

## **ANALYSIS OF THE CONCEPT "RESOURCES" AND THE MECHANISM OF THEIR EFFECTIVE FORMATION**

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**Introduction.** In modern market conditions, manufacturers are faced with an acute task of finding ways to ensure a high level of competitiveness, which requires the introduction of measures designed to improve the efficiency of using all the components of the enterprise's economic system. The main task of entrepreneurial activity is to obtain as much net profit as possible, which encourages entrepreneurs to constantly search for reserves and directions for improving the efficiency of using the resources they control. This issue becomes especially relevant for large industrial enterprises, which is explained by the need to use a significant amount of various resources in their production activities. In order to improve the use of resources, it is necessary to identify and evaluate the factors and factors that affect the generalizing indicators of their use: fund intensity and fund return, labor productivity, etc.

The relevance of the chosen topic is due to the fact that the issue of efficient use of resources has always aroused increased interest, not only among business leaders and employees of economic departments, but also scientists. The authors repeatedly turn to the study of this topic in order to find theoretical and practical directions for reducing costs, and therefore increasing competitiveness in the markets.

**Review of the recent research and publications sources.** Economists, researchers, scientists, and practitioners constantly pay a lot of attention to the study of resource availability and their effective use. In particular, they are widely covered in many scientific works, manuals, and textbooks of their best practices [1-8].

Determine the external resources that could increase social enterprises' efficiencies and performance, are the key management issues for the external supportive bodies. Guiding by the resource dependence theory, this cross-nation quantitative study established a framework to examine the most prominent external resources (i.e., financial and training supports), which were mediated by formal business planning, towards the financial and social performance of social enterprises in the emerging contexts (i.e., Malaysia and Singapore) [1].

Based on general theoretical analyses of the integration of scientific and technological resources and polarization effect, authors proposed a research model to explore the relationship between the integration of scientific and technological resources, polarization effect, and enterprise's innovation ability in emerging economies, specifically using the data from Chinese enterprises. Authors empirically found that polarization effect can be used as the intermediary variables between the integration of scientific and technological resources and enterprises' innovation ability. The results provided important insights to enterprises in emerging economies about utilizing the polarization effect of the integration of scientific and technological resources to improve innovation capability [2].

Enterprise Resource Planning (ERP) system is an Information Technology (IT) business solution that enables construction companies and their contractors to manage capital projects effectively and efficiently throughout the project lifecycle. Many studies have demonstrated the benefits of ERP systems in construction, correspondingly, more studies have reported the importance of investigating the critical success factors (CSFs) of the implementation process [5].

Many vendors of Enterprise Resource Planning (ERP) systems claim their products are widely applicable—configurable to meet the needs of any business, whatever the product or service offering. But Make-To-Order (MTO) companies, which produce high-variety and bespoke products, have particularly challenging decision support requirements and it remains unclear whether ERP systems can meet their needs. The paper [7] takes a contingency-based perspective of ERP adoption, assessing the fit or alignment between ERP functionality and a MTO production strategy. MTO features considered include: decision support requirements at critical Production Planning and Control (PPC) stages, idiosyncratic market-related features, typical company size and supply chain positioning, and shop floor configuration. It finds a substantial gap or misalignment between ERP functionality and MTO requirements; for example, between decision support provided by ERP systems and the decision support required by MTO companies at the customer enquiry and design & engineering stages. A research agenda for improving alignment is outlined, with implications for academics, MTO managers and ERP software developers. This includes: developing decision support tools that reflect the customer enquiry management activities of MTO companies; embedding MTO-relevant PPC concepts within ERP systems; and, conducting an in-depth empirical study into applications of ERP systems in MTO companies, assessing their performance impact.

The effect of a Make-To-Order (MTO) production strategy on the applicability and impact of Enterprise Resource Planning (ERP) systems is investigated through a mixed method approach comprised of an exploratory and explanatory survey followed by three case studies. Data on Make-To-Stock (MTS) companies is also collected as a basis for comparison. The exploratory data demonstrates, for example, that MTO adopters of ERP found the system selection process more difficult than MTS adopters. Meanwhile, a key reason why some MTO companies have not adopted ERP is that it is perceived as unsuitable. The explanatory data is used to test a series of hypotheses on the fit between decision support requirements, ERP functionality, and company performance. In general, a poor fit between the decision support requirements of MTO companies and ERP functionality is identified, although certain modules can lead to performance improvements – most notably for Customer Enquiry Management (CEM). MTS companies make more use of planning tools within ERP systems, and it is concluded that production strategy is an important contextual factor affecting both applicability and impact. Follow-up cases with two MTO adopters and one MTO non-adopter develop a deeper understanding of the survey results [8].

It should be noted that there is no single interpretation of the categories "resources" and their composition in the literature.

