication of processes leading to the radical disappearance of an enterprise, threatening its partners, staff, stakeholders, the size of assets, the image of the enterprise and the head, the goals and missions of the enterprise (Feinschmidt E.A., 2014).

The first signs of the emergence of an economic crisis include: a sharp deterioration in the quality of products produced by the enterprise (Feinschmidt E.A., 2014), a shortage of raw materials and material assets, staff instability (Ivanov G.P., Belyaev S.G., Koshkin V.I., 2019), a decrease in prices, a reduction in production volumes, a deterioration in the quality of work (Korotkov E.M., 2014), lack of demand, consumer outflow.

The emergence of the crisis at enterprises, its causes, the problems of carrying out preventive, preventive work, the problems of effective organization of anti-crisis management are written in the works of the following authors: Feinschmidt E. A., Ivanov G. P., Belyaev S. G., Koshkin V. I., Korotkov E. M., Machiavelli N., Coombs W.T. Bei Ma, Jing Zhang, P. G. Belov.

Methodology

The material base of the research work consists of the annual final financial reports of Tengizchevroil LLP for 2017-2022 and data from foreign companies. The following research methods were used in the course of the study: quantitative and qualitative analysis of official enterprise data, review and analysis of literature on the research topic, synthesis, methods of strategic analysis: PEST analysis, analysis based on the Michael Porter force model 5.

Research questions:

1. What is the effectiveness of the anti-crisis management system of Tengizchevroil LLP at the present time?
2. Is the company financially stable? What is the level of solvency?
3. What measures should be taken to improve the anti-crisis management system of Tengizchevroil LLP?

Hypothesis: It is hypothesized that by developing measures to enhance the company's anti-crisis management system and implementing them in the organization's operations, the company's efficiency will improve, and the risks associated with crises and bankruptcy will be minimized.

Results & Discussion

The occurrence of a crisis can be attributed to seven main factors:

- Objective factors arise from the need for restructuring and adapting to changes in the economic system, as well as the introduction of new innovations.
- Subjective factors are influenced by errors and unforeseen circumstances within the management system.
- Natural factors are characterized by natural disasters and a sudden deterioration in natural and climatic conditions.
- Internal factors are closely linked to issues within the internal organizational system of the enterprise.
- External factors emerge in connection with trends in macroeconomic development.
- Random factors are characterized by the presence of unpredictable processes.
- Regular or expected factors occur in accordance with established patterns and can be predicted.

A post-crisis scenario can unfold in one of two cases. First, the company successfully overcomes the crisis by promptly diagnosing it, identifying symptoms, and making effective decisions, which enables it to transition into a new economic cycle characterized by growth. The organization of an anti-crisis management system within the enterprise, along with a competent anti-crisis manager, plays a crucial role in facilitating this process.

The second case involves the termination of the company's operations. This often leads to production shutdowns, widespread unemployment, bankruptcy, and a deterioration of the economic and social situation. The existence of a crisis situation is a normal occurrence for any economic entity operating in a market, and given the threats it poses to the enterprise's viability, it becomes essential to timely identify, diagnose the causes of the crisis, and mitigate its consequences. To this end, enterprises implement anti-crisis management practices.

Anti-crisis management allows for the close monitoring of the financial and economic condition

of the enterprise, preventing crises and achieving efficiency. A well-organized anti-crisis management system enables the expansion of the enterprise's competitiveness.

Analysis of solvency provides reliable information about the financial condition of the enterprise and the risk of bankruptcy (Feinschmidt E.A., 2014).

The analysis of solvency is carried out by determining coefficients such as:

- absolute liquidity ratio;
- current liquidity ratio;
- asset security ratio of liabilities;
- coefficient of loss of solvency.

The solvency indicators of Tengizchevroil LLP are shown below (Table 1).

Table 1 – Solvency indicators of Tengizchevroil LLP

Coefficient	Formula	Calculation	Norm
Absolute liquidity ratio	$K \text{ absolute liquidity} = (\text{cash} + \text{short-term financial investments}) / \text{current liabilities}$	$(2500000 + 188000) / 48751000 = 0,05$	$>0,2$
Current liquidity ratio	$K \text{ current liquidity} = \text{current assets} / \text{short-term liabilities}$	$62680310 / 48751000 = 1,28$	>1
Asset security ratio of liabilities	$K \text{ asset security of liabilities} = \text{liabilities} / \text{balance sheet currency}$	$61065410 / 79565410 = 0,76$	$<0,85$
Coefficient of loss of solvency	$K \text{ coefficient of loss of solvency} = ((K.a.d. \text{ end of the period} + 6 / t (K.a.d. \text{ end of the period} - K.a. \text{ beginning of Stage})) / 2$	$(0,05 + 1,2(0,16 - 0,05)) / 2 = 0,091$	>1

According to Table 1, the coefficient of loss of solvency of the enterprise is equal to 0.09, which means the risk of

losing solvency. As a result of the analysis, we can conclude that the solvency of the enterprise is low (Figure 1).

