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### ESTIMATING ECONOMIC EFFICIENCY OF ENTERPRISESE FUNCTIONING

The article analyzes the essence and significance of the mechanism for assessing the efficiency of production activities. The main aggregate indicators of comprehensive assessment of economic efficiency of enterprises are identified. The main approaches to assessing the efficiency of production activities of the enterprise are analyzed and systematized. The use of econometric modeling is proposed to increase the reliability of the assessment of production efficiency. Improved theoretical foundations of the concept of "efficiency of the enterprise" as a property and ability of the enterprise to formulate and achieve its goals, taking into account the influence of external factors and using internal operating conditions, to achieve goals using all available resources and tools to solve social, environmental, budgetary and other problems of both society and the enterprise at the established ratio of expenses and results. The main theoretical and methodological approaches to assessing the economic efficiency of enterprises are considered. The main approaches to assessing the efficiency of production activities of the enterprise are analyzed and systematized. The use of econometric modeling is proposed to increase the reliability of the assessment of production efficiency. The expediency of such an assessment by determining the dependence of the efficiency of production activities on the partial indicators of the evaluation mechanism in modern industrial enterprises by traditional and multifactorial approaches is substantiated. The main elements of the assessment of the efficiency of production activities of the enterprise are identified and the integrated indicator of the assessment of the efficiency of production activities is determined. The expediency of such an assessment by determining the dependence of the efficiency of production activities on the partial indicators of the evaluation mechanism in modern industrial enterprises by traditional and multifactorial approaches is substantiated. The main elements of the assessment of the efficiency of production activities of the enterprise are identified and the integrated indicator of the assessment of the efficiency of production activities is determined. The article examines the main approaches to establishing the essence of economic attractiveness and economic efficiency of investment projects. Methodical approaches to assessing the economic attractiveness and cost-effectiveness of investment projects are explored. The main stages of evaluating the economic attractiveness and efficiency of the investment project have been established.

Keywords: economic efficiency; development; criterion for evaluation of efficiency; efficiency; rational use; benefits; essence.

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### ОЦІНКА ЕКОНОМІЧНОЇ ЕФЕКТИВНОСТІ ВИРОБНИЧОЇ ДІЯЛЬНОСТІ ПІДПРИЄМСТВ

У статті проаналізовано сутність та значення механізму оцінки ефективності виробничої діяльності Визначено основні агреговані показники комплексного оцінювання економічної ефективності підприємств. Проаналізовано і систематизовано основні підходи до оцінки ефективності виробничої діяльності підприємства. Запропоновано використання економетричного моделювання для підвищення достовірності оцінки ефективності виробничої діяльності. Удосконалено теоретичні засади поняття «ефективність діяльності підприємства» як властивості та здатності підприємства формулювати і досягати свої цілі, враховуючи впливу зовнішніх чинників і використовуючи внутрішні умови функціонування, досягати поставлених завдань, використовуючи всі наявні ресурси й засоби для розв'язання соціальних, екологічних, бюджетних та інших проблем як суспільства, так і підприємства за встановленого співвідношення витрат і результатів. Розглянуто основні теоретико-методичні підходи до оцінювання економічної ефективності підприємств. Проаналізовано і систематизовано основні підходи до оцінки ефективності виробничої діяльності підприємства. Запропоновано використання економетричного моделювання для підвищення достовірності оцінки ефективності виробничої діяльності. Обґрунтовано доцільність здійснення такої оцінки шляхом визначення залежності ефективності виробничої діяльності від часткових показників механізму оцінювання на сучасних промислових підприємствах за традиційним та багатофакторним підходами. Виділено основні елементи оцінки ефективності виробничої діяльності підприємства та визначено інтегральний показник оцінки ефективності виробничої діяльності. Обгрунтовано доцільність здійснення такої оцінки шляхом визначення залежності ефективності виробничої діяльності від часткових показників механізму оцінювання на сучасних промислових підприємствах за традиційним та багатофакторним підходами. Виділено основні елементи оцінки ефективності виробничої діяльності підприємства та визначено інтегральний показник оцінки ефективності виробничої діяльності. У статті досліджені основні підходи до встановлення сутності економічної привабливості та економічної ефективності інвестиційних проектів. Встановлено, що мета оцінювання економічної привабливості - встановлення результативності використання ресурсів суспільства в межах проекту, економічної ефективності – оцінка доцільності використання дефіцитних (обмежених) ресурсів суспільства у рамках конкретного проекту.

