Assessing the Financial Health of Uranium Mining Enterprises: A Comprehensive Analysis

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ABSTRACT: The The relevance of the study is determined by the significant role of the analysis of the financial condition of the enterprise in its effective management, ensuring growth reserves and eliminating problem areas that can lead to regression of key financial indicators and possible bankruptcy. The subject of the research is the analysis of the financial condition of the enterprise, considered in theoretical aspects and on the example of a specific organization - the enterprise of the mining industry of Kazakhstan STKK LLP (object of the research). The goal is to analyze the financial condition of the enterprise to identify problem areas and develop recommendations for their elimination, the analysis of typical problems of industrial enterprises of the industry. The research methods are presented by coefficient, vertical and horizontal analysis, as well as general techniques of analysis, synthesis, grouping and generalization of data. The author's approaches to understanding the term financial condition of the enterprise, its various interpretations, essence and scientific scope are presented. The factors, key indicators of the financial condition of the company, a list of degrees of financial stability are described. Among the sections of the financial condition analysis are considered the assessment of financial stability, business activity, liquidity, profitability. A list of indicators is presented within each section. The analysis of the financial condition of STKK LLP allowed us to conclude that the company has a fairly strong financial position. The results of the analysis of the financial condition of the enterprise reveal problem areas for financial management, a list of actions to eliminate them and guidelines for further long-term effective development. The results of the author's study of the financial condition of STKK LLP made it possible to identify significant differences in management strategies, as well as some common features of the financial position of industry leaders, which constitutes the scientific novelty of the study.

KEYWORDS - financial and economic activity, financial stability, liquidity, business activity, profitability

I. INTRODUCTION

The relevance of the study is due to the high role that the financial condition and its analysis play in ensuring the effective operation of the organization, designing the future development of the company, tracking alarm signals, markers of declining efficiency and reserves of financial growth [1]. The goal is to analyze the financial condition of one of the largest industrial enterprises in Kazakhstan - STKK LLP. The research methods are represented by coefficient, vertical and horizontal analysis, as well as general techniques of analysis, synthesis, grouping and generalization of data. The analytical base is represented by data for 2021-2023. For an enterprise, the analysis of the financial condition is of great importance, since only with its help can one evaluate the achievement of the set results, key strategic and tactical performance indicators, measure the past and current position of the company, assess the growth dynamics, and form financial plans for the future. The value of the company's shares, the terms of attracting borrowed funds, etc. depend on the results of the analysis of the financial condition of a joint-stock company. The financial condition of an enterprise is closely related to its financial and economic activities and is determined by its main indicators and results. Financial and economic activity is the activity of business entities aimed at performing their main functions and using financial resources for these purposes [2]. The category of financial condition is usually understood as a set of indicators reflecting the scale and efficiency of the use of the company's financial resources [3-5]. It is a key indicator of the overall efficiency of the organization's activities, which is assessed not only by employees, but also by other interested parties (partners, investors, the state, etc.). The system of indicators characterizing the financial condition covers the availability and use of financial resources, allows us to assess its payment and creditworthiness, fulfillment of obligations to creditors, investors, and the state [6; 7]. The financial condition of an organization includes various aspects: movement of inventory, labor resources, use of funds, etc. Thus, financial condition is a multidimensional category reflecting the credit and financial relations of the organization with other market participants regarding the payment of taxes, distribution of profits, use of property, dividend policy, company reputation, etc. To assess the financial condition of an enterprise, its reporting is used, as well as statistical data and other financial documents [8].

II. RESEARCH MATERIALS AND METHODS

When managing the financial condition of a company, which is understood as bringing all its indicators to target values, special attention is paid to financial stability as a guarantee of avoiding bankruptcy in the event of unfavorable scenarios for the development of the external environment. This is why financial condition management is so important for a company, its partners and competitors, clients and the state. It is extremely important to track the causes and sources of unfavorable changes in order to be able to predict the situation in the future. This will help develop the necessary measures to eliminate problem areas in the company's activities and prevent bankruptcy [9]. According to I. T. Balabanov, the financial condition of an enterprise is an economic category that reflects the state of capital in the process of its circulation and the ability of an economic entity to self-development at a fixed point in time [10]. Many researchers note that it is important to manage the financial condition both in the short term and in the long term [11]. In the short term, liquidity and solvency indicators are used to manage the financial condition as indicators of the organization's ability to pay off short-term debts [12]. In the long term, the composition of financing sources (capital structure) becomes important, which primarily characterizes the company's dependence on creditors and investors.