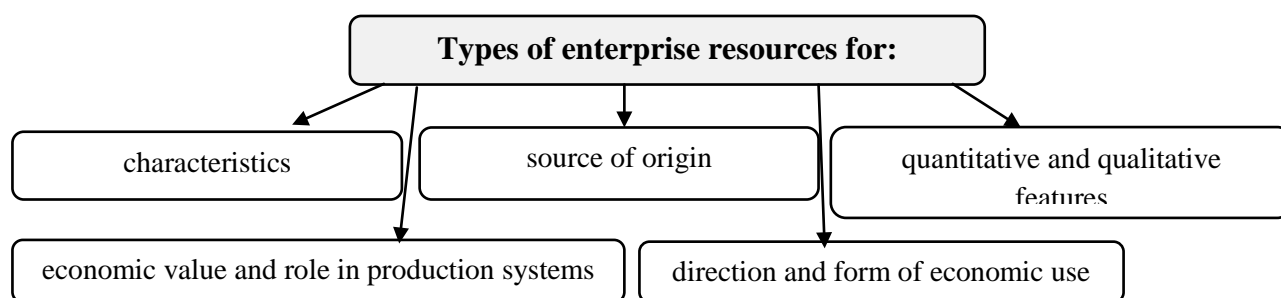
**Task statement.** The aim of the work is to study the concept of "resources" and the mechanism of their effective formation, to study the features of the efficiency of using enterprise resources, and to increase their reserves. This goal led to the solution of the following tasks: disclosure of the essence concept and composition of enterprise resources; analysis of the concept of "resources" and indicators that characterize them; identification of reserves and directions for efficient use of resources.

The object of research in this paper is the resources of the enterprise and the directions of their effective use. The subject of the research is a system of theoretical, methodological and practical aspects related to resources and the efficiency of their use. The methodological basis of the research was made up of general scientific and special methods: synthesis, logical, statistical, grouping, comparison, research of scientific professional sources, economic analysis, stylistic, etc.

**Basic material and results.** The effective operation of any enterprise depends, first of all, on the efficiency of using all types of resources. In this regard, it is extremely important to determine the degree of use of resources, which is the basis for analyzing the efficiency of the economy, calculating the competitiveness of the enterprise. The economic encyclopedia defines the following category of "resources": these are "the main elements of productive potential that the system has and that are used to achieve specific goals of economic development."

They believe that economic resources are a set of means by which a business entity can achieve a goal and get the expected result. The main feature of the category "economic resources" is the use of factors of production in production, the acquisition of a form. Potential resources formed in the capital market are transformed only into actual, real resources (assets) of the enterprise only from the moment of their acquisition, and factors of production from the moment of their intended use. Analysis of the definition of the concept of "resources" by modern scientific methods shows that most researchers understand "resources" as the means and actual opportunity of organizing a business entity, that is, to use their resources efficiently to achieve goals and implement tasks. Resources are an important factor in production. Resource provision is important for the economic environment and the system of all business entities, and this has always been subject to research by economists. The understanding of the essence of resources has been formed in the

modern economic literature and covers a wide range of classification systems. According to different classification criteria, different types of resources are allocated (fig. 1).

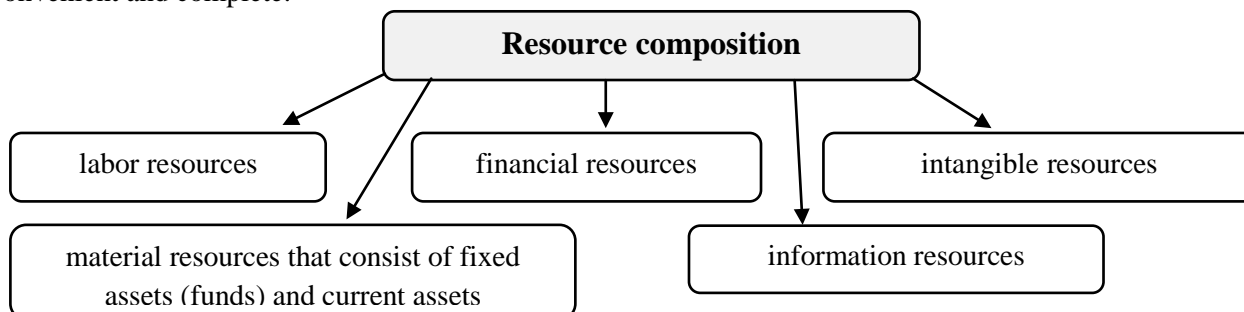


**Fig.1. Types of enterprise resources**

In the literature specializing in economics, some authors divide resources into natural, labor, material, and financial ones. Some authors have also added information resources to this classification. At the same time, natural resources include both their actual reserves, which can be obtained from a technical point of view and those that can be economically profitable at the current stage of technology development, as well as the potential for economic development in the future.

