

**Plaskova N.S.**

# **ANALYSIS OF COMPANY'S FINANCIAL POSITION**

TEXTBOOK

For bachelors of  
"Economics",  
"Finance and Credit",  
"Financial Management",  
"Economic Security",  
"Management",  
"State and Municipal Management"

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The textbook consistently reveals the methodology for analyzing the financial situation of the company. The book uses practical financial reporting data to implement analytical methods to assess the structure and dynamics of assets, liabilities, capital, turnover rate and liquidity of assets, solvency and probability of bankruptcy. The textbook is intended for university students studying under bachelor's degree programs in the following specialties “Economics”, “Finance and Credit”, “Financial Management”, “Economic Security”, “Management”, “State and Municipal Administration” and other.

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**Н.С. Пласкова**

# **АНАЛИЗ ФИНАНСОВОГО ПОЛОЖЕНИЯ КОМПАНИИ**

**УЧЕБНОЕ ПОСОБИЕ**

для студентов, обучающихся по направлениям  
подготовки бакалавров  
«Экономика», «Финансы и кредит»,  
«Финансовый менеджмент»,  
«Экономическая безопасность», «Менеджмент»,  
«Государственное и муниципальное управление»



## CONTENTS

|                                                                                                                   |           |
|-------------------------------------------------------------------------------------------------------------------|-----------|
| <b>PREAMBLE .....</b>                                                                                             | <b>6</b>  |
| <b>INTRODUCTION.....</b>                                                                                          | <b>7</b>  |
| <b>Chapter 1. METHODOLOGICAL FOUNDATIONS<br/>OF THE ANALYSIS OF COMPANY'S<br/>FINANCIAL POSITION .....</b>        | <b>9</b>  |
| 1.1. Information support for the analysis of the<br>company's financial position .....                            | 9         |
| 1.2. Content of financial statements — the<br>information base of the analysis of the<br>financial position ..... | 16        |
| <i>Control questions of the Chapter 1.....</i>                                                                    | 33        |
| <b>Chapter 2. CONTENT AND SEQUENCE OF THE<br/>ANALYSIS OF COMPANY'S FINANCIAL<br/>POSITION .....</b>              | <b>34</b> |
| 2.1 Analysis of assets, capital and liabilities .....                                                             | 34        |
| 2.2 Analysis of liquidity and financial stability .....                                                           | 51        |
| 2.3 Analysis of the use of current assets .....                                                                   | 67        |
| 2.4 Forecasting the solvency and probability of<br>bankruptcy of the company .....                                | 79        |
| <i>Control questions of the Chapter 2.....</i>                                                                    | 83        |
| <b>BIBLIOGRAPHY.....</b>                                                                                          | <b>86</b> |
| <b>GLOSSARY .....</b>                                                                                             | <b>88</b> |
| <b>APPENDIX 1.....</b>                                                                                            | <b>97</b> |

## **PREAMBLE**

### **Brief description of the discipline**

The training course “Analysis of company’s financial position” is designed to form students’ knowledge, skills and practical skills in the field of analysis and evaluation of the activities of enterprises. In the course of studying the discipline, a significant place is given to the study and skills of using financial statements as an information base for forming a system of analytical characteristics of organizations’ activities, preparing and making informed management decisions aimed at improving the planning and financial monitoring system.

### **Purpose and objectives of the discipline**

The purpose of the training course “Analysis of company’s financial position” is to master the methods of financial analysis, which is the most important function of business management in various sectors of the economy, to acquire skills in using financial analysis methods and their application to justify operational and strategic decisions in various areas of production, economic, financial, investment and innovation activities that ensure the growth of efficiency and sustainable development of companies.

### **Keywords**

Analysis, financial position, financial statements, system of indicators, methods of analysis, information support for analysis, assets, liabilities, capital, liquidity, asset turnover, solvency, bankruptcy risk.

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## INTRODUCTION

The trends of recent years, characterized by global economic transformations of business relations, require standardization of financial information that discloses the results of the activities of companies present on the international markets of goods and capital. Companies should prepare reliable financial statements that meet the requirements of international standards and are targeted at a wide range of external and internal users. The results of all business operations of the organization recorded and accumulated in the framework of accounting for the reporting dates should be systematized and presented in the form of specially prepared documents, the totality of which is the financial statements. Financial statements are a source of information for various stakeholders — shareholders, investors, stock market participants, credit institutions and investment companies. Financial analysis of reporting data is also necessary for the management and managers of the reporting company itself to understand the dynamics of the financial situation and business performance indicators, to assess the impact of factors on their level.

In the financial statements of different countries, there are differences caused by social, economic, legal and other conditions, which led to the emergence and use of different approaches to the formation of indicators characterizing the results of economic activity of organizations, and, in particular, such elements of the financial situation as assets, liabilities, capital, cash flows, income and expenses. The processes of international integration of business and capital have led to the need to standardize financial statements that comply with the general rules developed by the International Accounting Standards Board (IASB), which for several decades has been creating and continuing to improve common unified standards — International Financial Reporting Standards (IFRS) for all countries around the world.

Financial statements prepared in accordance with IFRS provide interested users with more detailed and reliable information about the results of the organization's activities as of the reporting date. The indicators

of international financial statements are studied using a wide range of analytical procedures, methods and techniques for a deep and comprehensive assessment of the financial position of the company, the financial results of its activities and identifying trends for business forecasting for management purposes. Of particular interest to various stakeholders are the results of the analysis of the financial situation of the company. This information is also necessary for the company's management, first of all, to summarize the work, ensure information security and develop a business development strategy. The management of any company for effective business management needs a deep analysis and assessment of the use of resource potential, assets, equity, liquidity and solvency, benefits and risks.

In today's difficult business conditions, even those companies that have the appropriate technological level of production, a stable competitive position in the market, may experience a shortage of financial and material resources, which can disrupt the balance of their financial relationships and, as a result, reduce the liquidity of assets, violation of payment discipline in terms of repayment of obligations to creditors, the budget, social funds, banks, owners of dividends and so on. Systematic analysis of the company's financial situation helps to identify negative trends in a timely manner and make corrective management decisions aimed at minimizing financial and business risks.

The analysis of the company's financial position is an important element of an integrated business management system, a means of identifying unused reserves and developing a program for their implementation, and also performs a control function.

This book will help readers to understand the complex issues of methodology and practice of analyzing the financial situation of the company, will allow them to acquire the necessary knowledge, skills and competencies in the field of analytical work.

The author hopes that the proposed textbook will contribute to improving the theoretical and practical skills of financial analysis for those who have chosen a financial and economic career in business.



## **Chapter 1. METHODOLOGICAL FOUNDATIONS OF THE ANALYSIS OF COMPANY'S FINANCIAL POSITION**

### **1.1. Information support for the analysis of the company's financial position**

Successful solution of analytical problems is impossible without the creation and effective functioning of the system of financial and economic information, one of the main components of which is the financial statements.

There are differences in the financial statements of different countries caused by social, economic, legal and other conditions. In addition, when setting national standards, countries focus on different users of financial statements. Various conditions have led to the emergence and use of various approaches to the formation of indicators that characterize the results of economic activity of organizations, and, in particular, such reporting elements as assets, liabilities, capital, income and expenses.

To standardize the content of financial statements of enterprises, achieve comparability and use common basic rules for its preparation, the international Financial Reporting Council develops International Financial Reporting Standards (IFRS) that are used in most countries of the world.

The main objective of the financial statements is to present fairly and fully the financial position of the organization, its financial performance and changes in its financial position. When forming financial statements, an organization should exclude unilateral satisfaction of the interests of some groups of users of financial statements over others. In addition, the financial statements of the organization should include performance indicators of all branches, representative offices and other divisions (including those that independently form their financial statements).

The financial statements should include the indicators necessary to form a reliable and complete picture of the financial condition of the organization and its dynamics, financial results of activity.

In accordance with the Conceptual Framework of IFRS adopted by the International Accounting Standards Board, financial statements are prepared in order to provide various users with information useful in making economic decisions, for example:

- a. to decide when to buy, hold or sell investments in equity instruments;
- b. to assess the management's performance in the interests of the owners or its accountability to them;
- c. to assess the ability of the organization to pay wages and provide other benefits to its employees;
- d. to assess the security of the borrowed funds provided to the organization;
- e. to determine the tax policy;
- f. to determine the amount of distributed profits and dividends;
- g. to collect and use national income statistics;
- h. to regulate the activities of organizations.

Users of financial statements are existing and potential investors, employees, credit organizations, suppliers and contractors, buyers, tax authorities, public organizations, etc. The main focus of the financial statements prepared in accordance with IFRS is to provide existing and future investors and owners of the enterprise with reliable financial information about its activities, primarily for managing financial flows. The financial statements contain useful information on the basis of which a wide range of interested users form an idea of the financial position, financial results and cash flows of the reporting organization. The financial statements also show the results of the company's management's activities in managing its resources.

In order for the financial statements to be of sufficient quality, the usefulness of the financial information contained therein must be characterized by:

- *Completeness* and materiality, that is, contain all sufficiently significant data with the necessary degree of detail, which will allow the interested user to get a reliable and complete picture of the financial position and financial results of the company;
- *Relevance*, that is, the ability to influence the assessment of the situation and the decisions made by users;
- *Clarity*, that is, to be formed in such a way that users, having the necessary minimum knowledge, could understand its nature and meaning;
- *Timeliness*, that is provided to users in the terms established by the legislation;
- *Truthfulness*, that is, contain information that adequately reflects the results of the company's activities;
- *Applicable for forecasting purposes*, that is, reflect the results of past events of the organization, on the basis of which users could assess the prospects for business development;
- *Prudent*, that is, in the formation of reporting data, care must be taken in the conditions of the uncertainty factors of economic events so that assets and income are not overstated, and liabilities and expenses are not understated.

The Conceptual Framework of IFRS presents the fundamental qualitative interrelated characteristics of the information disclosed in the financial statements: relevance and truthful presentation. Relevant information can influence the decisions made by users if it has a predictive and confirming value. The predictive value of financial reporting data consists in the possibility of using them to predict future results for interested users. The supporting value of these financial statements is the disclosure of evidence in relation to previously made estimates.

Another qualitative characteristic of the financial statements is the materiality of the information contained in them. That is, information is material if its omission or distortion can affect the decisions made by users based on financial information about a particular reporting organization.

The usefulness of financial statements is that they should not only give an idea of relevant economic phenomena, but also provide a truthful representation of the economic phenomena for which they are intended.

The truthfulness of the presentation of data in the financial statements is characterized by three parameters: completeness, neutrality and the absence of errors. Completeness means the disclosure of such a volume of data that is necessary for users to understand the displayed economic phenomenon, including all the necessary descriptions and explanations. The neutrality of financial statements consists in impartiality, that is, the absence of inclining the user's opinion in one direction or another, the absence of attenuation, manipulation of the user's opinion.

Compliance with such conditions as comparability, verifiability, timeliness, and clarity affects the increase in the usefulness of financial information. Comparability of information enables users to identify and evaluate similarities and differences between objects reflected in the financial statements. Verifiability means that different knowledgeable and independent observers can come to a common opinion, although not necessarily to complete agreement, that a certain mapping is a true representation. Timeliness means that information is available at a time when it can influence the decisions made by users. The clarity of information by users is achieved by performing the necessary systematizations, classifications, clarity and laconism.

The conceptual framework of the financial statements also contains the fundamental assumption of continuity of activity, that is, the conditions that the organization carries out its activities continuously and will continue it in the foreseeable future. It follows from this that the company has neither the intention nor the need to liquidate or reduce the scale of its activities. Therefore, the value of the company's assets is reflected in the financial statements without taking into account liquidation expenses. Otherwise, the financial statements must contain a statement of the company's intention to cease operations.

IFRS are rules that establish requirements for the recognition, evaluation and disclosure of financial and economic transactions for the

preparation of financial statements of companies around the world. The standards ensure the comparability of documentation between companies on a global scale, and are also a condition for the availability of reporting information for external users. IFRS are a set of compromise and fairly general recommendation options for disclosing financial and economic indicators that reflect the results of the company's activities for each reporting period. This system of standards covers all the main issues related to the preparation of financial statements by enterprises and organizations.

Each standard contains regulations for the disclosure of mandatory information related to: definitions of the accounting object — the formulation of the accounting object and the basic concepts associated with it; recognition of the accounting object—a description of the criteria for assigning accounting objects to various reporting elements; assessments of the accounting object — recommendations on the use of assessment methods and requirements for the assessment of various reporting elements; reflection of the accounting object in the financial statements — disclosure of information about the accounting object in various forms of financial statements.

The preparation of financial statements in accordance with international standards requires compliance with the fundamental rules that determine the general approach to the preparation and presentation of financial statements, one of which is accrual.

The principle of business continuity assumes that the company operates and will continue to operate in the foreseeable future (at least for the coming year). It follows from this that the company has neither the intention nor the need to liquidate or reduce the scale of its activities. Therefore, the assets of the enterprise are recorded at their original cost without taking into account liquidation costs. Otherwise, the financial statements must contain a statement of the company's intention to cease operations.

The accrual principle is based on the fact that the income and expenses of the enterprise are reflected as they arise, and not as they are actually received or paid out of cash or their equivalents. The accrual principle assumes:

- recognition of the result of the operation as it is performed;

- reflection of transactions in the reporting of the period in which they were carried out;
- formation of information about obligations to be paid and obligations to be received, and not only about payments actually made and received.

The implementation of the accrual principle ensures the recognition of income and expenses as economic benefits arise and resources are consumed. Financial statements prepared on the basis of the accrual principle inform users not only about past transactions involving payment and receipt of funds, but also about future obligations to pay cash and receipts of monetary resources. The accrual principle makes it possible to predict the impact of completed transactions on the financial position of the organization.

The financial statements of an organization prepared in accordance with IFRS differ significantly from those prepared according to Russian accounting standards. In this regard, the methods of analysis and evaluation of financial reporting indicators also differ. In foreign practice, special meaning has been given to the procedures for confirming the usefulness of financial reporting data in terms of the materiality of information for decision — making by users, as well as other accounting principles—the temporal certainty of facts, the monetary valuation of the statement of financial position items, income and expenses of the organization.

The formation of financial statements, its composition, structure, and content are regulated by IAS1 “Presentation of Financial Statements”. Its purpose is to formulate the rules for the presentation of financial statements by an organization that are comparable both in time (for a number of reporting periods) and with the financial statements of other organizations.

The financial statements should contain the following information about the organization: assets; obligations (liabilities); equity capital; income, expenses, profits and losses; transactions on receipts and withdrawals of funds by capital owners; cash flows.

In accordance with IAS1, an entity must present structured information in the financial statements, the components of which are: statement

of financial position; statement of comprehensive income; statement of changes in equity; cash flow statement; notes containing a brief overview of the main provisions of the accounting policy and other explanatory information.

IAS1 requires certain disclosures in the financial statements, disclosures of other items either in the statements themselves or in the notes. The standard establishes the recommended composition and structure of reports, if the company considers them acceptable, based on specific circumstances. Financial statements must be submitted at least once a year and contain digital information for at least two reporting periods.

A separate standard of IAS7 “Statement of Cash Flows” is devoted to the statement of cash flows and their equivalents, which is part of the company’s financial statements.

In addition to the listed components of the financial statements, it is encouraged to provide additional information in the form of financial and economic reviews of management, which describe and explain the main characteristics of the company’s financial results, its financial position and key factors that influenced the level of business efficiency. Such a review does not have a standard sample, but may include the following analytical blocks:

- external factors affecting the results of operations, including changes in the market environment in which the company operates, measures taken to minimize negative factors;
- the company’s investment policy aimed at maintaining and improving financial results, including the dividend policy;
- the company’s sources of financing, the policy regarding the optimization of the share of borrowed funds and risk management.

Many companies, in addition to financial information, submit additional reports, for example, reports on environmental protection, especially in industries where the environmental protection factor is of great importance. Companies are encouraged to submit additional reports if their management believes that they will help users make economic decisions.

IFRS do not establish uniform forms of reports, but only regulate the minimum amount of information that should be disclosed in them, and establish some principles for submitting this information. The presentation and classification of items (indicators) in the financial statements should be maintained from one period to the next, that is, consistency and comparability should be observed, which should be evaluated based on the concepts of “relevance” and “reliability”.

## **1.2. Content of financial statements — the information base of the analysis of the financial position**

*Content of the statement of financial position.* The statement of financial position — the balance of assets and liabilities — is one of the main documents based on the formula:

$$\text{TOTAL ASSETS} = \text{TOTAL LIABILITIES} + \text{EQUITY}$$

or

$$\text{TOTAL ASSETS} - \text{TOTAL LIABILITIES} = \text{EQUITY}.$$

Items presented directly in the statement of financial position should be classified as current and non-current assets, short-term and long-term liabilities. Another structure of disclosure of information about assets and liabilities based on liquidity is also possible. In this case, all assets are presented in descending order (or increasing) of their liquidity, and liabilities — as the urgency of their repayment decreases (increases).

Assets are resources controlled by the company as a result of past events, from which it expects economic benefits in the future. The economic benefit contained in the assets represents the potential that, under certain conditions of the company's functioning, makes up the flow of cash or cash equivalents of the organization. Future economic benefits are the potential contained in the object (a set of opportunities) that directly or indirectly contributes to the inflow of cash or their equivalents to the company. This potential can be production opportunities that are part of the company's operating activities. It can also take the following forms:



convertibility to cash or cash equivalents; the ability to reduce the outflow of funds from the company (for example, an alternative production process can reduce production costs). The future economic benefits that the company receives from the object can be expressed in the form of revenue from the sale of products, goods and services; cost savings; other benefits resulting from the use of the object — they can be an increase in business efficiency, a reduction in financial risks.

Assets (fixed assets, intellectual property, raw materials, materials, etc.) intended for use in the production of products (goods) that can meet the needs of customers who are willing to pay for it and thereby contribute to the flow of funds to the company, contain future economic benefits. Monetary funds, representing a universal means of exchange and thereby ensuring the turnover of resources, also contain future economic benefits. An intellectual property object, the use of which in the production process can lead to a reduction in production costs (and not to a direct increase in income), also carries future economic benefits.

To determine the future economic benefits contained in the object, it is necessary to be guided by the requirement of the priority of content over form. It is necessary to proceed, first of all, from the content of the object and the economic reality, and not only (and not so much) from its legal form. The future economic benefits contained in the asset are realized in different ways. In particular, an asset can be: used separately or in combination with other assets in the production of products intended for sale to third parties; exchanged for other assets; used to repay obligations; distributed among the owners of the company.

In turn, the outflow of economic benefits during the repayment of the obligation occurs as a result of the outflow of resources from the company through the payment of cash, the transfer of other assets, the provision of services, etc.

Disclosure of information about assets implies their differentiation into current and non-current, based on the concept of the operating cycle, that is, the time interval between the acquisition of assets for processing, sale and their conversion into cash. The term “non-current assets” is

applied to tangible, intangible assets, as well as financial assets of a long-term nature. An asset acquired for sale (consumption), which will occur within 12 months or the period of the normal operating cycle of the enterprise, should qualify as negotiable.

A liability is a company's current debt arising from past events, the settlement of which will lead to an outflow of resources containing economic benefits from the company. An obligation is a duty or obligation to act or perform something in a certain way. Obligations can be legally binding as a result of a contract or a legal requirement, as exemplified by the amounts paid for goods received from suppliers. At the same time, obligations may be conditioned by normal business practices, established customs of commercial and non-commercial relations, the company's desire to maintain good business relations or act fairly.

