



DSAEU



**ACCOUNTING, FINANCIAL, AND ECONOMIC
SUPPORT FOR SUSTAINABLE DEVELOPMENT
OF THE AGRICULTURAL SECTOR:
THEORETICAL FOUNDATIONS
AND PRACTICAL RECOMMENDATIONS**

COLLECTIVE MONOGRAPH

**DNIPRO
2025**

Ministry of Education and Science of Ukraine
Dnipro State Agrarian and Economic University

ACCOUNTING, FINANCIAL, AND ECONOMIC
SUPPORT FOR SUSTAINABLE DEVELOPMENT
OF THE AGRICULTURAL SECTOR:
THEORETICAL FOUNDATIONS
AND PRACTICAL RECOMMENDATIONS

Collective Monograph

DNIPRO
2025

**UDC 336 : 338 : 631 : 657
O 17**

Reviewers:

Svitlana SHULGA – Doctor of Economic Sciences, Professor, Vice-Rector for Scientific and Financial and Economic Work, National Academy of Statistics, Accounting and Auditing (Kyiv)
Natalia ZDYRKO – Doctor of Economic Sciences, Professor, Director of the Educational and Scientific Institute of Economics, Vinnytsia National Agrarian University (Vinnytsia)
Igor VINICHENKO – Doctor of Economic Sciences, Professor, Head of the Department of Economics, Dnipro State Agrarian and Economic University (Dnipro)

Editors-in-Chief:

Halyna PAVLOVA – Doctor of Economic Sciences, Professor, Dean of the Faculty of Accounting and Finance, Dnipro State Agrarian and Economic University (Dnipro)
Natalia VASYLIEVA – Doctor of Economic Sciences, Professor, Deputy Dean for Research, Dnipro State Agrarian and Economic University (Dnipro)

Recommended by the Academic Council of Dnipro State Agrarian and Economic University (protocol № 7 from 24.04.2025).

Authors:

Halyna PAVLOVA, Oleksandr ATAMAS, Oleksandr TKACHENKO, Liudmyla VOLCHANS'KA, Olha HUBARYK, Olena DUBYNA, Olga CHERNETSKA, Serhii YURCHENKO, Mariya BARDADYM, Lesia VASILIEVA, Olga ODNOSHEVNA, Tatiana MACHAK, Alona MINKOVSKA, Tetiana SAVANCHUK, Svitlana KHALATUR, Svitlana KACHULA, Anna SIRKO, Natalia VASYLIEVA, Iuliia MASIUK, Oksana VODOLAZSKA, Oksana HRABCHUK, Ilona SOLODOVNIKOVA

Accounting, financial, and economic support for sustainable development of the agricultural sector: theoretical foundations and practical recommendations: collective monograph / edited by H. Pavlova and N. Vasylieva. Dnipro: Maksymovska Y.A., 2025. 488 p.

ISBN: 978-617-95342-7-0

The monograph is focused on scientific, methodical and practical aspects of accounting, financial, and economic support for the sustainable development of the agricultural sector in Ukraine. The collective monograph was published within the framework of the state budget research topics “Innovative development of accounting, taxation and control in the system of ensuring the economic stability of enterprises” (state registration number 0121U109731), “Financial support for structural modernization and innovative development of agroindustrial production in Ukraine” (state registration number 0124U000027), “Information technologies and mathematical methods for the development of the agricultural sector of the economy” (state registration number 0120U105338).

The monograph is intended for policymakers and stakeholders in agriculture, accountants, banking and finance specialists, agricultural managers, farmers, researchers and postgraduate students in agricultural economics.

UDC 336 : 338 : 631 : 657

© Dnipro State Agrarian and
Economic University, 2025

ISBN: 978-617-95342-7-0

CONTENT

PREFACE	5
CHAPTER 1. Accounting and analytical support and financial and economic security in the agricultural sector	9
1.1. Accounting of milk processing processes <i>(Halyna Pavlova)</i>	9
1.2. Impact of non-financial reporting on investment attractiveness of enterprises in the agricultural sector <i>(Oleksandr Atamas)</i>	31
1.3. Solvency management in the system of ensuring the financial and economic security of an agricultural enterprise <i>(Oleksandr Tkachenko)</i>	55
1.4. Peculiarities of accounting and analysis of economic activities of enterprises under martial law <i>(Liudmyla Volchans'ka)</i>	77
CHAPTER 2. Accounting and economic aspect of enterprise development strategy	98
2.1. International financial reporting and auditing standards as the basis of trust in accounting information in the agricultural Sector <i>(Olha Hubaryk)</i>	98
2.2. Improvement of accounting and analytical support of payments with consumers in the utility sector <i>(Olena Dubyna)</i>	118
2.3. Sustainable development monitoring based on an integrated accounting and analytical system <i>(Olga Chernetska)</i>	138
2.4. Optimization of the accounting and analytical support system and control of the enterprise's accounts receivable <i>(Serhii Yurchenko)</i>	160
2.5. Accounting provision for management of sales expenses in accordance with the marketing strategy of the enterprise <i>(Mariya Bardadym)</i>	180
CHAPTER 3. Financial and economic security management	201
3.1. Formation of accounting and analytical support for managing financial and economic security of an agricultural enterprise <i>(Lesia Vasilieva)</i>	201
3.2. Formation of financial result and its impact on management income of an enterprise as an element of economic security <i>(Olga Odnoshevna)</i>	222

CHAPTER 3. FINANCIAL AND ECONOMIC SECURITY MANAGEMENT

3.1. FORMATION OF ACCOUNTING AND ANALYTICAL SUPPORT FOR MANAGING FINANCIAL AND ECONOMIC SECURITY OF AN AGRICULTURAL ENTERPRISE

*Lesia Vasilieva,
Doctor of Sciences of Public Administration, Professor,
Professor of the Department of Accounting, Taxation
and Management of Financial and Economic Security,
Dnipro State Agrarian and Economic University, Dnipro, Ukraine*

A significant part of companies is faced with certain aspects of competition, lack of time and resources. To solve these problems, there is a need for operational management decision-making in accordance with the current situation. There is a direct relationship between the effectiveness of the management decision and the reliability, relevance, timeliness, clarity and completeness of information received by management. Accounting and analytical support is currently considered one of the main elements of the system for solving tasks and goals facing management.

Accounting information is necessary for the enterprise to make sound management decisions, control over the financial condition, ensure transparency of reporting, evaluation, performance, as well as for planning and forecasting (Vasilieva, 2018). It acts as an important resource for achieving strategic goals, allows you to quickly respond to market changes, provides internal control and increases the confidence of investors and partners. Given the importance of accounting information, we propose to consider approaches to the definition of "accounting information" in the scientific literature, depending on their approach to the study of accounting, management and analysis.

Zamlynsky V.V., Voloshina O.V., Stepanenko S.V. emphasize that accounting information is primarily an information resource that provides enterprise management (Zamlynskyj, Voloshina, Stepanenko, 2024). They believe that accounting information is the result of data processing and should support planning, control and analysis processes. Thus, these researchers view accounting information as an integral component of a management information system.

