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THEORETICAL BASIS OF THE MECHANISM OF FINANCIAL ACTIVITY OF ENGINEERING ENTERPRISES

Abstract. *The article examines the theoretical foundations of the formation and functioning of the mechanism of financial activity of engineering enterprises as a component of their strategic development system. It is substantiated that financial activity in modern conditions of economic transformation is not only a tool for ensuring the operational stability of the enterprise, but also a key factor in realizing its long-term growth potential. The content of the concept of "financial mechanism" in the context of the economic mechanism of the enterprise is revealed, its structural elements, functions and principles of action are determined. The importance of harmonizing internal financial processes with the external economic environment is emphasized, which is especially relevant for engineering enterprises with long production cycles and a high level of capital intensity. In the process of the study, an analysis of scientific approaches to the interpretation of the financial mechanism of the enterprise was carried out, in particular in the works of Ukrainian and foreign economists. The trends of development of theoretical research for 2022–2024 are identified, which focus on strategic financial planning, forecasting, investment attractiveness and digitalization of financial processes. The impact of military and crisis factors on the financial management system of enterprises is summarized, which led to an increased need for the formation of flexible, adaptive and innovation-oriented financial mechanisms. The article identifies the main problems of the financial activities of machine-building enterprises: fragmentation of financial planning, insufficient level of integration of financial and production strategies, limited sources of investment financing and low efficiency of use of financial resources. It is substantiated that solving these problems requires improving the financial mechanism by introducing modern tools for financial planning, control and forecasting, developing digital financial management platforms, as well as forming a risk management system at enterprises. It is concluded that the effective functioning of the financial mechanism is a prerequisite for increasing the resilience of machine-building enterprises to external shocks, ensuring their competitiveness and creating a basis for sustainable economic development of the industry as a whole. The developed theoretical generalizations and practical proposals can be used in further research into the financial strategy of industrial enterprises and in the formation of a policy of state support for the machine-building sector.*

Key words: *financial activity, financial mechanism, enterprise, economic mechanism, machine-building industry, financial planning.*

Problem statement. In the current conditions of economic transformation, the financial activities of machine-building enterprises are gaining strategic importance, as they are not only a tool for supporting operational stability, but also a factor in realizing long-term development potential. Effective financial management ensures flexible adaptation to changes in the external environment, increases investment attractiveness and creates the prerequisites for a sustainable competitive position in the market. At the same time, issues related to the content, structure and mechanisms of functioning of financial activities remain debatable, which necessitates their in-depth scientific analysis, especially in the context of industrial production, in particular the machine-building sector.

Analysis of recent research and publications. A review of scientific literature for 2022–2024 demonstrates the active development of research in the field of the financial mechanism of an enterprise, especially with an emphasis on strategic planning, financial forecasting and investment attractiveness in conditions of economic instability. Thus, Nechyporenko A. examined the features of financial forecasting at enterprises in conditions of modern transformations [1], Gutsan T. G. investigated the trends of investment attractiveness of Ukraine in conditions of martial law [2]. Melnyk L. G. investigated the digitalization of enterprises, which is relevant for the development of modern models of strategic planning [3]. Aleksin G. O. presented modern innovative financial instruments in the enterprise development system [4]. The works update the theoretical foundations of the financial mechanism, taking into account digital transformation, unpredictable economic shocks and the need for adaptive strategic planning. The authors investigate how war and crisis challenges change approaches to forecasting and planning finances at an enterprise. The works also demonstrate the implementation of tools that contribute to increasing the investment attractiveness of enterprises, especially in conditions of increased uncertainty.

An in-depth review of scientific sources indicates an active improvement of approaches to understanding the financial mechanism of an enterprise, in particular, taking into account the impact of modern challenges – digitalization, war and economic transformation. At the same time, insufficient unity in the interpretation of the concepts of "financial mechanism" and its structural elements remains, which confirms the need for further scientific research.

Purpose of the study. The purpose of the article is to clarify the economic essence of the mechanism of financial activity of machine-building enterprises, identify the main problems in this area and develop directions for improving the financial mechanism, taking into account the peculiarities of the functioning of machine-building enterprises in Ukraine.

Presentation of the main material. Finances occupy a leading place in the system of economic relations of the enterprise, since they are the basis for the formation of both quantitative and qualitative characteristics of all production and management processes. The ability of the enterprise not only to maintain stable activity, but also to ensure long-term development depends on how rationally it forms and uses financial resources. At the present stage, when the economic environment is characterized by high dynamics and unpredictability, the role of finance in ensuring the flexibility and competitiveness of machine-building enterprises is significantly increasing [5].