In accordance with IFRS, the obligations have the following characteristic features: as a rule, they entail a future outflow of the asset; require execution even in the absence of benefits; caused by past, not future events.

The company's obligations are divided into the following types:

1. an obligation arising as a result of the purchase of goods and services necessary for the functioning of the company;
2. arrears due to prepayment;
3. other types of obligations arising in the course of the company's operation.

Settlement (repayment) of a current obligation is usually associated with the disposal of resources from the company that contain economic benefits. This can be carried out by the payment of funds, the transfer of other assets, the provision of services, the replacement of one obligation with another, the transfer of the obligation to capital.

Short-term liabilities include those that meet any of the following criteria:

- it is assumed that it will be repaid during the normal operating cycle;
- intended mainly for trading purposes;
- its maturity comes within twelve months after the reporting date;

- the organization does not have an unconditional right to postpone its repayment for at least twelve months after the reporting date.

The remaining liabilities are recognized as long-term.

Capital is the part of the company's assets remaining after deducting all liabilities from their amount. The capital includes funds contributed by shareholders (authorized, issued capital); retained earnings; reserves and funds; other types of equity.

In accordance with IFRS 1, an entity must present at least the following information in the statement of financial position:

- a. property, plant and equipment;
- b. investment property;
- c. intangible assets;
- d. financial assets;
- e. investments accounted for using the equity method;
- f. biological assets;
- g. stocks;
- h. trade and other receivables;
- i. cash and cash equivalents;
- j. total assets held for sale and assets included in disposal groups held for sale;
- k. trade and other payables;
- l. estimated liabilities;
- m. financial liabilities;
- n. current income tax liabilities and assets;
- o. deferred tax liabilities and deferred tax assets;
- p. liabilities included in disposal groups held for sale;
- q. non-controlling interests in equity;
- r. issued capital and reserves attributed to the owners of the parent organization.

The above list of objects reflected in the statement of financial position is not exhaustive. If necessary (according to the requirements of other standards), either in the Report itself or in the notes to the financial statements, the subclasses of each of the listed items classified according to the

company's operations can be disclosed. The reflection of each indicator is regulated by the corresponding standard.

Fixed assets are tangible assets that simultaneously meet the following two requirements: they are intended for the production or sale of goods, the provision of services, for leasing or for administrative purposes; they are supposed to be used for more than one year.

Investment property — real estate (land, building, or part of a building) owned by an organization (owner or lessee under a financial lease agreement) for the purpose of receiving lease payments or (and) capital gains.

An intangible asset is an identifiable non-monetary asset that does not have a physical form and meets the following requirements at the same time: there is confidence that the company will receive economic benefits from it in the future; its value can be reliably estimated.

Financial assets are divided into four main categories: financial assets held for trading; held-to-maturity investments; loans and receivables provided to companies (see below — “Trade and other receivables”); available-for-sale financial assets.

Investments accounted for using the participation method are the company's assets invested in other companies in order to obtain future economic benefits. Biological asset — living animals or plants that are owned by an organization, in which qualitative or quantitative changes occur, and are used to obtain agricultural products. Inventory — assets held for sale in the ordinary course of business; being in the production process for such sale or being in the form of raw materials and materials consumed in the production process or in the provision of services.

Trade and other receivables are allocated to a separate category if they include cash, goods or services transferred directly to the debtor (buyer, client, borrower, etc.). If loans or receivables are provided by the company for the purpose of their assignment in the very near future or in the short term, they are classified as held for trading. If the loans or receivables were not provided by the company itself, but were obtained as a result of the assignment of rights to claim on them, depending on the specific situation,

they can be identified as financial instruments: either “held to maturity”, “available for sale”, or “intended for trading”.

Cash and cash equivalents include: cash on hand and demand deposits; cash equivalents are short-term highly liquid investments that are easily converted into pre-known amounts of cash and are subject to insignificant risk of changes in their value.

Trade and other accounts payable are part of the company’s obligations arising as a result of contractual relations that require the payment of funds or the transfer of other assets of the company to other companies and organizations, for example: accounts payable to suppliers and contractors; accounts payable on advances received for goods, works, services; debt on promissory notes issued to various counterparties; settlements with related parties.

Deferred tax liabilities and claims include •

- deferred tax liabilities — amounts of income tax payable in future periods in respect of taxable temporary differences;
- deferred tax claims — amounts of income tax that are reimbursed in the future in respect of deductible temporary differences; deferred tax losses that are not accepted for a future period; unused tax credits that are transferred to a future period.

Reserves are the company’s obligations to make certain expenses in the future that have not been paid or formally agreed with the counterparty at the moment.

A provision is recognized if three conditions are met simultaneously:

- a. due to a certain event in the past, there is a certain obligation of the company;
- b. with a high probability, it can be argued that the fulfillment of this obligation will entail an outflow of resources containing economic benefits;
- c. this obligation can be estimated in monetary terms with a sufficient degree of reliability.

A financial asset is an asset that is cash; an equity instrument of another entity; a contractual right to receive cash or other financial asset

from another entity; or to exchange financial assets or financial liabilities with another entity on terms that are potentially beneficial to the entity; or a contract, the settlement of which will or may be made by the delivery of its own equity instruments, and is a non-derivative instrument, under which the entity will receive or may be required to receive a variable number of its own equity instruments; or a derivative instrument, the settlement of which will or may be made in a different way than the exchange of a fixed amount of cash or other financial asset for a fixed number of its own equity instruments.

A financial liability is a contractual obligation to transfer cash or other financial asset to another entity; to exchange financial assets or financial liabilities with another entity on terms that are potentially unfavorable for the entity; a contract that will or can be settled by delivering its own equity instruments, and is a non-derivative instrument for which the entity will provide or may be required to transfer a variable number of its own equity instruments; or a derivative instrument, the calculation of which will or can be made in a different way than the exchange of a fixed amount of cash or other financial asset for a fixed number of the company's own equity instruments.

Current income tax liabilities and assets — the amount of income tax accrued and payable (recoverable) in respect of taxable profit (tax loss) for the period.

Assets and liabilities included in disposal groups classified as held for sale are related to assets available for immediate sale in their current condition on the terms usual and mandatory for the sale of such assets, and their sale should be highly probable.

Non-controlling interests represented in equity are the part of equity reflected in the consolidated statement of financial position of the group of companies owned by third parties holding equity interests in subsidiaries and associates.

Issued capital and reserves consist of: the value of ordinary and preferred shares (giving their owners certain rights in relation to the company); issue income; reserves created at the expense of net (not distributed

in dividends) profit intended for various purposes defined by legislative and (or) statutory provisions; retained (capitalized) net profit.

The choice of the method of grouping the statement of financial position items is determined by the company. Each company should assess the feasibility of dividing assets and liabilities by time in the statement of financial position itself or in the notes. If the company does not use this classification, assets should be presented according to the degree of (increasing or decreasing) liquidity, and liabilities should be presented in the order of maturity.

*Content of the statement of profit or loss and other comprehensive income.* *comprehensive income.* In the course of financial and economic activity, the organization carries out various production and non-production costs that are necessary to generate income. Information on income and expenses recognized as expenses of the reporting period in accordance with the accounting policy is accumulated in the relevant accounting registers and is reflected in the statement of comprehensive income at the end of the reporting period. Income and expenses are the main elements of financial statements, the comparison of which allows you to obtain different financial results (profits, losses).

The statement of comprehensive income includes income received during the reporting period and expenses incurred, including the results of changes in accounting estimates, depreciation of assets, the impact of inflation, changes in foreign exchange rates, etc. Some indicators of income and expenses may not be included in the report if they are due, for example, to changes in accounting policies or correction of errors. Comparing the values of individual income and expenses allows us to identify the financial results of the company in the form of various profit indicators (gross, from operating activities before taxation, net).

Additional line items, headings, and interim amounts should be presented in the statement of comprehensive income in accordance with the requirements of a number of standards, as well as if this is necessary for reliable disclosure of information about the financial results of the company's activities. The company may also disclose information about financial

results that are not reflected in the statement of comprehensive income in the Notes, following the criteria of completeness and prudence. In addition to the sections on comprehensive income, the following indicators should be presented in the statement of profit or loss and other comprehensive income: a) profit or loss; b) total other comprehensive income; c) comprehensive income for the period as the total amount of profit or loss and other comprehensive income.

In addition to the sections on profit or loss and other comprehensive income, the organization must also present the following items showing the separation of profit or loss and other comprehensive income for the period: a) profit or loss for the period attributable to: non-controlling interests and owners of the parent organization; b) comprehensive income for the period attributable to non-controlling interests and to the owners of the parent organization.

The information to be presented in the statement of comprehensive income is disclosed in two ways. The first of them is the “by the nature of expenses” method, which reflects such types of expenses as depreciation, material, transport, advertising, employee benefits, etc. An example of such disclosure can be presented as follows: revenue; other income; changes in the cost of inventories of finished products and work in progress; used raw materials and consumables; employee benefit expenses; depreciation expenses; other expenses; total expenses; profit before tax.

The second option for reflecting income and expenses in the Statement of Comprehensive Income involves a functional classification, which is the distribution of items “by the purpose of expenses”, when using which expenses are classified according to their function as an integral part of the cost of sales, sales costs, administrative activities, which provides more relevant information compared to the classification of expenses “by the nature of expenses”. At the same time, an arbitrary grouping of costs based on professional judgment has a significant impact on the disclosure of income and expenses. An example of such disclosure based on the “as intended” method can be presented as follows: revenue; cost of sales; gross



profit; other income; distribution costs; administrative expenses; other expenses; profit before tax.

In addition to the above indicators, the statement of comprehensive income should separately reflect financing costs; impairment losses; the organization's share in the profit or loss of associates and joint ventures accounted for using the equity method; income tax expense; net profit; other comprehensive income. Figure 1.1 shows a model for generating profit indicators taking into account the international practice of analytical disclosure of financial results.

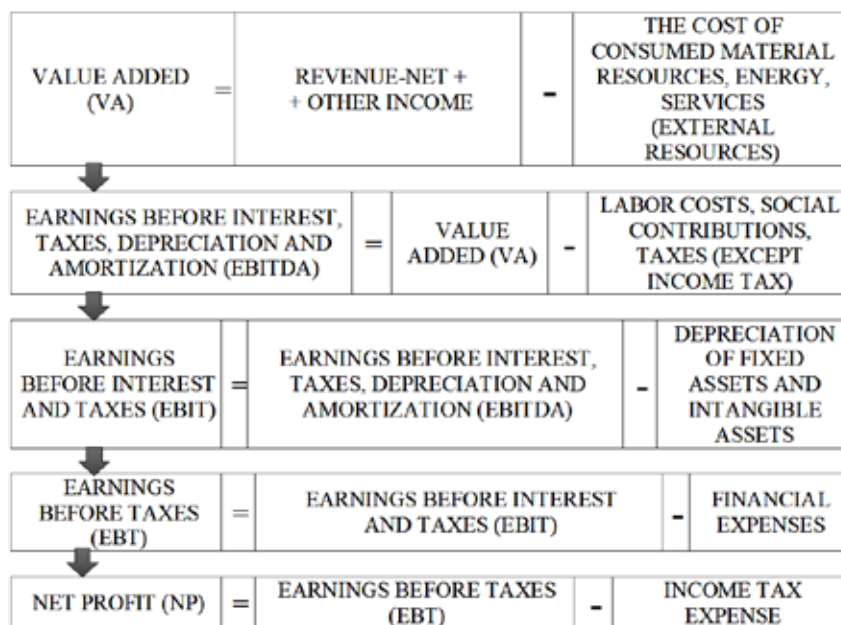


Figure 1.1 Formation of profit indicators according to IFRS reporting

*Content of the statement of changes in equity.* In a separate presentation of the financial statements, the company must disclose changes in relation to the amount of its capital, its constituent elements, as well as other information related to capital in the statement of changes in equity, which includes the following information:

- total comprehensive income for the period, separate the aggregate amounts attributable to the equity capital of the parent company and uncontrolled shares;
- the results of the retrospective recalculation of each component of equity recognized in accordance with IAS8 “Accounting Policies, Changes in Accounting Estimates and Errors”;
- reconciliation of the carrying amount at the beginning and end of the period for each component of equity, with separate disclosure of changes due to items of profit (loss), items of other comprehensive income, transactions with owners on contributions to the authorized capital and withdrawals in their favor (dividends), as well as changes in direct interests in subsidiaries that do not lead to loss of control.

The statement of changes in equity should also reflect the dynamics of the company's net assets for the period. Include the following indicative list of items in the statement of changes in equity, reflecting its dynamics as a whole and for individual elements of capital (authorized capital reserve Treasury shares reserve investment revaluation reserve cumulative translation differences reserve hedge reserve for payments based on shares, retained earnings equity attributable to shareholders of the company, and private equity attributable to holders of uncontrolled shares): profit; exchange rate differences; loss on available-for-sale investments; loss on the hedging instrument; total comprehensive income; acquisition of subsidiaries; share-based payments; profit from the sale of own shares; repurchase of own shares; dividends.

*Content of the statement of cash flows.* The preparation of cash flow statements is regulated by a separate standard of IFRS7 “Statement of Cash Flows”, the purpose of which is to provide users of financial statements with information to determine the ability of an enterprise to generate cash and cash equivalents to meet the needs of the enterprise in using these flows for various needs. The statement of cash flows is, in fact, an aggregated list of cash receipts and payments that allow you to reconcile incoming and outgoing cash balances reflected in the statement

of financial position. The presentation of information on changes in cash and cash equivalents is made taking into account the necessary classification of their flows in the context of operating, investment and financial activities. The following basic terms are used to disclose information about cash flows:

- cash — cash and demand deposits;
- cash equivalents — short-term highly liquid investments that are easily convertible into a certain amount of cash and are subject to insignificant risk of changes in value;
- cash flows — receipts (positive flow) and payments (negative flow) of cash and cash equivalents;
- net cash flow is the net result of the movement of positive and negative cash flows as a result of the company's operations (increase or decrease);
- operating activity — the main activity that generates the company's revenue, and other activities other than investment and financial (cash receipts from the sale of goods and the provision of services in the form of royalties, fees, commissions and other revenue; cash payments to suppliers for goods and services; employees and on behalf of employees; cash receipts and payments to the insurance company for insurance premiums, claims, annuities and other insurance benefits; cash payments or refunds of income tax and cash receipts and payments under contracts concluded for commercial or commercial purposes);
- investment activity is the acquisition and sale of long-term assets and other investments that are not related to cash equivalents (cash payments for the purchase of fixed assets, intangible and other long-term assets, payments related to capitalized development costs and self-produced fixed assets; cash proceeds from the sale of fixed assets, intangible assets and other long-term assets; cash payments for the purchase of equity or debt instruments of other enterprises and interests in joint ventures (other than payments for instruments considered as cash equivalents or intended

for commercial or trading purposes); cash proceeds from the sale of equity or debt instruments of other enterprises and interests in joint ventures (other than income from instruments considered as cash equivalents or intended for commercial or trading purposes); cash advances and loans granted to other persons and their repayment; cash receipts and payments on futures contracts, forward contracts, options and swap agreements (not related to financial transactions);

- financial activity — activity that leads to changes in the size and composition of the company's equity capital, as well as debt on borrowed funds (cash proceeds from the issue of shares or other equity instruments, the issue of debt obligations, loans, promissory notes, bonds, mortgages and other short-term or long-term borrowings; cash payments to owners for the purchase or repayment of shares of the enterprise; cash payments for the repayment of borrowed funds, as well as for the purpose of reducing debt on financial lease).

The statement of cash flows from operating activities can be prepared using the direct or indirect method. When using the direct method, information about the main types of gross cash receipts and payments is disclosed, when using the indirect method, profit (loss) is adjusted to take into account the results of non-monetary transactions, deferred or accrued past and future cash receipts and payments arising in the course of operating activities, as well as income or expense items related to the receipt or payment of cash within the framework of investment or financial activities. The essence of direct and indirect methods of disclosure of information about cash flows generated within the framework of operating activities is presented in (Figure 1.2).

Other information about cash and cash equivalents is subject to disclosure (together with comments) if it relates to amounts held by the company that are not available for use by the group, for example, funds of a subsidiary doing business in a country with certain legal restrictions (strict currency controls, etc.) that cannot be used by the parent company. In addition, any

additional disclosure of information necessary for users to understand the financial situation and liquidity of the company is encouraged.

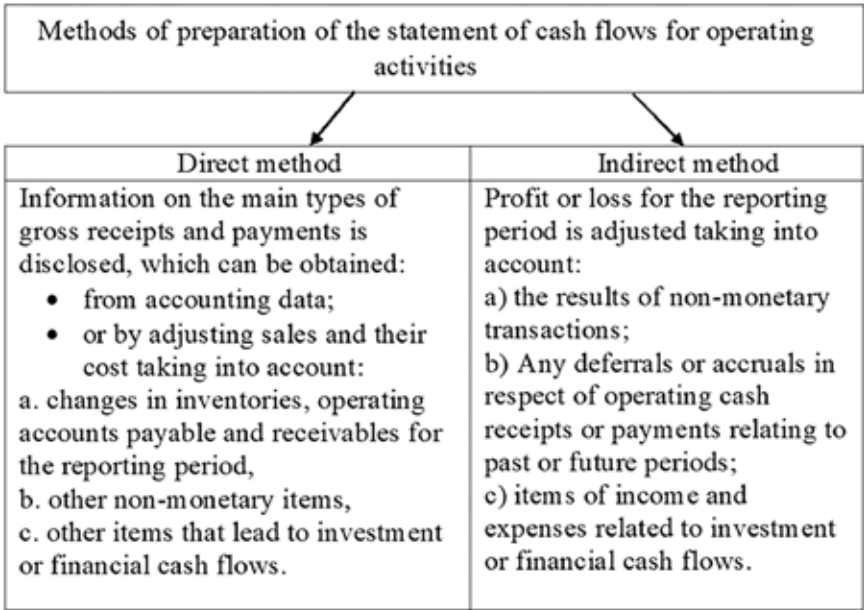


Figure 1.2 Methods of preparation of the statement of cash flows for operating activities

*Content of the Notes to the financial statements*

A large amount of detailed information about the company’s results of operations is presented in the Notes to the financial statements, which should:

- provide information about the basis for preparing the financial statements and about the specific accounting policies selected and applied for significant transactions and events;
- disclose information required by IFRS that is not presented in the financial statements themselves;
- provide additional information that is not presented in the financial statements themselves, but is necessary for a reliable presentation.

The notes to the company’s financial statements should be presented in an orderly manner. For each item in the Statement of Financial Position,

the Income Statement and other components of the comprehensive financial result (the Statement of Comprehensive Income), the Statement of Changes in Equity, the Statement of Cash Flows, cross-references should be made to any information related to it in the Notes. The notes include a description, a detailed analysis of the indicators of the financial statements, as well as additional information that may be useful to users. Along with the mandatory information, in accordance with the requirements of IFRS, the Notes are encouraged to include other information that, in the opinion of the company, contributes to achieving a reliable presentation of the results of operations, financial position, etc.

As a rule, the Notes offer information in the order that helps users in understanding the financial statements, comparing them in dynamics, in comparison with the financial statements of other companies.

This sequence is usually followed:

- statement of compliance with IFRS;
- information about the applied valuation basis (s) and accounting policy;
- supporting information for the items contained in each financial reporting form in the order of presentation of line items;
- contingent events, contractual obligations, other disclosures of a financial and non-financial nature.