The scientific literature also provides for a more detailed classification of resources. The economic encyclopedia lists the types of resources: natural, technical, technological, personnel, spatial, temporal, structural and organizational, informational, financial, and intangible. They also demonstrate the classification of resources by the main elements of the production process: resources of the means of labor (material and non-material); resources of labor objects; labor resources; information resources. Individual researchers identify resource cells based on corporate activities: resources that serve operational, financial, and investment activities. The following types of economic resources are distinguished: labor, financial, tangible (fixed assets and current assets), intangible and informational.

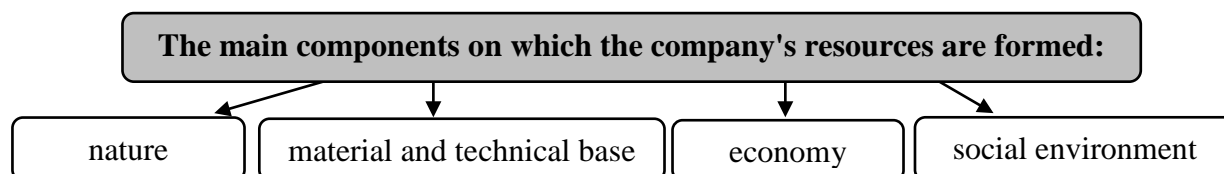
During the study, we came to the conclusion that the classification given in Figure 2 is the most convenient and complete.



**Fig.2. Composition of enterprise resources**

Therefore, we will briefly consider each group of economic resources (fig.3).

Taking into account the importance and significance of using resource conservation strategies in the production process to assess the effectiveness of enterprises and industries in general, we recommend using a set of indicators of systematic resource provision and their types. Taking this into account, we believe that there are objective prerequisites for considering the production potential and resources of an enterprise formed into four main components (fig.4).