Qualified management of financial resources allows enterprises to quickly respond to changes in the external environment, in particular fluctuations in demand, prices for resources, exchange rates, and also to adapt production programs and investment projects to market requirements. Such management involves the integration of financial planning with production, sales and innovation strategies, which is especially important for the machine-building industry, where the production cycle is often long-term and capital investments are significant [6].

The financial mechanism is a key tool for implementing the financial policy of an enterprise. It is understood as a set of forms, methods, levers and instruments by which financial resources are formed, distributed and used. It covers both internal economic processes (formation of working capital, financing of investments, cost management) and interaction with the external environment (settlements with counterparties, tax payments, attracting loans and investments) [7].

According to modern scientific approaches, the financial mechanism includes the following components: Financial provision, as the process of forming the necessary amount of resources for the current activities and development of the enterprise; Financial regulation, as a system of instruments and levers by which the distribution and use of financial resources is influenced; Financial indicators, which include indicators reflecting the financial condition, solvency, profitability and other aspects of the enterprise's activities [8].

For machine-building enterprises, a balanced combination of short-term and long-term financial decisions is an important aspect. On the one hand, it is necessary to ensure liquidity and solvency, on the other hand, to invest in the modernization of production, the introduction of new technologies and the expansion of the product range. The experience of leading enterprises in the industry shows that an effective financial management strategy combines a conservative policy in the field of debt obligations with an active investment policy aimed at technological renewal [9].

Financial forecasting and planning in mechanical engineering are of particular importance, as production projects are often designed for several years ahead. Forecasting includes determining the volume of future demand, prices for raw materials and components, possible changes in tax legislation and foreign economic conditions. Planning involves the development of detailed financial plans, budgets and estimates that allow you to reconcile costs and revenues, optimize the use of resources and prevent a shortage of working capital [10].

Analysis and control of financial activities perform the function of diagnosing the state of the enterprise. With the help of financial analysis, indicators of profitability, liquidity, asset turnover, financial stability and capital structure are determined. Control procedures ensure compliance with financial discipline, timeliness of calculations and fulfillment of planned tasks. For mechanical engineering enterprises, control is of particular importance due to large volumes of material inventories and a long production cycle [11].

In recent years, the digitalization of financial processes has become of significant importance. The use of ERP systems, big data analysis technologies, artificial intelligence and machine learning makes it possible to automate accounting, forecasting and control of finances, increase the accuracy of calculations and accelerate decision-making [12]. In particular, in mechanical engineering, digital tools allow you to model financial risks, assess the effectiveness of investments in new equipment, and conduct scenario analysis depending on changes in the market situation. Thus, the financial mechanism of mechanical engineering enterprises is a multi-level system that combines organizational, methodological and technological elements of financial management. Its effectiveness is determined not only by the quality of planning and forecasting, but also by the ability of the enterprise to adapt to changes in the external environment, use innovative management tools and ensure sustainable financial development in the long term. Special attention is required to form criteria for selecting sources of financing for the activities of mechanical engineering enterprises (Fig. 1).