**Ключові слова:** економічна ефективність; розвиток; критерій оцінки ефективності; результативність; раціональне використання; переваги; сутність.

## Э.Д. ШЕЯНОВА

# ОЦЕНКА ЭКОНОМИЧЕСКОЙ ЭФФЕКТИВНОСТИ ПРОИЗВОДСТВЕННОЙ ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЙ

В статье проанализированы сущность и значение механизма оценки эффективности производственной деятельности Определены основные агрегированные показатели комплексной оценки экономической эффективности предприятий. Проанализированы и систематизированы основные подходы к оценке эффективности производственной деятельности предприятия. Предложено использование эконометрического моделирования для повышения достоверности оценки эффективности производственной деятельности. Усовершенствованы теоретические основы понятия «эффективность деятельности предприятия» как свойства и способности предприятия формулировать и достигать свои цели, учитывая влияния внешних факторов и используя внутренние условия функционирования, достигать поставленных задач, используя все имеющиеся ресурсы и средства для решения социальных, экологических, бюджетных и других проблем как общества, так и предприятия при установленном соотношение затрат и результатов. Рассмотрены основные теоретико-методические подходы к оценке экономической эффективности предприятий. Проанализированы и систематизированы основные подходы к оценке эффективности производственной деятельности предприятия. Предложено использование эконометрического моделирования для повышения достоверности оценки эффективности производственной деятельности. Обоснована целесообразность осуществления такой оценки путем определения зависимости эффективности производственной деятельности от частных показателей механизма оценки на современных промышленных предприятиях по традиционному и многофакторным подходами. Выделены основные элементы оценки эффективности производственной деятельности предприятия и определены интегральный показатель оценки эффективности производственной деятельности. Обоснована целесообразность осуществления такой оценки путем определения зависимости эффективности производственной деятельности от частных показателей механизма оценки на современных промышленных предприятиях по

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традиционному и многофакторным подходами. Выделены основные элементы оценки эффективности производственной деятельности предприятия и определены интегральный показатель оценки эффективности производственной деятельности. В статье исследованы основные подходы к установлению сущности экономической привлекательности и экономической эффективности инвестиционных проектов. Установлено, что цель оценки экономической привлекательности - установление результативности использования ресурсов общества в рамках проекта, экономической эффективности - оценка целесообразности использования дефицитных (ограниченных) ресурсов общества в рамках конкретного проекта.

**Ключевые слова**: экономическая эффективность; развитие; критерий оценки эффективности; результативности; рациональное использование; преимущества; сущность.

**Introduction.** The problem of production efficiency has always been one of the most important economic problems science. Interest in it arises at different levels economic management - from private enterprise owners to heads of state.

The current stage of development of market relations in Ukraine requires domestic entities management of active actions for increase efficiency of their functioning. Continuousenterprise development is the key to efficiency and performance of the enterprise.

It is the efficiency of operation that maintains a high level of competitiveness business entity [1, p. 115–118].

In modern conditions, in times of great competition, the goal of business entities is to obtain maximum profits with minimum costs, the main task of managers at all levels there are not so many quantitative indicators activities of the enterprise, how many of them are high quality characteristics, management efficiency.

**Setting objectives.** The purpose of the article is the study and improvement of methodological support for the evaluation of economic efficiency development of sugar beet production enterprises for their survival in the realities of a market economy and integration into the world economic system.

**Results.** The problem of efficiency of subjects management is devoted to a large number works of foreign scientists, in particular, N. Menkew, K. McConnell, S. Brew, P. Drucker, A. Tender, D. Sink and others. In turn, the issues of efficiency and effectiveness of production were studied by such domestic scientists, as A. Zagorodniy, O. Ivanilov, V. Kulishov, L. Melnyk, E. Mnykh, V. Osipov, E. Pelikhov, A. Podderogin, V. Tkachuk and others. The decisive factor in the economic and social development of society is to improve the efficiency of the functioning of enterprises agricultural production. The concept of economic efficiency of enterprises as universal for all types of economic activity categories characterizes [2, p. 52].

To evaluate cost effectiveness production uses the criterion and system economic indicators. The criterion is a sign on on the basis of which the activity is evaluated or the parameters for the future are determined.

The use of new and production technology, the prevention of unnecessary costs, disadvantages in work is to find reserves of increase efficiency and survival in competition, strengthening market positions. Methodical approach to determining performance businesses remain well known: results of operations are compared with costs or the resources that provided this result.