**Fig.4. Main components for generating enterprise resources**

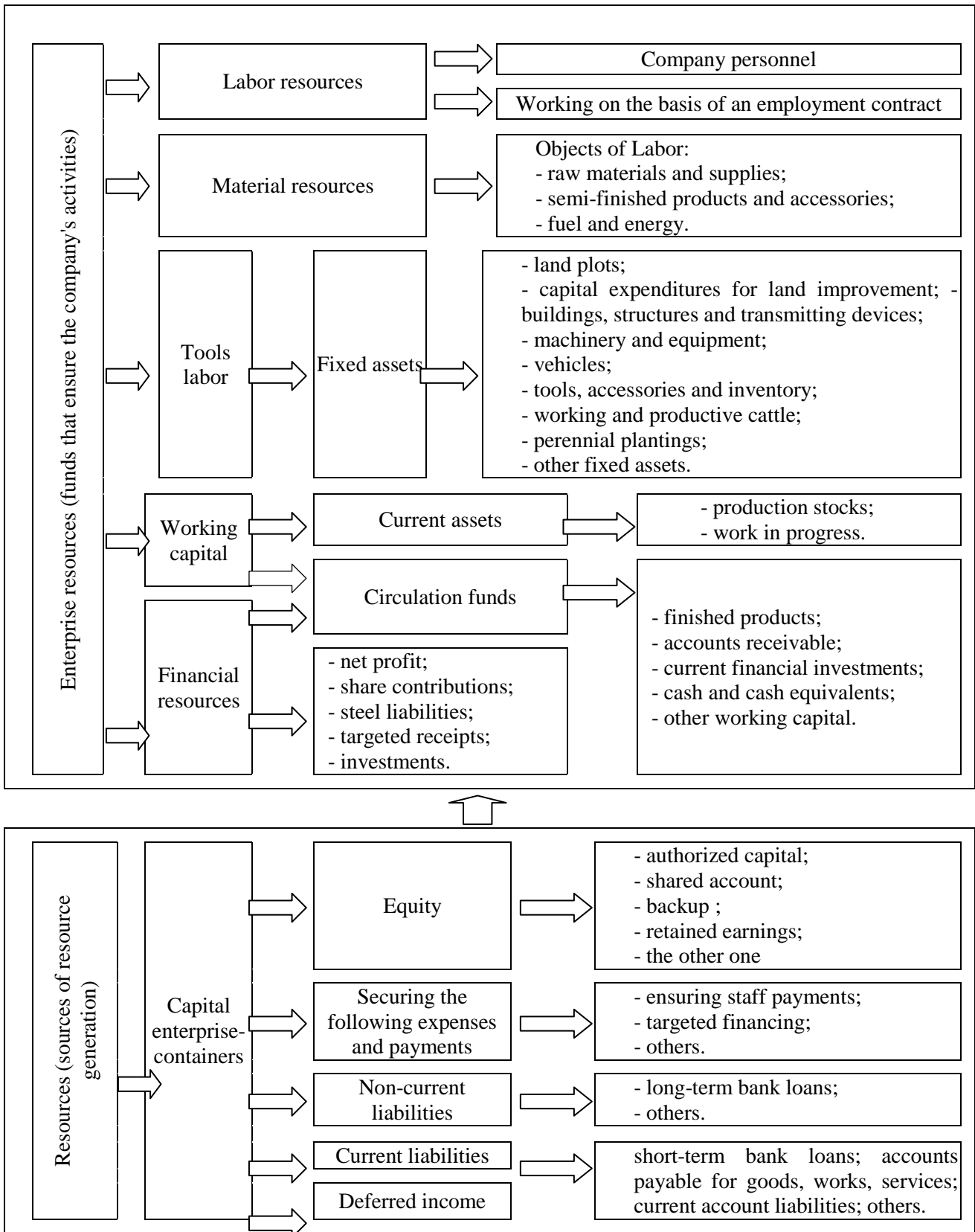


Fig.3. Enterprise resources

In turn, the natural component of potential depends on the available land and water resources and favorable production and climatic conditions (fig. 5).

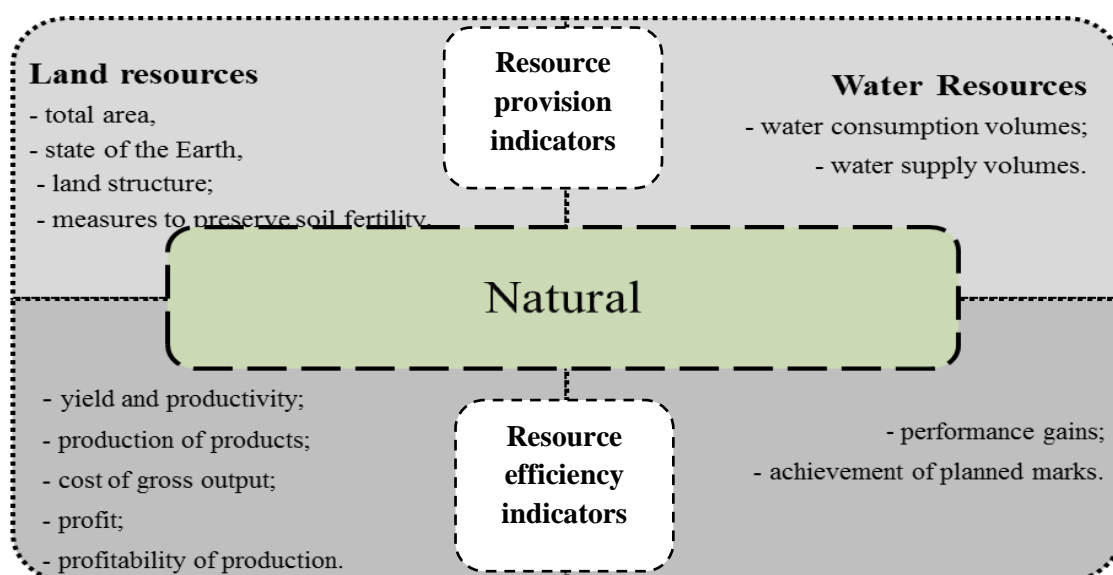


Fig.5. Key indicators of ensuring and efficient use of Natural Resources

The structure of material and technical resources consists of buildings, structures, vehicles, equipment, fuel and energy, building materials, fertilizers, protective equipment, etc. (fig. 6).