The key performance indicators of financial condition management are:

- 1. The enterprise's provision with standardized reserves;
- 2. The organization's provision with its own working capital (OWC);
- 3. The efficiency of using credit funds, their provision;
- 4. The financial stability and solvency of the organization.

After studying the factors that determine the financial condition, it is possible to identify growth reserves in various aspects of the company's activities [13-15]. In order to track the financial condition and control it, it is monitored, the dynamics and main trends are identified, the key factors of growth or decline are determined, and a forecast of future changes is made [16].

The main sections of the analysis of the financial condition of an enterprise for the purpose of managing it are:1) Assessment of the financial stability of an economic entity (based on the study of the ratio of equity and borrowed funds). 2) Assessment of business activity (carried out in order to determine the efficiency of production and sales of the company [17]).

Liquidity analysis (one of the main stages of the analysis of the financial and economic activities of the enterprise, the main purpose of which is to study the provision of the enterprise with liquid assets and readiness to timely fulfill payment obligations [18-20]). Analysis of the profitability of the enterprise (involves assessing the profitability of the enterprise by various parameters [20; 21]).

Let's consider the financial condition of STKK LLP. Today, the enterprise is one of the largest industrial enterprises in terms of mining operations. The enterprise has a long and rich history of more than 15 years. The main activities of the company are uranium mining and its sale both on the domestic market and for export. Priority areas are mining, processing and sale of finished products to the consumer. The enterprise is a joint venture and a subsidiary of the National Atomic Company Kazatomprom.

Figure 1 shows the world's importers of uranium from Kazakhstan. The largest volume of deliveries (more than half - 57% of all exports) was sent to China: 8 thousand tons, 422.6 million US dollars. In second place is Canada (18.2% of all exports): 2.6 thousand tons, 108.2 million US dollars. Russia (16.6% of all exports) rounds out the top three importers of Kazakhstani uranium: 2.4 thousand tons, 113.6 million US dollars. Kazakhstan is also expanding the geography of its product deliveries on the global nuclear fuel market. For example, this year the company won an international tender for the supply of natural uranium concentrates for the Brazilian company Indústrias nucleares do Brasil (INB) and delivered on time.



Fig. 1 – World importers of uranium products from Kazakhstan

The volume of metal transportation via the Trans-Caspian route increased by 4.5% last year. Since 2018, Kazakhstan has been supplying uranium products via the territory of Azerbaijan using the TITR (Trans-Caspian International Transport Route). In 2023, for the first time, 308 tons were shipped via the territory of the Republic of Azerbaijan to the United States. In total, 2.3 thousand tons were transported via Azerbaijan in 2023. In 2023, more than 2.3 thousand tons of uranium products were transported to France, Canada, Romania, India and the United States, compared to 2022, an increase of 4.5% (2022 - 2.2 thousand tons). Figure 2 shows the existing and planned product transportation routes. During 2023, several physical deliveries were made via the Trans-Caspian International Transport Route to final consignees in Romania, the United States and Canada. By the end of 2023, 64% of all uranium shipments from Kazakhstan to Western countries were successfully carried out via the Trans-Caspian International Transport Route.



Fig.2 – Uranium product transportation routes

III. RESULTS

Let's consider the analysis of the structure and value of the enterprise's property. According to the reporting data, the balance sheet currency of STKK LLP increased by 16% by 2023. Over the period 2021–2023, the value of intangible assets increased to 9%, and the volume of tangible exploration assets increased by three times. There is an increase in the volume of fixed assets and work in progress (by 20% in total), financial investments in non-current assets (by 27%), and profitable investments in intangible assets (by 18%). Accounts receivable have increased significantly (by 19%), as has the volume of cash and cash equivalents (by 2.5 times), and inventories have increased slightly (by 5%). In the liabilities side of the balance sheet, an increase is recorded in the volume of retained earnings (by almost a quarter), the main indicator of the organization's

performance. There is also an increase in deferred tax liabilities (by 35%), short-term borrowed funds (by 66%), accounts payable (by 22%), and estimated liabilities [23].

Over the three years under review, there has been a reorientation of the enterprise's financial strategy towards financing using short-term resources - their volume has doubled while the volume of long-term resources has decreased by more than a quarter. A slight (1%) increase in the share of equity in the total volume of financing sources was noted. The ratio of equity and borrowed sources of financing in 2023 was 39% and 61%, respectively. In the structure of borrowed funds, priority is given to short-term sources of financing.