The materials of the Notes to the financial statements can be structured in the form of separate independent blocks (for example, a report on specific accounting policies, a report on investment activities, a report on business development prospects, etc.).

One of the most important sections of the Notes to the financial statements is the “Accounting Policy”, which is a set of principles, methods, procedures, rules and practices of accounting (primary observation, cost measurement, current grouping, summary of transactions and events) adopted by the company for the preparation and presentation of financial statements. The main principle of the company’s accounting policy is to choose methods that do not contradict IFRS, deviation from which is allowed in extremely rare cases if following them leads to unreliable results.

When describing the company's accounting policy, the following main points are disclosed:

- the basis (or bases) of the assessment;
- each specific accounting policy issue that is essential for the correct understanding of the financial statements by users.

Valuation is the process of determining the monetary amounts for which elements of the financial statements should be recognized and included in the company's financial statements, for which it is necessary to choose a specific valuation method.

Depending on the requirements of IFRS, various valuation methods are used in the financial statements: historical (actual cost of acquisition); current (replacement cost, possible cost of sale (repayment), current discounted value and fair value).

The company should present in the Notes to the financial statements the following provisions of its accounting policy (but not limited to them):

1. revenue recognition;
2. principles of information, including subsidiaries and associated companies;
3. business associations;
4. joint activities;
5. recognition and depreciation of tangible and intangible assets;
6. capitalization of borrowing costs and other costs;
7. contract agreements;
8. investment property;
9. financial instruments and investments;
10. rent;
11. research and development costs;
12. stocks;
13. taxes, including deferred taxes;
14. reserves;
15. pension costs;
16. foreign currency translation and hedging;

17. definition of economic and geographical segments and the basis for the distribution of costs between them;
18. determination of cash and cash equivalents;
19. accounting for inflation;
20. government subsidies.

Along with IAS1, other standards may also require disclosures of accounting policies on many other accounting aspects. In general, the accounting policy chosen by the company can be changed only if it is required by the body regulating financial reporting standards, as well as when switching to a more appropriate and reliable option. The scope and procedure for disclosing accounting policies in financial statements are discussed in each specific standard.

Other information to be disclosed in the company's financial statements (if it is not disclosed in other information published together with the financial statements):

- permanent location and legal form;
- legal address (if the address of the main place of business is different from the legal one);
- description of the nature of the company's operations and main activities;
- the name of the parent company and the ultimate parent company of the group;
- the number of employees at the reporting date or the average number of employees for the reporting period.



***Control questions of the Chapter 1.***

1. What are the requirements for the information system used to analyze the financial situation of the company?
2. What types of reporting are used when analyzing the financial position of the company?
3. How are the definitions formulated: non-current assets, current assets, equity, long-term liabilities, short-term liabilities?
4. What indicators are reflected in the statement of financial position?
5. What methods are used to analyze the financial position of the company according to the reporting data?
6. What is the structure of the company's assets?
7. What does the principle of "usefulness of information" mean?
8. What international standard regulates the preparation of a report on the financial position of a company?
9. How is the aggregation of reporting indicators for the purposes of analyzing the financial situation?
10. How are assets and liabilities disclosed in the statement of financial position on a temporary basis?
11. What is the purpose of the statement of financial position?
12. What is the purpose of the cash flow statement?
13. What is the purpose of the statement of changes in equity?
14. What indicators are calculated to analyze the dynamics of assets?
15. What indicators are calculated to analyze the structure of assets?

## **Chapter 2. CONTENT AND SEQUENCE OF THE ANALYSIS OF COMPANY'S FINANCIAL POSITION**

### **2.1 Analysis of assets, capital and liabilities**

The statement of financial position is central to the financial statements of the organization. The indicators of this report make it possible to study and evaluate the financial condition of the organization at the date of its preparation and analyze its dynamics in comparison with previous reporting data.

According to the ratio of own and borrowed sources of funds, it is possible to judge the degree of financial independence and the level of financial risk in the implementation of the organization's financing policy. The study of the items of non-current and current assets allows us to draw conclusions about the level of liquidity of the organization. Comparing the sections of the liability and asset of the statement of financial position allows you to determine which sources are used to form long-term capital investments (non-current assets), which sources are used to form current assets, to establish the level of risk of reducing financial stability, liquidity and solvency.

The financial condition is reflected through a system of absolute and relative indicators, which are either directly reflected in the assets and liabilities, or are determined using a number of calculation procedures.

According to the statement on the financial position, the following most important indicators of the financial condition of the organization are established and evaluated:

- composition, structure and dynamics of assets and liabilities;
- availability of own working capital;
- the value of the organization's net assets;
- financial stability coefficients;
- solvency and liquidity ratios, etc.

Analysis of the company's financial stability, according to the statement of comprehensive income, allows you to characterize its level at the reporting date, identify trends in the financial situation and predict the development of the financial situation in the future. One of the main manifestations of the financial stability of an organization is its solvency, which can be estimated and predicted using indicators of assets and liabilities. The indicator of a company's potential solvency is its liquidity, i.e. the ability to repay monetary obligations to owners, suppliers, tax authorities, banks, insurance institutions and other participants of economic turnover in a timely manner in full.

Using the data of the statement of financial position allows you to solve the following analytical tasks:

- analyze the composition, structure and dynamics of the organization's assets, equity and liabilities;
- analyze the liquidity;
- conduct a solvency analysis;
- establish the degree of probability of bankruptcy;
- calculate financial ratios and determine the level of financial stability of the organization;
- implement a methodology for analyzing the independence of the organization in the formation of material and production stocks;
- identify factors that reduce the financial stability and solvency of the organization.

A comparison of the sections of the liability and the asset allows us to determine at the expense of which sources non-current assets were formed, what was the source of the formation of current assets, and how this affected financial stability. For an in-depth analysis of the financial situation, in addition to the indicators of assets and liabilities, more detailed information is required, which is disclosed in the appendix to the financial statements prepared in accordance with IFRS.

The indicators of the statement of financial position are closely related to the indicators presented in other reporting forms. Figure 2.1 shows a diagram showing the relationship between the asset and liability of the

statement on the financial position and the income statement. With the help of this relationship, the implementation of the two main concepts enshrined in the principles of IFRS is clearly traced — the financial and physical concepts of capital, which are fundamental for evaluating the effectiveness of the company's activities for the reporting period.

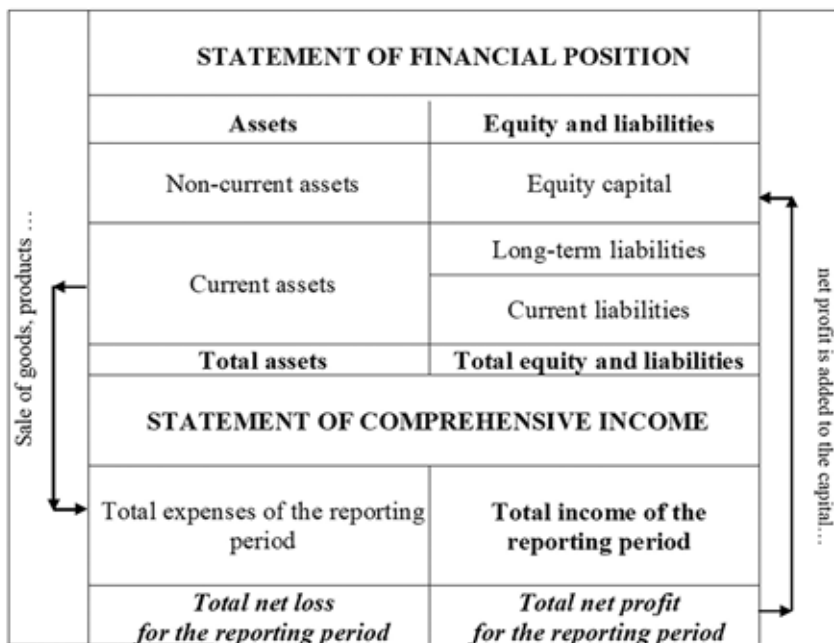


Figure 2.1 The scheme of implementation of the concept of capital accumulation

According to the financial concept, capital is retained if its value by the end of the reporting period (minus the amounts contributed by shareholders or paid to shareholders) is equal to its value fixed at the beginning of this period. According to the physical concept, capital is retained if the organization at the end of the reporting period has the same level of production capital or operational capabilities that it had at the beginning of this period. The analysis of the financial statements using the data of the statement of financial position and the statement of comprehensive income allows us to assess the implementation of the financial and physical

concepts, the formalization of the process of which is shown schematically in Figure 2.1. In the process of capital turnover during the implementation of financial and economic activities during the reporting period, net profit is generated, which increases equity and current assets.

Let's consider the process of implementing the financial and physical concepts of capital on the example of only one economic operation related to the sale of goods. For convenience, we abstract from the tax component of this operation. Fixing the sale of goods in the framework of accounting leads to the formation of revenue, i.e. the recognition of income (economic benefit) and the formation of accounts receivable of the buyer. Therefore, the turnover on the loan for the amount of income will be reflected in the statement of comprehensive income. At the same time, there will be an increase in the total value of assets by the same amount. Along with the recognition of income, expenses related to the disposal of sold goods from the asset should be reflected, that is, the amount of the expense (decrease in economic benefits) will be reflected as a debit turnover and as an expense item in the statement of comprehensive income with a simultaneous decrease in the total amount of assets by the amount of the value of the disposed goods.

The total financial result will be formed as profit (the difference between income and expense) in the statement of comprehensive income. Provided that the selling price of a product (goods, services) is higher than its cost price (that is, the excess of income over expenses), the company receives a profit, the amount of which will increase the total amount of the balance under the item "Retained earnings", which is part of the "Capital", since the profit is reflected as a credit balance.

By carrying out its business activities and registering various transactions in the framework of accounting, an organization at the end of the reporting period should eventually have an increase in its own capital in the form of profit, provided that the total amount of income received during this period exceeds the total expenses incurred. It follows that the positive dynamics of equity, according to the statement of financial position, indicates an effective business. Thus, the dynamics of the indicators

of the statement of financial position allows not only to determine the volume, dynamics, structure and directions of capital investments, but also to assess the effectiveness of its use for the analyzed period, to establish its sufficiency to ensure the existing volumes of current activities, as well as to assess the possibility of expanding its scale in the upcoming period.

Based on the information contained in the company's statement of financial position, external users can make a decision on the feasibility and conditions of concluding commercial transactions with it; assess its creditworthiness as a borrower and measure the degree of financial risk of their investments, the feasibility of acquiring securities or assets, etc.

The financial well-being of the organization depends on what capital the organization has, how optimal its structure is and how expediently it is transformed into fixed and revolving funds, and, consequently, the well-being of persons interested in obtaining economic benefits.

To a large extent, the financial stability of an organization is determined by the correspondence of the structure of financial sources (liabilities) and the structure of their placement in assets. The directions of financing assets at the expense of own and borrowed sources of funds are shown in Figure 2.2.

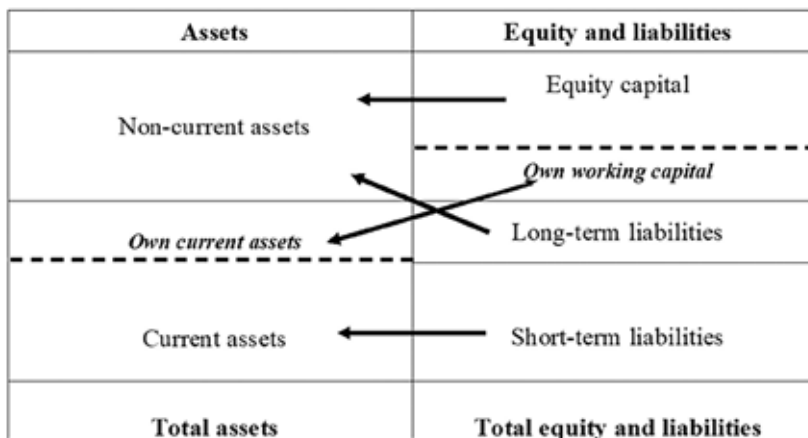


Figure 2.2 Asset financing scheme

Under the influence of various factors of the financial and economic activity of the organization, one or another type of asset financing can be formed, which, based on the combination of the structure of assets and liabilities, can be attributed to one of the proposed four options (types) of financial stability, schematically presented in Figure 2.3. The values of the corresponding elements of the asset and liability of the statement of financial position are presented in the form of indicators of their specific weight in the aggregate value of the total asset (liability).

| <b>Assets financing option No. 1</b> |                                                   |
|--------------------------------------|---------------------------------------------------|
| <b><i>Assets</i></b>                 | <b><i>Equity and liabilities</i></b>              |
| Non-current assets = 50%             | Equity capital = 60%                              |
| Current assets = 50%                 | Long-term liabilities = 20%                       |
|                                      | Current liabilities = 20%                         |
| <b><i>Total assets = 100%</i></b>    | <b><i>Total equity and liabilities = 100%</i></b> |
| <b>Assets financing option No. 2</b> |                                                   |
| <b><i>Assets</i></b>                 | <b><i>Equity and liabilities</i></b>              |
| Non-current assets = 50%             | Equity capital = 50%                              |
| Current assets = 50%                 | Long-term liabilities = 10%                       |
|                                      | Current liabilities = 40%                         |
| <b><i>Total assets = 100%</i></b>    | <b><i>Total equity and liabilities = 100%</i></b> |
| <b>Assets financing option No. 3</b> |                                                   |
| <b><i>Assets</i></b>                 | <b><i>Equity and liabilities</i></b>              |
| Non-current assets = 50%             | Equity capital = 40%                              |
| Current assets = 50%                 | Long-term liabilities = 10%                       |
|                                      | Current liabilities = 50%                         |
| <b><i>Total assets = 100%</i></b>    | <b><i>Total equity and liabilities = 100%</i></b> |
| <b>Assets financing option No. 4</b> |                                                   |
| <b><i>Assets</i></b>                 | <b><i>Equity and liabilities</i></b>              |
| Non-current assets = 50%             | Equity capital = 20%                              |
| Current assets = 50%                 | Long-term liabilities = 0%                        |
|                                      | Current liabilities = 80%                         |
| <b><i>Total assets = 100%</i></b>    | <b><i>Total equity and liabilities = 100%</i></b> |

Figure 2.3 Assets financing options

Option No. 1 reflects an absolutely stable type of financial situation in which the equity capital fully covers the organization's need for financing non — current assets, and the amount of its own working capital (equity+ + long-term liabilities – non-current assets) with a large margin of financial strength forms current assets. The share of the formation of current assets at the expense of equity —  $60\% \left( \frac{60 + 20 - 50}{50} \times 100 = 60\% \right)$ .

This option of asset formation creates a high level of protection against financial risks, but it also contains a negative component, since the company. The company does not use the possibility of attracting borrowed funds to expand the scale of financing activities, that is, it indicates the lost profit of an insufficiently high level of use of borrowed funds, which, as a rule, are characterized by a lower level of cost in interest-bearing servicing than equity capital.

Option No. 2 is optimal from the point of view of the adequacy of equity capital to fully provide non-current assets and the necessary part of current assets. In this case, the own funds that form current assets are  $20\% \left( \frac{50 + 10 - 50}{50} \times 100 = 20\% \right)$ .

In financing under option No. 3, the company's activities are more exposed to financial risks, since its own capital does not fully finance non-current assets. For their full financial support, long-term borrowed capital is used (long-term liabilities that will be repaid more than a year after the reporting date). In this situation, the company does not have its own working capital ( $40 + 10 - 50 = 0\%$ ), that is, the financing of current assets is carried out exclusively at the expense of short-term borrowing. If the period of turnover of current assets is shorter than the average period of repayment of short-term liabilities, then the company can cope with financial instability. Then, due to the acceleration of the turnover of current assets in the future, it may be possible to change the ratio between the value of short-term liabilities and current assets in favor of the latter. In an unfavorable scenario for the development of business processes (a slowdown in the turnover of current assets, for example, due to a reduction in



product sales), an enterprise may find itself in an area of increased financial risks associated with a high share of short-term borrowed funds in total liabilities.

Without taking adequate measures to strengthen financial stability, the company may find itself in a typical financial crisis situation, as reflected in option No. 4. In this case, the unsatisfactory structure of financial sources is manifested in a significant share of short-term liabilities (80%) and a low level of equity (20%). Taking into account the structure of assets, it can be noted that the company's own capital covers the need for financing non-current assets by only 40%  $\left( \frac{20}{50} \times 100 = 20\% \right)$ . There

is no long-term attraction of borrowed funds, and the value of own current assets is generally negative ( $20 + 0 - 50 = -30\%$ ) of the total balance). Financing of 60% of non-current assets is carried out at the expense of short-term borrowed funds, which, of course, in the near future may turn into a financial catastrophe for the enterprise, up to the loss of the business as a whole, if it is declared bankrupt. The impending bankruptcy in this situation is obvious, since the payment period for short-term liabilities will come faster (from a few days to several months, but not more than a year) than the refund of funds diverted to the acquisition of non-current assets will occur (it is usually measured in several years, but not less than 12 months).

The main area of the organization's capital use is the operational process, in which the most important indicator of the effect of this use is formed — profit. In modern conditions, the increase in the amount and quality of operating profit is provided not so much by an increase in product prices, but by an increase in the volume of its production and sale, achieved by accelerating capital turnover. In certain market circumstances, a decrease in product prices with an acceleration of capital turnover allows you to get a greater effect. Therefore, the acceleration of capital turnover, the rationalization of cash and material flows is one of the targets of its use.

An important area of capital use is the investment process, the long nature of which can divert significant funds from the usual circulation

for a long time. However, if the effect of investing capital was justified in advance, and the risks associated with this process were reduced to the lowest possible level, then the expected results will become real, and the invested capital will be multiplied. Therefore, an important direction of ensuring the efficiency of capital use is the implementation of a risk management policy that accompanies any type of entrepreneurial activity. A special role in this is played by financial and economic analysis, which contributes to the development of such a policy, creating options for the development of a particular situation, justifying it with the necessary calculations, estimates, conclusions.

When developing a competent management financial policy of an organization related to the formation and use of capital, there is a need to apply various methods and techniques that allow for a comprehensive systematic study of the formation, placement and efficiency of the use of own and borrowed capital and their individual components. In this regard, the analysis of the sources of capital formation, the rationality of its placement and effective use is given exceptional importance.

The problems of the formation, functioning and reproduction of the organization's capital have been considered by economists for many years; there are many modern views, theories and methods that try to solve these problems. Modern concepts of capital suggest that there is no universal solution for the formation of an optimal capital structure that meets the various economic interests of interested persons, and even one group of persons, but at different stages of the organization's development.

A variety of indicators are used to measure, analyze and evaluate capital. It should be noted that capital is a category of complex economic nature, and complex analytical methods are sometimes in demand for its comprehensive research. These circumstances, in turn, determine the urgent need to develop and use in the analysis of capital a system of indicators that most fully characterize its condition, movement and efficiency of use.

Extensive analytical opportunities for studying the sources of capital and its placement are opened in the process of using the data of the Statement of Financial Position, Appendices to the financial statements,

as well as additional information contained in accounting registers and other data sources.