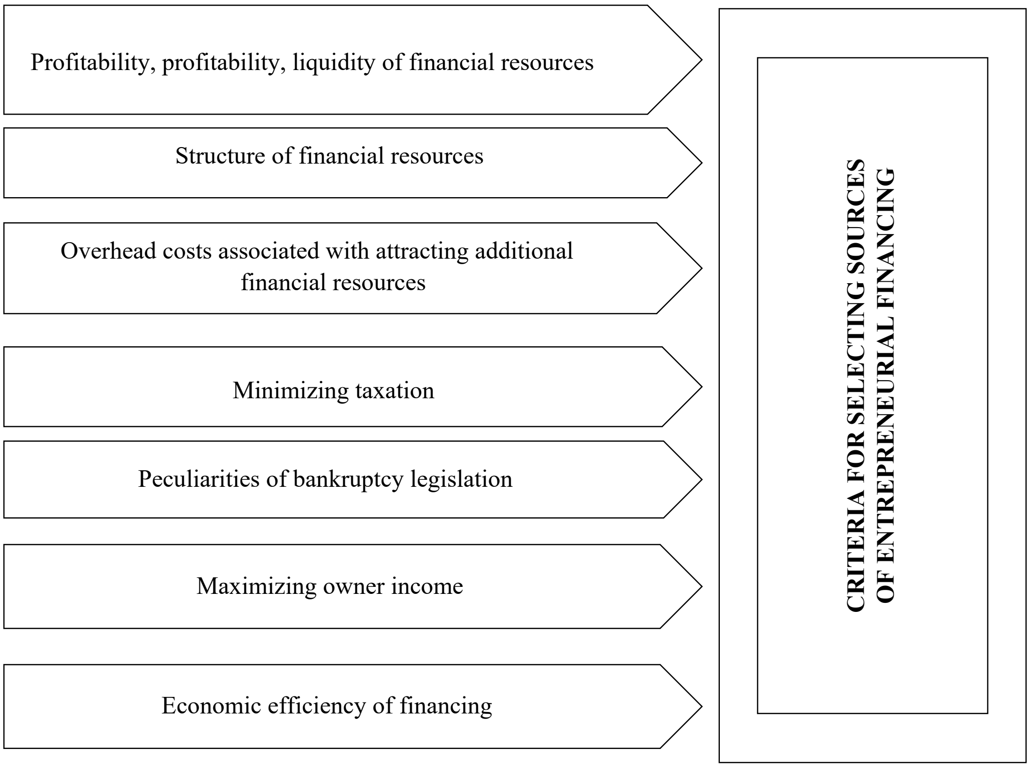

Figure 1 – Criteria for selecting sources of financing for the activities of machine-building enterprises

Source: Grouped by the author according to [4–7]

Financing the activities of machine-building enterprises, as well as any other business entities, is determined by the timeliness, quality and efficiency of filling the cash turnover with financial resources. The structure of sources of financial support formation significantly depends on the industry specifics of production processes and business organization. In the case of the agricultural sector, with which it is advisable to draw certain analogies, total financial resources consist of current financial resources, non-current assets and other assets that can be transformed into liquid forms.

The most mobile part is current financial resources, because they ensure the ability of the enterprise to fulfill financial obligations in a timely manner and in the proper amount. Non-current and other assets acquire the value of a financial resource only if they can be converted into liquid forms. Given the time separation between the processes of production, financing of development and sales of products, the liquidity of financial resources becomes one of the key destabilizing factors in the activities of machine-building enterprises. Current assets, even if they are available, are not always able to perform the function of a highly liquid product, since they are closely related to production cycles. For example, finished products, the terms of sale of which are delayed, lose liquidity and partially their monetary value, turning from a source of financial resources into an object of financing, requiring additional costs for storage or disposal.

Scientific approaches to determining the essence of the financial mechanism reflect different conceptual positions. The institutional and organizational approach identifies it with financial engineering – the system of internal functioning of cash flows of the enterprise. The instrumental and regulatory approach considers the financial mechanism as a set of levers and means of influencing the economic condition of the enterprise, including indicators, norms, incentives, sanctions and methods of regulation. Most modern Ukrainian researchers are inclined to the second approach, emphasizing the need to model the impact of financial decisions on socio-economic results.

In the context of machine-building production, the financial mechanism should be interpreted as a multi-component system that includes the formation of a resource base, financial regulation, determination of financial indicators (coefficients, indicators, balances), application of levers (incentives, standards, sanctions) and instruments (budgeting, lending, leasing, reinvestment). A special role is played by financial planning, which determines the balance between the needs of the enterprise and the possibilities of covering them, and also sets priorities for the use of resources.

The organizational and financial activities of machine-building enterprises are provided by financial departments, separate sectors or specialists. In small enterprises, these functions are often performed by the chief accountant. In the case of foreign economic activity, currency control units are created, responsible for conducting international settlements and managing currency risks. Such a comprehensive construction of the financial mechanism ensures the stability of financial flows and contributes to increasing the competitiveness of machine-building enterprises in dynamic market conditions.

The algorithm for assessing the financing of machine-building enterprises is shown in Fig. 2.