According to the views developed by Vasylishyn S.I., accounting information is an economic characteristic of the resources of the enterprise (Vasylishyn, 2020). The author considers it as a reflection of the economic processes taking place in the enterprise, and as a basis for calculating the financial indicators necessary for internal and external analysis.

Other scientists, like Bondarchuk N.V., Nikolajchuk Yu.M. focus on the formalization of accounting information (Bondarchuk, Nikolajchuk, 2016). They emphasize that accounting information should be clearly structured, classified and aggregated to form management decisions. Thus, this approach focuses on information processing algorithms, which should be based on mathematical models that optimize solutions.

Such scientists as Cescon F., Costantini A., Grassetti L., consider accounting information as a system covering various types of accounting (financial, Managerial, tax) (Cescon, Costantini, Grassetti, 2019). They emphasize the need for data integration to

create a comprehensive accounting information system that can ensure the relationship between different levels of enterprise management.

Consequently, accounting information in the scientific literature is interpreted differently, but in general it is perceived as a fundamental tool for managing and controlling the activities of an enterprise, which allows obtaining the necessary data for making decisions at different levels of management. Thus, accounting information is a system of data that reflects the financial and economic activities of the organization and provides users with the necessary information for making management decisions, which is formed on the basis of data from financial, managerial, tax accounting and analysis, and includes information about assets, liabilities, income, expenses and results of the organization.

In our opinion, the main characteristics of accounting information include its reliability, relevance, timeliness, clarity and completeness (Table 3.1.1).

Table 3.1.1

Main characteristics of accounting information

Principle	Characteristics
Reliability	Reliable accounting information reflects the real state of economic processes and is accurate and reasonable. This means that all data must be verified and consistent with reality. Reliability is achieved through the application of accounting methodologies that meet regulatory requirements, compliance with accounting principles, the use of verified data sources and regular monitoring. Reliable information reduces the risk of errors and manipulations.
Relevance	Relevant information is essential and meaningful to users because it directly influences decision-making. Relevance is determined by the ability of information to help predict future events or confirm the correctness of past decisions. Information is relevant if it answers questions that are important to specific users and helps them achieve their goals.
Timeliness	Timely information comes at the right time for decision-making and reflects events in the current period. This means that accounting information must be provided before its usefulness is reduced due to obsolescence. Timeliness of accounting data allows you to make operational decisions, respond to changes in the enterprise environment and prevent negative trends.
Clarity	Understandable information is easily perceived by users with different levels of knowledge and experience. It should be clearly and logically structured, set out without excessive complexity, so that users can quickly understand its essence and meaning. Clarity contributes to a more efficient use of information in enterprise management, which is especially important for external users, such as investors or regulators.
Completeness	Complete accounting information covers all necessary aspects of economic activity, without leaving missing data or important details. This means that the information must fully reflect all financial and non-financial indicators that are necessary for making informed decisions. Completeness provides comprehensive analysis and allows users to form a complete picture of the state of the enterprise.

These characteristics work in combination, creating accounting information that is useful for decision-making, control, analysis and planning of the enterprise. This information is the basis for financial reporting and analytical processes that help the farm achieve its strategic and tactical goals.

For example, we note that reliability, relevance, and timeliness are critical to its usefulness in enterprise management. Reliability ensures data accuracy, while relevance determines the correspondence of information to user needs. Timeliness is necessary so that data does not lose its value, and clarity guarantees ease of perception of information without difficulties. In addition, the completeness of the information must be ensured to form a holistic view of the financial condition of the enterprise. Together, these characteristics create the quality of accounting information, which contributes to the effective management and achievement of the strategic goals of the enterprise.

Classification of accounting information plays an important role in ensuring effective management of the enterprise because it facilitates the systematization of data and simplifies their use for various purposes (Grabchuk, Lyaxovych, Vakun, 2021). Thanks to classification, information can be easily sorted by its purpose, form, level of detail and users, which allows you to optimize data processing and quickly find the necessary information for decision-making (Vasilieva, 2018). This improves the accuracy of analysis and forecasting, provides flexibility in reporting for internal and external users and helps to adapt accounting to the specifics of the enterprise. In addition, the classification allows you to distribute information according to the degree of importance, relevance and accessibility, which contributes to increasing the transparency of the accounting process and the reliability of the accounting system as a whole.

Accounting information is classified into different categories depending on its purpose, type, form, users and other characteristics. Classification of accounting information includes the definition of categories on the basis of which it can be distributed for specific purposes, which in turn contributes to improving the efficiency of enterprise management.

1. Classification by origin. Accounting information can be classified by the source of its occurrence into primary and secondary.

Primary information is data coming directly from accounting objects and reflecting the facts of economic activity. It is formed in the process of accounting for business transactions, such as purchases, sales, production processes, etc. It can be a variety of documents confirming the facts of expenses, income, transfer of goods, works or services (check, invoice, acceptance certificate, etc.).

Secondary information is data obtained on the basis of primary information, systematized, summarized and revised using accounting and analytical procedures. It is used for reporting, financial indicators and for making strategic and operational management decisions.

2. Classification by time of occurrence. Information used for management and analytical needs is also classified depending on the time of its occurrence on the current and future.

The current information is used for operational management and decision-making in the short term. It covers data on the current financial condition of the enterprise, capital turnover, account balances, expenses, income, as well as short-term liabilities and payables. Current information is fundamental to managing daily operations, generating reports to monitor financial results and managing liquidity.

Future information is used for forecasting and planning. It includes forecast data based on current trends and information on future market changes, technological innovations, as well as expected changes in financial and economic indicators. Such information is needed for strategic management, development of business plans, assessment of potential risks and planning of financial flows.

3. Classification by level of detail. Classification of accounting information by level of detail involves the division into aggregated and detailed information.

Aggregated information consists of generalized indicators that provide an overall picture of the financial condition of the enterprise. For example, it can be an annual financial report that contains totals of income, expenses, profits and losses of the enterprise for a certain period. Aggregated information is important to the company's senior management, shareholders and external users (for example, investors or lenders) because it gives an overview of the financial situation (Shtangret, Steciv, 2017).

Detailed information contains detailed information about certain aspects of the economic activity of the enterprise, which allows a deeper analysis of individual elements, for example, costs for specific items, receivables or the cost of individual goods or services. Detailed information is needed to make specific management decisions, for example, to adjust costs or optimize business processes.

4. Classification by volume. Information can also be classified by the scope of its coverage: quantitative and qualitative.

Quantitative information is accounting data that reflects numerical values: the amount of income, expenses, the number of products produced, the number of employees, the timing of work, etc. Such information is fundamental for financial calculations, analytical assessments, forecasting and management control. It allows you to monitor the efficiency of the enterprise, compare the actual results with the planned indicators (Vasilieva, 2018).

Qualitative information provides an idea of the intangible aspects of the enterprise, such as reputation, customer satisfaction, efficiency of management practices, innovative ability, etc. Quality information is important for strategic management and assessment of long-term development prospects.

