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METHODS FOR DETERMINING THE SOLVENCY AND LIQUIDITY OF AN ENTERPRISE

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Abstract. The article is dedicated to the methods of assessing the solvency and liquidity of an enterprise, which are key aspects for ensuring its financial stability and competitiveness in the market. The study presents a comprehensive analysis of financial indicators, including the liquidity of assets and liabilities, using various financial analysis methods. The focus is placed on horizontal, vertical, and trend analysis, which allows for the assessment of changes in the financial position of the enterprise over several years.

The article also includes an analysis of the balance sheet liquidity to qualitatively assess the solvency and liquidity of the enterprise, as well as to investigate the sources of its financial condition. The balance sheet of the production and commercial enterprise "Senan" for the years 2021-2023 is analyzed using horizontal and vertical methods. Changes in the structure of assets and liabilities are studied, particularly the value of long-term and current assets, as well as their impact on the liquidity of the enterprise.

To assess liquidity, key liquidity ratios were used, including the current, quick, and absolute ratios, which help determine the company's ability to meet its short-term obligations. According to the calculations, the company has sufficient liquidity to cover current debts in critical situations.

The results of the study show that the enterprise has adequate liquidity to meet its current debts when necessary. The article also proposes a series of practical recommendations to improve the financial stability of the company, including strengthening control over accounts receivable, creating a reserve for doubtful debts, and implementing short-term financial investments. These measures are identified as enabling the reduction of debt, freeing up additional funds, and increasing working capital, which contributes to improving operational efficiency in a changing economic environment. The developed recommendations are of significant importance for ensuring the long-term financial stability of the enterprise.

Key words: liquidity, balance sheet, accounts receivable, financial stability, horizontal analysis, vertical analysis, absolute growth, relative growth, solvency.

Introduction. The financial condition of an enterprise is shaped by its interactions with suppliers, customers, tax authorities, banks, and other business partners. These relationships reflect the enterprise's ability to maintain stability and continuity in its operations, which are critical for achieving long-term success. A solid financial position is crucial not

only for daily operations but also for the company's ability to withstand economic downturns, pursue growth opportunities, and attract investments. Therefore, evaluating financial stability is vital, especially when a company is navigating a competitive environment with many large and influential players.

Financial stability can be characterized as a state in which an organization's income consistently exceeds its expenses, thereby enabling the free circulation of cash flows [1]. This stability is the foundation upon which the enterprise's solvency rests. Solvency represents the organization's ability to meet its short-term and long-term obligations as they come due [2]. It is essentially an external manifestation of the financial stability of an enterprise, indicating whether the company can fulfill its financial commitments in the near future and continue to operate effectively.

Understanding solvency and liquidity is central to assessing the financial health of an enterprise. Liquidity, in this context, refers to the company's ability to convert assets into cash quickly to cover its short-term obligations.

Without adequate liquidity, even a profitable business can face severe operational disruptions, as it may struggle to settle outstanding debts or cover operating expenses. Therefore, an in-depth analysis of these financial aspects is essential for understanding the overall risk profile of the enterprise.

The results from studying sustainability indicators provide a reliable foundation for implementing a set of strategic measures aimed at improving the financial stability of the enterprise. By focusing on key financial strategies and incorporating modern financial management tools, a company can significantly enhance its solvency and liquidity.

The main directions in improving financial stability and, consequently, increasing solvency include [2]:

- increasing the volume of authorized capital;
- increasing the profit and profitability of operating activities, for example, through the budget system;
- rational use of net profit, taking into account the interests of all participants in the economic and financial process;
- increasing the efficiency of the distribution of non-current assets;

- accelerating the turnover of working capital, improving the structure of equity and debt capital;
 - correct use of borrowed financial resources;
- improving the organization's financial mechanisms, in particular ensuring the efficiency of analytical work and control, economic feasibility of financial indicators, strengthening financial service, etc.

A robust financial strategy built on these principles supports the ongoing solvency of a company and enhances its operational efficiency. By strengthening financial mechanisms and ensuring liquidity, a business can achieve a competitive edge, maintain market stability, and foster long-term success in a dynamic and ever-changing economic environment.