As a rule, the analysis of assets and liabilities, according to the statement of financial position (Appendix 1), begins with the construction of an analytical table containing aggregated articles — the results of the sections of assets and liabilities, data on which are presented in the (table 2.1), from which it follows that in 2022 the company significantly increased its investments in the implementation of its activities. This is evidenced by the increase in the total amount of assets from €46.822.224 at the beginning of the year to €57.831.482 at the end of the year, as well as a relative indicator — the growth rate, which was 123.51%. The value of assets increased due to investments in working capital by €11345.356. or by 30.05%. At the same time, the amount of investments in long-term (non-current) assets for the reporting period decreased by €336.098, or by 3.71%.

Table 2.1 — Structure and dynamics of assets, capital and liabilities according to the statement of financial position of the company “ABC”

| Indicator             | The amount, €   |                 |                 | Growth rate, % | Share of the total balance, % |               |       |
|-----------------------|-----------------|-----------------|-----------------|----------------|-------------------------------|---------------|-------|
|                       | 31.12.21        | 31.12.22        | ±Δ              |                | 31.12.21                      | 31.12.22      | ±Δ    |
| 1                     | 2               | 3               | 4               | 5              | 6                             | 7             | 8     |
| Non-current assets    | 9064869         | 8728771         | –336098         | 96.29          | 19.36                         | 15.09         | –4.27 |
| Current assets        | 37757355        | 49102711        | 11345356        | 130.05         | 80.64                         | 84.91         | 4.27  |
| <b>Total assets</b>   | <b>46822224</b> | <b>57831482</b> | <b>11009258</b> | <b>123.51</b>  | <b>100.00</b>                 | <b>100.00</b> | –     |
| Equity capital        | 13494691        | 15109350        | 1614659         | 111.97         | 28.82                         | 26.13         | –2.69 |
| Long-term liabilities | 7119052         | 8869645         | 1750593         | 124.59         | 15.20                         | 15.34         | 0.14  |

| <b>1</b>                            | <b>2</b>        | <b>3</b>        | <b>4</b>        | <b>5</b>      | <b>6</b>      | <b>7</b>      | <b>8</b> |
|-------------------------------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|----------|
| Current liabilities                 | 26208481        | 33852487        | 7644006         | 129.17        | 55.98         | 58.53         | 2.55     |
| <b>Total equity and liabilities</b> | <b>46822224</b> | <b>57831482</b> | <b>11009258</b> | <b>123.51</b> | <b>100.00</b> | <b>100.00</b> | <b>–</b> |

The relative indicators of the asset structure (the share of individual items in the total value of total assets) reflect a decrease in the share of non-current assets by 4.27% at the reporting date and, accordingly, the same growth in current assets, as a result of which the share of current assets reached the level of 84.91%. This ratio of current and non-current assets is quite typical for retail enterprises, which include the company under study.

The growth rate of equity capital by 11.97% in 2022 compared to 2021 indicates a positive trend in the company's' development. As of the reporting date, the amount of equity capital reached the level of €15 109350, which is €1614659 more than at the beginning of the year. The share of equity in total liabilities decreased significantly during the reporting year. Its level as of 31.12.2022 fell to 26.13%, which is 2.69% lower than it was at the beginning of the year.

The company's liabilities increased at an accelerated pace during the reporting period. Thus, long-term liabilities increased by €1 750 593 (or by 24.59%), short — term liabilities-by €7 644006 (or by 29.17%). The increase in the level of financial dependence on borrowed sources of funds is also evidenced by an increase in the share of liabilities in the total amount of liabilities: the share of long-term liabilities amounted to 15.34% at the reporting date, exceeding its value by 0.14% compared to the beginning of the reporting year, and the share of short-term liabilities as of 31.12.2022 reached the level of 58.53%, which is 2.55% higher than the level of this indicator at the beginning of the reporting year. The negative dynamics is shown by an increase in the share of long-term and short-term liabilities by €9 394599 in total.

The indicators of the dynamics and structure of the company's assets, reflecting its property status, are presented in table 2.2 for a more detailed

consideration, the data of which are studied using horizontal (dynamic) and vertical (structural) analysis. The main factor in the decline in non-current assets was long-term financial investments, mainly represented by contributions to the authorized capital of other companies, which decreased by €1 055 335, or by 25.76%, in 2022. Their share in the structure of assets at the reporting date was reduced by 3.49%.

Table 2.2 — Indicators of the dynamics and structure of the assets of the company «ABC»

| Indicator                                | The amount, €     |                   |                   | Growth rate, % | Share of the total balance, % |               |          |
|------------------------------------------|-------------------|-------------------|-------------------|----------------|-------------------------------|---------------|----------|
|                                          | 31.12.21          | 31.12.22          | ±Δ                |                | 31.12.21                      | 31.12.22      | ±Δ       |
| Property, plant and equipment            | 3 120 883         | 3 776 126         | 655 243           | 121.00         | 6.67                          | 6.53          | −0.14    |
| Intangible assets                        | 435 287           | 530 906           | 95 619            | 121.97         | 0.93                          | 0.92          | −0.01    |
| Investment property                      | 4 096 278         | 3 040 943         | −1 055 335        | 74.24          | 8.74                          | 5.25          | −3.49    |
| Trade and other receivables — long-term  | 1 412 421         | 1 380 796         | −31 625           | 97.76          | 3.02                          | 2.39          | −0.63    |
| Stocks                                   | 20 085 885        | 22 245 295        | 2 159 410         | 110.75         | 42.90                         | 38.47         | −4.43    |
| Trade and other receivables — short-term | 12 181 731        | 17 300 185        | 5 118 454         | 142.02         | 26.02                         | 29.92         | 3.90     |
| Tax advance                              | 53 778            | —                 | −53 778           | —              | 0.11                          | —             | −0.11    |
| Financial assets                         | 72 335            | 105 754           | 33 419            | 146.20         | 0.15                          | 0.18          | 0.03     |
| Cash and cash equivalents                | 5 363 626         | 9 451 477         | 4 087 851         | 176.21         | 11.46                         | 16.34         | 4.88     |
| <b>Total assets</b>                      | <b>46 822 224</b> | <b>57 831 482</b> | <b>11 009 258</b> | <b>123.51</b>  | <b>100.00</b>                 | <b>100.00</b> | <b>—</b> |

In 2022, there was a slight increase in the item “Property, plant and equipment” (by €655.243), the share of which in the total amount of assets decreased by 0.14% and amounted to 6.53% as of 31.12.2022. The share of the item “Intangible assets” represented in this company by computer software also tended to decrease, during the reporting year it decreased to 0.92% of the total assets. At the same time, in absolute terms, the amount of intangible assets increased slightly (by € 95.619 or by 21.97%) and amounted to € 530.906.

Long-term accounts receivable as part of non-current assets were formed due to the transfer of advances to the supplier in accordance with the concluded delivery contract. A decrease in its amount as of 31.12.2022 by €31.625. This is a consequence of the fact that this part was reclassified into short-term accounts receivable, the settlement of which was expected in 2022 by receiving the corresponding tangible assets from the supplier.

Let's take a closer look at the company's current assets, which account for 84.91% of the total assets. The characteristic of current assets is a short turnover period (“turning money into new money” with an increase), not exceeding 12 months, or the period of one operating cycle. Both at the beginning and at the end of 2022, the most significant items of current assets in the analyzed company are inventories, accounts receivable and cash. Thus, the largest share as of 31.12.2022 falls on inventories (38.47%), accounts receivable (29.92%) and slightly less on cash and cash equivalents (16.34%). This indicates a generally high level of asset liquidity.

It should be noted that an acceptable level of the structure of current assets is determined by a number of factors, the main of which are the industry affiliation of the business, the features of production activity and its scale, the organization of logistics processes. Thus, the diversion of funds to accounts receivable is determined by the type of products sold, the capacity of the market, the conditions of competition, the degree of confidence in buyers and customers when shipping products on deferred payment terms. Nevertheless, the increase in the repayment period of accounts receivable by customers worsens the solvency of the supplier company.

Cash and short-term deposits include cash on bank accounts and cash, as well as short-term deposits with a maturity of no more than three months. As at 31.12.2022, cash and cash equivalents recorded in the company's statement of financial position amounted to €9.451.477. The increase in this article to 16.34% indicates a positive dynamics of the asset structure as a whole and an increase in the share of the most liquid of them, due to which the company can immediately repay its obligations. Thus, the mobile assets of the organization increased by 4.27% in the asset structure, which indicates a decrease in the duration of the production cycle. Working capital is of great importance in the organization's activities, the growth of which ensures its liquidity and solvency.

The general assessment of the structure and dynamics of liabilities, according to the company's statement of financial position, prepared in accordance with IFRS, gives an idea of the financial sources at the expense of which the company carries out its activities. The company's capital is formed both at the expense of its own (internal) and at the expense of borrowed (external) sources. In modern conditions, the capital structure is the factor that has a direct impact on the financial condition of the company — its long-term solvency, the amount of income, profitability of activities.

According to the data presented in (table 2.3), the amount of the company's equity capital in 2022 increased by €1.614.659 (or by 11.97%) mainly due to an increase in retained earnings, which, in turn, was the result of generating net profit. The negative factor is a higher growth rate of borrowed sources of funds due to an increase in long-term liabilities by 1.750.593 thousand rubles (or by 24.59%) and short-term liabilities by € 7.644.006 (or by 29.17%). Such dynamics led to the fact that the share of equity in total liabilities as of 31.12.2022 decreased by 2.69% and reached the level of 26.13%, which indicates an extremely high risk of borrowing.

Analyzing the financial sources of the company, it is necessary to assess the size and dynamics of its net assets, which are the cost estimate of the part of the assets that are formed at the expense of equity. Net assets reflect real equity, the absolute value and positive dynamics of which characterize

the stability of the financial condition of the organization. In other words, net assets are assets that are free from the company's liabilities.

Table 2.3 — Indicators of the dynamics and structure of equity and liabilities of the company "ABC"

| Indicator                                    | The amount, € |             |           | Growth rate, % | Share of the total balance, % |          |       |
|----------------------------------------------|---------------|-------------|-----------|----------------|-------------------------------|----------|-------|
|                                              | 31.12.21      | 31.12.22    | ±Δ        |                | 31.12.21                      | 31.12.22 | ±Δ    |
| 1                                            | 2             | 3           | 4         | 5              | 6                             | 7        | 8     |
| Authorized capital                           | 17 957 135    | 17 957 135  | –         | 100.00         | 38.35                         | 31.06    | –7.29 |
| Other funds and reserves                     | (6 853 067)   | (6 853 067) | –         | 100.00         | –14.64                        | –11.85   | 2.79  |
| Retained earnings                            | 2 376 339     | 3 984 629   | 1 608 290 | 167.68         | 5.08                          | 6.89     | 1.81  |
| Reserve for conversion of foreign currencies | 8 823         | 13 014      | 4 191     | 147.50         | 0.02                          | 0.02     | –     |
| Uncontrolled ownership shares                | 5 461         | 7 639       | 2 178     | 139.88         | 0.01                          | 0.01     | –     |
| Long-term credits and loans                  | 6 700 000     | 8 000 000   | 1 300 000 | 119.40         | 14.31                         | 13.84    | –0.47 |
| Long-term trade and other payables           | –             | 504 000     | 504 000   | –              | –                             | 0.87     | –     |
| Deferred tax liabilities                     | 419 052       | 365 645     | –53 407   | 87.26          | 0.89                          | 0.63     | –0.26 |
| Short-term credits and loans                 | 3 000 471     | 5 464 073   | 2 463 602 | 182.11         | 6.41                          | 9.45     | 3.04  |



| 1                                   | 2                 | 3                 | 4                 | 5             | 6             | 7             | 8        |
|-------------------------------------|-------------------|-------------------|-------------------|---------------|---------------|---------------|----------|
| Trade and other payables            | 22 487 475        | 27 293 563        | 5 646 165         | 126.08        | 48.02         | 47.19         | -0.83    |
| Tax liabilities                     | 118 458           | 326 099           | 207 641           | 275.29        | 0.26          | 0.56          | 0.30     |
| Other liabilities                   | 602 077           | 768 752           | 166 675           | 127.68        | 1.29          | 1.33          | 0.04     |
| <b>Total equity and liabilities</b> | <b>46 822 224</b> | <b>57 831 482</b> | <b>11 009 258</b> | <b>123.51</b> | <b>100.00</b> | <b>100.00</b> | <b>-</b> |

The growth of net assets indicates an increase in the organization's own capital in the process of carrying out economic activities, which should primarily occur due to the capitalization of retained earnings, as well as an increase in additional capital and additional contributions of owners to the authorized capital.

The positive dynamics of the value of net assets is an important estimated indicator of the growth of the investment attractiveness of the company, a market indicator of its financial stability, which, in turn, can increase the activity of sales of securities initiated by the company, as well as contribute to the growth of their quotes on the financial markets.

A decrease in net assets is an unjustified diversion, withdrawal of funds beyond the scope of economic activity, a consequence of financial difficulties, the reasons for which, as a rule, are:

- losses;
- covering losses with previously formed reserves;
- diversion of reserves for repayment of obligations on bonds and dividends.

The low level of net assets is often the reason why shareholders (founders) are not credited with dividends.

The company's net assets at the end of 2022, according to the company's statement of financial position, amounted to €15.109.350, which is € 1.614.659 (or 11.97%) more than at the beginning of the reporting year, which is a positive trend.

Commercial organizations should regularly monitor the amount of net assets. Their level should not be allowed to decrease to a value less than the amount of the authorized capital. The necessity of maintaining a correspondence between the value of net assets and the authorized capital of the company follows from the economic and legal content of the concept of “Authorized capital”, the value of which is equivalent to the nominal value of the company’s shares acquired by shareholders, or the nominal value of the shares of its participants. At the same time, the authorized capital determines the minimum amount of the company’s property that guarantees the interests of its creditors, so there is a requirement that the minimum allowable value of the company’s net assets is limited by the amount of its authorized capital. Otherwise, the company will not be able to guarantee the repayment of obligations to creditors, even in the minimum amount that reflects the amount of the authorized capital.

Continuing the analysis of the indicators presented in (table 2.3), it should be noted that the increase in short-term liabilities in 2022 was mainly due to the growth of short-term credits and loans (by €2.463.602, or by 82.11%), accounts payable by €5.646.165 (or by 26.08%). The percentage equivalent of the specific weight of these two items from the total amount of the company’s liabilities was as of 31.12.2022 56,64% (9.45% + + 47.19%), this indicates a significant increase in financial dependence on borrowed sources of funds. In addition, the growth of debt on loans and borrowings “weighs down” the company’s financial expenses and reduces net profit.

Along with this, it should be noted that accounts payable are funds raised for a certain period by the enterprise as a result of various economic operations that have taken place, which are subject to return to the relevant legal entities or individuals. Accounts payable can be considered as a trade (commodity) loan with a zero service rate, which is its significant positive difference from cash bank loans, one of the conditions of which is the need to pay interest. Therefore, the attraction of such a source of financing as a commodity loan can be considered as more profitable.

## 2.2 Analysis of liquidity and financial stability

One of the most important aspects of the analysis of the financial situation of an organization is the assessment of its solvency in both the short and long term. The solvency of the company is understood as its ability to pay in full in due time various financial obligations. Potential solvency is determined by a system of liquidity indicators that reflect the company's ability to timely and fully perform calculations on loans, loans, accounts payable to suppliers, tax and social obligations, staff salaries, etc.

Solvency in the most general form is characterized by the degree of liquidity of the current assets of the organization and indicates its financial capabilities to fully pay off its obligations as the debt matures. The analysis and assessment of the level of solvency of any economic entity is due to a number of circumstances and the need:

- regular forecasting of the financial situation and stability;
- development of the organization;
- timely repayment of obligations to the state, non-budgetary funds, suppliers, employees, shareholders;
- increase the confidence of partners and investors in conducting joint activities;
- full repayment of loans and evaluation of the effectiveness of their use.

In the generally accepted sense, liquidity is the ability of values to turn into money (the most liquid assets). The level of liquidity of assets is characterized by the amount of money that can be obtained from their sale, and the time that is necessary for this. The ability of the company to turn its assets into money in the shortest possible time, without sacrificing their price, characterizes the high level of its liquidity.

Since money, as a rule, performs one function for commercial organizations, serving only as a means of payment, maintaining a sufficient level of liquidity consists in forming an optimal structure of capital investments in assets that ensures the inflow of funds through the sale of goods, products, etc. in order to repay obligations as soon as the established deadlines occur. At the same time, liquidity and solvency are not identical concepts.

Thus, the liquidity indicators calculated based on the data of the statement of financial position may indicate their satisfactory level, but, in essence, the company may have overdue obligations due to a slowdown in direct cash turnover — for example, due to the lengthening of the terms of payment of receivables by buyers and customers.

The liquidity of the balance sheet of assets and liabilities is defined as the degree of coverage of the organization's liabilities by its assets, the term of conversion of which into money corresponds to the maturity of the obligations. To analyze the level of liquidity, asset items grouped by the degree of liquidity are compared with liability items grouped by the maturity of liabilities (table 2.4).

Table 2.4 — Grouping of assets by degree of liquidity and liabilities by payment terms

| <b>Assets</b>       |                                                                                                                                | <b>more / less</b> | <b>Equity and liabilities</b>       |                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A1</b>           | <ul style="list-style-type: none"> <li>• cash and cash equivalents;</li> <li>• highly liquid financial investments;</li> </ul> | >                  | <b>L1</b>                           | <ul style="list-style-type: none"> <li>• accounts payable;</li> <li>• dividend debt;</li> <li>• overdue loans and borrowings</li> </ul>    |
| <b>A2</b>           | <ul style="list-style-type: none"> <li>• short-term trade receivables;</li> <li>• tax prepayment;</li> </ul>                   | >                  | <b>L2</b>                           | <ul style="list-style-type: none"> <li>• short-term loans and borrowings (except overdue);</li> <li>• other current liabilities</li> </ul> |
| <b>A3</b>           | <ul style="list-style-type: none"> <li>• stocks;</li> <li>• advances paid to suppliers</li> </ul>                              | >                  | <b>L3</b>                           | <ul style="list-style-type: none"> <li>• long-term liabilities</li> </ul>                                                                  |
| <b>A4</b>           | <ul style="list-style-type: none"> <li>• non-current assets</li> <li>• other low-liquid current assets</li> </ul>              | <                  | <b>L4</b>                           | <ul style="list-style-type: none"> <li>• equity capital</li> </ul>                                                                         |
| <b>Total assets</b> |                                                                                                                                | =                  | <b>Total equity and liabilities</b> |                                                                                                                                            |

The balance of assets and liabilities is considered absolutely liquid if all four inequalities are met:  $A1 > L1$ ;  $A2 > L2$ ;  $A3 > L3$ ;  $A4 < L4$ . The fulfillment of the first three entails the fulfillment of the fourth inequality, so it is important to compare the results of the first three groups of assets

and liabilities. If one or more inequalities of the system are not met, then the liquidity differs from absolute.

The lack of funds of one or another more liquid group of assets when adding up their totals ( $A1 + A2 + A3$ ) can be compensated by an excess for another group. In the real situation, more liquid assets cannot fully compensate for the lack of less liquid ones for the purposes of solvency.