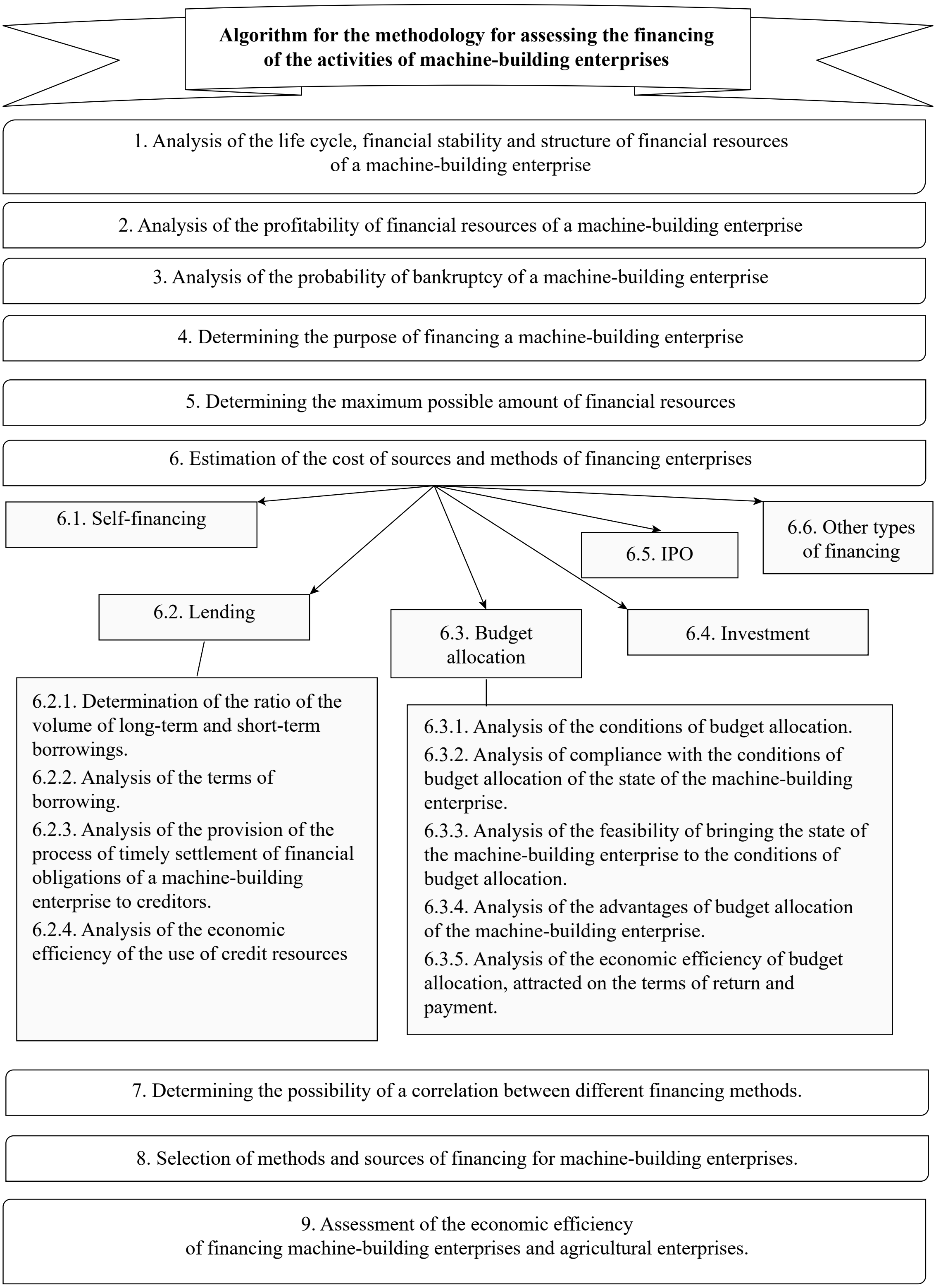

Figure 2 – Algorithm for the assessment of the financial security of financing the activities of machine-building enterprises

Source: Developed by the author based on [4–12]

The financial activities of machine-building enterprises are considered as a complex of organizational, methodological and practical actions aimed at the formation, distribution and rational use of financial resources to achieve strategic and tactical goals. The main tasks of financial activities are to ensure the financing of current operations, search for internal reserves to increase profitability, fulfill obligations to counterparties, create a resource base for investment and reproduction, as well as to exercise control over the targeted use of financial resources.

An important place in this system is occupied by financial planning and forecasting, which include determining resource needs, planning the volume of income, expenses, tax payments and profit. Financial analysis and control are used to assess the financial condition of the enterprise, identify deviations from planned indicators, determine internal reserves and adjust the strategy. Operational financial activities ensure the daily solvency of the enterprise, make settlements with suppliers, the budget, personnel and banks. The results of analytical work and control form the basis for improving the mechanism of financial flow management and increasing the efficiency of resource use.

Financial support for the activities of machine-building enterprises involves the allocation of a certain amount of financial resources to implement the tasks of the financial policy of the business entity. It has both a securing and regulatory effect. The securing function consists in determining the sources of financing for everyday needs, which reflects the passive influence of financial support. The regulatory function exerts an active influence by providing sufficient financial resources and determining specific forms of their use, aimed at achieving the strategic and tactical goals of the enterprise's development.