Analysis of recent research and publications. The issues of corporate solvency and liquidity are central to financial analysis research, as these indicators determine a company's stability, its ability to attract investment, and ensure sustainable development. Both domestic and international studies in the academic literature [1-16] examine various methods for assessing financial stability, liquidity, and financial risk management.

One of the most widely used approaches to solvency analysis involves the application of financial ratios. The works of Gitman & Zutter [7] and Ross, Westerfield, & Jaffe [8] discuss key liquidity indicators, including the current ratio, quick ratio, and absolute liquidity ratio. Research by Brigham & Ehrhardt [9] emphasizes the importance of determining optimal values for these ratios in accordance with international standards. Meanwhile, Peterson & Fabozzi [10] highlight that the quick ratio is a more stringent measure, as it excludes inventory from calculations.

The analysis of financial statements is also a critical tool for assessing a company's liquidity. Stickney, Brown, & Wahlen [11] describe horizontal and vertical analysis methodologies that help identify trends in the structure of assets and liabilities. Authors note that horizontal analysis is useful for detecting liquidity trends, while vertical analysis assesses the impact of individual balance sheet items on overall financial stability.

Damodaran [12] underscores that a combined application of both methods provides the most accurate picture of a company's financial position.

Corporate financial stability is analyzed in the works of Brealey, Myers, & Allen [13] through indicators such as the equity ratio, interest coverage ratio, and capital maneuverability ratio. Authors argues that a high level of equity (above 50 %) enhances a company's resilience to external shocks, while Fabozzi & Drake [14] emphasize the interest coverage ratio as a key indicator of bankruptcy risk.

The literature review confirms the necessity of a comprehensive approach to assessing and managing corporate liquidity and solvency. The use of financial ratios, financial statement analysis methods, and working capital management strategies helps minimize financial risks and enhance corporate stability in an uncertain market environment. Studies emphasize the importance of maintaining a balanced approach between equity and debt financing, as well as the need for flexible liquidity management in response to macroeconomic changes.

The scope and objectives of the article. The purpose of this article is to explore and analyze methods for determining the solvency and liquidity of an enterprise. The study aims to assess financial stability as a key factor in ensuring the sustainable development of a company, enhancing its investment attractiveness, and maintaining its competitive position in the market.

The article examines various approaches to liquidity analysis, including the classification of assets and liabilities, calculation of liquidity ratios, and the application of financial analysis methods such as horizontal, vertical, and trend analysis. The findings contribute to the development of effective financial management strategies that improve an enterprise's solvency and liquidity, ultimately supporting its long-term financial stability and operational efficiency.

Statement of the main material of the research. The analysis of the enterprise's solvency and liquidity will be conducted based on financial analysis methods and key financial ratios presented in the literature [1-16]. A qualitative assessment of solvency and liquidity will be carried out to determine the financial stability of the enterprise. The calculation and evaluation of liquidity ratios will allow for the assessment of short-term capabilities, identification of potential risks, and the enterprise's ability to meet its current obligations. This approach will provide a comprehensive understanding of the enterprise's financial position and its capacity to maintain operational stability.

The assets and liabilities of the balance sheet are systematized according to the following characteristics:

- 1. By the degree of decrease in liquidity (assets).
- 2. By the degree of urgency of payment of obligations.

To determine the liquidity of the balance sheet, it is necessary to compare the totals of the given groups on assets and liabilities (table 1).