The minimum necessary condition for recognizing the liquidity of the structure of assets and liabilities as satisfactory is compliance with the  $A4 < L4$  inequality. Otherwise, when the value of the equity is less than the value of the group of hard-to-realize (non-current) assets, this means that the company is implementing a more risky financial policy, using part of the liabilities for the formation of long-term investments. The reduction of financial risks in this situation can be ensured by attracting long-term borrowed funds in the form of investment loans and loans. If the company does not have such a type of liabilities ( $L3$ ), this means that part of the non-current assets is financed by attracting short-term borrowed capital, the repayment period of which will come earlier than the non-current assets will pay off. This may result in persistent insolvency, which threatens to lose the business as a whole when the enterprise is declared bankrupt.

Comparison of groups of assets and liabilities allows you to determine the level of liquidity as of the reporting date, as well as to predict it for the future. The current liquidity indicates that the organization has an excess amount of liquid assets ( $A1 + A2$ ) to repay short-term liabilities ( $L1 + L2$ ) in the near future, that is, the inequality is observed:  $A1 + A2 > L1 + L2$ . Prospective liquidity predicts the solvency of the organization for a longer period, which will be provided on the condition that cash receipts, taking into account existing inventory and long-term receivables, exceed all external obligations:  $A1 + A2 + A3 > L1 + L2 + L3$ .

To analyze the liquidity of the company's statement of financial position, assets grouped by their degree of liquidity were compared with liabilities grouped by their maturity dates, according to (table 2.5), which made it possible to recognize it as conditionally liquid, since the last inequality is

fulfilled: equity capital exceeds the value of hard-to-sell assets ( $A4 < L4$ ) both at the beginning and at the end of the reporting period.

Table 2.5 — Grouping of assets of the company “ABC” by the level of liquidity and obligations by the urgency of payment

| Assets, €           |                   |                   | Equity and liabilities, €           |                   |                   |
|---------------------|-------------------|-------------------|-------------------------------------|-------------------|-------------------|
| Group               | 31.12.21          | 31.12.22          | Group                               | 31.12.21          | 31.12.22          |
| A1                  | 5 435 961         | 9 557 231         | L1                                  | 22 605 933        | 27 619 662        |
| A2                  | 12 235 509        | 17 300 185        | L2                                  | 3 602 548         | 6 232 825         |
| A3                  | 20 085 885        | 22 245 295        | L3                                  | 7 119 052         | 8 869 645         |
| A4                  | 9 064 869         | 8 728 771         | L4                                  | 13 494 691        | 15 109 350        |
| <b>Total assets</b> | <b>46 822 224</b> | <b>57 831 482</b> | <b>Total equity and liabilities</b> | <b>46 822 224</b> | <b>57 831 482</b> |

Absolute indicators allow for a preliminary analysis of liquidity, but do not give an idea of the extent of the lack of funds to repay obligations. For a more in — depth analysis of liquidity, a number of relative indicators are also widely used-coefficients that allow us to get an idea of the company's potential ability to pay its obligations in the short and medium term, as well as the instant possibility of paying part of its short-term obligations. The most common in financial analysis are the liquidity ratios, the calculation algorithms of which are presented in (table 2.6).

In financial analysis, it is considered that the optimal values of liquidity ratios are: absolute liquidity — from 0.2 to 0.4; intermediate (critical) liquidity — from 0.5 to 1; current liquidity — from 1 to 2. The value of the current liquidity ratio equal to 2 will mean that the book value of current assets is twice the book value of short-term liabilities, which indicates a high level of guarantees regarding the repayment of the organization's debts, the availability of the necessary resources and conditions for the sustainable functioning and development of production and financial activities. This financial situation also indicates that the organization has net current assets. In international financial and analytical practice, the difference between current assets and short-term liabilities is called net working capital (NWC). Based on the use of the balance sheet equality

“assets = equity + liabilities”, it can be noted that net current assets are formed at the expense of own funds, that is, they are equal in value to their own working capital.

Table 2.6 — Calculation algorithms and the content of liquidity ratios

| Indicator                                    | Calculation                                                         | What characterizes                                                                                                                                                                                                                                                                                               | Optimal value |
|----------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1. Total liquidity ratio, TR                 | $\frac{A1+0.5 \cdot A2+0.3 \cdot A3}{L1+0.5 \cdot L2+0.3 \cdot L3}$ | Reflects the overall level of liquidity, shows a possible change in the financial situation, taking into account liquidity                                                                                                                                                                                       | > 1           |
| 2. Current Ratio, CR                         | $\frac{A1+A2+A3}{L1+L2}$                                            | Reflects the level of liquidity of current assets. It shows how much current assets account for a unit of short-term liabilities. Since short-term liabilities are repaid mainly at the expense of current assets, if current assets are greater than short-term liabilities, the company is potentially solvent | > 2           |
| 3. Quick Ratio, QR (“acid test”)             | $\frac{A1+A2}{L1+L2}$                                               | Shows the forecast of solvency on condition of timely repayment of receivables                                                                                                                                                                                                                                   | 0.5–0.8       |
| 4. Liquidity Ratio, LR                       | $\frac{A1}{L1+L2}$                                                  | It is the most stringent criterion for the instant liquidity of an organization. Shows how much of the short-term liabilities can be repaid immediately if necessary                                                                                                                                             | > 0.2         |
| 5. Security of current assets with own funds | $\frac{L4+L3-A1}{A1+A2+A3}$                                         | Shows how much of the current assets are formed at the expense of equity (after using the required amount of equity to finance non-current assets)                                                                                                                                                               | > 0,1         |

The lower limit of the regulatory value of the current liquidity ratio is due to the fact that working capital must be at least sufficient to repay short-term liabilities, otherwise the company will be at risk of

bankruptcy. It should be noted that lenders and investors often focus on this indicator and consider it one of the main ones for assessing the liquidity of partner companies.

The results of calculations of the most common liquidity ratios using data from the company's statement of financial position are presented in (table 2.7).

**Table 2.7 — The values of of the company “ABC”  
liquidity indicators and their dynamics**

| <b>Indicator</b>                 | <b>31.12.21</b> | <b>31.12.22</b> | <b>±Δ</b> |
|----------------------------------|-----------------|-----------------|-----------|
| 1. Total liquidity ratio, TR     | 0.6623          | 0.7035          | 0.0412    |
| 2. Current Ratio, CR             | 1.4407          | 1.4505          | 0.0098    |
| 3. Quick Ratio, QR (“acid test”) | 0.6743          | 0.7934          | 0.1191    |
| 4. Liquidity Ratio, LR           | 0.2074          | 0.2823          | 0.0749    |

The estimated value of the absolute liquidity ratio as of 31.12.2022 reached 0.2823, which is 0.0749 higher than at the previous reporting date — 31.12.2021. Such dynamics shows a positive trend of strengthening the company's liquidity, especially since the normative value of this indicator is 0.2. It should be noted that the indicator of the company's absolute liquidity has been within the norm for the past three years, as follows from the financial statements. Nevertheless, the current resources available to the enterprise as a whole are still insufficient for full confidence in the satisfaction of all creditors' claims, which is confirmed by the value of the current liquidity ratio. So, as of the reporting date, its level was only 1.4505 with the required value of 2. Noting the slight positive growth trend of this coefficient, we note that if it persists in the near future, the company will still remain insolvent. In the near future, the necessary actions should be taken to accelerate the turnover of assets, which can become a reliable source of strengthening the financial situation in the company and will increase the value of the current liquidity ratio.

The estimated value of the critical liquidity ratio (interim coverage) at the reporting date was 0.7943, which is within the acceptable value, and is 0.1191 higher than it was a year ago. That is, the company's total amount



of cash and receivables expected to be repaid in the near future covers almost 80% of short-term liabilities.

It should be noted that according to the totality of the values of the liquidity coefficients, its level in the analyzed company is high, the level of risk of loss of liquidity is moderate. If necessary, the company is able to repay short-term obligations, therefore, from the point of view of potential solvency, it has attractiveness for creditors and investors.

Analysis of the financial stability of an organization allows you to form an idea of its true financial position and assess the financial risks associated with its activities. Financial stability is an ambiguous characteristic of the organization's activities. In a broad sense, the financial stability of an organization should be understood as its ability not only to maintain the achieved level of business activity and business efficiency, but also to increase it, while guaranteeing solvency, increasing investment attractiveness within the limits of an acceptable level of risk. At the same time, the company must maintain a structural balance of assets and liabilities in dynamically changing market conditions, as well as under the influence of internal factors.

The key to a stable financial condition of an organization is that it has sufficient funds to form such an asset structure that it meets the current and future business needs. This requires reliable and, if possible, relatively inexpensive sources of asset formation, which, as a rule, are borrowed sources. When attracting borrowed funds into economic turnover, the company must present the financial consequences that arise in this regard: an inevitable increase in financial risks, an increase in the price of borrowed funds, an adverse impact of these factors on financial indicators.

The task of ensuring financial stability is to ensure that the business financing policy is based on a balance between an increase in financial resources and an increase in financial dependence accompanying this process, on the one hand, and achieving such an increase in the return (efficiency) of financial resources that could compensate for a decrease in financial risks, on the other hand. In order to prevent (or at least minimize) financial risks, it is necessary to fulfill the mandatory requirement of

prudence in financial planning, compliance with which can be expressed in the formation of various internal reserves in case of unforeseen circumstances that could lead to loss of financial stability.

The main condition for ensuring the financial stability of the organization is the growth of sales, which is a source of covering current costs, forms the amount of profit necessary for normal functioning. In these conditions of profit growth, the financial condition of the organization is strengthened, there are opportunities for business expansion, investments in improving the material and technical base, mastering new technologies, etc.

To obtain adequate conclusions about the financial condition and characteristics of the financial stability of the organization, it is advisable to use the reporting data for 2–3 years to distinguish one-time instability, often caused by random factors, from chronic, the causes of which should be sought in production and economic activity, the level of management, including the level of financial management of the organization.

As part of the analysis of the financial situation, high values of indicators reflecting solvency, liquidity, creditworthiness, turnover, profitability will indicate a high level of financial stability of the company.

The objects of the analysis of the financial stability of the organization for the purpose of its comprehensive assessment are:

- the availability and placement of capital, the effectiveness of its use;
- optimal structure of liabilities (compliance with the level of financial independence and the degree of financial risk);
- optimal asset structure (matching the level of asset liquidity and the degree of production risk);
- solvency and investment attractiveness;
- probability of bankruptcy;
- the threshold of profitability and the margin of financial strength.

The main tasks of analyzing the financial stability of an organization include:

- assessment of the financial position of the organization on the basis of a system of criteria indicators;

- identification and measurement of the significance of the factors of the organization's economic activity that affect the level of its financial stability;
- forecasting the financial condition and financial results of the organization based on the prevailing business conditions, the availability of resources;
- justification of management decisions aimed at implementing reserves to strengthen the financial condition of the organization by creating various options for financial models of the company's development.

A detailed analysis of the financial condition of the organization to determine the level of its financial independence is carried out using a system of absolute and relative indicators. The absolute indicators include such as the total amount of equity and its dynamics, the amount of own working capital, net current assets, the calculation algorithms of which are presented in (table 2.8).

**Table 2.8 — Calculation algorithms and the content of absolute indicators of financial stability**

| <b>Indicator</b>                            | <b>Calculation</b>                                          | <b>What characterizes</b>                                                                                  |
|---------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1. Long-term sources of asset financing     | Equity capital + Long-term liabilities                      | Reflects the value of the most reliable sources of financing, the period of use of which exceeds 12 months |
| 2. Own working capital (own current assets) | Equity capital + Long-term liabilities — Non-current assets | Reflects the amount of equity allocated to finance current assets                                          |
| 3. Net current assets (net working capital) | Current assets — Short-term liabilities                     | Reflects the amount of current assets, the source of financing of which is equity capital                  |

The sufficiency of the values of the absolute indicators of financial stability calculated according to the data of the statement of financial position should be evaluated by comparing with a number of other indicators presented in the report. Thus, the maximum minimum value of long-term

sources of financing should exceed the value of non-current assets. Otherwise, the situation will reflect the lack of its own working capital. This will indicate the extreme degree of the company's dependence on short-term liabilities, which can not only fully finance current assets, but also partially be used to finance non-current assets. Such a financial situation will be assessed as extremely risky, and if the speed of working capital slows down, it can lead to the threat of insolvency, up to bankruptcy.

According to the report on the financial position of the company "ABC", the absolute indicators of financial stability presented in (table 2.9) are calculated.

The dynamics of all indicators is positive, which generally reflects the strengthening of the company's financial stability. It should be emphasized that the main source of positive dynamics is the growth of equity capital, which favorably affected the absolute values of own working capital.

Table 2.9 — Calculation of absolute indicators of financial stability of the company "ABC"

| Indicator                                   | 31.12.19                                       | 31.12.20                                       | Absolute dynamics, $\pm\Delta$ | Growth rate, % |
|---------------------------------------------|------------------------------------------------|------------------------------------------------|--------------------------------|----------------|
| 1. Long-term sources of asset financing     | 13 494 691 +<br>+ 7 119 052 =<br>= 20 613 743  | 15 109 350 +<br>+ 8 869 645 =<br>= 23 978 995  | 3 365 252                      | 116.33         |
| 2. Own working capital (own current assets) | 20 613 743 –<br>– 9 064 869 =<br>= 11 548 874  | 23 978 995 –<br>– 8 728 771 =<br>= 15 250 224  | 3 701 350                      | 132.05         |
| 3. Net current assets (net working capital) | 37 757 355 –<br>– 26 208 481 =<br>= 11 548 874 | 49 102 711 –<br>– 33 852 487 =<br>= 15 250 224 | 3 701 350                      | 132.05         |

Another indicator used to determine the level of financial stability when comparing with own working capital is the value of the least liquid current assets, which include stocks. For the smooth functioning of production, the formation of the necessary material and production stocks in terms of volume and composition is of great importance, therefore,

when describing the financial stability of an organization, a significant role belongs to the indicator of the availability of its own sources of financing of material and production stocks.

An easy-to-use way to assess financial stability for this case is to compare the amount of funds allocated by the enterprise for the formation of material and production stocks, and the sufficiency of financial sources of these funds.

If the amount of own working capital is sufficient to finance material and production stocks, then financial independence is qualified as absolute. The fulfillment of this condition shows that the material and production stocks are fully covered by its own working capital, that is, the organization is absolutely independent of external creditors, forming reliable own sources of financing for the low-liquid part of current assets, since it does not need borrowed funds for this purpose. In this case, the following conditions will be met:

$$\text{Stocks} < \text{Own working capital}$$

At the same time, this situation also has a negative side, since it means that the company adheres to a too conservative policy in terms of financing the business with borrowed funds, does not use the effect of financial leverage to the proper extent, which in a profitable business contributes to the growth of profit and return on capital.

If the condition of absolute financial independence in terms of financing inventory is not met, then it should be determined at the expense of which borrowed financial resources are used to finance inventory. It is obvious that such sources may be some short-term obligations of the enterprise to creditors. Provided that the missing part of the funds is compensated by attracting short-term loans and loans. As a rule, they are attracted to replenish the missing volume of their own working capital. In such a situation, the financial stability of the enterprise is considered normal and will look like this:

$$\text{Stocks} < \text{Own working capital} + \text{Short-term loans and borrowings}$$

A high degree of financial dependence will be characterized by an organization whose situation with the financing of reserves according to the statement of financial position is as follows:

$$\begin{array}{rcl} & \text{Own working capital} + \\ \text{Stocks} & < & \text{Short-term loans and borrowings} + \\ & & + \text{Accounts payable to suppliers} \end{array}$$

In this case, the financing of part of the material and production stocks is carried out at the expense of short-term accounts payable to suppliers. In these circumstances, the presence of the item “Advances received” (prepayments from customers for future deliveries of products, goods, etc.) in the composition of accounts payable can somewhat ease financial tension. The company's financial position in terms of financing inventory will be considered extremely unfavorable if, according to the statement of financial position, the following ratio is formed:

$$\begin{array}{rcl} & \text{Own working capital} + \\ \text{Stocks} & > & + \text{Short-term loans and borrowings} + \\ & & + \text{Accounts payable to suppliers} \end{array}$$

In this situation, part of stocks is financed by the part of the accounts payable that reflects the accrued liabilities for wages, taxes, social payments, etc. If such a financial situation occurs for a long time, then the organization constantly has problems with paying the most urgent current obligations, therefore, its financial situation will be qualified as a crisis.

According to the company's financial statements, the ratio of funds invested in stocks and their sources of financing has been established (table 2.10).

As can be seen from the data in (table 2.10), the company does not have sufficient volumes of reliable sources of financing for material and production stocks, that is, at the reporting date, it used, along with an insufficient amount of its own working capital, not only short-term loans and loans, but also partially trade payables to cover this need. This indicates a high level of financial dependence on creditors. At the same time, it should be noted that the combination of the growth rates of investments in inventory (+10.75%) and its own working capital (+32.05%)

gives reason to believe that if such dynamics is maintained in the future, the company will be able to reduce the level of financial dependence.

Table 2.10 — Indicators for determining the level of financial stability when financing the stocks of the company “ABC”

| Indicator                                                     | 31.12.19   | 31.12.20   | Absolute dynamics, $\pm\Delta$ | Growth rate, % |
|---------------------------------------------------------------|------------|------------|--------------------------------|----------------|
| 1. Stocks                                                     | 20 085 885 | 22 245 295 | 2 159 410                      | 110.75         |
| 2. Own working capital (own current assets)                   | 11 548 874 | 15 250 224 | 3 701 350                      | 132.05         |
| 3. Short-term loans and borrowings                            | 3 000 471  | 5 464 073  | 2 463 602                      | 182.11         |
| 4. Own working capital +<br>+ Short-term loans and borrowings | 14 549 345 | 20 714 297 | 6 164 952                      | 142.37         |
| 5. Accounts payable to suppliers                              | 22 487 475 | 27 293 563 | 5 646 165                      | 126.08         |

The most widespread in financial analysis are relative indicators of financial stability-coefficients that are accepted in the world and domestic accounting and analytical practice (table 2.11).

Table 2.11 — Calculation algorithms and the content of coefficients of financial stability

| Coefficient                                     | Calculation                                                                                                      | What characterizes                                                                                                            |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1                                               | 2                                                                                                                | 3                                                                                                                             |
| 1. Financial autonomy (financial independence)  | $\frac{\text{Equity capital}}{\text{Equity capital} + \text{Total liabilities}}$                                 | Shows how much of the total assets are financed by equity capital                                                             |
| 2. Financial leverage                           | $\frac{\text{Total liabilities}}{\text{Equity capital}}$                                                         | Shows the ratio of total liabilities and equity capital                                                                       |
| 3. Mobility of equity capital (maneuverability) | $\frac{\text{Equity capital} + \text{Long-term liabilities} - \text{Non-current assets}}{\text{Equity capital}}$ | Shows how much of its own capital is used to finance current assets (the ratio of its own working capital to its own capital) |

| <b>1</b>                                                                                                                  | <b>2</b>                                                                                    | <b>3</b>                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 4. Provision of working capital with own capital                                                                          | Equity capital +<br>+Long-term liabilities –<br>–Non-current assets<br><hr/> Current assets | Shows how much of the current assets are financed by its own working capital (the ratio of its own working capital to current assets)  |
| 5. Provision of stocks with own capital                                                                                   | Equity capital +<br>+Long-term liabilities –<br>–Non-current assets<br><hr/> Stocks         | Shows how much of the inventory is financed by its own working capital (the ratio of its own working capital to reserves)              |
| 6. Net debt to earnings before interest, taxes, depreciation and amortization (EBITDA) ratio                              | <hr/> Short-term liabilities<br>EBITDA                                                      | Shows the ratio of short-term liabilities to EBITDA (debt load)                                                                        |
| 7. Ratio of the earnings before interest and taxes (EBIT) to financial expenses (covering financial expenses with profit) | <hr/> EBIT<br>Financial expenses                                                            | Shows the ratio of operating profit to financial expenses (the possibility of reimbursement of financial expenses by operating profit) |

The main indicator of the financial stability of the enterprise is the level of independence from borrowed sources of financing. In modern conditions, the composition of funding sources is the factor that has a direct impact on the financial condition and financial stability of the organization. The high level of equity capital reflects the high-quality financial structure of the organization's capital, its financial independence and the absence of significant financial risks.