5. Classification by purpose. By appointment, accounting information can be classified into managerial and financial. Management information is used directly for internal control and management decisions. It covers all aspects of the enterprise related to process management, cost optimization, efficiency, strategic planning and operational control. Management information allows management to respond quickly to changes, adjust strategies, analyze internal business processes.

Financial information is aimed at external users and must comply with international financial reporting standards. It reflects the overall financial results of the enterprise and its financial condition. This information is used to compile accounting reports, assess the

financial stability, liquidity and profitability of the enterprise. Such information should be transparent and accessible to investors, banks, regulatory authorities.

6. Classification by processing method. The information can be divided into processed and unprocessed.

Processed information is data that has been processed in the form of generalization, analysis, forecasting. It is the basis for decision-making because it provides guidance for accurate and informed conclusions based on collected and processed data.

Raw information is initial data provided without any analysis or processing. They are raw material for further processing and analysis in the process of management.

Classification categories of accounting information for management and analytical needs are an important tool for effective enterprise management. Depending on the type of activity, the scale of the enterprise and the specifics of its work, the classification of accounting information helps to ensure the accuracy, efficiency and expediency of the decisions made, which in turn increases the efficiency of management and analytical processes.

Every enterprise needs an effective and efficient accounting information system to be ahead in the conditions of market competition (Zhuk, Vasylyshyn, Zamlynskyj, 2023). As a rule, an information system is considered effective when it is able to achieve its goals and increase the effectiveness of the organization in terms of activities, process and results. We note that the accounting information generation system follows certain successive stages, including data collection, processing, analysis and reporting. Each stage is important for ensuring the quality of accounting information, and that the effectiveness of the entire system depends on the consistency of these stages.

At the same time, we emphasize that the accounting information formation system should be considered as part of a wider information system of the enterprise, that is, the integration of accounting information with other subsystems, such as financial management, production management and strategic planning, is distinguished. That is, it is this approach that allows you to achieve data consistency and their more efficient use in management.

We are convinced that the system of formation of accounting information is an organized set of elements, methods and processes that interact with each other to collect, process, store and analyze financial and management data of the enterprise. The main purpose of this system is to provide relevant, reliable and relevant information necessary for making sound management decisions.

At the same time, the managerial aspect of accounting information is emphasized by the fact that the main purpose of the formation of accounting information is to provide useful data for decision-making. We focus on the importance of reliability, timeliness and relevance of information for effective enterprise management.

Note that the formation of accounting information must adhere to a certain methodology, developing rules and principles governing accounting processes. It is important to apply accounting and reporting standards to ensure the quality and unambiguity of accounting information.

Today, an actual aspect in the formation of the accounting information system is modern technologies that contribute to the formation of high-quality and timely information. The introduction of information systems, automation of accounting processes and the use of the latest technologies such as artificial intelligence and data analysis to increase the efficiency and accuracy of accounting information are relevant.

In our opinion, the system of formation of accounting information is a comprehensive mechanism that combines various stages, methods, tools that provide the creation, processing and analysis of financial data of the enterprise, which aims to provide management with accurate and timely information necessary for making managerial decisions.

The formation of accounting information involves a consistent process involving the collection and systematization of primary data, their classification and verification, registration in accounting registers, aggregation to obtain generalized information, analysis of the financial condition of the enterprise, preparation of financial statements and preservation of documentation (Bondarchuk, Nikolajchuk, 2016). As a result of this process, structured and reliable information is created, which is the basis for making managerial decisions and ensuring the economic security of the enterprise. We offer the stages that must be considered in the process of forming accounting information (Table 3.1.2).

Table 3.1.2

Stages of accounting information formation process

Stage	Description of accounting information generation process stage
Collection of primary information	Collection of data on the facts of economic activity (documents, checks, invoices, acts of acceptance, etc.) confirming the transactions that occurred.
Registration of accounting documents	Registration of primary accounting documents reflecting the fact of a business transaction, and their verification for compliance with norms and requirements.
Entering data into accounting registers	Transfer of information from primary documents to accounting registers (journals, books, cards). This includes a mechanism for systematizing data for ease of further use.
Generalization of data	Summarize information on specific accounts, categories or periods. At this stage, the grouping and classification of data for reporting.
Analysis and processing of information	Data validation, error detection and correction. Various methods of analysis are used to calculate the indicators of the financial and economic activity of the enterprise.
Generation of reports and analytical materials	Based on generalized data, reports (financial, accounting, statistical, etc.) are compiled for internal and external use.
Making management decisions	Use of the formed accounting information for the development of management decisions based on the analysis of financial indicators, performance, forecasting.
Control and adjustment	Evaluate the effectiveness of the accounting process, identify problems or deficiencies, adjust accounting procedures or processes to improve the accuracy and efficiency of data collection.

This table reflects the general stages of the formation of accounting information in the enterprise, allowing to ensure its correct maintenance, analysis and use for making effective management decisions.

Thus, the system of formation of accounting information provides an integrated approach to data management, which contributes to improving the efficiency of the enterprise and achieving its strategic goals.

The basis for the formation of accounting information, which in the future will be used for decision-making, is, firstly, the collection and classification of primary documents, which involves the recording of all financial, production and management operations that occur in the process of the enterprise (Vasylishyn, 2020). This stage is decisive, because the quality of the initial data directly affects the accuracy of further analysis and, ultimately, the validity of managerial decision-making. Further, the data are analyzed to identify the main trends and calculate key indicators. The results obtained are interpreted and summarized in the form of financial and internal reports that are provided to management for decision-making. This process is completed by monitoring the implementation of decisions made and, if necessary, adjusting further actions.

In the management system, special attention is paid to qualitative indicators, which are sometimes key for making managerial decisions (Cescon, Costantini, Grassetti, 2019). For example, aspects such as the competitive position of the organization, relationships with partners and the structure of its business processes are subject to analysis. The main emphasis is on non-financial data accumulated in the accounting system from various sources: media, the Internet, sociological research, competitor documents, employee opinions, expert opinions, and technical documentation. This non-financial data is the basic information for accounting, which provides the information needs of the management system.

Note that the composition and structuring of accounting information is also determined by the specifics of business processes implemented by the organization as a result of activities (Table 3.1.3). At the same time, it should be noted that, although managerial functions are often similar at different enterprises, each enterprise has its own set of business processes that distinguish it from others, for example, agribusiness enterprises. This table covers the main business processes of the agricultural enterprise and includes accounting and analytical information that is necessary for each of them.

Thus, the system of formation of accounting information must be consistent with the process of making a managerial decision. In this context, the management of the organization establishes the volume and frequency of information collection for each management decision, determines the format of its presentation and selects tools for the preparation and transmission of the necessary data.

For an agrarian enterprise, the formation of a system of accounting and analytical support for the management of financial and economic security is an important process, which includes the development and implementation of tools and techniques for assessing, analyzing and controlling the financial and economic aspects of the enterprise. The purpose of such a system is to ensure the stability, efficiency and sustainable development of the enterprise, in particular in ensuring its financial and economic security.