 ${\it Table~1}$ Classification of assets and liabilities for liquidity analysis

| | | 1 |
|---|--|------------------------------|
| Asset | Liability | Absolute liquidity condition |
| 1. The most liquid assets (A1) - amounts of all cash that can be used immediately to make current settlements. This group also includes short-term financial investments. | 1. The most urgent liabilities (P1) are accounts payable, dividend payments, other short-term liabilities, including loans, paid on time (in accordance with the annexes to the balance sheet). | A1 ≥ P1 |
| 2. Marketable assets (A2) are assets that require a certain time to be converted into cash. This group may include accounts receivable (payments are expected within 12 months after the reporting date), other current assets. | 2. Short-term liabilities (P2) – short-term debts from banks and other loans that are due within 12 months after the reporting date. When determining the first and second groups of liabilities, it is necessary to know the maturity of all short-term liabilities in order to obtain reliable results. In practice, this is possible only for internal analytics. | A2 ≥ P2 |
| 3. Slow-selling assets (A3) - the least liquid assets - these are reserves, accounts receivable, value added tax. Acquired valuables, while the item "Deferred expenses" is not included in this group. | 3. Long-term liabilities (P3) - long-term debts and other long-term liabilities - items of section IV of the balance sheet "Long-term liabilities". | A3 ≥ P3 |
| 4. Hard-to-sell assets (A4) - assets intended for use in entrepreneurial activities for a relatively long period of time. | 4. Permanent liabilities (P4) - items of section III of the balance sheet "Capital and reserves" and individual items of section V of the balance sheet that are not included in the previous groups: "Deferred income" and "Provisions for future expenses". | A4 ≤ P4 |

The absolute liquidity of the balance sheet is considered correct if the following inequalities are satisfied: A1 \geq P1; A2 \geq P2; A3 \geq P3; A4 \leq P4.

The fulfillment of the first three inequalities will lead to the emergence of the fourth, therefore, a comparison of the totals of the first three groups on assets and liabilities should be carried out. The fourth inequality "Balancing" and at the same time has a deep economic meaning: its fulfillment provides information about compliance with the minimum condition of financial stability - indicates the presence of specific working capital of the enterprise.

For a qualitative assessment of the solvency and liquidity of an enterprise, it is necessary to calculate liquidity ratios in addition to analyzing the liquidity of the balance sheet.

Liquidity ratios are used to assess the ability of an enterprise to fulfill its short-term obligations.

They provide an idea of the enterprise's solvency not only in the current period, but also in extreme cases.

Liquidity ratios have various uses. Thus, the current liquidity ratio is used by investors, the quick liquidity ratio is used by creditors, and the absolute liquidity ratio is used by suppliers. Thus, it is used to assess the ability of the enterprise to pay its counterparties - suppliers - in cash.

The current liquidity ratio is an indicator of the liquidity of the enterprise and is calculated as the ratio of working capital to short-term liabilities.

This indicator is used to determine whether there are enough funds on the balance sheet of the enterprise to pay short-term debts. International standards describe a value from 1.5 to 2 as a normal indicator of the general liquidity ratio.

The quick liquidity ratio is a more serious assessment of the liquidity of the company. Through this ratio, it is determined how much it will be possible to pay off current liabilities if the situation is really critical, based on the assumption that reserves have no salvage value.

This shows whether the company has enough personal funds to pay. The larger the ratio, the higher the solvency of the enterprise. A ratio with a value greater than 0.8 is considered normal. A number of analysts consider the optimal value of the ratio to be 0.6-1.0.

The absolute liquidity ratio determines what part of the company's creditors can quickly pay off. The normative value for the absolute liquidity ratio is considered to be >0.2. The higher the value of the ratio, the greater the liquidity of the enterprise. However, at high values of this absolute liquidity ratio, it can be concluded that it is irrational. Economists justify the optimal range for the indicator 0.2-0.5. In the analysis of the financial stability of the enterprise, in addition to absolute and relative indicators, solvency and liquidity indicators are used: absolute liquidity ratio, current liquidity ratio, quick liquidity ratio.

The results of the first section of the analysis of financial stability can help to find out whether an enterprise manages its financial resources correctly. Thus, the state of financial resources should meet not only the requirements of the market, but also the needs of the enterprise itself for its development.

The unstable state of an enterprise can lead to its bankruptcy or a lack of funds for its development. Common methods used to analyze an enterprise's balance sheet.

Financial stability, like any financial and economic category, is expressed by a system of relative indicators and is closely related to indicators. The most common methods used to analyze the balance sheet are given below.

Horizontal analysis involves comparing the absolute values of each reporting item with the previous period, calculating the rate of change for each position. In other words, horizontal analysis helps to compare performance by identifying the current period with similar indicators of the previous year and determining the dynamics of these indicators over time. One of the main disadvantages of this method is the inconsistency of reporting data in terms of inflation.