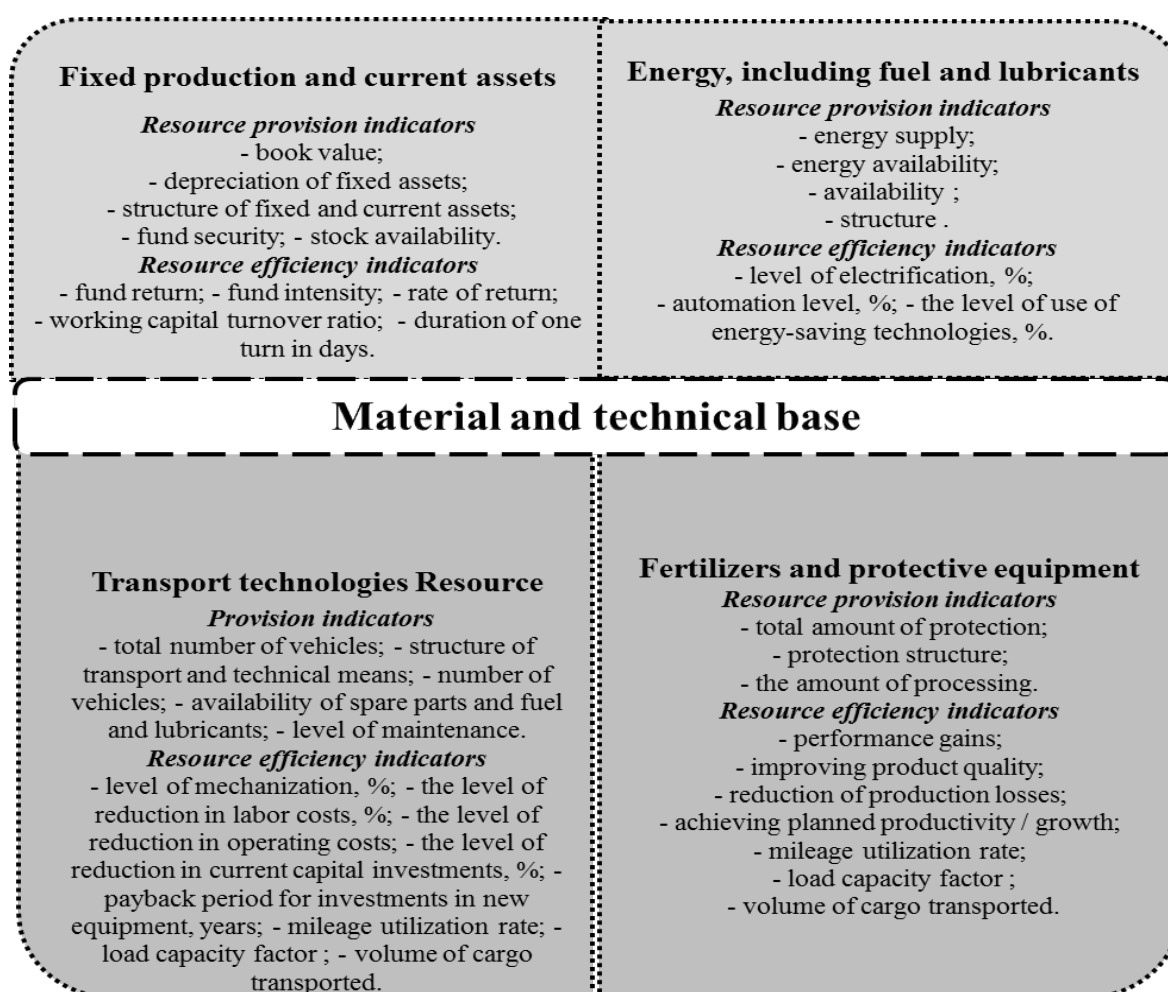
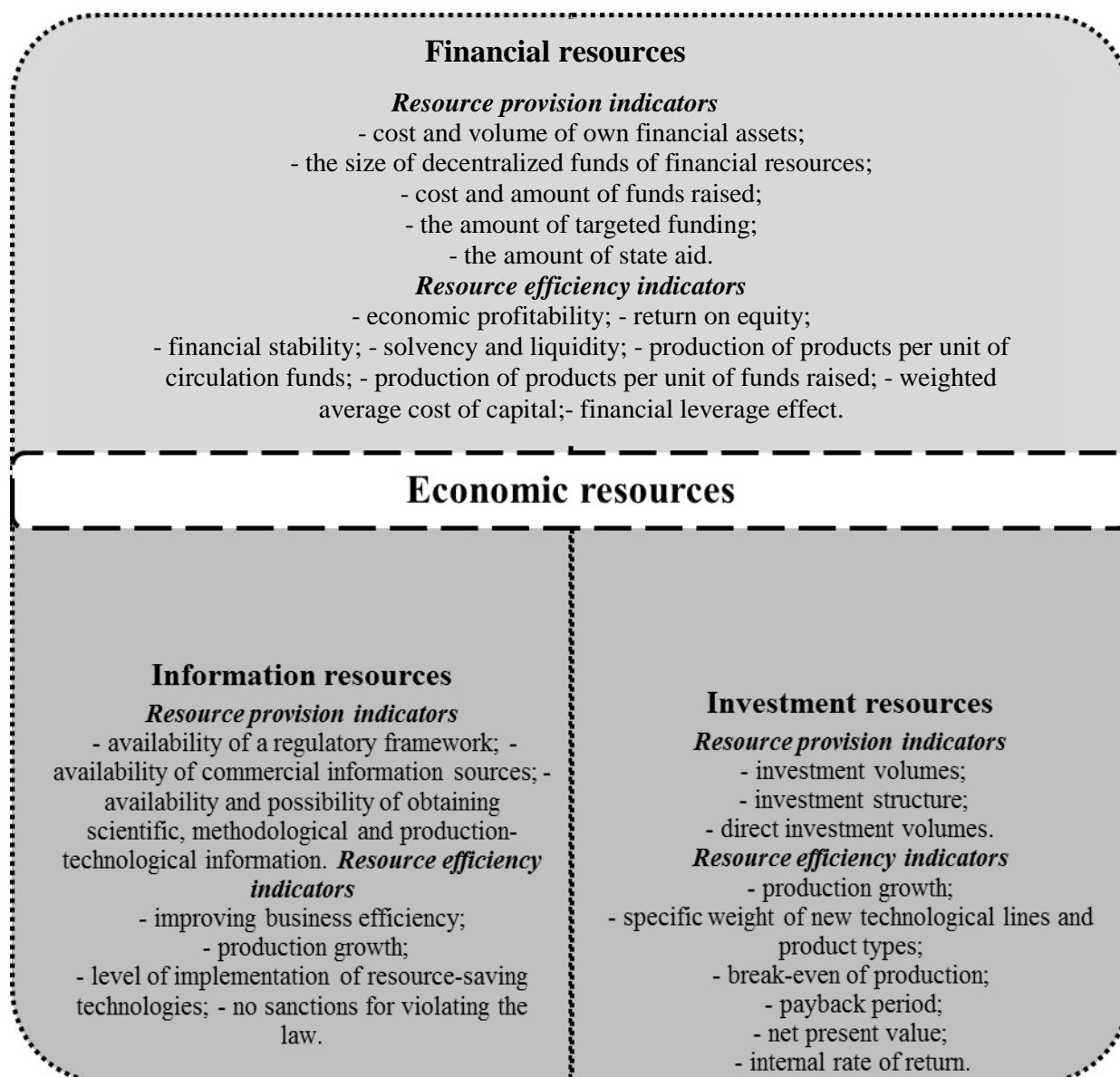