Table 3.1.3

Accounting information system in the management process in the context of business processes of agribusiness enterprises

Business Process	Composition of accounting information
Procurement of resources	Contracts with suppliers, material accounting documents, resource prices, procurement plans.
Production process	Accounting for the costs of sowing work, the cost of fertilizers and plant protection products, reporting on the performance of work.
Harvesting	Data on yields, collection costs, data on product losses, accounting for collected products.
Storage and processing	Data on warehouse balances, storage costs, product quality accounting, indicators of loss during storage.
Implementation process	Sales contracts, revenue accounting, market analytics, data on logistics costs and sales of products.
Financial analysis and budgeting	Budget indicators, reporting of financial results, profitability data, analysis of income, expenses and financial results.
Human Resources Management	Accounting for payroll calculations, information about personnel, data on labor productivity.
Economic Security	Data on risks, assessment of financial stability, analytics of competitors, etc.
Innovation and Development Management	Information on new technologies, data on research and development, costs of innovative projects.

First of all, we note that the formation of this system for an agrarian enterprise has its own characteristics due to the specifics of the agricultural sector, in particular seasonality, dependence on weather conditions and the significant influence of external economic and social factors. For example, agricultural enterprises operate in conditions of seasonal fluctuations, which requires special attention to forecasting income and expenses, as well as budgeting. The accounting and analytical support system should take into account these fluctuations and ensure timely monitoring and adjustment of financial flows.

Weather and climatic conditions can significantly affect the yield and productivity of agricultural production. Therefore, it is important to include methods of forecasting and assessing natural risks in the accounting and analytical support system, as well as to ensure financial planning taking into account unforeseen circumstances.

Agricultural production requires specific accounting methods, such as accounting for biological assets (farm animals, plants), requiring special valuation standards and techniques. The system should take into account the variability in the cost of products at different stages of its development (from sowing to harvesting). Agricultural enterprises

often receive state subsidies and subsidies, which can be important for financial stability. The system of accounting and analytical support should take into account the specifics of such revenues, ensuring accurate accounting and compliance with the requirements of the legislation.

It should be noted that the use of modern agricultural technologies, such as precision farming, geographic information systems and drones for monitoring, requires the integration of these technologies into the accounting and analysis system to ensure more efficient resource management and increase the productivity of the economy.

Agricultural enterprises face numerous risks, such as changes in price policy, disparity in prices for agricultural products, that is, prices for agricultural products vary significantly depending on various factors that can lead to a discrepancy between the prices of raw materials, products and the costs of its production, fluctuations in world prices for agricultural products, as well as economic instability (Vasileva, 2018). At the same time, the accounting and analytical support system should include tools for assessing and managing such risks in order to reduce their negative impact, for example, analysis of price trends and forecasting, hedging strategy (insurance against price fluctuations), cost and efficiency analysis, monitoring of world prices and economic indicators, financial planning and budgeting, inventory planning and logistics, etc.

For example, S.I. Vasylyshyn identifies tools for risk assessment - the use of quantitative risk assessment methods, such as sensitivity analysis, scenario analysis and Monte Carlo method, to determine the likelihood of risks and their impact on financial results; development of a system for assessing the financial, production and economic risks of an enterprise and plans for their minimization (Vasylyshyn, 2020).

Thus, the system of accounting and analytical support at an agricultural enterprise should take into account specific aspects of activity, providing adaptation to the conditions of seasonality, weather conditions, technological innovations and changes in the legislative and economic situation.

Vasileva L. emphasizes that the accounting and analytical support system "plays an important role in the functioning of financial and economic security system by the enterprise, ensuring the interaction of various structural units and responding to changes in the internal and external environments" (Vasileva, 2018).

It should be noted that the system of accounting and analytical support for the financial and economic security of the enterprise should be built on the principles that allow to effectively assess, control and minimize the risks associated with the financial and economic aspects of the enterprise. The basic principles of the formation of such a system include:

1. The principle of complexity. The system should cover all aspects of the financial and economic activities of the economy, including accounting, financial analysis, management accounting and cost control. It is important to ensure the integration of all elements of accounting and analysis to form a single information space.

2. The principle of consistency. Accounting and analytical support should function as a single system, where each element is interconnected with others. The information collected and processed should be systematized for adoption of decisions (Vasylyshyn, 2020).

3. The principle of transparency. To ensure effective control and analysis of financial and economic security, it is important that the system is transparent. This includes access to financial information and ensuring it is correct, up to date and accurate. According to Shtangret A.M., Steciv L.P. "the formation of a system of accounting and analytical support largely depends on the information needs of economic security actors" (Shtangret, Steciv, 2017).

4. The principle of responsibility. Responsibility for ensuring financial and economic security at different levels of management should be clearly distributed. This allows you to effectively respond to changes and risks.

5. The principle of objectivity. All indicators and data used in the accounting and analytical support system should be objective and based on facts, and not on subjective assumptions. This allows you to adequately assess the real state of financial and economic security enterprise.

6. The principle of efficiency (Grabchuk, Lyaxovych, Vakun, 2021). For timely detection and response to changes in the financial and economic situation, the system must ensure the prompt flow of information. This includes the use of modern technologies to automate the collection, processing and analysis of data.

7. The principle of adaptability. The system must be flexible and able to adapt to changes in the external environment, including changes in legislation, economic conditions and financial reporting requirements. It should provide the ability to quickly modify and update accounting and analysis methods.

8. Principle of preventive control. An important aspect is proactive control over possible risks and threats to financial and economic security. This involves the timely identification of potential threats and the development of measures to minimize them.

In our opinion, the formation of a system of accounting and analytical support for the financial and economic security of an enterprise requires an integrated approach that combines theoretical foundations with practical aspects of financial and economic security management. Taking into account the proposed principles, the process of creating and implementing a system of accounting and analytical support for the financial and economic security of an enterprise provides (Fig. 3.1.1).

The main advantages of such a system of accounting and analytical support are:

- improving the efficiency of financial flow management;
- Timely identification of financial problems and risks;
- increasing the level of financial discipline and reducing the likelihood of violations.

Thus, the system of accounting and analytical support for the management of financial and economic security is necessary to ensure the sustainable development of the enterprise. It allows not only to control financial flows, but also to respond effectively to changes in the external environment and internal processes of the enterprise. The introduction of such a system requires careful preparation, the use of modern information technology and proper control.

Improving the analytical framework for the management of the financial and economic agrarian enterprise is an important direction, since it allows to improve the risk management strategy, ensure the stability and development of the enterprise, as well as minimize losses in case of crisis situations.