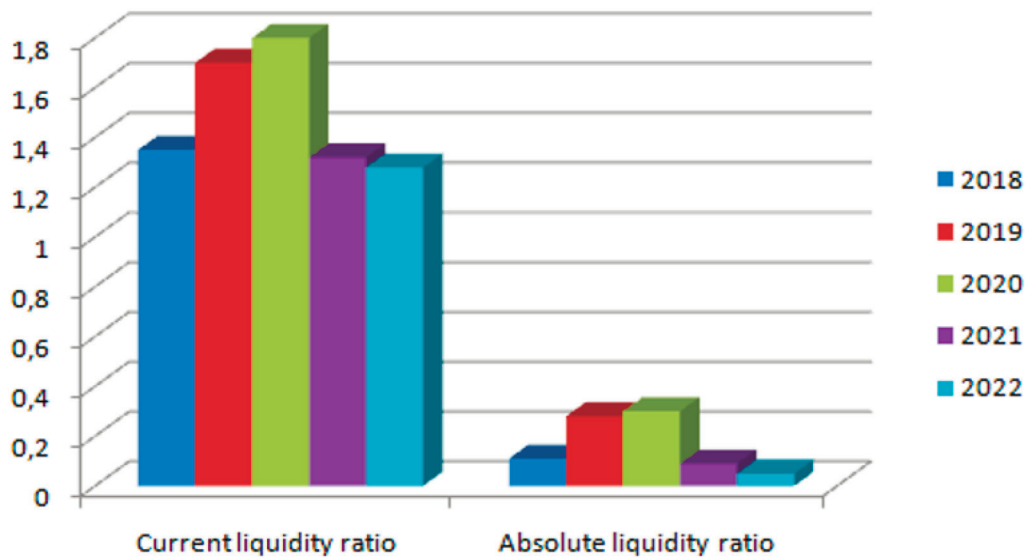


Figure 1 – Dynamics of solvency of Tengizchevroil LLP, 2018-2022

Financial stability is a criterion that reflects the financial and economic situation of the enterprise, the ef-

fectiveness of financial management and how independent it is from a financial point of view (Belov, 2015).

It identifies absolute, stable, unstable and crisis types of financial stability. We can determine the possibility of settlements of the enterprise with creditors and other parties by analyzing financial stability. The indicators of financial stability are the coefficient of autonomy, the coefficient of provision with own working capital, the coefficient of financial stability, the coefficient of financial de-

pendence, the share of overdue accounts payable in liabilities, etc.

Financial stability indicators, compiled on the basis of the data of the Tengizchevroil LLP enterprise for 2021, are as follows: autonomy coefficient – 0.23; own working capital provision coefficient – 0.02; share of overdue accounts payable in liabilities – 0.26; financial stability coefficient – 0.4; financial dependence coefficient – 0.77 (Table 2).

Table 2 – Financial stability indicators of Tengizchevroil LLP

Coefficient	Formula	Calculation	Norm
Autonomy ratio	$K = \text{own capital} / \text{balance sheet currency}$	$18500000/79565410 = 0,23$	$>0,5$
Coefficient of provision of own working capital	$K = (\text{own capital} - \text{non-current assets}) / \text{current assets}$	$(18500000 - 16885100) / 62680310 = 0,02$	$>0,1$
Share of past accounts payable in liabilities	$K = \text{accounts payable} / \text{liabilities}$	$16146300/61065410 = 0,26$	-
Financial stability ratio	$K = (\text{own capital} + \text{long-term liabilities}) / \text{balance sheet currency}$	$(18500000 + 12314410) / 79565410 = 0,4$	$>0,75$
Financial dependence ratio	$K = \text{liabilities} / \text{asset}$	$61065410/79565410 = 0,77$	$<0,5$

The autonomy coefficient shows how independent the financial condition of the enterprise is from external sources of financing, that is, from creditors. The autonomy coefficient of the enterprise is equal to 0.23, which indicates that the financial condition depends on borrowed funds. The coefficient of financial dependence of the enterprise is equal to 0.77 (the sum of the coefficient of financial dependence and the coefficient of autonomy is always equal to 1), which indicates that the assets of the enterprise have a higher level of financing from external sources. According to the results of 2021, the accounts payable of the enterprise amounted to 16146300 tenge, which is 2707588 tenge or 20% more than last year. Financing from external sources (loan, loan) reduces the solvency of the enterprise. As a result of the anal-

ysis, it can be seen that the financial condition of the enterprise is unstable, is in a crisis situation.