Fig.6. Key indicators of ensuring and efficiency of using material and technical resources

Often, economic resources are the main component of the production potential of enterprises that directly support the production process. The economic component is formed at the expense of material and non-material resources, they participate in production, finance, trade, information, etc. (fig. 7).



**Fig.7. Key indicators of ensuring and efficiency of using economic resources**

The social component is a set of labor resources, management of an enterprise or industry, and the ability of personnel and employees to effectively use available resources. The labor force includes permanent, seasonal, and temporary workers. Improving efficiency and efficiency directly depends on the level of qualification and effective use of labor resources. These resources should be constantly supplemented by highly qualified specialists, knowledge and entrepreneurial resources (fig.8).

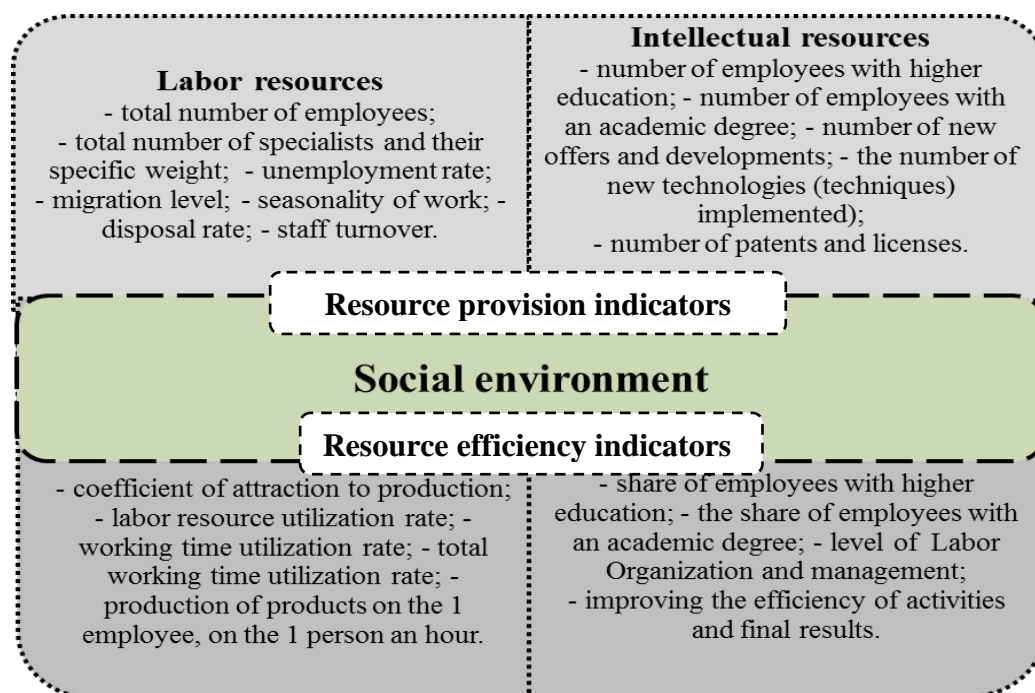


Fig.8. Key indicators of ensuring and efficiency of using social resources

The components of production potential are of a dual nature. Therefore, in terms of functional characteristics, they are uniform in quality, and the degree of influence on production and its results is unequal, since some of them largely determine the final result, while others have less influence. It is important to note that the importance of resources is not constant, but changes with the creation of new elements, such as innovation, knowledge, information, and other resources.