The purpose of vertical analysis, also called structural analysis, is to assess the dynamics of the balance sheet information structure, presented as relative values. With its help, the balance sheet can be analyzed as a whole through its individual elements, that is, the share of each item in the total amount of the balance sheet, as well as the impact of each individual item of the balance sheet on the balance sheet, can be assessed.

This method is considered more convenient for analysis, since absolute indicators cannot always visually represent the overall picture. Trend analysis of financial statements involves comparing each reporting item with previous periods and determining the trend, in other words, determining the main dynamics of indicators. Trend analysis is probabilistic in nature, since it allows you to predict possible changes in reporting items only in the future. With this analysis method, one of the periods acts as the base period, and all financial statements for subsequent periods are calculated. An example of trend analysis is regression analysis.

Analysis of the financial condition begins with a study of the structure of the enterprise and the sources of its formation, which involves the use of the horizontal (in tables 2 and 3) and vertical (in tables 4 and 5) methods of balance sheet analysis (figures are conditional).

A horizontal analysis of assets over three years in table 2 showed that changes in property values did not have any particular trend.

Table 2 Horizontal analysis of the assets of the "Senan" production and commercial enterprise for 2021-2023 (in thousand manats)

| Name of sections | Period, years | | | Absolute growth, +, - | | Relative growth, % | | | | |
|--|-------------------|--------|----------|-----------------------|---------------|--------------------|---------------|---------------|--|--|
| Name of sections | 2021 | 2022 | 2023 | 2022- 2021 | 2023- 2022 | 2022: 2021 | 2023: 2022 | 2023: 2021 | | |
| | | I | Long-ter | | 2022 | 2021 2022 2021 | | | | |
| Fixed assets | | | | | -1 044 | -5,75 | -11,03 | -16,14 | | |
| Total for section I | 10 047 | 9 469 | 8 425 | -578 -578 | -1 044 | -5,75 | -11,03 | -16,14 | | |
| | II Current assets | | | | | | | | | |
| Reserves | 41 046 | 28 847 | 21 542 | -12 199 | -7 305 | -29,72 | -25,32 | -47,52 | | |
| Value added tax on acquired assets | - | _ | 721 | _ | 721 | - | _ | _ | | |
| Accounts receivable | 42 641 | 43 678 | 83 421 | 1 037 | 39 743 | 2,43 | 90,99 | 95,64 | | |
| Financial investments (excluding cash equivalents) | 20 458 | 6 457 | 12 974 | -14 001 | 6 517 | -68,44 | 100,93 | -36,58 | | |
| Cash and cash equivalents | 5 007 | 3854 | 7444 | -1 153 | 3 590 | -23,03 | +93,15 | 48,67 | | |
| Other current assets | 1 587 | 1 874 | 2 648 | 287 | 774 | 18,08 | 41,30 | 66,86 | | |
| Total for Section II | 110 739 | 84 710 | 128 750 | -26 029 | 44 040 | -23,50 | 51,99 | 16,26 | | |
| Balance sheet | 120 786 | 94 179 | 137 175 | -26 607 | 42 996 | -22,03 | 45,65 | 13,57 | | |

By the end of 2022, the balance sheet currency decreased by 22.03 % compared to 2021, by the end of 2023, on the contrary, an increase of 45.65 % was observed in the value of assets compared to 2022. In absolute terms, the decrease in value in 2022 amounted to 26,607 thousand manat, and in 2023, the increase was 42,996 thousand manat. Changes in the balance sheet occur as a result of changes in the value of current assets. Non-current assets lose value: In 2022, there was a decrease of 578 thousand manat (-5.75 %), By the end of 2023 - 1,044 thousand manat (-11.03 %). This is primarily due to the write-off of depreciation.