Figure 3 presents statistical data in which we can see that spot prices for uranium are steadily increasing. According to Bloomberg, over the past 5 years, uranium has risen in price by 233%, which is three times higher than the figures for copper and gold. Analysts say that this trend indicates the development of nuclear energy. According to experts, the rise in uranium prices is due to the growing gap between its supply and demand. Thus, the demand for this raw material is rapidly increasing in China, India, Japan and the USA, while production volumes are growing much more slowly. The president of TradeTech suggests that in the next decade the gap between supply and demand could reach 100 million pounds.

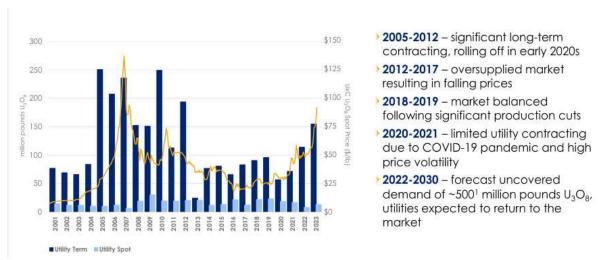


Fig.3 – Historical annual spot and term trading volumes

Let's consider the analysis of the financial stability of the enterprise. Let's present the calculation of specialized indicators of liquidity and financial stability of STKK LLP (table 1).

The share of property formed using the organization's own funds is demonstrated by the financial autonomy ratio. Its value varies from 37% to 39% over three years of activity (i.e. remains practically unchanged). At the same time, the standard indicator is 50%. Therefore, the enterprise has an excess of borrowed funds. The financial dependence indicators were 1.59–1.68, which is significantly higher than the standard (less than 1). Dependence on borrowed funds negatively affects the solvency of the enterprise and its financial stability.

However, another indicator demonstrating the share of capital formed using equity capital and equivalent sources (long-term loans) - the financial stability ratio - was included in the regulatory field already in 2022. Its value was 0.85 (standard: 0.75–0.9). But literally the following year, the situation worsened: the ratio dropped to 0.57 as a result of a reduction in the volume of long-term loans and credits.

The third indicator showing the proportion of the company's capital formed by non-current assets is the asset immobilization ratio, which is significantly higher than the recommended values (more than 70%). The maneuverability ratio is designed to assess the share of invested equity in working capital. Its values corresponded to the recommended ones in 2022. In 2021 and 2023, they did not reach the regulatory level, since equity did not cover the volume of current assets. The maneuverability ratio had a particularly low value in 2023 (–0.42).

Table 1. Financial stability indicators of STKK LLP

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Coefficient	2021	2022	2023	Changes	Standard					
Autonomy (independence)	0,38	0,37	0,39	0,01	≥0,5					
Financial dependence	1,65	1,68	1,59	-0,05	≤1					
Financial stability	0,67	0,82	0,57	-0,11	0,75–0,9					
Asset immobilization	0,73	0,72	0,73	0,00	Individual for each industry					
Maneuverability	-0,15	0,25	-0,42	-0,27	0,2-0,5					
Provision of fixed assets with current	-0,21	0,50	-0,60	-0,39	≥0,1					
assets										
Provision of fixed assets with stocks	-0,95	1,66	-2,96	-2,02	0,5-0,8					
Ratio of mobile	0,37	0,38	0,37	0,00	Individual for each industry					
and immobilized assets	2,13	2,11	2,08	-0,05	≤1					
Ratio of accounts receivable	0,56	0,54	0,57	0,01	≥0,5					

The current assets security ratio had similar dynamics: it was included in the regulatory field only in 2022 - 0.5. In 2023, the enterprise increased the volume of short-term loans and reduced the volume of long-term loans, as a result of which the value of the ratio reached its minimum (-0.6). The same can be noted with regard to the current assets security ratio: its value in 2022 corresponded to the regulatory one, in 2021 and 2023 the indicator significantly decreased. The ratio of current and non-current (mobile and immobilized) assets of the enterprise remains around 37-38%, i.e. fixed assets consistently prevail. Accounts receivable in their volume exceed accounts payable by two times or more, with the standard being one-time value.