The study of the problem of efficient use of resources defines it as a process of consistent and comprehensive implementation of organizational economic and technical measures aimed at ensuring the economy and rational use of material and raw materials in all sectors of the national economy (fig. 9).

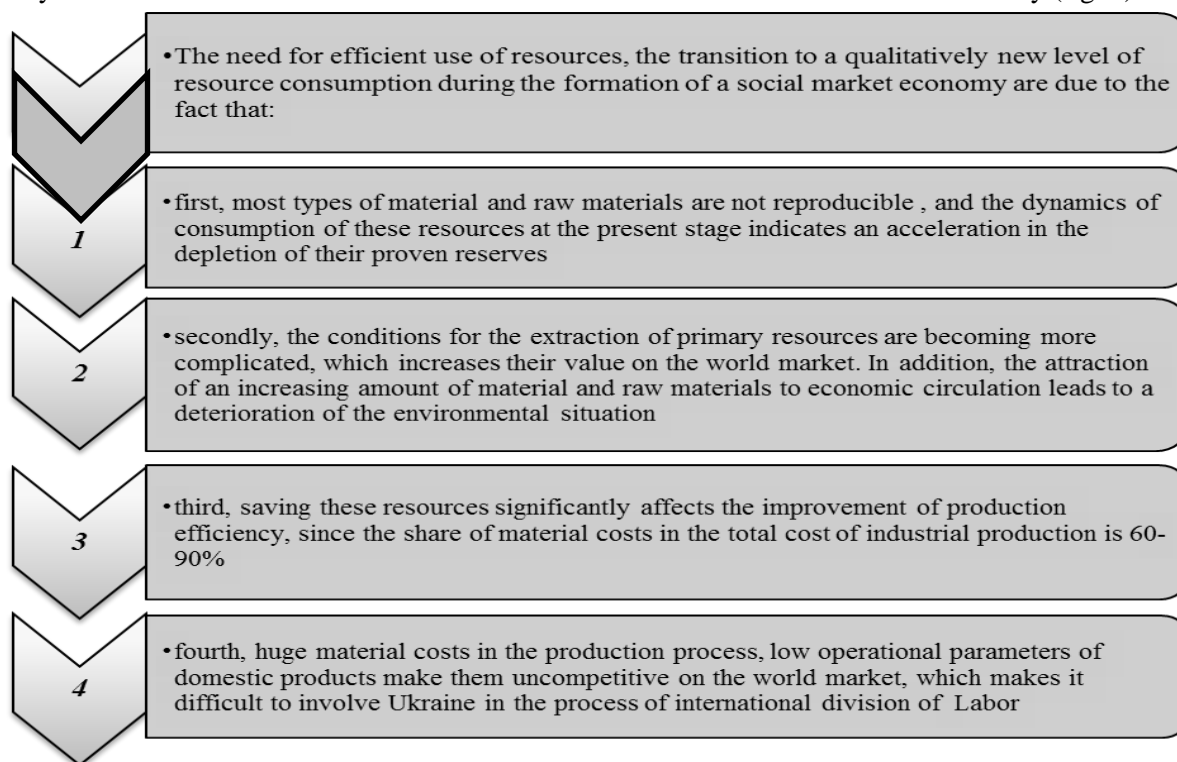
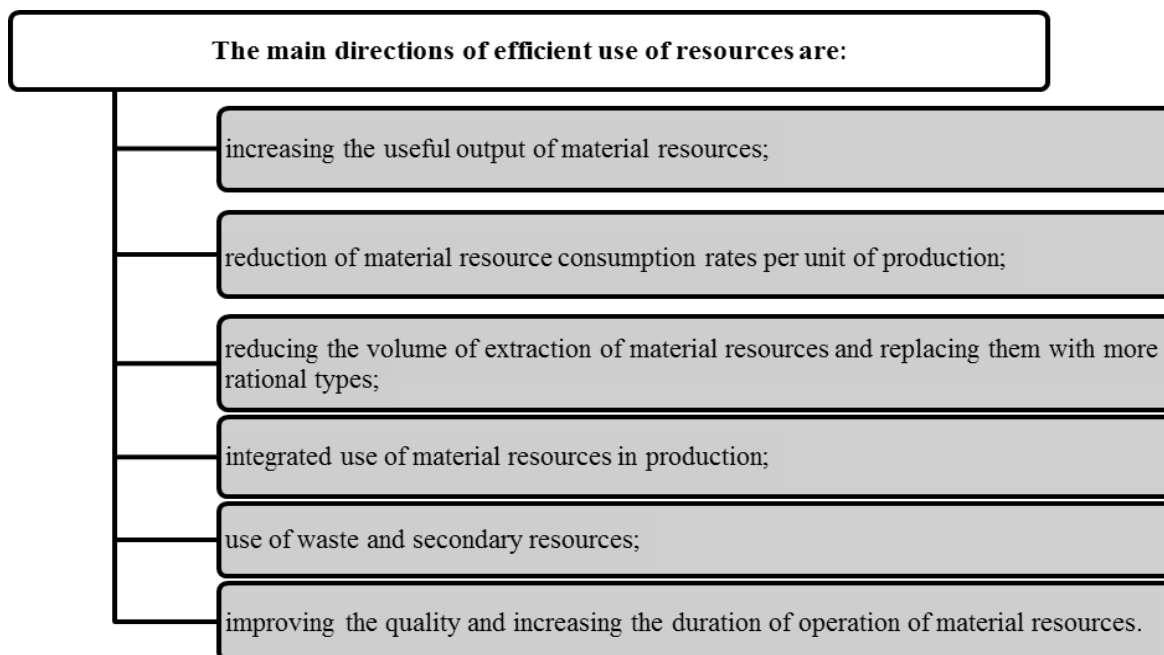