Table 2.12 shows the values of the most common indicators of financial stability, which are calculated according to the financial statements of the company "ABC".

Table 2.12 — Indicators of financial stability of the company "ABC"

| <b>Indicator</b>                               | <b>31.12.21</b> | <b>31.12.22</b> | <b>±Δ</b> |
|------------------------------------------------|-----------------|-----------------|-----------|
| <b>1</b>                                       | <b>2</b>        | <b>3</b>        | <b>4</b>  |
| 1. Financial autonomy (financial independence) | 0.2882          | 0.2613          | –0.0269   |



| <b>1</b>                                                                                                                                                 | <b>2</b> | <b>3</b> | <b>4</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| 2. Financial leverage                                                                                                                                    | 2.4697   | 2.8275   | 0.3578   |
| 3. Mobility of equity capital (maneuverability)                                                                                                          | 0.8558   | 1.0093   | 0.1535   |
| 4. Provision of current assets with own capital                                                                                                          | 0.3059   | 0.3106   | 0.0047   |
| 5. Provision of stocks with own capital                                                                                                                  | 0.5750   | 0.6406   | 0.0656   |
| 6. Net debt to earnings before interest, taxes, depreciation and amortization (EBITDA) ratio                                                             | 11.2688  | 7.5146   | -3.7542  |
| 7. Ratio of the earnings before interest and taxes (EBIT) to financial expenses (covering financial expenses with profit — interest coverage ratio, ICR) | 3.2596   | 1.9958   | -1.2638  |

The coefficient of financial independence (autonomy) shows what share of the company's assets is formed at the expense of its own capital. The higher the value of this coefficient, the more independent the enterprise is from external sources of financing, financial market conditions, and the high cost of servicing borrowed funds. The recommended value of the indicator is 0.5. The calculated value of the independence coefficient at the reporting date was 0.2613, which is below the norm. In addition, its negative dynamics is observed — 0.0269 lower than last year's value.

Noting this negative fact, it should be said that the excessive use of external borrowed funds carries the risk of non-payment.

The financial leverage ratio (leverage) reflects the ratio of the debt and equity capital of the organization. With large values of the coefficient (about 3), the company loses its financial independence and its financial situation becomes extremely unstable. As of the reporting date, this indicator for the company is 2.8275, which goes beyond the recommended limits (no more than 1–1.5).

The coefficient of maneuverability of equity capital increased by 0.1535 compared to 31.12.2021, which indicates an increase in capital mobility and is evaluated positively.

The coefficient of security of current assets with own funds has positive values, since the company's current assets are formed partly at the expense of its own capital. The dynamics of the coefficient is positive growth in 2022 — by 0.0047 compared to 2021.

The normative value of the coefficient of provision of stocks with own funds, equal to one, reflects the absolutely stable financial condition of the organization. However, the actual value of this indicator at the reporting date is insufficient and amounted to only 0.6406, but this is higher by 0.0656 than it was a year ago.

To assess the current financial stability of the company, investors and creditors use such indicators as the ratio of net debt to EBITDA profit (net debt/EBITDA ratio) and the ratio of EBIT profit to financial expenses (interest coverage ratio, ICR).

The ratio of net debt to EBITDA is an indicator of the net debt burden on an organization (long-term and short-term loans and borrowings minus cash and short-term deposits), its ability to repay existing liabilities, the source of which is the gross result of financial and economic activities. In this case, EBITDA — profit before deduction of financial expenses, income tax and depreciation is used as an indicator of the receipt of funds necessary for calculating the organization's debts. The indicator of the ratio of net debt to EBITDA is a fairly popular coefficient among analysts, cleared of the influence of non-monetary items (depreciation). In the normal financial condition of the organization, the value of this coefficient should not exceed 3. If the coefficient value exceeds 3–4, this indicates too much debt burden on the enterprise and likely problems with paying off its debts to creditors. This indicator of the company is significantly higher than the limit value, since the total loan portfolio of the company has increased.

The second popular indicator among lenders and investors is the percentage coverage ratio of EBIT profit. It characterizes the ability of an organization to service its debt obligations. The indicator compares earnings before interest and taxes (EBIT) for a certain period of time with interest on debt obligations. In fact, the coefficient shows how many times the EBIT profit exceeds the financial expenses for debt servicing. The lower

the interest coverage ratio, the higher the credit burden of the organization and the higher the probability of bankruptcy. A coefficient of less than 1 is considered critical (EBIT exceeds interest payable), which means that the cash inflow is insufficient to pay interest to creditors. The higher the interest coverage ratio, the more stable the financial position of the organization is. Nevertheless, a too high coefficient indicates a too cautious approach to attracting borrowed funds, which can lead to a reduced return on equity (since leverage is not used).

The interest coverage ratio of the analyzed company is above the norm (1.9958), but has the negative dynamics for the reporting period. This fact is associated with an increase in the cost of servicing borrowed financial resources, that is, the effective rate of the company's loan portfolio increased during this period.

Summing up the assessment of the financial position of the company "ABC", it should be noted that in general it is at a satisfactory level with a negative trend towards excessive lending due to borrowing. This situation increases financial costs and the risk of insolvency.

## **2.3 Analysis of the use of current assets**

Current assets are the most important economic category that reflects the cost assessment of the working capital of an organization, the optimal volume, the composition and structure of which significantly affect the stability of its financial position. At the same time, current assets are one of the main components of the resource potential of the enterprise as a whole. The funds invested in current assets should be compensated for one turnover, i.e. for a short period of time, on average corresponding to the period of money turning into money. Current assets, being in constant motion and providing a circulation of funds, constantly change their material and material form.

A characteristic feature of working capital is their circulating functioning. The working capital advanced to economic activity is returned to the enterprise in the form of revenue from the sale of products, thereby completing each turn of the continuous cycle of financial and economic activity.

By increasing revenue in this way and directing it to compensate for the expenses incurred, the company receives an additional product, the cost of which corresponds to profit. In the process of production activity, there is a constant transformation of individual elements of current assets.

Current assets ensure the continuity of the process of production and sales of products, the implementation of the general management of the company, are used in financial activities. Their characteristic feature is the turnover rate, which affects the duration of the production and financial cycle — the period of full turnover of the entire amount of current assets, during which their material and material form changes.

| <b>Working capital:</b>                                   |                                                                                                                   |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Gross working capital =</b><br><b>= Current assets</b> | <b>Net working capital =</b><br><b>= Current assets – Short-term liabilities =</b><br><b>= Net current assets</b> |

Figure 2.4 Working capital scheme of the company

Current assets are formed at the expense of the working capital of the organization, one part of which is financed from its own sources (own working capital), and the source of the other part is borrowed funds (usually short-term liabilities) (Figure 2.4).

The sufficiency of the volume, the structure of the working capital formation are of great importance for ensuring the financial stability and solvency, profit and profitability of the organization. By its economic nature, working capital is funds invested in assets expressed in various forms and directly providing the process of production and sale, which can become cash during one economic cycle. The material elements of working capital are completely consumed in each production cycle, they completely transfer their value to the cost of the products created.

In the process of analyzing current assets, it is important to determine how optimal their volume and structure of formation are. In modern economic conditions, organizations independently solve issues related to the attraction and use of working capital, as well as the optimization of the structure of their sources. Additional increase of working capital

has certain limitations. The growth of working capital is justified if it is accompanied by an increase in sales, and consequently, an increase in profits. At the optimal level of working capital, profit reaches its maximum, but further unjustified growth of working capital will lead to excessive release of assets, excess liquidity, inactive funds, additional costs for their maintenance, which will lead to a decrease in profit.

In conditions of insufficient volume of working capital, production stability cannot be maintained properly, hence the possible lack of funds, failures in work and, as a result, low profit or its absence.

When working capital increases, production expands, resulting in an increase in sales and profits. It is important that there is no unjustified growth of working capital, the result of which may be temporarily free, inactive assets, causing unnecessary expenses, which, in turn, leads to a decrease in profit. Such expenses include the costs of servicing borrowed sources of financing of current assets (interest on borrowed funds); procurement, storage and other expenses related to material and production stocks; impairment of excess cash balances on bank accounts; loss of part of the value of accounts receivable under the influence of inflationary processes. Thus, the formation and use of working capital is associated with the risks of financial losses both in the conditions of a shortage of working capital and in their excess. Therefore, on the basis of a thorough analysis of the effectiveness of current assets, the financial policy of managing the working capital of the enterprise should be built, the implementation of which should provide a compromise between the risk of loss of liquidity and the efficiency of economic activity.

In the process of analyzing the formation and use of working capital, it is necessary to:

- establish the company's need for working capital;
- determine the composition, structure and dynamics of current assets;
- to justify the optimal choice of sources of financing of current assets;
- calculate the impact of the state and speed of turnover of current assets on the level of liquidity and profitability;

- evaluate the efficiency of the use of working capital.

When analyzing current assets, special attention is paid to their turnover, so the turnover rate. Different types of current assets have different turnover, which depends on many internal and external factors. Asset turnover allows you to assess the real efficiency of the company's operating activities. Turnover indicators characterize the efficiency of the use of current assets and are determined for each article of the section of the statement of financial position and its total and can be calculated for the year, quarter, month. It is customary to use the duration in days to calculate the average turnover period: for a month — 30 days, for a quarter — 90 days, for a year — 360 days. For a detailed analysis of the current assets and business activity of the organization, data on profit or loss and other comprehensive income, comprehensive income and Notes to the financial statements are required. Indicators of turnover of current assets are presented in the form of coefficients reflecting the number of revolutions, and in the form of indicators of the average duration of one turnover of current assets in the number of days:

$$\frac{\text{revenue}}{\text{the average value of current assets for the analyzed period}} \quad (2.1)$$

$$\frac{\text{average value of current assets for the analyzed period} \times \text{the number of days in the analyzed period}}{\text{revenue}} \quad (2.2)$$

The duration of the operating cycle has a significant impact on the efficiency of the use of current assets. When carrying out economic activity, there is a constant circulation of current assets, during which some types of assets are transformed (acquire a form and economic content) into others. To maintain an uninterrupted circulation of assets, the organization, having cash, purchases raw materials, materials, pays for the work of employees, services of third-party organizations, produces products, ships them to customers who, in accordance with contractual obligations, repay accounts receivable. As a result, the organization receives funds, which are again directed to purchases, etc. The period of time for which one such turn is carried out

is called an operational cycle. The duration of the operating cycle in days is determined by summing up the indicators of the average duration of the periods of funds being held in certain types of current assets.

The organization's need for working capital to ensure the processes of production and sale of products depends on how long the operating cycle is. An increase in the duration of the operating cycle leads to a slowdown in the turnover of funds, i.e. the organization needs additional sources of financing, which most often become expensive loans, which has a negative impact on financial results.

The acceleration of asset turnover as a result of the shortening of the operating cycle contributes to the conditional release of funds that are re-involved in turnover and bring additional income.

The shorter the time required to complete the operating cycle (the conversion of cash into cash with an increase), the faster the financial result is formed in the form of an increase in profit. The greater the number of revolutions made by the funds invested in the business, the greater the amount of profit and cash received by the enterprise during the analyzed period. Therefore, the main factor of efficiency growth is the acceleration of asset turnover.

The duration of the cycle is affected by:

- specifics of the organization's activities;
- period of crediting the organization by suppliers;
- period of crediting by the organization of buyers;
- period of finding raw materials and materials in stocks;
- period of production and storage of finished products in the warehouse.

Due to the acceleration of turnover, there is a relative savings (conditional release of funds) invested in current assets. As a result of the slowdown in turnover, there is a relative overspending of funds (additional involvement), the source of financing of which, as a rule, are additional loans. In the conditions of increasing debt on loans and borrowings, the financial stability of the organization decreases, financial dependence and the risk of insolvency increases, which ultimately can lead to the bankruptcy of the company. The amount of release (relative savings) or additional

attraction (immobilization) of working capital can be calculated using one of the following formulas:

$$\frac{\text{Average value of current assets of the reporting period}}{\text{Average value of current assets of the base period}} \times \quad (2.3)$$

$$\times \frac{\text{Revenue of the reporting period}}{\text{Revenue of the base period}} \times \frac{\text{average amount of revenue for one day of the reporting period}}{\text{average amount of revenue for one day of the base period}} \times \left( \frac{\text{average duration of one turnover of current assets of the reporting period}}{\text{average duration of one turnover of current assets of the base period}} - 1 \right) \quad (2.4)$$

The result calculated according to the above formulas with a minus sign means the amount of release (relative savings) of funds, and with a plus sign-additional attraction (relative overspending) of funds. The acceleration of the turnover of current assets has a positive impact on the financial stability of the organization, as it contributes to the growth of income in the form of sales revenue, profit, profitability.

The values of turnover indicators calculated according to the company's financial statements (Appendix 1) are presented in (table 2.13).

Table 2.13 — Indicators of turnover of current assets of the company "ABC"

| Indicator                                                                | 2021       | 2022       | Absolute dynamics, ±Δ | Growth rate, % |
|--------------------------------------------------------------------------|------------|------------|-----------------------|----------------|
| 1                                                                        | 2          | 3          | 4                     | 5              |
| 1. Average value of current assets for the year — total, €<br>including: | 30 721 913 | 43 430 033 | 12 708 120            | 141.37         |
| 1.1 stocks                                                               | 15 261 707 | 21 165 590 | 5 903 88              | 138.68         |
| 1.2 trade and other receivables                                          | 11 024 164 | 14 740 958 | 3 716 794             | 133.71         |



| <b>1</b>                                                                                                                                            | <b>2</b>   | <b>3</b>   | <b>4</b>   | <b>5</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|----------|
| 1.3 financial assets                                                                                                                                | 92 736     | 89 045     | –3 691     | 96.02    |
| 1.4 cash and cash equivalents                                                                                                                       | 4 271 609  | 7 407 552  | 3 135 943  | 173.41   |
| 1.5 tax prepayment                                                                                                                                  | 71 699     | 26 889     | –44 810    | 37.50    |
| 2. Revenue, €                                                                                                                                       | 70 116 031 | 92 236 559 | 22 120 528 | 131.55   |
| 3. Average duration of one turnover of current assets, days<br><i>including:</i>                                                                    | 157.74     | 169.51     | 11.77      | 107.46   |
| 3.1 stocks                                                                                                                                          | 78.36      | 82.61      | 4.25       | 105.42   |
| 3.2 trade and other receivables                                                                                                                     | 56.60      | 57.53      | 0.93       | 101.64   |
| 3.3 financial assets                                                                                                                                | 0.48       | 0.35       | –0.13      | 72.92    |
| 3.4 cash and cash equivalents                                                                                                                       | 21.93      | 28.91      | 6.98       | 131.83   |
| 3.5 tax prepayment                                                                                                                                  | 0.37       | 0.11       | –0.26      | 29.73    |
| 4. Number of turnover of current assets for the year                                                                                                | 2.2823     | 2.1238     | –0.1585    | 93.06    |
| 5. Economic result:                                                                                                                                 |            |            |            |          |
| 5.1 speeding up (slowing down) of turnover of current assets, days                                                                                  | –          | –          | 11.77      | –        |
| 5.2 amount of conditional release of funds (relative savings) or additional attraction of funds due to changes in the turnover of current assets, € | –          | –          | 3 015 356  | –        |

Note that the current assets of the analyzed company account for 85% of the value of its total assets. The increase in the average annual value of the company's current assets in 2022 compared to 2021 amounted to 12.708.120 € (a relative increase of 41.37%) and reached €43.430.033 by 31.12.2022.

This was due to the growth of investments in inventories, accounts receivable and monetary assets. It should be noted that sales revenue in the analyzed period increased by 31.55%. A comparison of the growth rates of current assets and revenue allows us to make an assumption about a slowdown in the turnover of the company's working capital in the reporting year compared to last year. This is confirmed by an increase in the average duration of one turnover in 2022 by 11.77 days. The turnover ratio of current

assets decreased in the reporting year and amounted to 2.1238 times. If we compare the turnover of 2022 with 2021, we can calculate the “idle” of current assets in days:  $11.77 \text{ days} \times 2.1238 \text{ times} = 25 \text{ days}$ .

It should be noted that the general trend of slowing down the turnover rate for such elements as inventories (by 4.25 days), accounts receivable (by 0.93 days) and monetary assets (by 6.98 days), as a result of which there was an excessive accumulation of working capital, measured by the amount of their relative overspending. The amount of relative overspending (conditional additional attraction of funds) due to a slowdown in the turnover rate amounted to €3.015.356. This estimated value reflects the excess “ballast” in the working capital invested in production and financial activities in 2022. Taking into account the main characteristic of assets as funds that should be used to generate income, it can be concluded that the company did not use these funds for the reporting year. If we consider this problem from the point of view of using sources of financing of current assets (as a rule, expensive credit), which have a specific price (the price of capital), we can definitely say that the company suffered direct losses on the use of additional attracted capital to finance excess working capital.

For a more detailed study of the reasons why there are failures in the turnover rhythm, it is necessary to calculate the turnover not only of those types of current assets that are presented in (table 2.13), but also of each of them by elements. Of particular relevance is the analysis of the turnover of stocks in the context of individual types of raw materials used for production, finished products in the assortment section, etc. For this analysis, financial reporting data is not enough, it is necessary to involve management accounting data.

The business activity of an enterprise is the most important characteristic of the economic state and development of an enterprise, a complex and dynamic characteristic of entrepreneurial activity and the efficiency of resource use. The levels of business activity of a particular organization reflect the stages of its life (origin, development, rise, decline, crisis, depression) and show the degree of adaptation to rapidly changing market conditions, the quality of management. In the framework of financial analysis,

the assessment of business activity is a quantitative analysis that involves assessing the profitability of capital investments, business as a whole and its individual areas. Business activity indicators characterize the results and the degree of intensity of operational production and sales activity, the efficiency of the use of material, labor and financial resources. They are calculated in terms of turnover for the period and in the number of days, that is, the average duration of the period of diversion of financial resources to certain types of them. In the practice of analyzing financial statements prepared in accordance with IFRS, various indicators of business activity are traditionally calculated. Some of them are presented in (table 2.14).

Table 2.14 — Indicators of business activity

| Indicator                                                              | Calculation                                                                                                          | 2021   | 2022  | ±Δ     |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------|-------|--------|
| 1. Own working capital turnover ratio, OW-CTR (quantity of the period) | $\frac{\text{revenue}}{\text{Own working capital of the analyzed period (current assets – short-term liabilities)}}$ | 101.41 | 6.84  | –94.57 |
| 2. Return on fixed assets, RFA, (quantity of the period)               | $\frac{\text{revenue}}{\text{fixed assets of the analyzed period}}$                                                  | 32.05  | 26.75 | –5.30  |
| 3. Return on total assets, RTA (quantity of the period)                | $\frac{\text{revenue}}{\text{total assets of the analyzed period}}$                                                  | 2.28   | 1.76  | –0.52  |

The own working capital turnover ratio shows how effectively the company uses its own funds invested in current assets. The higher the value of this coefficient, the more effectively the company uses its net working capital. The calculated values of the working capital turnover coefficient in both 2021 and 2022 are positive, since working capital is positive. However, there is a significant negative trend towards a decrease in the efficiency of the use of working capital.