**Presentation of the main research material.** Analysis of the scientific literature shows that economic efficiency is a complex and multifaceted category of modern economics, which arose simultaneously with the

formation of the period material production and which does not have an unambiguous definition and interpretation and depends on the optimally justified ratio of costs and production results. IN the process of scientific research must be addressed attention to assessing the efficiency of enterprises as the final stage of financial and management analysis of economic activity of enterprises.

Evaluation of economic efficiency of production and economic activities of enterprises is carried out using a set of different scientific sound and interrelated indicators, providing a comparative description of the costs that were used to produce products with the final results. Today, there is no single defined system indicators, as well as their classification, based on which can conduct a detailed analysis of economic efficiency of enterprises.

Determining the essence of the efficiency of the enterprise will help delimitation and a clear definition of such categories as the result of the enterprise, the effect, the efficiency of the enterprise and the criterion of efficiency [3, p. 63–76].

Evaluation of the functioning of the enterprise determined by the characteristics of this activity and generally characterizes the consequences of its activities in operational, investment, financial, social, environmental, scientific and technical and others areas. Operational results can be determined taking into account the amount produced (sold) products. But not always an estimate activity is due to the number of quality products. In most cases, the operation of the enterprise is of poor quality products (lack).

Marriage is a negative, but still a result. The results of financial activities can be received payment for rent of the basic funds, dividends and interest received, income from equity participation in the activities of other enterprises, etc. To scientific and technical results include income from the sale of rights to create intellectual property in the enterprise property.

Social, environmental and other non-economic the results of the operation of the enterprise are taken into account in the calculations of efficiency, if they have a value expression. Social and environmental performance of the enterprise may be negative. Example, the consequences of the activities of the enterprise that pollutes the environment, or social the consequences of automation of the production sphere on an enterprise located in a region that has a surplus of labor, provided that such mechanization will be accompanied by a reduction in the number of employees.

Effect - a concept that depicts excess performance over costs for a certainperiod. The effect is characterized by indicators differing in the content of costs and results and ways to determine the costs and results incurred in Вісник НТУ «ХПІ» Економічні науки

different periods. But the absolute valueffect, as a rule, does not indicate the level of efficiency of the enterprise. The effect of the activity can be the same and the degree level use of borrowed resources - different.

The efficiency of the enterprise is the concept that determines the relevance of the resultsand costs of the enterprise for the purposes of activity and interests of owners [3, p. 61]. The concept of "efficiency" involves comparing the resultsactivities with the amount of costs. Because the c ompany is an open system and operates in within a certain national economy, the problem the effectiveness of its activities can be considered from different positions.

Quite often the results of the project are reflected not only in the clear benefits and costs of society, but also in the insignificant manifestations of these indicators, which are quite difficult to quantify.

When selecting and evaluating projects, they are determined the most significant insignificant benefits and costs that are trying to quantify.

If it is impossible to make an accurate quantitative estimation of the implicit costs and benefits of the project, which reflect their social significance, succeed to the assessment of the minimum benefits that justify the necessary decision costsabout the feasibility of the project.

The economic consequences of projects usually include:

- reduction of prices for individual goods and services due to new sales channels, improvement
  - production technologies;
  - elimination of shortages of certain goods;
- optimization of consumption patterns, which corresponds to the level of development of society [4, p. 89].

An example of the external influence of the project be a reduction in the cost of operating road transport after the implementation of the project reconstruction of highways. Cost reduction is usually accompanied by a reduction prices set by the manufacturer for the consumer.

Consumers benefit when prices fall - the ability to use real savings revenue for other goods or increase consumption of these products. Projects focused on lowering market prices increase project returns by the value of consumer surplus growth.

Consumer surplus is the difference between the maximum price that the consumer is ready pay per unit of production and the real one the amount of price he actually paid

Unlike the project financier, the economist determines all the externalities (side effects) that accompany him. Under the externalities understand all the benefits and costs it entails project and which have no direct impact for the project and therefore not included in its financial analysis. Side effects can be as both positive and negative. Existing types effects and their possible manifestations.

The effects of changing distribution channels (advertising, direct

- sales)
- 1. Population dissatisfaction
- 2. Increased aggression

- 3. Invasion of privacy
- 4. Violation of social norms

But we must strive to identify and evaluate the most important of them, and to consider their qualitative aspect.