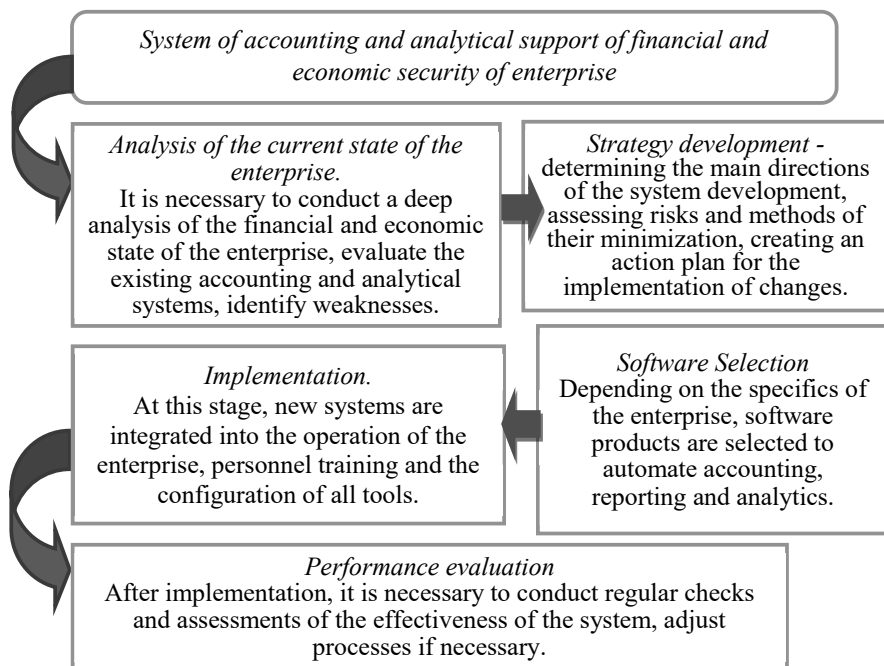


Fig. 3.1.1. Stages of creation and implementation of the system of accounting and analytical support of financial and economic security of the enterprise

Agricultural enterprises often face various financial and economic risks - fluctuations in prices for agricultural products, changes in legislation, weather conditions, lack of financing, etc. (Shtangret, Steciv, 2017). Therefore, one of the areas of improvement is the development of modern analytical tools for a comprehensive assessment of these risks.

Note that for this purpose we propose to use analytical tools for risk assessment, namely: the use of forecast models for risk assessment allows to more accurately determine the probability of occurrence of these risks, their impact on the enterprise and develop effective strategies to minimize them; application of financial analysis methods; taking into account external factors (weather, market prices, changes in legislation).

As Vasylishyn S.I. emphasizes the introduction of information technologies for monitoring financial processes (Vasylishyn, 2020). The author notes that analytical processes should be based on real data, which requires effective monitoring of financial flows in the enterprise, which can be achieved by automating the accounting and control of financial transactions, introducing information systems for collecting and processing data (ERP systems, business analytics), using analytical platforms for making decisions based on real-time data.

We are convinced that the accounting and analytical support for the management of the financial and economic security of an agrarian enterprise largely depends on the professional risks of an accountant, since it is the accounting information, its accuracy and correctness of interpretation by an accountant, that forms the basis for the effective functioning of this system. Any errors or shortcomings in the process of processing and analyzing accounting data can lead to distortion of the results of financial statements, which directly affects management decision-making and the state of the financial and economic enterprise as a whole.

Since the intensity and frequency of occurrence of situations related to the professional risks of the accountant are stochastic in nature and difficult to predict, accurate and impartial assessment of such risks is difficult (Shtangret, Steciv, 2017). The accounting system records only the consequences of such risks, in particular fines, penalties and penalties arising from violations during the execution of business transactions or tax payments. Therefore, enterprises are faced with the need to develop effective tools for predicting, analyzing and minimizing the professional risks of an accountant. Management of professional risks of an accountant is an important element of the general system of financial and economic security of an agrarian enterprise. Not only the stability of financial flows, but also the protection of the enterprise from external and internal threats that may arise in the process of its activity depends on its effectiveness.

Thus, the management of professional risks of an accountant at an agricultural enterprise requires taking into account the specifics of agribusiness. It is important to introduce effective methods of accounting and control, training of accounting employees and the use of modern technologies to reduce risks and ensure the financial and economic security of the enterprise. If a serious professional risk of an accountant is identified, the following approaches can be chosen (Zamlynskyj, Voloshina, Stepanenko, 2024):

- "risk avoidance" consisting in the termination of cooperation with certain employees or groups of accounting personnel whose activities may cause significant damage to the enterprise;

- "risk insurance," which involves concluding contracts with insurance companies that cover liability for damage caused by employees who are most exposed to risks. It can be, for example, low-skilled workers, students, pensioners or those who previously had problems with the disclosure of trade secrets in previous jobs. It also determines the amount of insurance premiums paid to insurance companies, thus creating a fund to cover the consequences of occupational risks.

We are convinced that it is necessary to develop a system of constant monitoring of the financial situation of an agrarian enterprise to identify potential threats, which involves regular analysis of financial statements, assessment of changes in economic indicators (it is necessary to analyze the dynamics of the main financial and production indicators, which allows timely detection of deviations from normal values and timely response to changes), conducting stress tests is a method of assessing the resistance of an enterprise to external and internal economic shocks.

Stress tests can predict the consequences of various scenarios (for example, lower

product prices, higher costs, currency fluctuations), which can help in identifying possible threats to the financial and economic security of an enterprise, developing indicators and thresholds for identifying threats and possible problems (Zamlynskyj, Voloshina, Stepanenko, 2024). After analysis and stress testing, it is necessary to identify the main threats that may affect the activities of the enterprise. It can be both internal factors (for example, a decrease in the effectiveness of management decisions) and external (changes in legislation, economic instability in the country or in the world market).

The development of such a monitoring system allows agricultural enterprises to respond in a timely manner to changes in the economic situation, optimize resources and ensure stability and competitiveness in the market.

Scientists who study and analyze the system of formation of accounting and analytical support for the management of financial and economic security of agrarian enterprises emphasize that the variety of objects and their qualitative characteristics, the growth of the share of operations performed by the organization, as well as other aspects of its activities, complicate the processes of accounting, collection and processing of information. "In this regard, there is a need to improve methodological approaches that would more effectively satisfy user information requests" (Grabchuk, Lyaxovych, Vakun, 2021).

Modern enterprises, in particular agricultural, are faced with the need to introduce alternative approaches to accounting and reporting that would meet the needs of owners and management. Traditional reporting is not always able to provide complete and prompt information about the status of the organization, so this role is often assigned to management accounting and reporting. We agree with the statement of S.I. Vasylyshyn, who notes that "since the management of financial and economic security of the message mainly depends on the management decisions of internal users, then its information support should be based on improving the forms of internal reporting" (Vasylyshyn, 2020).

Thus, in order to meet the needs of external and internal stakeholders who need information on the financial and economic security of agrarian enterprises, it is proposed to introduce the "Management Reporting Report" in a special form - "Internal Report on Financial and Economic Security," this report combines financial data and textual information on the impact of various types of risks on financial and economic security, has the status of "trade secret" and serves as the basis for the adoption by the managers of the agricultural enterprise of justified decisions aimed at strengthening its financial stability, and, accordingly, financial and economic security.