Table 3
Horizontal analysis of assets of the "Senan" production
and commercial enterprise for 2021-2023 (in thousand manats)

| Name of | Period, years | | | Absolute growth, +, - | | Relative growth, % | | | | | |
|-------------------------|--------------------------|--------|----------|-----------------------|--------|--------------------|-------|------------|--|--|--|
| sections | 2021 | 2022 | 2023 | 2022- | 2023- | 2022: | 2023: | 2023: | | | |
| | 2021 | | | 2021 | 2022 | 2021 | 2022 | 2021 | | | |
| | III Capital and reserves | | | | | | | | | | |
| Authorized capital | 50 | 50 | 50 | _ | _ | _ | _ | _ | | | |
| Retained earnings | 10 547 | 14 875 | 18 243 | 4 328 | 3 368 | 41,04 | 22,64 | 72,97 | | | |
| Total for Section III | 10 547 | 14 875 | 18 243 | 4 328 | 3 368 | 41,04 | 22,64 | 72,97 | | | |
| | | IV L | ong-term | liabilities | S | | | | | | |
| Debt funds | 10 234 | 9 254 | 8 854 | -980 | -400 | -9,58 | -4,32 | - 13,48 | | | |
| Total for Section IV | 10 234 | 9 254 | 8 854 | -980 | -400 | -9,58 | -4,32 | 13,48 | | | |
| | | V Sh | ort-term | liabilities | 3 | | | | | | |
| Debt funds | _ | 10 584 | 25 874 | 10 584 | 15 290 | _ | 144,5 | _ | | | |
| Loans | 88 412 | 42 158 | 55 366 | -46 254 | 13 208 | 52,32 | 31,33 | -7,38 | | | |
| Other liabilities | 11 543 | 17 258 | 28 788 | 5 715 | 11 530 | 49,51 | 66,81 | 149,4 | | | |
| Total for Section V | 99 955 | 70000 | 110 028 | -29 955 | 40 028 | - 29,97 | 57,18 | 610 | | | |
| Balance sheet | 120 786 | 94 179 | 137 175 | -26 607 | 42 996 | 22,03 | 45,65 | 13,57 | | | |

A decrease in the value of current assets by 26,607 thousand manat (-23.5 %) Due to a significant decrease in the value of items such as "Financial investments" by the end of 2022 by 14,001 thousand manat (-68.44 %), the value of reserves by 12,199 thousand manat (-29.72 %), including "Cash and cash equivalents" by 1,153 thousand manat (-23.03 %).

Despite the decrease in most items in the "Current assets" section, the value of receivables increased by 1,037 thousand manat or 2.43 %, other current assets also increased by 298 thousand manat (+18.08 %). The increase in current assets by 51.99 % (+44,040 thousand rubles) by the end of 2023 is associated with a significant increase in the value of receivables by 39,743 thousand manat (90.99 %). There was also an increase in the value of the following balance sheet items:

financial investments increased by 6,517 thousand manat (+100.93 %), cash increased by 3,590 thousand manat (+93.15 %), other current assets by 774 thousand manat (+41.3 %), value added tax reached 721 thousand manat and. The balance sheet item "reserves" lost value by 7,305 thousand manat (25.32 %).

In 2023, the value of assets increased by 13.57% compared to 2021. Significant changes have been made to the item "Accounts receivable" of the balance sheet. Since 2021, accounts receivable have increased by 95.64% (+40,780 thousand manat), cash value by 48.67% or 2,437 thousand manat, the value of other current assets by 1,061 thousand manat (+66.86\%).

Other items decreased: the value of inventories decreased by 19,504 thousand manat (-47.52 %), financial investments The decrease in the value of non-current assets by 2023 compared to 2021 amounted to 1622 absolute deviations of the value of fixed assets or 16.14 %.

Table 3 shows the data of the horizontal analysis of the company's liabilities for three years, showing a decrease in the sources of property formation by 26,607 thousand manat.

A significant increase by the end of 2022 (-22.03 %) and by the end of 2023 by 42,996 thousand manat, a relative deviation (+45.65 %). Changes in the value of the sources of property formation are primarily associated with a sharp change in the value of short-term liabilities. By the end of 2022, their amount decreased by 29.97 % or 29,995 thousand

manat, due to a decrease in accounts payable by 46,254 thousand manat (-52.32 %). Other items of the "Short-term liabilities" section increased: the amount of borrowed funds increased by 10,584 thousand manat, other liabilities increased by 5,715 thousand manat (+49.51 %).

By the end of 2023, the situation changes dramatically, and the amount of short-term liabilities increases by 40,025 thousand manats. (+57.18%) due to a significant increase in borrowed funds and accounts payable by 15,290 thousand manats. (+144.5%) and 13,208 thousand manats. (+31.33%), respectively. The value of other liabilities also increases - by 11,530 thousand manats. (+66.81%).