Analysis of budget allocations for a machine-building enterprise is shown in Table 1.

Table 1 – Analysis of budget allocations for a machine-building enterprise

№ n/a	Analysis stage	Analysis content	Expected results/conclusions
1.	Analysis of budget allocation conditions	Study of regulatory legal acts that regulate the procedure for providing budget funds, determining the volumes, terms, and intended purpose of funding.	Determining the legal and economic framework for obtaining appropriations
2.	Analysis of compliance with the conditions of budget allocation of the state of a machine-building enterprise	Assessment of the financial, production and organizational indicators of the enterprise for compliance with the criteria for receiving budget support.	Establishing the ability of the enterprise to apply for budget financing.
3.	Analysis of the feasibility of bringing the state of the enterprise into line with the budget allocation conditions	Determining the costs and timelines required to meet the requirements for obtaining budget funds, taking into account the potential benefits.	Assessment of the rationality of adapting the enterprise's activities to the requirements of the budget program
4.	Analysis of the benefits of budget allocation	Determination of strategic and operational benefits: increased solvency, modernization of production, reduction of credit burden	Identifying key benefits for enterprise development
5.	Analysis of the economic efficiency of budget allocations on the basis of return and payment terms	Calculation of the ratio of costs of raising funds and economic results from their use.	Establishing the level of profitability and efficiency of the budget resources involved.

Source: Compiled by the author

Attracting and effectively using credit resources is one of the key factors in ensuring the sustainable development of machine-building enterprises, since this industry is characterized by high capital intensity of production, long production cycle and significant investment needs. Credit resources allow for the prompt renewal of fixed assets and production capacities without the need for long-term accumulation of own funds, and also provide coverage of the temporary gap between the expenditure and the receipt of revenue. In addition, they create financial prerequisites for conducting research and development, implementing innovative technologies and increasing the level of automation of production processes. Lending also contributes to increasing the flexibility of enterprises in responding to changes in market conditions, maintaining liquidity and timely fulfillment of financial obligations to counterparties and the state. Provided that the return on investment exceeds the cost of the loan, the attracted resources act as an effective tool of financial leverage, contributing to the growth of the profitability and competitiveness of the enterprise in the domestic and foreign markets. The areas of analysis of attracting and using credit resources of a machine-building enterprise are reflected in Table 2.

Levers of influence on the socio-economic development of a machine-building enterprise determine the nature and force of the action of financial instruments, adjust this action and are classified by the direction of influence (incentives or sanctions), by types (norms and standards), as well as by methodological principles that cover the conditions and principles of income formation, savings and funds, as well as financing and lending. In the system of financial indicators, financial categories, indicators and coefficients are distinguished. The use of

Table 2 – Areas of analysis of attracting and using credit resources of a machine-building enterprise

Direction of analysis	Study content	Key analytical indicators	Key analytical indicators
Determining the ratio of long-term and short-term borrowings	Assessment of the structure of the company's loan portfolio by maturity; determination of the optimal balance between long-term and short-term liabilities	– Ratio of long-term to short-term liabilities; – Share of long-term loans in total liabilities	Formation of a liability structure that minimizes liquidity and financial instability risks
Analysis of engagement conditions	Assessment of interest rates, loan terms, availability of benefits and penalties; comparison with market conditions	Weighted average interest rate on loans; – Deviation of conditions from average market values	Determining economically advantageous sources of credit resources and optimal conditions for their attraction
Analysis of the provision of the process of timely settlement of financial obligations to creditors	Assessment of solvency and liquidity for timely repayment of debt obligations	– Current liquidity ratio; – Absolute liquidity ratio; – Interest coverage ratio	Ensuring financial stability and maintaining a positive credit history
Analysis of the economic efficiency of using credit resources	Assessment of the impact of raised funds on the financial results and profitability of the enterprise	Return on assets taking into account the effect of financial leverage; – Profit growth obtained from credit funds	Optimization of loan volumes and directions to maximize profitability

Source: Compiled by the author

financial categories as indicators is limited, since they are mainly theoretical abstractions of economic relations and cannot be used as a full-fledged information base. In contrast, financial indicators reflect the quantitative characteristics of financial relations and allow assessing the scale of the enterprise's financial activities.