In cases where projects have a direct impact on society, such as the development of district infrastructure, the creation of additional jobs, there is a multiplicity an effect that reflects the interdependence of investment and income

The project can have both positive and negative consequences. For example, creating new workers places leads to increased solvency population, which will increase the level of national income, increase the income budget. Increasing solvency gives the impetus for the development of new industries, which initially produce consumer goods and then industrial products. However, an assessment of these effects have the danger of a double result unreasonable overestimation of the project impact level

In order to avoid repeated consideration of the positive and negative effects of the project results on the economies of the regions and regions, countries in overall, they use calculated metrics animations for specific sectoral, cross-sectoral and regional development models.

The methodology of economic evaluation of the project gives be able to use a rich methodological arsenal and tools to determine the feasibility of implementing the project in terms of overall welfare. However, it should be remembered that the analyst who prepares the economic analysis, plays the role an expert on the effectiveness of macroeconomic policy of a country whose conclusions and evaluations are of interest for finding new benefits to society in within the framework of national development [5, p. 324].

# Calculation of raw material costs

The systems approach involves finding the necessary tools, evaluated in absolute or relative categories, and external productivity enterprises.

Analyzing the works of domestic and foreign scientists, we note that the question is increase the economic efficiency of production and the choice of a system of indicators for analysis are comprehensively studied. Next we will consider system of aggregate indicators for evaluation.

Conclusions. In order to fully analyze the activities of the enterprise, to do clear conclusions about its condition, it is necessary to consider the system of indicators as a whole. Indexes, which characterize the enterprise, it is necessary analyze in the dynamics, the optimal period for comparison of indicators the period of time in 3–5 years is considered as it is possible to trace this or that dynamics accurately for this period, while identifying certain patterns on the basis of which to formulate an action plan to eliminate existing deviations.

To evaluate economic efficiency sugar beet production is used a system of indicators, which is due to its specificity, versatility and dependence on a number various natural, production and technological and economic groups of factors.

Improving the efficiency of the sugar beet complex involves strategic approaches to analyze the situation on the domestic and global sugar markets, solving the real № 5'2020 ISSN 2519-4461 (print)

state support for manufacturers, controlled imports, removal of customs restrictions on export operations.

Agriculture cannot normally to develop without external financial support. Businesses in the industry should not only have access for short-term but also for long-term loans, without which the restoration of their material base is not possible. Investment needs to be strengthened attractiveness of the industry, including working on attracting foreign investment.

The determination of the economic attractiveness of the project is linked to the assessment it in terms of the possibility of achieving certain economic goals of the country's development. Rating the economic efficiency of the project is carried out with to determine the effectiveness of the use of community resources within the project.

To determine the economic value of the project use the concept of alternative cost, shadow prices, insignificant benefits and costs, transfer payments, consumer surplus and externalities. Finding out the economic value the project provides an opportunity to assess how much the benefits outweigh its costs to society, what will be the value of the nation's benefits in the event of the project.

Research on the impact of the project on the economy the country should be accompanied by identification of the side effects of the project and their consequences. Analysts should only track and measure the most important externalities as they evaluate everything the side effects of the project are almost impossible, and inappropriate.

The implementation of the project can contribute to the reduction prices for consumer goods and services (increase consumer surplus), elimination of shortages of any commodity, development of infrastructure of districts, creating more jobs and more. Such economic results should be taken into account when evaluating the cost effectiveness of the project.

This is especially important in modern conditions in connection with the adaptation of industrial enterprises to the dynamics of market conditions under the influence of various factors of uncertainty and risk. Modern production is a complex dynamic system of stream processes, characterized by a multitude of variable parameters and variables. Functioning in a market economy, production systems are influenced by various types of external and internal disturbing factors that reduce their effectiveness. Environmental factors, having an unequal degree of structure, have a diverse effect on business processes in the production system at various levels of formation of management decisions.

The development trend of industrial enterprises, especially those producing high-tech products, shows that the transition begins from "lean" production to the so-

called "active", which has the ability to successfully operate in poorly predictable, rapidly changing conditions with elements of uncertainty.

Currently, two main factors determine the development of the countries of the world community the sufficiency of raw materials (energy) resources and the level of development of high-tech products. The presence and effective use of at least one of these factors is a necessary condition for the successful development of the country in the short and medium term, but insufficient for the long term. With a certain degree of approximation, this situation can be transferred to individual enterprises and large-scale projects.

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