The change in the value of capital and reserves is directly related to the change in the amount of retained earnings, the authorized capital is constant and amounts to 50 thousand rubles.

At the end of 2022, the growth rate of retained earnings was 41.04 %, and by the end of 2023 it was 22.64 %. In absolute terms, the increase in 2022 amounted to 4,328 thousand manats. and 3,368 thousand manats. By the end of 2023. Long-term liabilities decreased by 9.58 %, amounting to 980 and 400 thousand manats, respectively, in 2023.

Taking into account changes in the balance sheet compared to the base year, the increase is 1.36 %. 4,113 thousand manats (+1 %), the increase in the cost of capital amounted to 545 thousand manats. (+23.1 %). The amount of registered own funds is gradually increasing its value. By the end of 2022, the increase was 40.84 %, by the end of 2023 - 22.57 %.

In Table 4, the share of long-term assets changes from year to year. If in 2021 their share was 8.32 % of the balance sheet, then after one year it increases by 1.74 %, and after another a decrease of 3.91 percentage points is observed. This is directly related to the decrease in the share of the item "Fixed assets", which is the only one in this section.

The share of current assets during the analyzed period is more than 89 %, for example, at the end of 2021 the share of current assets was 91.68 %, in 2022 it was 89.95 %, and in 2020 it was 93.86 %. A significant part of current assets is occupied by shares and receivables.

By the end of 2021, the share of receivables in the balance sheet structure was 35.3 %, and the share of reserves was 33.98 %. A year

later, the situation does not change: the share of receivables continues to grow until the end of 2023. By the end of 2023, it reaches a maximum value of 60.81 %. Reserves gradually decrease in their share, starting from 33.98 % and reaching 15.7 % in 2023. A significant weight in the asset structure is occupied by financial investments. By the end of 2021, the share of financial investments was 16.94 %, which is the largest share for the entire analyzed period. In addition, the value of the share begins to change unevenly: by the end of 2022, the decrease in the indicator was 10.08 %, and by 2023, the increase in the share was 2.6 %. Thus, the share of financial investments, which amounted to 16.94 % in the balance sheet structure at the end of 2021, amounted to 9.46 % at the end of 2023

Table 4
Vertical analysis of assets of the production
and commercial enterprise "Senan" for 2021-2023

| | Pe | eriod, yea | ırs | Changes in structure, % | | | |
|------------------------------|--------|------------|-------|-------------------------|--------|--------|--|
| Name of sections | 2021 | 2022 | 2023 | 2022: | 2023: | 2023: | |
| | | | | 2021 | 2022 | 2021 | |
| | I Long | g-term as | sets | | | | |
| Fixed assets | 8,32 | 10,05 | 6,14 | +1,74 | -3,91 | -2,18 | |
| Total for section I | 8,32 | 10,05 | 6,14 | +1,74 | -3,91 | -2,18 | |
| II Current assets | | | | | | | |
| Inventories | 33,98 | 30,63 | 15,7 | -3,35 | -14,93 | -18,28 | |
| Value added tax on acquired | | | 0,53 | | +0,53 | +0,53 | |
| assets | _ | - | 0,55 | _ | TU,33 | T0,33 | |
| Accounts receivable | 35,3 | 46,38 | 60,81 | 11,07 | 14,44 | 25,51 | |
| Financial investments | 16,94 | 6,86 | 9,46 | -10,08 | 2,6 | -7,48 | |
| (excluding cash equivalents) | 10,94 | | | | | -7,40 | |
| Cash and cash equivalents | 4,15 | 4,09 | 5,43 | -0,05 | 1,33 | 1,28 | |
| Other current assets | 1,31 | 1,99 | 1,93 | 0,68 | -0,06 | 0,62 | |
| Total for section II | 91,68 | 89,95 | 93,86 | -1,74 | 3,91 | 2,18 | |
| Balance sheet | 100 | 100 | 100 | - | - | - | |

Source: The table was prepared by the authors

The change in the share of cash does not have a certain trend: compared to 2021, a decrease of 0.05 % is observed in the share of cash

in 2022, while the share increases by 1.33 % over the year. Although the share of VAT on purchased valuables in 2023 was 0.53 %, this balance sheet item did not exist in previous periods.