The ratio of fixed assets, raw materials and materials, costs in work in progress to the sum of all assets is described by the coefficient of the real value of fixed assets. Its value exceeds ½, is within the regulatory framework. Analysis of the dynamics of financial stability indicators showed that the most favorable situation in this regard was observed at the enterprise in 2022, in 2021 and 2023, most indicators did not correspond to the regulatory values.

Analysis of business activity of the enterprise. The dynamics of the conversion of investments into cash is characterized by business activity indicators.

First of all, we will evaluate the implementation of the so-called "golden rule" of economic efficiency:

Tpb>Tr>Tak>100%,

where:

Tpb – rate of change in balance profit,

%; Tr – rate of change in sales volume, %;

Tak – rate of change in advanced capital (enterprise property), %.

The data presented in Table 2 indicate that the "golden rule" is fully met. Over three years, net profit increased by 2.6 times, revenue by 17%, and advanced capital by 16%. The value of property and sales volumes increased almost proportionally, and profit increased ahead of schedule.

Table 2. Dynamics of changes in profit, revenue and advanced capital

Indicator	2021	2022	2023	Growth rate, %
Net (loss) / profit, million tenge	3683	2690	9611	260,96
Revenue, million tenge	73497	69130	85884	116,85
Advanced capital (assets), million tenge	88273,66	96463,56	102499,64	116,12

According to the data obtained (Table 3), the total capital turnover, which characterizes the ratio of revenue to the average annual value of the enterprise's assets, was 0.83–0.86 in 2021 and 2023. In 2022, the indicator value was slightly lower due to a decrease in revenue - 0.75.

The enterprise's current assets turn over on average 3 times during the period under review, the number of turnovers increased by 2023 and amounted to 3.17. The accounts receivable turnover also decreased slightly by 2022 (4.17) and increased again by 2023 - to 4.73. The average balance of accounts receivable turnover for 2021-2023 remained virtually unchanged (not counting a slight increase in 2022), amounting to 76.08 thousand tenge at the end of the analyzed period.

Table 3. Business activity indicators of the enterprise

Indicator	2021	2022	2023	Changes
Total capital turnover	0,826	0,748	0,863	0,038
Turnover of working capital	2,987	2,741	3,165	0,177
Accounts receivable turnover	4,870	4,174	4,732	-0,138
Average balance of accounts receivable turnover,	73,920	86,246	76,082	2,161
thousand tenge				
Accounts payable turnover	9,876	8,867	9,926	0,050
Average balance of accounts payable turnover,	36,452	40,601	36,267	-0,185
thousand tenge				
Return on fixed assets	1,685	1,533	1,739	0,055
Turnover of equity capital	2,332	1,533	1,739	-0,592
Shareholder equity return ratio	0,602	0,440	1,572	0,970

Accounts payable turned over somewhat faster - on average 9.9 in 2021 and 2023 with an average balance of 36 thousand tenge. In 2022, there was a decrease in the number of turnovers to 8.9 and an increase in the balance of accounts payable to 40.6 thousand tenge.

The indicator of return on fixed assets, showing the revenue received per 1 unit of fixed assets, has a tendency to increase: from 1.69 in 2021 to 1.74 in 2023 (with a decrease to 1.53 in 2022). The equity turnover ratio, on the contrary, decreased from 2.33 in 2021 to 1.74 in 2023 (the minimum value of the indicator falls on 2022 - 1.53).

Against the backdrop of a multiple increase in profit over a three-year period, the return on equity ratio significantly increased: from 0.6 in 2021 to 1.57 in 2023 (with a decrease in 2022 to 0.44).

Summarizing the conclusions on business activity indicators, we note that most of them remained unchanged over three years. This applies to the capital turnover ratios, working capital, accounts receivable and accounts payable. At the same time, in 2022, all of these indicators showed a decrease against the backdrop of a slight decrease in revenue and current assets. For 2021-2023, the indicators of fixed assets utilization and return on equity increased against the backdrop of profit growth. A decrease is observed in the equity turnover ratio. The analysis of the liquidity of the enterprise's balance sheet is based on a comparison of enlarged groups of assets and liabilities. The most liquid assets (A1) contain pure cash, as well as short-term financial liabilities that are most easily converted into cash. The integral indicator A1 almost doubled over the period under review (up to 926 million tenge). The group of quickly sold assets (A2) covers short-term accounts receivable and other current assets. This indicator increased from 16.5 to 19.7 billion tenge for 2021–2023. The group of indicators A3 (slowly sold assets) includes inventories and VAT on purchased items (minus deferred expenses). This integral indicator increased slightly – from 16.8 to 17 billion tenge. The group of indicators A4 (hard-to-sell assets) includes non-current assets and accounts receivable. In this case, the values of the indicators increased from 64.5 to 74.9 billion tenge.