To assess the anti-crisis management system of an enterprise, it is necessary to conduct a comprehensive analysis of the internal and external reasons for being in a crisis situation. A comprehensive analysis of factors of the internal and external environment allows the enterprise to determine which factor has a negative and positive impact, to prevent a crisis, to carry out measures to improve solvency (Korotkov E.M., 2014). Methods for diagnosing a crisis situation in an enterprise: PEST-analysis of the external environment, SWOT analysis of its market position and competitive analysis based on M. Porter's 5 strength model are carried out (Tables 3, 4).

Table 3 – Results of PEST analysis of Tengizchevroil LLP

Political factors		Economic factors	
Factor	Score	Factor	Score
Increased customs duty	4	Inflation rate, purchasing power of consumers	4
Changes in tax policy	2	Amount and conditions of remuneration	3,7
Legislative changes	5	Exchange rate	4
Social factors		Technological factors	
Demographic changes	4	New technologies in production	4,5
Migration	4		

Table 4 – Analysis of the competitive environment of Tengizchevroil LLP based on M. Porter’s 5 strength model

Criterion	Description	Risk level
Strength of new competitors	There is a high probability that new competitors will appear.	high
Power of buyers	80% of the enterprise's customers are regular wholesale buyers, the sensitivity of consumers to Prices is average, consumers are satisfied with the level of price and quality.	average
Supplier strength	The number of suppliers is 5-8. the suppliers of the Enterprise are reliable companies that have been partners for many years.	low
Substitute goods	The level of risk on the part of substitute goods is low.	low
The strength of intra-industry competition	The main competitors of the enterprise in the oil and gas sector are Karachaganak Petroleum Operating, NC KazMunayGas, Mangistaumunaygas, CNPC-Aktyubemunaygas	average

Summing up the analysis, we can say that the competitiveness of the enterprise is high. This is influenced by the fact that the enterprise is a market leader, providing quality services and the effectiveness of marketing activities.

Enterprise expenses increased significantly in 2021 compared to the previous year, for example, General and administrative expenses by 94% (2020 – 3 495 000 tg, 2021 – 6 780 300 tg), operating costs by 30% (2020 – 1 455 100 tg, 2021 – 1 890 250 tg), remuneration costs by 3.6% (2020 – 57 419 470 tg,

2021 – 59 500 000 tg), financial losses by 89% (2020 – 2 581 100 tg, 2021 – 4 880 750 other expenses increased by 40.2% (2020-516,190 tenge, 2021 – 723,755 tenge). Despite the increase in the volume of losses at the enterprise, the volume of total income decreased by 26.78% compared to the previous year.

Accounts payable of Tengizchevroil LLP in 2021 increased by 20% compared to the previous year. The dynamics of accounts payable of the enterprise Tengizchevroil LLP is shown in the figure below (Figure 2).

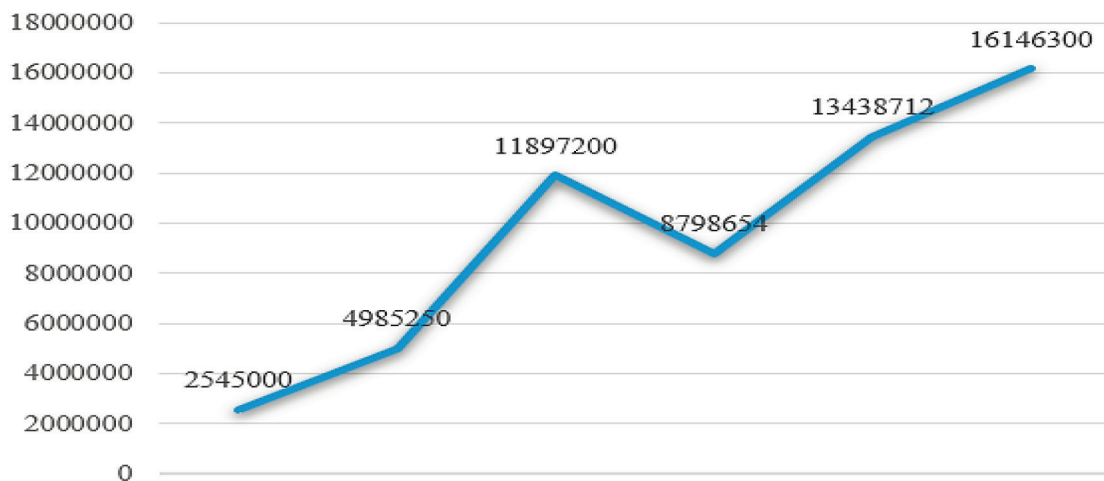


Figure 2 – Dynamics of accounts payable of Tengizchevroil LLP

The preparation and implementation of measures to overcome the crisis situation of the enterprise is considered important for maintaining and increasing the company’s position in the market, restoring solvency, achieving financial stability,

and the viability of the enterprise as a whole (Machiavelli N., 2017).