The share of other current assets changes from year to year: if at the end of 2021 their share was 1.31 %, by the end of 2022 the share of other current assets increases by 0.68 %. By the end of 2023, on the contrary, there is a decrease in the share by 0.06 % and currently amounts to 1.93 % of the currency. The ratio of debt and equity varies, but nevertheless, borrowed funds significantly prevail over the company's own capital.

In Table 5, the dominant share in the balance sheet structure is occupied by short-term liabilities. Their share in 2021 was 82.75 %, in 2019 it was 74.33 %, and by the end of 2020 it was 80.21 %. The change in the share of short-term liabilities is mainly due to changes in the amount of accounts payable and other liabilities.

Table 5
Vertical analysis of liabilities of the "Senan" production
and commercial enterprise for 2021-2023

| N. C. | Period, years | | | Changes in structure, % | | | | | |
|--|--------------------------|-------|-------|-------------------------|-----------|-----------|--|--|--|
| Name of sections 202 | | 2022 | 2023 | 2022:2021 | 2023:2022 | 2023:2021 | | | |
| | III Capital and reserves | | | | | | | | |
| Authorized capital | 0,04 | 0,05 | 0,04 | 0,01 | -0,02 | _ | | | |
| Retained earnings | 8,73 | 15,79 | 13,3 | 7,06 | -2,5 | 4,57 | | | |
| Total for section III | 8,77 | 15,85 | 13,34 | 7,07 | -2,51 | 4,56 | | | |
| IV Long-term liabilities | | | | | | | | | |
| Borrowed funds 8,47 9,83 6,45 1,35 -3,37 -2,02 | | | | | | | | | |
| Total for section IV | 8,47 | 9,83 | 6,45 | 1,35 | -3,37 | -2,02 | | | |
| V Short-term liabilities | | | | | | | | | |
| Borrowed funds | _ | 11,24 | 18,86 | +11,24 | +7,62 | +18,86 | | | |
| Accounts payable | 73,2 | 44,76 | 40,36 | -28,43 | -4,4 | -32,84 | | | |
| Other liabilities | 0,96 | 18,32 | 20,99 | 17,37 | 2,66 | 20,03 | | | |
| Total for section V | 82,75 | 74,33 | 80,21 | -8,43 | 5,88 | -2,54 | | | |
| Balance sheet | 100 | 100 | 100 | - | - | - | | | |

In the structure of the balance sheet, accounts payable occupy the most important place: in 2021, its share in the total balance sheet was 73.2 %, gradually decreasing and by the end of 2023 amounted to 40.36 %. Relatively speaking, the share of accounts payable in 2021 was 32.84 %, and compared to 2022, it decreased by 4.4 %.

The share of other liabilities, on the contrary, is increasing: the change in the structure of 2022 compared to 2021 was 17.37 %, and the change in 2023 compared to 2022 was 2.66 %. The share of debt increased year by year: by the end of 2022, the increase was 11.24 %, by the end of 2023, it increased by 7.62 % and amounted to 18.86 %.

In 2022, the share of capital and reserves increased by 7.07 % compared to 2018, and by the end of 2023, a decrease in the share by 2.51 % compared to 2022 was observed. Such fluctuations are due to changes in the share of retained earnings. Initially, its share in the balance sheet was 8.73 %, but by 2022, as previously mentioned, it increased by 7.06 % to 15.79 %. By 2023, the share of retained earnings decreased by 2.5 % to 13.3 %.

The authorized capital does not change from year to year, and its share in the structure changes slightly. The share of authorized capital increased by 0.04 % in 2021, by the end of 2022 by 0.01 %, and by the end of 2023 its share again reached 0.05%. The share of long-term liabilities represented by debt funds does not change evenly: by the end of 2021, the share of debt funds increased to 8.47 %, by 2022 to 9.83 %, and by 2023 this share decreases by 6.45 % (balance sheet currency). Balance sheet liquidity analysis is a grouping of all assets and liabilities of the enterprise.