In our opinion, the preparation of the appropriate form should be carried out at the request of the managers of the enterprise, but at least once 1 a quarter. The functionality of this form of internal reporting is ensured by synchronizing the assessment indicators of different risk groups with the articles of the "Statement of Financial Position (Balance)." The practical significance of the proposed form is the possibility of an adequate assessment of the risk environment of the agrarian business, as well as the formation of sound management decisions to strengthen financial and economic security and strengthen internal control. Here is the proposed form "Internal report on financial and economic security." For example, we will make such a report for the object "fixed assets."

I. The financial aspect. The value of the assets of the enterprise, which is reflected in

the balance sheet, is essential for assessing the financial and economic security of the enterprise, since it determines the level of liquidity, financial stability and the ability of the enterprise to fulfill its obligations. The internal report on the financial and economic security of the enterprise contains an analysis of the risks associated with the financial indicators and assets of the enterprise. Basically, such a report covers the analysis of fixed assets, their depreciation, impairment, as well as potential risks that may arise due to incorrectly chosen valuation methods, changes in market conditions or the technical condition of equipment.

1. Cost of fixed assets.

Fixed assets of the enterprise are one of the key elements that determine its financial stability and ability to produce products. The cost of fixed assets at the reporting date is 12,500 thousand UAH. This amount is associated with a number of financial risks that can significantly affect the financial and economic security of the enterprise.

The first risk is asset impairment, which can be caused by several factors, including changes in market conditions, aging equipment or insufficient modernization of fixed assets. In this regard, a risk analysis and an assessment of the possible impairment of assets were carried out. The risk of impairment is estimated at UAH 1,600 thousand, which corresponds to the amount of potential losses due to changes in market conditions or a decrease in the value of assets due to their physical deterioration.

As part of this analysis, the method of depreciation of fixed assets was changed to a straightforward method. This made it possible to better take into account the depreciation of assets and ensure a more stable calculation of their value during the period of use.

2. Potential risks.

The main risks that may arise in the valuation of fixed assets include:

- Amortization method is incorrect. If the company has chosen a depreciation method that does not correspond to the actual use of fixed assets, this can lead to significant errors in the financial statements. In particular, excessive or underestimated depreciation may distort the financial results of the enterprise, in particular in terms of profit or loss.

- Errors in the valuation of assets. Such errors may arise from inaccuracies in the valuation of assets, in particular due to insufficient consideration of market fluctuations or the physical condition of fixed assets. As a result, the accounting value of fixed assets may not correspond to the real state of affairs, which leads to a violation of the principles of reliability and truthfulness of financial statements.

- Decrease in value due to market fluctuations. Market conditions can change very quickly, and the value of fixed assets can be adversely affected by a drop in demand or a decrease in the competitiveness of the products produced by these assets. As a result, this can lead to significant depreciation of equipment.

- Failures in the operation of fixed assets. Deterioration of the equipment and failures in its operation can lead to a halt in production processes and additional costs for the repair or replacement of equipment. This can adversely affect the implementation of the planned indicators and cause serious damage to the financial results of the enterprise.

3. Possible consequences and recommendations.

Inconsistency of the structure of fixed assets of the enterprise strategy can significantly reduce its competitiveness. If fixed assets do not meet the modern requirements of production or do not have the necessary level of efficiency, this can cause problems in achieving the strategic goals of the enterprise.

Therefore, the company needs to regularly audit fixed assets and their technical condition. Particular attention should be paid to the modernization of equipment in accordance with modern digital standards and technologies, which allows to increase the efficiency of its use and reduce the risk of malfunctions.

An important aspect is also risk management with the rapid sale of fixed assets to cover financial obligations. If it is necessary to sell fixed assets to obtain liquid funds, significant losses from impairment of assets are possible due to limited market demand.

To reduce these risks, the company should ensure:

1. Regular revaluation of fixed assets in accordance with changes in the market situation, which allows to accurately reflect their real value in the reporting.

2. Selection of optimal depreciation methods that meet the conditions and specifics of the use of assets, in particular, a straightforward depreciation method that allows you to more accurately reflect the depreciation of assets.

3. Modernization of fixed assets, in particular through the introduction of new technologies, which allows to increase the efficiency of their use and reduce the risks associated with their physical wear.

Risk management in the sale of fixed assets, ensuring proper valuation of assets before sale, in order to avoid significant losses due to low demand or limited liquidity in the market.

II. Text aspect. In connection with the above financial aspects, it is also important to take into account a number of textual aspects that may affect the valuation of fixed assets and the risks associated with them. Here are some possible errors and consequences:

1. Errors in the valuation of fixed assets may arise as a result of incorrect selection of the depreciation method or lack of actualization of value due to changes in the market or obsolescence of assets. Such errors can lead to distortion of reporting and incorrect analysis of the financial condition of the enterprise.

2. Possible impairment of assets due to changes in market conditions or the need for a quick sale. If an enterprise is forced to quickly realize its fixed assets to cover liabilities, this can lead to significant losses, since asset prices may fall due to limited demand.

3. The mismatch of fixed assets to the strategic goals of the enterprise can lead to a loss of competitiveness and a decrease in the efficiency of the enterprise as a whole. It is important to ensure that assets are modern and meet changing business needs.

4. Lack of modernization of fixed assets can lead to a decrease in their efficiency and increase in maintenance costs. Modern digital technologies and technical innovations can significantly increase the productivity of assets, which directly affects the economic security of the enterprise.

The creation of an analytical framework for managing the financial and economic security of agricultural enterprises is an important stage in ensuring the stability and development of the enterprise in a changing market environment, high competition and specific challenges of the agricultural sector (Fig. 3.1.2).