The coefficient of return on fixed assets reflects a fairly high level of efficiency of the capital invested by the company in fixed assets. However, this indicator also had a negative trend in 2022. The value of this coefficient is largely determined by the methods of depreciation and the practice of assessing the value of assets.

The return on total assets (turnover ratio of total assets) characterizes the efficiency of the company's use of all economic resources available in its disposal, regardless of the sources of their attraction. The coefficient shows how many times a year a full cycle of production and circulation is performed, bringing the corresponding effect in the form of economic benefits. The value of this coefficient varies significantly depending on the industry affiliation of the organization, the scale of activity, the stage of the business development life cycle. The estimated value of the turnover ratio of total assets in 2022 shows that each euro invested in the company's activities brought it €1.76 revenue, which is lower by 52 cents compared to the previous year.

An aggregated view of the level of business activity of an organization provides a comparison of the growth rates of asset indicators (economic resources), sales volume (sales revenue) and profit (operating profit) In general, it is expressed by a set of the following inequalities:

$$100\% < \frac{\text{Growth rate of current assets}}{\text{Revenue growth rate}} < \frac{\text{Revenue}}{\text{Operating profit growth rate}}$$

To expand the scale of economic activity, additional funds are needed that are involved in turnover, which can be both own and borrowed. Therefore, the value of total assets as of the reporting date should exceed their value as of the previous reporting date, as a result of which the first inequality will be fulfilled.

The implementation of the second inequality is possible provided that the return on assets involved in economic turnover increases. At the same time, the turnover ratio (return) of the company's total assets (the ratio of revenue to the average book value of total assets for the period) for the reporting year should be higher than for the base year:

$$\frac{\text{revenue for the reporting period}}{\text{current assets of the reporting period}} > \frac{\text{revenue for the base period}}{\text{current assets of the base period}} \quad (2.5)$$

The fulfillment of this inequality is possible only if the growth rate of revenue (the numerator of the fraction) is faster than the growth rate of capital (the denominator of the fraction). This will indicate that the company, increasing its capital investments (both own and borrowed) in assets, uses it effectively. That is, for every ruble of functioning capital invested in economic resources, the company receives a larger amount of revenue in the reporting year compared to the previous year.

If in the reporting period the company actively developed investments of an investment nature in capital assets (fixed assets, intangible assets, etc.), the return on which is stretched for a long period (exceeding 12 months) through depreciation, then in the analyzed year the revenue growth rate may be lower than the growth rate of total assets. This situation is quite understandable, and in the next reporting periods, when the revenue growth rate will continue to grow, and the cost of amortized investment objects will decrease, the inequality “the growth rate of current assets < sales revenue” will have to be fulfilled.

When studying the reporting period, which was accompanied by significant investment costs, it is advisable to use the growth rate of current assets instead of the growth rate of total assets to assess the implementation of the “golden rule of effective business”.

To fulfill the third inequality “revenue growth rate < profit growth rate”, it is necessary to control the structure and dynamics of the organization’s current expenses. Since the growth of revenue causes a corresponding increase in the so-called variable costs (the value of which varies in proportion to the volume of production and sales of products) when consuming a larger volume of raw materials, materials, labor production costs, etc., then part of the additional revenue received will become a source of their coverage. Another part of the current expenses,

the so-called fixed (not related to the functional dependence on the volume of production), may also increase in the context of expanding the scale of the business. Their growth rate will be recognized as justified only if the sales revenue grows faster.

Restraining the growth of fixed costs while increasing the realization of products, and, accordingly, revenue from its sale, contributes to the generation of additional operating profit. At the same time, the effect of the operating lever will manifest its effect. The operational lever manifests its effect in the fact that a change in sales volumes (sales revenue) generates a stronger change in profit. At the same time, the strength of the operating lever reflects the degree of entrepreneurial risk: the greater the value of the operational leverage, the higher the entrepreneurial risk.

According to the company's financial statements "ABC" (Appendix 1), the "golden rule of effective business" was tested:

|        |                  |   |               |   |                  |
|--------|------------------|---|---------------|---|------------------|
|        | Growth rate of   |   | Revenue       |   | Operating profit |
| 100% < | current assets — | < | growth rate — | < | growth rate —    |
|        | 141.37%          |   | 131.55%       |   | 92.46%           |

As can be seen from the calculations presented above, the growth rates of current assets (141.37%) of the company in 2022 compared to 2021 exceed the growth rate of sales revenue (131.55%), and operating profit in the reporting period even decreased by 7.54%. This situation characterizes the company's operating activities in 2022 extremely negatively, since there was a decrease in the return of economic resources in general and current assets in particular, and the faster growth rate of current expenses compared to income led to a decrease in the financial result — operating profit. It can be concluded that in 2022 there was an reduction in the efficiency of operating activities. Consequently, the "golden rule of effective business" in 2022 is not fulfilled in all three of its components. In the reporting period, the company significantly reduced its business activity and, despite the expansion of potential resource opportunities, did not receive a corresponding refund (return) on the invested capital.

## **2.4 Forecasting the solvency and probability of bankruptcy of the company**

The methodology of financial analysis of insolvent organizations has characteristic features, since the purpose of such an analysis is to identify specific causes of the financial crisis and substantiate the policy of financial recovery. For this purpose, various objects of the so-called crisis field are analyzed, which are peculiar indicators of changes in the financial situation of the organization. To assess the probability of bankruptcy, various entities that analyze the financial condition of an organization use their own criteria. The methodological approaches underlying such an analysis, as a rule, involve the use of a set of financial indicators that can be combined into the following main groups:

- quality of the structure of assets and liabilities;
- liquidity and solvency;
- financial independence;
- working capital efficiency (turnover, profitability, profitability);
- efficiency of non-current capital (return on fixed assets, profitability of long-term financial investments);
- completeness and timeliness of execution of budgetary and extra-budgetary obligations;
- investment attractiveness;
- market stability.

Recently, methods based on a comprehensive assessment of creditworthiness, point methods and rating assessment methods have become increasingly widespread, among which it is worth noting the assessment of creditworthiness using the “6S” method (in a simplified version — “3C”) developed by commercial banks in the United States, as well as scoring systems for predicting bankruptcy using the “Z-score” indicator of E. Altman (USA), the Taffler’s method (Great Britain), the U. Beaver’s method, etc.

The most widespread methods of analysis and evaluation of a financial organization have been used in the practice of lending in the banking sector. The criteria by which a potential borrower is evaluated are individual

for each commercial bank, based on its practical experience, the requirements of regulatory authorities and are periodically reviewed.

The use of banking experience of financial analysis and credit rating assessment is quite applicable for the purposes of assessing the threat of insolvency of a commercial organization. The methodology for conducting such an analysis is based on various information contained in the company's financial statements.

One of the variants of the methodology for assessing solvency is presented in (table 2.15), which is based on the ranking of clients by class, depending on the calculated values of the corresponding indicators.

Table 2.15 — Indicators for assessing the company's solvency

| Kind of activity of companys | Indicators                           | The value of indicators by level (class) |           |        |
|------------------------------|--------------------------------------|------------------------------------------|-----------|--------|
|                              |                                      | High                                     | Medium    | Low    |
| Production                   | Current ratio                        | > 2.5                                    | 2.5–1.5   | < 1.5  |
|                              | Financial independence               | > 0.6                                    | 0.6–0.4   | < 0.4  |
|                              | Probability of bankruptcy (Z-Altman) | > 3.0                                    | 3.0–1.8   | < 1.8  |
| Wholesale trade              | Current ratio                        | > 1.5                                    | 1.5–0.7   | < 0.7  |
|                              | Financial independence               | > 0.4                                    | 0.4–0.25  | < 0.25 |
|                              | Probability of bankruptcy (Z-Altman) | > 2.8                                    | 2.8–1.5   | < 1.5  |
| Retail trade                 | Current ratio                        | > 1.0                                    | 1.0–0.5   | < 0.5  |
|                              | Financial independence               | > 0.33                                   | 0.33–0.25 | < 0.25 |
|                              | Probability of bankruptcy (Z-Altman) | > 2.5                                    | 2.5–1.0   | < 1.0  |
| Construction                 | Current ratio                        | > 1.0                                    | 1.0–0.4   | < 0.4  |
|                              | Financial independence               | > 0.5                                    | 0.5–0.2   | < 0.2  |
|                              | Probability of bankruptcy (Z-Altman) | > 2.7                                    | 2.7–1.2   | < 1.2  |
| Research, engineering        | Current ratio                        | > 1.5                                    | 1.5–0.8   | < 0.8  |
|                              | Financial independence               | > 0.6                                    | 0.6–0.3   | < 0.3  |
|                              | Probability of bankruptcy (Z-Altman) | > 2.6                                    | 2.6–1.5   | < 1.5  |



Algorithms for calculating the indicators of current ratio (current liquidity) and financial autonomy (financial independence) were presented earlier in this chapter.

The probability of bankruptcy (Z-Altman) is determined by one of the following algorithms, depending on the organizational and legal form of the enterprise being evaluated:

a) for companies whose securities have market quotations:

$$Z_{\text{issuing company}} = \frac{\text{net current assets}}{\text{total assets}} \times 1.2 + \frac{\text{operating profit}}{\text{total assets}} \times 3.3 + \frac{\text{accumulated capital (retained earnings and reserves)}}{\text{total assets}} \times 1.4 + \frac{\text{authorized capital}}{\text{total liabilities}} \times 0.6 + \frac{\text{revenue}}{\text{total assets}} \times 1 \quad (2.6)$$

| Value of the Z-account | Probability of bankruptcy |
|------------------------|---------------------------|
| < 1.8                  | very high                 |
| 1.81–2.7               | high                      |
| 2.71–2.99              | possible                  |
| > 3.0                  | very low                  |

b) for companies whose securities do not have market quotations:

$$Z_{\text{company-non issuer}} = \frac{\text{net current assets}}{\text{total assets}} \times 0.717 + \frac{\text{operating profit}}{\text{total assets}} \times 3.107 + \frac{\text{retained earnings}}{\text{total assets}} \times 0.84 + \frac{\text{equity capital}}{\text{total liabilities}} \times 0.42 + \frac{\text{revenue}}{\text{total assets}} \times 0.995$$

No probability of bankruptcy if the Z-account value is at least 1.23.

Based on the data of the company's financial statements (Appendix 1) for 2022, the indicator of the probability of bankruptcy is calculated

according to the method of E. Altman. It is based on a five-factor model developed to assess the probability of bankruptcy of companies whose securities have market quotations.

$$Z = \frac{13476747}{52326853} \times 1.2 + \frac{2917251}{52326853} \times 3.3 + \frac{3180484}{52326853} \times 1.4 + \frac{17959175}{38024832} \times 0.6 + \frac{92236559}{52326853} \times 1 = 4.2801$$

Net current assets are determined according to the statement of financial position as the difference between the total amount of current assets and the total amount of short-term liabilities. Accumulated capital is calculated according to the statement of financial position as part of the amount of equity formed at the expense of net profit, i.e. the amount of reserves formed at the expense of net profit and retained earnings.

It should be noted that in the calculation of indicator Z, along with the data reflecting revenue and profit for the analyzed period, the indicators of the items of assets and liabilities reflected on the dates of the report are used. Therefore, to achieve a more accurate calculation result, it is necessary to use the average values of the indicators of the items of assets and liabilities, which, depending on the available initial information, are determined by the arithmetic average or chronological average formula. The indicators of total assets, net current assets, accumulated capital, authorized capital and liabilities are determined according to the data of the company's statement of financial position for 2022 using the arithmetic mean formula.

Calculations using the method of E. Altman showed that the company "ABC" has an insignificant level of probability of bankruptcy.

***Control questions of the Chapter 2***

1. How is the structural and dynamic analysis of assets and liabilities of the statement of financial position?
2. What is the procedure for calculating and evaluating net assets?
3. What elements form the equity capital?
4. What are the sources of reserve capital and for what purposes?
5. How is the status and effectiveness of the organization's fixed assets assessed?
6. What is the value, functions and role of the statement of financial position in assessing changes in the property status of the organization?
7. What is the definition of "non-current assets", "current assets", "equity", "long-term liabilities", "and short-term liabilities"?
8. What is included in the current assets and how are they analyzed according to the statement of financial position and Explanations to the financial statements?
9. What indicators are used to assess the effectiveness of current assets?
10. What is the effect of accelerating the turnover of the organization's funds?
11. What is the duration of the operating cycle?
12. What analytical indicators are used to analyze the accounts receivable and payable of the organization?
13. What are the advantages and disadvantages of financing the activities of the organization from own and borrowed sources of funds?
14. What is the optimal scheme of financing the property complex of the organization?
15. What objective constraints exist in the borrowed funds?
16. What information does the statement of financial position contain to analyze the financial stability of the company?
17. How to analyze the structure and dynamics of liabilities according to the data of the statement of financial position?
18. How is the structure and dynamics of assets analyzed according to the data of the statement of financial position?

19. What is the procedure for calculating and evaluating the company's net assets?
20. How is liquidity analyzed based on the absolute data of the statement of financial position?
21. How to analyze the structure and dynamics of equity capital?
22. How is the structure and dynamics of current assets analyzed?
23. How to analyze asset turnover?
24. What are the indicators characterizing the turnover of working capital?
25. How is the relative savings or overspending of working capital determined?
26. What indicators are calculated according to the statement of financial position, characterize the financial independence of the organization?
27. What are the recommended values of the financial independence coefficient?
28. What is the liquidity, what factors affect it?
29. What indicators of solvency are calculated based on the data of the statement of financial position?
30. What methods are used to assess the probability of bankruptcy?
31. What are the methods of assessing and forecasting the financial stability of an organization?
32. What sources of information are used to predict the probability of bankruptcy?
33. What are the relative liquidity indicators and how is their optimal level justified?
34. How is the liquidity analysis based on the data of the statement of financial position based on absolute data?
35. How are the financial stability coefficients calculated based on the data of the statement of financial position?
36. What methods of financial analysis are used to assess the probability of bankruptcy?
37. What methods are used to analyze cash flows?
38. What indicators are calculated to assess the turnover of assets?
39. How is the turnover rate of current assets estimated?

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40. How is the indicator of relative savings (overspending) of working capital determined and evaluated?
  41. What is the necessary condition for minimizing the risk of insolvency: the duration of repayment of receivables should be greater or less than the average duration of repayment of short-term liabilities?
  42. What conditions should be maintained to ensure the financial stability of the company?

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## GLOSSARY

**Accounting** — ordered system of gathering, registration and generalization of information in money terms about property, obligations of the organizations and their movement by continuous, continuous and documentary accounting of all economic operations.

**Accounting policy** — set of accounting methods adopted by the organization — primary observation, cost measurement, current grouping and final generalization of the facts of economic activity.

**Accounts payable** — obligations of the organization to legal entities and individuals arising as a result of economic relations with them, requiring repayment of monetary and non-monetary assets in a timely manner.

**Accounts receivable** — liabilities of legal entities and individuals owed to the organization and arising as a result of economic relations with them, as well as assets receivable paid in advance.

**Accrual basis** — method of recognition of income and expenses, according to which the increase and decrease in economic benefits as a result of business transactions and events recorded in the financial statement, regardless of the fact associated with the receipt and disposal of funds.

**Amortization — Depreciation** — reduction of the initial cost of the asset due to its wear and tear in the process of use in the economic activities of the organization to generate income, the compensation of which is a long period (more than 12 months).

**Analysis** — means the dismemberment, decomposition of the studied object into parts, elements — general scientific method, which is a process of detailing the studied object on the elements, a comprehensive study of cause-effect relationships between which, as a rule, requires a generalization (synthesis) of the results.



**Analysis of the ratio “cost — volume of production — profit”** — method of analysis by which the nature of changes in profits and costs depending on changes in production.

**Article of the financial statements** — numerical indicator of the statement of financial position, the report on financial results and other forms of financial statements, which is submitted by the organization, based on the requirements of regulations governing the procedure of accounting and preparation of financial statements.

**Assets** — resources of the organization that have a value assessment, control over which it has received as a result of business transactions and events that can provide it with economic benefits in the future.

**Asset turnover ratio** — ratio of sales revenue to the average carrying amount of assets for the reporting period.

**Authorized capital** — nominal value of shares (shares of participants) acquired by shareholders, which determines the minimum size of the property of the organization, which guarantees the interests of its creditors.

**Basic profit (loss) per share (EPS)** - ratio of the basic profit (loss) of the reporting period (determined by reducing the net profit of the reporting period by the amount of dividends on preferred shares accrued for the reporting period) to the weighted average number of ordinary shares outstanding during the reporting period.

**Book Value** — value of assets and liabilities recorded in the accounting records and in the statement of financial position.

**Capital Expenditure** — cost of construction, acquisition, as well as modernization and reconstruction of fixed assets, which after their completion improve (increase) the previously adopted regulatory performance indicators (useful life, capacity, quality of use, etc.) of fixed assets.

**Cash** — most liquid part of the assets of the organization, which is cash and non-cash means of payment; easily sold securities.

**Commercial expenses** — expenses related to the sale of products, goods, works and services (sales expenses).

**Consolidated financial statements** — statements reflecting the financial condition and financial results of two or more connected companies, within the group, in which are aggregated the accounts of the parent and its subsidiaries, which first owns or which are controlled.

**Construction in progress** — amount of capital expenditures of the developer for the construction of objects from the beginning of construction to their commissioning.

**Cost of capital (weighted average cost of capital, WACC)** — average interest rate of yield or average interest rate services for financial resources.

**Current assets** — part of the resources of the organization, limited to the period of use up to 12 months (or the period of one production cycle) and in the process of the circulation of capital fully transfers its value to the cost of production, changing its original (material) form.

**Current market value** — amount of cash or cash equivalents that can be received (paid) as a result of the sale (purchase) of the asset.

**Current ratio** — ratio of current assets to current liabilities.

**Diluted earnings per share** — reduced basic profit per ordinary share as a result of possible future issuance of additional ordinary shares without a corresponding increase in the company's assets or conversion of financial instruments issued by the organization into ordinary shares.

**Direct method of cash flow statement** — disclosure of information on cash flows based on the reflection of direct positive and negative gross cash flows of the organization for the reporting period.

**Discounted value**- present value of future cash or cash equivalents, taking into account alternative investment opportunities.

**Discounting** — reverse build-up process that allows you to estimate a given future value from an earlier point in time, taking into account the time value of money.

**Economic benefits** — increase of cash (their equivalents or other assets), which is the result of the use of the organization's resources in the course of business processes.

**Effect of financial leverage (Leverage Effect, LE)** — expressed in percentage of the measurement that reflect some level of return on equity obtained due to attraction of borrowed sources of financing in spite of their payment.

**Equity (equity capital)** — formed by the contributions of the owners of the organization, as a result of reinvestment (capitalization) of net profit, valuation of non-current assets, obtaining emission income and gratuitously received assets financial resource that forms part of the assets and used to generate future income, contributing to the welfare of owners and the market value of the business.

**Expenses** — those arising in the course of the economic activity of the organization, are a decrease in economic benefits as a result of the disposal of assets (cash, other property) and (or) the occurrence of liabilities, leading to a decrease in the capital.