Financial coefficients, as relative indicators, perform an evaluation function, providing the possibility of analyzing the effectiveness of financial operations, provided that the criteria of completeness, reliability and timeliness of data are met. Thus, the financial mechanism acts as a comprehensive management system that ensures the organization and coordination of the enterprise's financial activities. Its application allows solving a wide range of tasks related to ensuring solvency, optimizing financial flows and increasing profitability. At the same time, it is necessary to take into account that finance has a secondary role in distribution relations, since the main regulation takes place in the production sphere.

Organizational support for financial work at machine-building enterprises depends on their scale and structure. Large enterprises have a financial department, which can be divided into sectors and groups responsible for individual areas of work. If there is a significant volume of foreign economic operations, currency settlement and currency control groups are created. At medium-sized enterprises, financial management functions can be performed by separate sectors within the accounting department, and at small enterprises, by a chief accountant or accountant who combines accounting with financial planning.

In modern conditions of economic development, the financial mechanism of enterprises is constantly being improved. This includes the formation of prerequisites for the development of market relations, ensuring rational proportions of the distribution of gross national product, overcoming the consequences of financial crises, introducing scientifically sound financial planning, increasing the efficiency of financial control, improving the action of financial levers, incentives and sanctions, as well as strengthening the legal and regulatory basis for the functioning of the system.

Conclusions. The financial mechanism of a machine-building enterprise is an integrated system that combines strategic and operational tools for influencing economic results, ensures a balanced allocation of resources and creates conditions for the realization of production potential in a competitive environment. Its effectiveness directly depends on the ability of the enterprise to adapt financial strategies to changes in the market and macroeconomic environment, as well as on the level of professional training of management personnel. Further research should be aimed at developing methods for quantitatively assessing the impact of individual elements of the financial mechanism on the performance of machine-building enterprises, which will contribute to increasing the efficiency of management decisions and the financial stability of the industry.

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ТЕОРЕТИЧНІ ОСНОВИ МЕХАНІЗМУ ФІНАНСОВОЇ ДІЯЛЬНОСТІ МАШИНОБУДІВНИХ ПІДПРИЄМСТВ

Анотація. *У статті досліджено теоретичні основи формування та функціонування механізму фінансової діяльності машинобудівних підприємств як складової системи їх стратегічного розвитку. Обґрунтовано, що фінансова діяльність у сучасних умовах трансформації економіки виступає не лише інструментом забезпечення операційної стабільності підприємства, але й ключовим чинником реалізації його довгострокового потенціалу зростання. Розкрито зміст поняття «фінансовий механізм» у контексті господарського механізму підприємства, визначено його структурні елементи, функції та принципи дії. Наголошено на важливості гармонізації внутрішніх фінансових процесів із зовнішнім економічним середовищем, що особливо актуально для машинобудівних підприємств із тривалими виробничими циклами та високим рівнем капіталоємності. У процесі дослідження проведено аналіз наукових підходів до трактування фінансового механізму підприємства, зокрема у працях українських та зарубіжних економістів. Визначено тенденції розвитку теоретичних досліджень 2022–2024 років, у яких акцентується увага на стратегічному фінансовому плануванні, прогнозуванні, інвестиційній привабливості та цифровізації фінансових процесів. Здійснено узагальнення впливу воєнних і кризових факторів на систему управління фінансами підприємств, що зумовило посилення потреби у формуванні гнучких, адаптивних і інноваційно орієнтованих фінансових механізмів. У статті визначено основні проблеми фінансової діяльності машинобудівних підприємств: фрагментарність фінансового планування, недостатній рівень інтеграції фінансових і виробничих стратегій, обмеженість джерел інвестиційного фінансування та низька ефективність використання фінансових ресурсів. Обґрунтовано, що вирішення зазначених проблем потребує вдосконалення фінансового механізму шляхом упровадження сучасних інструментів фінансового планування, контролю та прогнозування, розвитку цифрових платформ управління фінансами, а також формування системи ризик-менеджменту на підприємствах. Зроблено висновок, що ефективне функціонування фінансового механізму є передумовою підвищення стійкості машинобудівних підприємств до зовнішніх шоків, забезпечення їх конкурентоспроможності та створення бази для сталого економічного розвитку галузі в цілому. Розроблені теоретичні узагальнення та практичні пропозиції можуть бути використані у подальших дослідженнях фінансової стратегії промислових підприємств і при формуванні політики державної підтримки машинобудівного сектору.*

Ключові слова: *фінансова діяльність, фінансовий механізм, підприємство, господарський механізм, машинобудівна галузь, фінансове планування.*

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