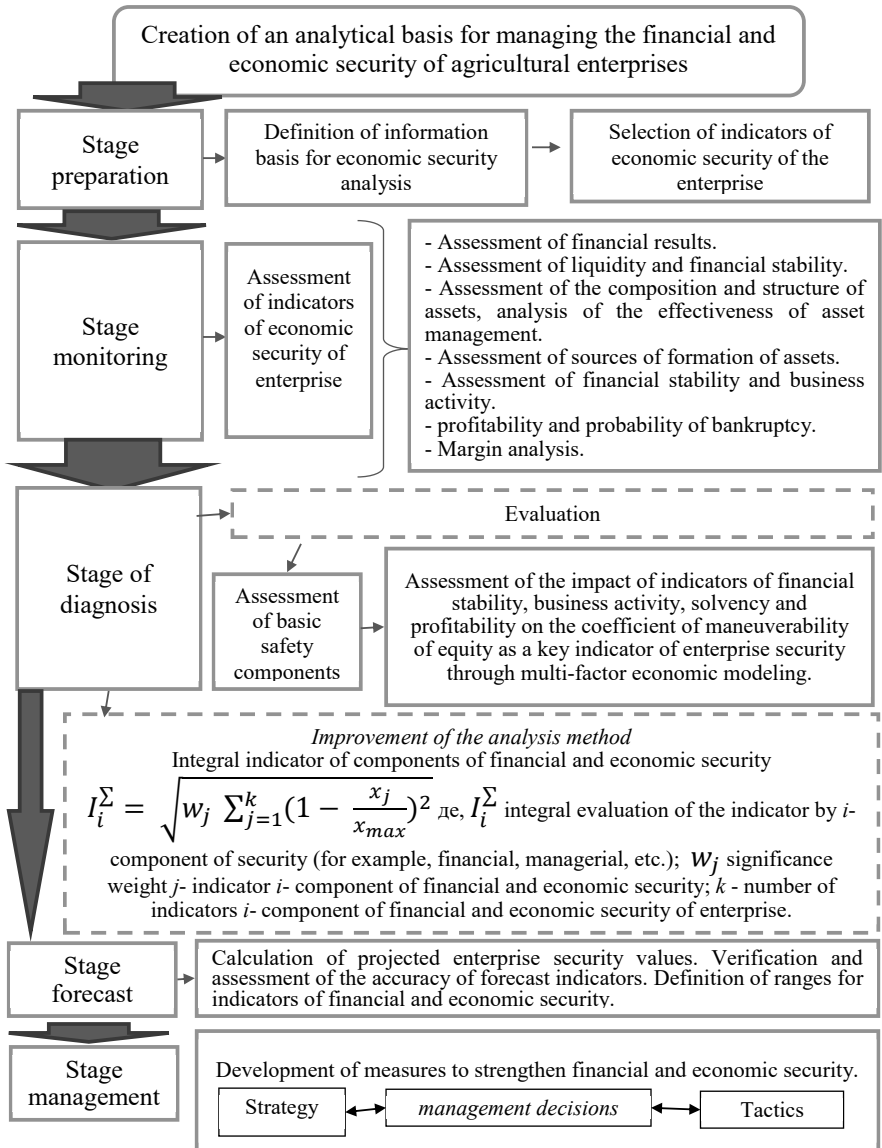


Fig. 3.1.2. Algorithm for creating an analytical framework for managing the financial and economic security of agricultural enterprises

The first step is to collect relevant information that will help form the analytical basis. The next step is to assess the financial and economic activities of the enterprise in terms of its sustainability, profitability and efficiency. Separately, it is necessary to study the risks that an agrarian enterprise may face. It is important to develop indicators that allow to identify and assess the level of financial and economic security of the enterprise. To create an analytical basis, it is necessary to use various forecasting and modeling methods to predict future changes in the financial and economic state of the enterprise. Finally, it is necessary to create a management system based on the collected and analyzed data, namely the integration of the accounting system (ensuring the effective collection and processing of information from all departments), the use of software tools for analysis (the introduction of modern IT solutions to automate the processes of analysis and management decision-making), monitoring and adjustment of decisions (based on the results of analytical research, the current strategy of the enterprise is adjusted).

Thus, the creation of an analytical basis for managing the financial and economic security of agricultural enterprises allows not only to effectively assess the current state of the enterprise, but also to predict possible threats, to respond quickly to changes and ensure financial stability, and as a result, financial and economic security.

The formation of a separate strategy for ensuring the financial and economic security of an agricultural enterprise is critical for stable and sustainable business development. The main purpose of such a strategy is to minimize financial, production and market risks, ensure financial stability and protect the agricultural enterprise from unpredictable threats.

As noted by S.I. Vasylyshyn, an agrarian enterprise faces numerous financial and economic risks and, as a result, a separate strategy of financial and economic security allows to systematize approaches to managing these risks, create reserves to cover possible losses and preserve the liquidity of the enterprise (Vasylyshyn, 2020).

Along with this, we note that the agricultural sector is often exposed to external shocks (climatic changes, natural disasters, changes in market conditions). Accordingly, the strategy of financial and economic security allows you to conduct a systematic analysis of potential threats and determine the most effective measures to minimize or neutralize them. This may include providing insurance, creating financial reserves or diversifying sources of income. The agricultural sector is usually seasonal. Therefore, to ensure the stability and profitability of the enterprise, it is important to properly plan financial flows, especially taking into account seasonal fluctuations in costs and income. It is the strategy of financial and economic security that allows you to create clear plans to cover costs and ensure profitability throughout the year.

We agree with Shtangret A.M. and Steciv L.P. that the financial and economic security strategy involves the development of measures aimed at maintaining an optimal capital structure, controlling cash flows, managing debts and attracting financing if necessary. This provides the enterprise with financial stability even in case of changes in the market or negative economic conditions (Shtangret, Steciv, 2017).

The strategy of financial and economic security helps to improve the system of accounting and analytical support. For example, the use of modern technologies, such as

automation, makes it possible to accurately monitor financial results, optimize costs and timely adjust financial plans.

As noted by S.I. Vasylyshyn, there may be various state support programs in the agricultural sector (subsidies, subsidies, preferential lending, etc.), it is precisely the pre-developed strategy of financial and economic security that allows adapting to changes in legislation, effectively using state resources and avoiding fines for violation of regulatory requirements (Vasylyshyn, 2020). In conditions of rapid changes (climatic changes, new technologies, political and economic changes), an agricultural enterprise should be able to adapt to new conditions (Vasilieva, 2018). The strategy of financial and economic security helps to form a flexible adaptation mechanism that allows you to quickly respond to changes and maintain financial stability.

Thus, the formation of a strategy for ensuring financial and economic security for an agrarian enterprise is an important element that allows increasing the enterprise's resistance to internal and external risks, ensuring financial stability, reducing costs and optimizing the use of resources. This allows the company to remain competitive, achieve sustainable development and ensure profitability for the long term.

The development and implementation of a strategy for the financial and economic security of an agricultural enterprise on the basis of accounting and analytical support is a comprehensive process that includes several mandatory stages, where special attention is paid to creating a reliable information base for making sound management decisions.

The first stage is the analysis of the existing financial and economic situation of the enterprise. The goal is to identify the strengths and weaknesses of the enterprise, as well as internal and external threats to financial and economic security. At this stage, it is necessary to conduct a comprehensive analysis of the financial condition of an agrarian enterprise, study the main economic and financial indicators, and also identify factors that may threaten its financial and economic security, namely: analysis of financial statements, assessment of liquidity, solvency, etc., analysis of the effectiveness of the use of resources such as land, equipment, labor resources, assessment of risks that are inherent in agrarian enterprises (climatic, political, market, etc.). Use of modern technologies for detailed analysis of costs for each stage of the production process, identification of inefficient costs, optimization of purchases and management of inventories, monitoring of prices and market trends, use of accounting and analytical data for forecasting demand.

The role of accounting and analytical support at this stage is the use of data from accounting systems (for example, BAS Accounting) to analyze key financial indicators, create analytical reports that help identify inefficiencies and evaluate financial flows.

The next stage is the identification of risks that may affect the financial and economic security of the enterprise. For example, market risks (fluctuations in prices for agricultural products (cereals, vegetables, fruits), instability of demand), climatic and production risks (negative climatic conditions (drought, floods), failures in the operation of agricultural machinery, repair costs), financial risks (high interest rates on loans, changes in exchange rates (if the company works with imported suppliers), risks of budget defaults or cost overruns due to inefficient planning), regulatory risks (changes in tax and agrarian

legislation, loss of state subsidies or support) (Zamlynskyj, Voloshina, Stepanenko, 2024).