The group of indicators P1 (the most urgent liabilities) includes two types of debt: accounts payable and to the company's participants for the payment of income (for the enterprise STKK LLP, only accounts payable). In this case, there is an increase from 7.7 to 9.4 billion tenge. Short-term liabilities (P2) cover loans and credits, reserves for upcoming expenses and other short-term liabilities. According to this indicator, the enterprise significantly increased the values - from 21 to 39 billion tenge. The integral indicator P3 (long-term liabilities) includes the company's long-term obligations. In this case, there is a decrease from 26 to 18.7 billion tenge. Permanent liabilities (P4) - sections of capital and reserves, income of future periods (minus reserves for upcoming expenses). According to this indicator, there is an increase from 33 to 40 billion tenge.

Problems identified in financial condition management and recommendations for their solution The conducted analysis of the financial condition of the enterprise STKK LLP indicates a good financial position of the organization in 2021-2023: the company's assets increased by 16% (intangible assets increased by 16%, tangible exploration assets - 3 times, investments in tangible assets and non-current assets - by 18-20%, cash - 2.5 times), profit increased by 2.7 times. The profit growth rate turned out to be higher than the growth rates of revenue and cost price, which indicates the overall efficiency of the enterprise. In 2021-2023, the profitability of fixed, permanent capital, assets, the enterprise as a whole and the profitability of the final activity increased (from 5% to 11%).

However, the analysis also revealed a number of problems, the solution of which depends on ensuring the long-term development of the company. The first of them is related to the displacement of long-term sources of financing by short-term ones. To solve this problem, it is proposed to return long-term borrowed funds to the company's financial portfolio, replacing part of the short-term liabilities with them by attracting budget funds, actively using leasing, issuing long-term bonds, and adjusting financial statements to the creditor's requirements. The second problem is the high share of borrowed funds in the overall structure of financing sources. Additional

analysis showed that the company has a positive financial leverage effect, i.e. the use of borrowed funds has a positive effect on the profitability of the company's assets. However, a large loan portfolio reduces the financial stability of the organization and worsens the conditions for providing new long-term loans. The company needs to adopt a certain financial strategy that allows it to choose between increasing the profitability of assets and financial stability.

The third identified problem of the financial and economic activity of STKK LLP concerns the high share of non-current assets in the structure of the company's property. In order to reduce the share of non-current assets in the structure of property, the company is offered to reduce the volume of investments in intangible assets, in particular in software; the volume of investments in intangible and tangible exploration assets due to a more effective solution to personnel and organizational issues related to geological exploration; the volume of investments in tangible assets by selling the least profitable property leased to other enterprises; the volume of financial investments by getting rid of the least profitable options for participation in other companies.

The fourth problem of the company's financial condition is the increased volume and low turnover of accounts receivable. In order to solve this problem, it is proposed to monitor the financial position of buyers, introduce new terms of the contract designed to stimulate payment discipline, and plan accounts receivable in the short and long term.

IV. CONCLUSION

Even the favourable financial condition of large industrial enterprises, high growth rates of key financial indicators do not guarantee the absence of problems with liquidity, solvency, financial stability due to the high share of low-liquid fixed assets of industrial giants, which increases the risk of bankruptcy, reduces the maneuverability of capital and strategic financial decisions. Substitution of short-term sources of financing for long-term ones has an even more detrimental effect on financial independence and liquidity indicators in a crisis, which is expressed in a higher vulnerability of industrial enterprises to fluctuations in the exoenvironment. Reserves for using financial leverage in this case remain unrealized, since this will further reduce the financial independence of the company and can actually lead to bankruptcy. The competitiveness of an industrial enterprise and its survival in the market environment depend on its financial condition. This, in turn, increases the importance of continuous monitoring of the company's financial condition for the purposes of all interested parties (founders, shareholders, etc.). Forecasting the financial condition of an industrial enterprise, based on extrapolation of its monitoring data, will allow in the long term to avoid economic fluctuations, detect the first signs of inefficiency, bankruptcy, and overcome new risks and threats.

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