Conclusion. The management of the enterprise should develop and implement the following to improve financial stability:

- strengthening control, analysis and collection of receivables;
- creating a reserve for doubtful debts;
- making short-term financial investments.

For effective management of accounts receivable, the company should follow the following recommendations:

1) monitor the status of settlements with buyers (for deferred debts) and make timely demands;

2) carry out factoring operations and spontaneous financing.

Based on the proposed stages of work with accounts receivable at the enterprise, one can expect a reduction in debt, additional profit from the released funds, as well as an increase in its own working capital. In the event that the organization is recognized as bankrupt due to an unsatisfactory balance sheet structure, it is necessary:

- to analyze the dynamics of the organization's property and identify the factors affecting its change;
- the organization of economic turnover, the decrease in property values signals the main reasons for the decrease: a decrease in effective demand for the products and services of this organization, limited access to raw materials markets, the inclusion of subsidiaries into economic turnover at the expense of the parent company, etc.

In the event of an increase in the value of property, an assessment of the extent of the influence of the following factors on these changes should be made: an increase in the cost of manufactured inventories, finished products of fixed assets.

If, in the event of an increase in assets, the organization is not solvency, then the main factors are: irrational ownership structure, unreasonable diversion of funds to pay off receivables, inefficient inventory management, errors in the organization's pricing policy, etc.

It can be used to restore financial stability: sale of part of the organization's property; reduction of excess inventories; establishment of payment discipline, in particular, settlements with buyers and suppliers as a result of the liquidation of receivables; an increase in profit, part of which is part of own funds remaining in the current account; improvement of the rationing policy of certain components of working capital; increasing the efficiency of using non-current assets; other ways to restore solvency.

Thus, a company's balance sheet liquidity control algorithm is needed, which allows prioritizing the indicators that need to be changed to increase the liquidity of the company's balance sheet, as well as the necessary measures to increase liquidity.

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МЕТОДИ ВИЗНАЧЕННЯ ПЛАТОСПРОМОЖНОСТІ ТА ЛІКВІДНОСТІ ПІДПРИЄМСТВА

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Анотація. Стаття присвячена методам оцінки платоспроможності та ліквідності підприємства, що є ключовими аспектами для забезпечення його фінансової стабільності та конкурентоспроможності на ринку. У рамках дослідження проведено комплексний аналіз фінансових показників, зокрема ліквідності активів та зобов'язань підприємства, за допомогою різноманітних методів фінансового аналізу. Акцент зроблено на горизонтальному, вертикальному та трендовому аналізі, що дозволяє оцінити зміни у фінансовому становищі підприємства протягом кількох років.

У статті проведено аналіз ліквідності балансу для якісної оцінки платоспроможності та ліквідності підприємства, а також з метою дослідження джерел формування фінансового стану, балансу виробничо-комерційного підприємства «Сенан» за 2021-2023 роки проаналізовано горизонтальним та вертикальним методами. Вивчено зміни у структурі активів і пасивів, зокрема вартості довгострокових та поточних активів, а також їх вплив на ліквідність підприємства.

Для оцінки ліквідності були використані основні коефіцієнти ліквідності, зокрема поточний, швидкий та абсолютний, що дозволяють визначити здатність підприємства виконувати свої короткострокові зобов'язання. Згідно з розрахунками, підприємство має достатній рівень ліквідності для покриття поточних боргів у критичних ситуаціях.

Результати дослідження показують, що підприємство має достатній рівень ліквідності для покриття поточних боргів у разі необхідності. У статті також запропоновано ряд практичних рекомендацій для покращення фінансової стабільності підприємства, зокрема зміцнення контролю за дебіторською заборгованістю, створення резерву сумнівних боргів та впровадження короткострокових фінансових інвестицій. Визначено, що ці заходи дозволяють зменшити заборгованість, вивільнити додаткові кошти та підвищити оборотний капітал, що сприяє підвищенню операційної ефективності в умовах змінного економічного середовища. Розроблені рекомендації мають важливе значення для забезпечення довгострокової фінансової стабільності підприємства.

Ключові слова: ліквідність, баланс, дебіторська заборгованість, фінансова стійкість, горизонтальний аналіз, вертикальний аналіз, абсолютне зростання, відносне зростання, платоспроможність.

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