The anti-crisis management system was recognized as ineffective and measures were developed to get out of the crisis, taking into account the fact that

the enterprise is in a crisis situation, it is possible to go bankrupt in the amount of 1-5 years. Measures to overcome the crisis of the enterprise include the 8th stage: analysis in financial and economic conditions; analysis of the internal and external environment; assessment of

the anti-crisis management system; development of a crisis exit strategy; development and implementation of a crisis Exit Program; creation of a special anti-Crisis Group; assessment and control of the effectiveness of measures; development of a new methodology.

Table 5 – Proposed measures to improve the anti-crisis management system of Tengizchevroil LLP

Responsible executive	Anti-crisis management measures	Expected result
Department of Finance and accounting	monitoring the financial condition of the enterprise	recovery of solvency, the presence of financial stability, the presence of financial control
	conducting an internal audit	
	optimization and control of costs; reduction of administrative, operational, financial costs	
	reducing total liabilities	
	monitoring the dynamics of receivables and payables	
	strategic financial planning	
	development and implementation of the anti-crisis management program	
	refinancing or restructuring	
Strategic Planning Department	development of an enterprise development strategy	improvement of the image of the enterprise
	improving the logistics system	
	establishing reliable communication with partners	
Production and technical department	saving resources	increase in labor productivity and production capacity;
	quality control	
	modernization of production	
	introduction of innovative technologies	
HR	professional training and motivation of personnel	effectiveness of Personnel Management
	effective staff reduction	
	reducing travel expenses	
Deputy director	creation of a special anti-crisis management group and monitoring the effectiveness of measures to improve the financial situation	gaining extra time to recover in a crisis
	negotiations with creditors on the deferral and installment payment of arrears	
Director Responsible executive Department of Finance and accounting	approval of the enterprise development strategy	Expected result
	realization of opportunities for the enterprise to enter a new market	
	improving the management system and structure	

Using the measures indicated in Table 5, it is possible to maintain the position of the enterprise in the market, increase production, achieve stability of the financial situation, and, most importantly, get out of a crisis situation.

Reducing the costs of the enterprise Tengizchevroil LLP is possible as a result of the use of such measures as:

- reduction of travel expenses of employees;
- optimization of the staff;
- introduction of innovative technologies;

- introduction of waste-free technologies;
- use of progressive, innovative types of material resources;
- full repayment of loan interest;
- reduction of administrative costs: reduction of costs for the internet and communications; reduction of utility costs – modernization of the electric power industry.

Below are the forecast financial indicators that are expected after the implementation of the proposed activities (Table 6).

Table 6 – Estimated financial indicators expected after the activities are carried out

Indicator	Previous result	Expected result	Dynamics
Financial stability ratio	0,4	0,8	0,4
Financial dependence ratio	0,77	0,5	-0,27
Share of overdue accounts payable in liabilities	0,26	0	-0,26
Autonomy ratio	0,23	0,7	0,47
Coefficient of own working capital provision	0,02	0,2	0,18
Absolute liquidity ratio	0,05	0,2	0,15
Current liquidity ratio	1,28	1,5	0,22
Asset security ratio of liabilities	0,76	0,5	-0,26
Altman's 2-factor model	-1,316	-2	-3,316
W. Beaver model	1,28	3	1,72

The effectiveness of measures to improve the anti-crisis management system is observed on the basis of the financial and economic condition of the enterprise and an increase in labor productivity (Machiavelli N., 2017).

Conclusion

In conclusion, as a result of the analysis, a number of shortcomings of the enterprise were identified:

- reduced indicators of the solvency of the enterprise in recent years, indicators of overall financial stability;
- there is no established clear system of crisis management at the enterprise, the department “Finance and Strategic Planning” is engaged in crisis management;

- there is a less internal audit at the enterprise;
- decrease in labor productivity;
- less introduction of innovative technologies;
- lack of efficiency of the management system as a whole.

As a result of the analysis, it was found that the anti-crisis management system established at the Tengizchevroil LLP enterprise has low efficiency. Given the large number of changes in the oil and gas industry and the high competition in the industry, the company must carry out preventive measures. In order to prevent possible crisis situations in the future, the company needs, first of all, to improve internal audit, improve financial stability indicators, and create a clear anti-crisis management system.

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