The role of accounting and analytical support at this stage is the operational collection and processing of data on costs, income, financial results and production volumes, analysis of seasonal changes in costs and income to predict possible cash gaps, the use of data to assess risks based on historical trends.

Next, you need to define the objectives of the strategy of financial and economic security. The goal is to create clear and achievable goals to ensure the financial and economic stability of the enterprise, namely: ensuring financial stability (increasing liquidity by optimizing working capital, increasing reserves to cover unpredictable costs); cost optimization (using information technologies to automate production accounting and identify inefficient costs, reducing the cost of purchasing and storing materials through centralized inventory management); risk management (formation of reserves to combat seasonal or economic risks, introduction of agricultural insurance).

The role of accounting and analytical support at this stage is the clear formation of goals based on financial and analytical reports, the use of accounting and analytical support data to establish realistic financial and production benchmarks.

The fourth stage is the development of specific measures for the implementation of the strategy of financial and economic security. The goal is to introduce practical measures aimed at achieving strategic goals, namely:

- introduction of modern accounting and analysis tools (effective use of the functionality of the accounting program for automated accounting of costs and income, creation of integrated reports that allow you to track financial and production indicators in real time) (Vasylishyn, 2020);

- optimization of financing and financial flows (revision of the capital structure, formation of reserve funds for financing unpredictable expenses, effective cash management, ensuring solvency and liquidity) (Grabchuk, Lyaxovych, Vakun, 2021);

- Improving the market situation (development of a marketing and sales strategy, including the use of accounting and analytical data to predict customer needs, expanding distribution channels through digital platforms or direct sales);

- Diversification of activities (expanding the range of products or entering new markets to reduce dependence on one segment);

- risk management (development of plans to respond to various risk situations (insurance, hedging, inventory creation, etc.).

At the fourth stage, when specific measures are developed for the implementation of the financial and economic security strategy, the role of accounting and analytical support is to provide automated monitoring and control over the implementation of financial and production measures, as well as to provide accurate data for managerial decision-making. The accounting and analytical support system helps in determining priorities for reducing costs, optimizing cash flows, managing risks and ensuring financial stability, which allows you to adjust the strategy in real time to achieve your goals.

Implementation of the financial and economic security strategy requires active application of the developed measures in daily activities to achieve stability, minimize

risks and ensure long-term financial stability. For the effective implementation of the strategy of financial and economic security of the agrarian enterprise, it is necessary to actively integrate the measures of the strategy into daily activities through accounting and analytical support. The system of accounting and analytical support automates and optimizes key financial and production processes, providing control over costs, cash flows, risks and liquidity. This allows you to maintain stability, respond quickly to changes and ensure a stable financial position of the enterprise in the long term.

The last stage is the constant monitoring and evaluation of the results of the implementation of the strategy. The goal is to assess the effectiveness of the implemented strategy based on the achievement of key indicators, namely:

- regular monitoring of financial and economic indicators;
- assessment of the success of risk management and the ability of the enterprise to withstand financial threats;
- making adjustments to the strategy if necessary, in particular, when the economic situation changes or new risks appear.

At the stage of constant monitoring and evaluation of the results of the implementation of the financial and economic security strategy, the role of the accounting and analytical support system is to automatically collect and analyze data, which allows you to quickly track the implementation of strategic goals, identify deviations from planned indicators and take corrective measures. The accounting and analytical support system provides accurate financial reports to help assess the effectiveness of the implemented measures, providing a basis for making informed management decisions.

Implementation of the strategy of financial and economic security of the agrarian enterprise on the basis of accounting and analytical support allows you to effectively manage the risks and resources of the enterprise. Careful conduct of all stages, from the analysis of the external environment to the implementation of the strategy, makes it possible to ensure the stability of the enterprise to external and internal threats, and also contributes to the achievement of strategic goals for the development of agricultural business.

Thus, the development of a financial and economic security strategy based on accounting and analytical support is a key point in increasing the competitiveness of the enterprise. The use of automated accounting systems, such as BAS Accounting, allows you to exercise operational control, identify risks in a timely manner and respond effectively to changes, which gives the enterprise advantages in the market.

The main direction of improving the system of accounting and analytical support is the introduction of modern information technologies that allow automating accounting processes, increasing the accuracy and efficiency of obtaining analytical information. In addition, it is necessary to expand the range of analyzed indicators to include not only financial, but also other important aspects of the enterprise, such as production, marketing and environmental. An important aspect is also the development of special models for assessing financial and economic security, which will more accurately determine the level of protection of the enterprise from various types of risks. It is the use of economic and mathematical modeling in the study of systems of accounting and analytical support for the management of financial and economic security of agrarian enterprises that will make it possible to move from qualitative analysis to quantitative assessment of risks and the

SCIENTIFIC EDITION

**ACCOUNTING, FINANCIAL, AND ECONOMIC
SUPPORT FOR SUSTAINABLE DEVELOPMENT
OF THE AGRICULTURAL SECTOR:
THEORETICAL FOUNDATIONS
AND PRACTICAL RECOMMENDATIONS**

COLLECTIVE MONOGRAPH

In English

Responsible for the issue is Natalia Vasylieva

The materials are printed in the author's edition.

The views expressed in the publications are solely the position of the authors.

*Authors are responsible for the scientific level of publications, the validity
of conclusions, the reliability of results, and the presence of plagiarism.*

Підписано до друку 30.04.2025 р. Формат 60 x 841/16. Папір офсетний. Друк
цифровий. Обл.-вид. арк. 35. Ум.-друк. арк. 35. Тираж 100 прим. Зам. № 95

Видавець ФОП Максимовська Ю. А.

Свідоцтво держ. реєстрації серія ДК № 7589 від 07.02.2022

Надруковано у ТОВ "Україна-Принт"

Вул. Архитектора Олега Петрова, 25, Дніпро, тел. 067 165 74 75

Автори:

*Галина ПАВЛОВА, Олександр АТАМАС, Олександр ТКАЧЕНКО, Людмила ВОЛЧАНСЬКА,
Ольга ГУБАРИК, Олена ДУБИНА, Ольга ЧЕРНЕЦЬКА, Сергій ЮРЧЕНКО, Марія БАРДАДИМ,
Леся ВАСИЛЬЄВА, Ольга ОДНОШЕВНА, Тетяна МАЧАК, Альона МІНЬКОВСЬКА, Тетяна
САВАНЧУК, Світлана ХАЛАТУР, Світлана КАЧУЛА, Анна СІРКО, Наталя ВАСИЛЬЄВА,
Юлія МАСЮК, Оксана ВОДОЛАЗСЬКА, Оксана ГРАБЧУК, Ілона СОЛОДОВНИКОВА*

О17 Облікове, фінансове та економічне забезпечення сталого розвитку аграрного
сектору: теоретичні основи та практичні рекомендації: колективна монографія.
Англійською мовою. Дніпро: ФОП Максимовська Ю. А., 2025. 488 с.

ISBN: 978-617-95342-7-0

UDC 336 : 338 : 631 : 657