**Factor analysis** — analysis of the influence of individual factors (causes) on the outcome indicator using deterministic or stochastic methods of research.

**Financial condition of the organization** — characterized by the placement and use of funds (assets) and the sources of their formation (equity and liabilities).

**Financial investments** — long-term and short-term investments of the organization in corporative securities, in the authorized (share) capital of other organizations, as well as loans provided to other legal entities and individuals.

**Financial leverage (debt burden, total debt to equity)** — ratio of total liabilities to equity; the mechanism of controlling the level of return on equity by optimizing the structure of liabilities (the ratio of debt and equity), the effectiveness.

**Financial position of the organization** — generalizing characteristic determined by a set of indicators and factors of economic activity.

**Financial stability** — ability to increase the achieved level of its business activity and business efficiency, ensuring constant solvency and increasing investment attractiveness within the limits of the acceptable level of risk.

**Financial statements** — information on the financial position of an economic entity at the reporting date, the financial result of its activities and cash flows for the reporting period, is a system of interrelated financial and economic indicators contained in the forms of financial statements, their annexes and analytical reviews, in order to disclose information for making informed management decisions by interested external and internal users.

**Group** — allocation among the studied phenomena of characteristic groups and sub-groups for various characteristics.

**Goodwill** — asset that results from the acquisition of another entity for an amount greater than the carrying amount of its net assets.

**Horizontal (dynamic) analysis** — comparison of indicators over time.

**Income (income, revenue)** — increase in the economic benefits of the organization, which is manifested either in the growth of assets, or in the reduction of liabilities, or simultaneously in both.

**Indirect method of cash flow analysis** — study of the impact of various factors of financial and economic activity on net cash flow to establish and quantify the most significant of them in terms of diversion and attraction of funds by the organization to compensate the money supply.

**Initial (actual, historical) value** — amount of cash or cash equivalents paid or accrued in the acquisition or production of these funds (or liabilities).

**Intangible assets** — having a valuation of objects intended not for subsequent sale, and used for production and non-production needs of the organization for a long time (over 12 months), which have no material form, but can be separated from other property, the value of which is determined

by the rights of the owner (patents, copyrights, trademarks), and can bring economic benefits (income) in the future.

**Integral method of factor analysis** — based on the summation of increments of a function defined as a partial derivative multiplied by the increment of an argument at infinitesimal intervals.

**Investment activity** — activity of the organization associated with the acquisition of land, buildings and other real estate, equipment, intangible assets and other non-current assets, as well as their sale, with the implementation of financial investments (acquisition of securities of other organizations, including debt, contributions to the authorized capital.

**Liabilities** — financial sources of assets, which are the total debts (to owners and external creditors), arising as a result of business transactions and events, the possible repayment of which can reduce its economic benefits.

**Linear programming** — method of finding the optimal solution to the problem of resource allocation under the existing constraints.

**Liquidity** — ability of values to turn into money (the most liquid assets), the level of which is characterized by the amount of money that can be obtained from their sale and the time it takes.

**Liquidity of assets** — ability to convert assets into cash, the level of which is characterized by the real value of funds that can be obtained from the disposal of the asset and the time it takes.

**Modeling of a deterministic factor system** — process that provides the possibility of constructing an identical transformation of the initial formula of the effective indicator according to the theoretically assumed direct and inverse relations of the latter with the factors influencing it.

**Net assets** — part of the book value of assets, free from the obligations of the organization, formed at the expense of the owners of the company.

**Net cash flow** — difference between positive (incoming) and negative (outgoing) cash flows for each activity and (or) for the organization as a whole.

**Non-current assets** — resources used in the activities of the organization for a long period (more than 12 months), during which there is a refund of the cost of capital invested in them by depreciation.

**Net realizable value** — amount of cash or cash equivalents to be received or paid when the funds are realized or the liabilities are settled; this value is generally equal to the selling price less ordinary selling expenses.

**Net working capital (net current assets, own working capital)** — difference between current assets and short term liabilities.

**Operating activities** — activities of the organization pursuing extraction of profit as a main objective or not having extraction of profit as such purpose in accordance with the object and purpose of the activities (production of goods, execution of works, sale of goods, rendering of services, the delivery of property in lease, etc.).

**Operating cycle** — average period of time, consisting of the duration of diversion of funds of the organization to maintain the required volume of inventories, receivables, short-term financial investments and cash for the purpose of uninterrupted circulation of assets.

**Payback period** — time period from the moment of capital investment to the moment of receipt of the cost of income equivalent to the amount of the initial investment (the period of full return of capital).

**Perspective analysis** — analysis of the results of economic activity in order to determine their possible values in the future.

**Profit (earnings)** — financial result of the company for the period formed by the accrual method, which is the excess of income over expenses.

**Professional judgment** — conscientiously expressed opinion of a specialist-analyst about the economic situation and is useful both for its description and for making effective management decisions.

**Profit margin** — value amount representing the difference between the revenue from sales (net) and variable costs required to reimburse (cover) fixed costs and the formation of sales profit (net profit from ordinary activities).

**Profitability ratios (coefficients of profitability)** — percentage ratio of the various indicators profit (financial results) to the assets and their elements, own capital, income and their elements, costs and their elements.

**Property (plant and equipment)** — tangible assets of long-term use (more than 12 months), intended not for resale, but for production or management purposes, capable of bringing economic benefits in the future.

**Purpose of the analysis of financial statements** — to obtain key characteristics of the financial condition and financial results of the organization for optimal management decisions by various users of information.

**Quick Ratio (Absolute liquidity ratio)** — ratio of the statement of financial position values of the most liquid assets and short-term liabilities.

**Ratio analysis** — calculation of financial and other indicators and their comparison with indicators obtained in previous periods, with the average industry data and standards.

**Reliability** — degree of reliability of information, ideally meaning the absence of errors and deviations.

**Reliability of financial statements** — degree of accuracy of financial statements, which allows the competent user to make on its basis the correct conclusions about the results of economic entities and take decisions based on these findings of other organizations, the provision of loans to other organizations, etc.).

**Retained earnings** — financial resource accumulated by reinvesting part of the net profit received for the entire period of the organization's activity, remaining after its distribution by the owners, which is a stable source of growth of assets.

**Return on sales (ROS)** — ratio of profit from sales to revenue.

**Return on shareholders' equity (ROE)** — ratio of net profit to the carrying amount of equity.

**Return on assets (ROA)** — ratio of profit to the carrying amount of total assets.

**Revenue** — sum of the economic benefits as a result of ordinary activities for a certain period

**Short-term liabilities (Current Liability)** — liabilities that must be settled within one year after the reporting date.

**Solvency** — degree of liquidity of the organization's current assets, which allows it to fully pay with creditors and owners the debt matures.

**Statement of financial position** — form of financial statements, which gives an idea to interested users about the size, composition and changes in the accounting value of assets, capital and liabilities of the organization as of a number of reporting dates.

**Stocks (inventories)** — current assets, either held for sale or used in the manufacture of products (works, services) for the purpose of its subsequent sale, or for management purposes (raw materials, materials, fuel and other similar values, finished products, goods for resale).

**Structural-dynamic analysis** — identification of changes (structural shifts) of the specific weight (share) of the values of individual indicators that form the total final indicator for two or more analyzed periods.

**Trend analysis** — study of dynamic (time) series of indicators of economic activity, the splitting of the level of a number of its components, the allocation of the main line of development — the trend.

**Vertical (structural) analysis** — comparison of absolute and relative (specific weight) values of individual indicators that form a total final indicator.

**Work in progress** — not passed all stages of processing products (semi-finished products), as well as incomplete manufactured products that have not passed the test and technical acceptance.

**Working capital** — funds invested in assets that directly support the production and sale process, expressed in the form of cash, receivables, inventories or other assets that can become cash within one financial and economic cycle.



## APPENDIX 1

**CONSOLIDATED FINANCIAL STATEMENTS**  
**OF «ABC» GROUP OF COMPANIES, €**  
**Statement of financial position**

|                                                  | 31.12.2022        | 31.12.2021        | 31.12.2020        |
|--------------------------------------------------|-------------------|-------------------|-------------------|
| <b>ASSETS</b>                                    |                   |                   |                   |
| <b>Non-current assets</b>                        |                   |                   |                   |
| Property, plant and equipment                    | 3 776 126         | 3 120 883         | 1 254 195         |
| Intangible assets                                | 530 906           | 435 287           | 343 739           |
| Investment property                              | 3 040 943         | 4 096 278         | 2 531 550         |
| Trade and other accounts receivable              | 1 380 796         | 1 412 421         | 163 390           |
| Deferred tax assets                              | –                 | –                 | 185 455           |
| <b><u>Total non-current assets</u></b>           | <b>8 728 771</b>  | <b>9 064 869</b>  | <b>4 478 329</b>  |
| <b>Current assets</b>                            |                   |                   |                   |
| Stocks                                           | 22 245 295        | 20 085 885        | 10 437 528        |
| Trade and other accounts receivable              | 17 300 185        | 12 181 731        | 9 866 596         |
| Tax advance                                      | –                 | 53 778            | 89 619            |
| Financial assets                                 | 105 754           | 72 335            | 113 136           |
| Cash and cash equivalents                        | 9 451 477         | 5 363 626         | 3 179 591         |
| <b><u>Total current assets</u></b>               | <b>49 102 711</b> | <b>37 757 355</b> | <b>23 686 470</b> |
| <b><u>TOTAL ASSETS</u></b>                       | <b>57 831 482</b> | <b>46 822 224</b> | <b>28 164 799</b> |
| <b>CAPITAL AND LIABILITIES</b>                   |                   |                   |                   |
| <b>Equity capital</b>                            |                   |                   |                   |
| Authorized capital                               | 17 957 135        | 17 957 135        | 1 100 000         |
| Other funds and reserves                         | (6 853 067)       | (6 853 067)       | –                 |
| Retained earnings                                | 3 984 629         | 2 376 339         | 50 243            |
| Reserve for conversion of foreign currencies     | 13 014            | 8 823             | –                 |
| <i>Total share capital of the parent company</i> | <i>15 101 711</i> | <i>13 489 230</i> | <i>1 150 243</i>  |
| <i>Uncontrolled ownership shares</i>             | <i>7 639</i>      | <i>5 461</i>      | <i>435 517</i>    |
| <b><u>Total equity capital</u></b>               | <b>15 109 350</b> | <b>13 494 691</b> | <b>1 585 760</b>  |
| <b>Liabilities</b>                               |                   |                   |                   |
| <b>Long-term liabilities</b>                     |                   |                   |                   |
| Credits and loans                                | 8 000 000         | 6 700 000         | 3 000 000         |
| Trade and other payables                         | 504 000           | –                 | 543 503           |
| Deferred tax liabilities                         | 365 645           | 419 052           | 9 696             |
| <b><u>Total long-term liabilities</u></b>        | <b>8 869 645</b>  | <b>7 119 052</b>  | <b>3 553 199</b>  |

|                                                          | 31.12.2022        | 31.12.2021        | 31.12.2020        |
|----------------------------------------------------------|-------------------|-------------------|-------------------|
| <b>Short-term liabilities</b>                            |                   |                   |                   |
| Credits and loans                                        | 5 464 073         | 3 000 471         | 6 213 929         |
| Trade and other payables                                 | 27 293 563        | 22 487 475        | 15 896 325        |
| Tax liabilities                                          | 326 099           | 118 458           | 472 036           |
| Other liabilities                                        | 768 752           | 602 077           | 443 550           |
| <b><u>Total short-term liabilities</u></b>               | <b>33 852 487</b> | <b>26 208 481</b> | <b>23 025 840</b> |
| <b><u>Total long-term and short-term liabilities</u></b> | <b>42 722 132</b> | <b>33 327 533</b> | <b>26 579 039</b> |
| <b><u>TOTAL CAPITAL AND LIABILITIES</u></b>              | <b>57 831 482</b> | <b>46 822 224</b> | <b>28 164 799</b> |

### Statement of profit or loss and other comprehensive income

|                                                                 | 2022              | 2021              | 2020              |
|-----------------------------------------------------------------|-------------------|-------------------|-------------------|
| Revenue                                                         | 92 236 559        | 70 116 031        | 56 384 935        |
| Cost of production                                              | (58 336 339)      | (44 210 522)      | (36 629 463)      |
| <b><u>Gross profit</u></b>                                      | <b>33 900 220</b> | <b>25 905 509</b> | <b>19 755 472</b> |
| Commercial expenses                                             | (30 937 336)      | (22 321 571)      | (13 064 462)      |
| Administrative expenses                                         | –                 | –                 | (2 732 186)       |
| Other income                                                    | 26 823            | 67 690            | –                 |
| Other expenses                                                  | (72 456)          | (496 406)         | (212 330)         |
| <b><u>Operating profit</u></b>                                  | <b>2 917 251</b>  | <b>3 155 222</b>  | <b>3 746 494</b>  |
| Financial income                                                | 909 076           | 624 456           | 330 556           |
| Financial expenses                                              | (1 461 702)       | (967 969)         | (1 197 921)       |
| <b><u>Profit before tax</u></b>                                 | <b>2 364 625</b>  | <b>2 811 709</b>  | <b>2 879 129</b>  |
| Income tax expense                                              | (754 157)         | (897 155)         | (652 388)         |
| <b><u>Net profit</u></b>                                        | <b>1 610 468</b>  | <b>1 914 554</b>  | <b>2 226 741</b>  |
| Other comprehensive income                                      | 4 191             | 8 823             | –                 |
| <b><u>Total comprehensive income for the reporting year</u></b> | <b>1 614 659</b>  | <b>1 923 377</b>  | <b>2 226 741</b>  |

## Statement of changes in equity

|                                          | Share capital of the parent company |                          |                   |                                              |                   | Uncontrolled ownership shares | Total equity capital |
|------------------------------------------|-------------------------------------|--------------------------|-------------------|----------------------------------------------|-------------------|-------------------------------|----------------------|
|                                          | Authorized capital                  | Other funds and reserves | Retained earnings | Reserve for conversion of foreign currencies | Total             |                               |                      |
| <b>31.12.2020</b>                        | <b>1 100 000</b>                    | –                        | <b>50 243</b>     | –                                            | <b>1 150 243</b>  | <b>435 517</b>                | <b>1 585 760</b>     |
| Profit of 2021                           | –                                   | –                        | 1912 619          | –                                            | 1912 619          | 1935                          | 1914 554             |
| Other comprehensive income               | –                                   | –                        | –                 | 8823                                         | 8823              | –                             | 8823                 |
| <b>Total comprehensive income</b>        | –                                   | –                        | <b>1912 619</b>   | <b>8823</b>                                  | <b>1921 442</b>   | <b>1935</b>                   | <b>1923 377</b>      |
| Contribution to the authorized capital   | 16857 135                           | (6853 067)               | –                 | –                                            | 10 004 068        | –                             | 10 004 068           |
| Shareholders' contribution               | –                                   | –                        | 50 398            | –                                            | 50 398            | –                             | 50 398               |
| Acquisition of non-controlling interests | –                                   | –                        | 363 079           | –                                            | 363 079           | (431 991)                     | (68 912)             |
| <b>31.12.2021</b>                        | <b>17957 135</b>                    | <b>(6853 067)</b>        | <b>2 376 339</b>  | <b>8823</b>                                  | <b>13 489 230</b> | <b>5 461</b>                  | <b>13 494 691</b>    |
| Profit of 2022                           | –                                   | –                        | 1608 290          | –                                            | 1 608 290         | 2 178                         | 1 610 468            |
| Other comprehensive income               | –                                   | –                        | –                 | 4 191                                        | 4 191             | –                             | 4 191                |
| <b>Total comprehensive income</b>        | –                                   | –                        | <b>1 608 290</b>  | <b>4 191</b>                                 | <b>1 612 481</b>  | <b>2 178</b>                  | <b>1 614 659</b>     |
| <b>31.12.2022</b>                        | <b>17957135</b>                     | <b>(6853067)</b>         | <b>3984629</b>    | <b>13014</b>                                 | <b>15 101 711</b> | <b>7 639</b>                  | <b>15 109 350</b>    |

### Statement of cash flows

|                                                                         | 2022                      | 2021                      | 2020                      |
|-------------------------------------------------------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cash and cash equivalents<br/>as of the 1<sup>st</sup> January</b>   | <b>5 363 626</b>          | <b>3 179 591</b>          | <b>1 891 838</b>          |
| <b><i>Operational activities</i></b>                                    |                           |                           |                           |
| Receipt of funds from buyers                                            | 518 947 338               | 308 110 928               | 150 791 880               |
| Cash paid to suppliers                                                  | (499 143 245)             | (292 458 041)             | (136 838 989)             |
| Salary and social insurance                                             | (11 559 274)              | (9 319 414)               | (7 203 024)               |
| Income tax expense                                                      | (518 088)                 | (639 965)                 | (510 449)                 |
| Other payments                                                          | (3 075 079)               | (2 083 728)               | (3 057 761)               |
| <b><u>Net cash flow from operating activities</u></b>                   | <b><u>4 651 652</u></b>   | <b><u>3 609 780</u></b>   | <b><u>3 181 657</u></b>   |
| <b><i>Investment activity</i></b>                                       |                           |                           |                           |
| Purchase of fixed assets and intangible<br>assets                       | (3 261 161)               | (4 597 521)               | (1 492 755)               |
| Receipt of money from the sale of fixed<br>assets                       | 2 929                     | 45 062                    | 62 907                    |
| Acquisition/sale of subsidiaries and<br>associates                      | –                         | –                         | (35 812)                  |
| Loans issued                                                            | (2 503 664)               | (5 945 733)               | (4 369 273)               |
| Receipts of previously issued loans                                     | 3 343 659                 | 977 055                   | 2 700 616                 |
| Interest received                                                       | 164 711                   | 93 998                    | 68 232                    |
| <b><u>Net cash flow from investing activities</u></b>                   | <b><u>(2 253 526)</u></b> | <b><u>(9 427 139)</u></b> | <b><u>(3 066 085)</u></b> |
| <b><i>Financial activities</i></b>                                      |                           |                           |                           |
| Loans and credits received                                              | 3 187 205                 | 2 071 931                 | 2 280 014                 |
| Loans and borrowings paid                                               | (1 450 741)               | (1 061 065)               | (935 088)                 |
| Acquisition/sale of non-controlling<br>interest                         | –                         | (95 741)                  | –                         |
| Contributions to the authorized capital                                 | –                         | 10 004 065                | –                         |
| Dividends paid to holders of preferred<br>shares                        |                           | (148 963)                 | (170 209)                 |
| Other payments                                                          | –                         | (2 675 410)               | –                         |
| <b><u>Net cash flow from financing activities</u></b>                   | <b><u>1 736 464</u></b>   | <b><u>8 094 817</u></b>   | <b><u>1 174 717</u></b>   |
| <b>Net increase in cash and cash<br/>equivalents</b>                    | <b><u>4 134 590</u></b>   | <b><u>2 277 458</u></b>   | <b><u>1 290 290</u></b>   |
| <b>Net exchange rate difference</b>                                     | <b><u>(46 739)</u></b>    | <b><u>(93 423)</u></b>    | <b><u>(2 537)</u></b>     |
| <b>Cash and cash equivalents as at the 31<sup>st</sup><br/>December</b> | <b><u>9 451 477</u></b>   | <b><u>5 363 626</u></b>   | <b><u>3 179 591</u></b>   |