Fig.9. Necessary components for the effective use of enterprise resources in the formation of the social component of the economy

So, an objective condition for economic development in the process of transition to a socially oriented market economy is the creation and implementation of an economic mechanism for efficient use of resources, which should provide economic conditions under which rational resource consumption would be beneficial for all business entities, and the search and sale of reserves were stimulated.

The motivational basis for effective use of resources is the Coordination of individual, collective and state interests in the use of material and raw materials.

The dominance of state interests in resource consumption (in a command and administrative economy) does not ensure rational consumption of resources, since the interest of labor collectives and individual employees in this is insignificant; planning individual interests ignores the interests of the state, gravitating to predatory, wasteful use of resources. Taking this into account, a combination of individual, collective and state interests is optimal for rational consumption and efficient use of resources (fig. 10).



**Fig.10. Main directions of efficient use of resources**

Collective and individual economic interests can be satisfied only with an optimal combination of State, Collective and private ownership of the means of production, since the results of efficient use of resources directly affect the income of owners of the means of production. Therefore, a competitive non-state sector of the economy is an important condition for ensuring this.

The general methodological principle of measuring available reserves in a particular industry is to compare the actual level of resource use (purchase costs) with scientifically based norms and standards, statistical data for several years, or the achieved level of resource use and their costs at industry enterprises after the introduction of the latest achievements in Science, Technology, Technology, production organization. The most objective quantitative assessment for each type of level is a comparative analysis of potential and actually achieved indicators of the use of certain types of resources.

Generalizing indicators of the level of use of enterprise resources are indicators of production per unit of resource expenditure – fund return, labor productivity, and others. Rational use of resources occurs on the basis of the extensive and intensive nature of production, factors of efficiency growth are conditionally divided into organizational and technical (growth of the technical level of production-increase in material and fund return, labor productivity) and organizational and economic (improvement of management, labor organization, structural changes in the volume and assortment of production). The essence of efficient use of resources is shown in Figure 11.



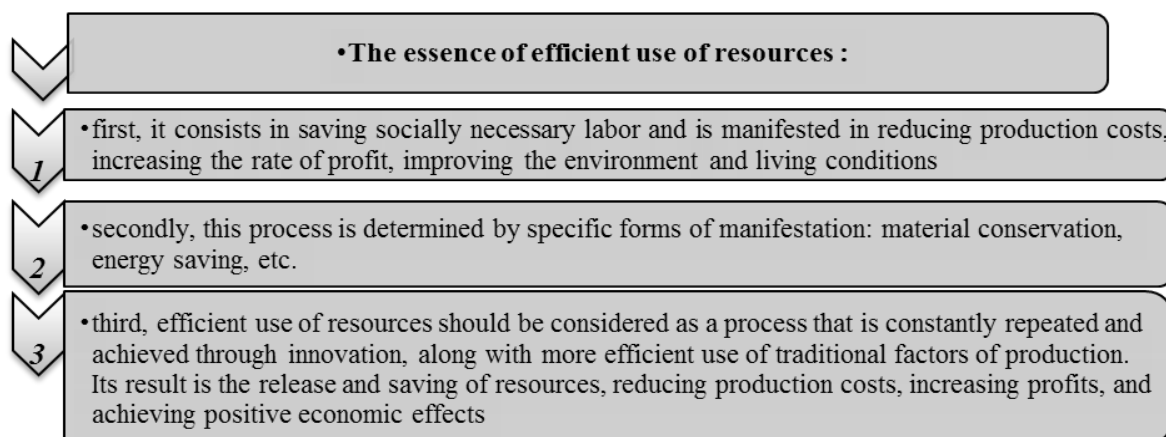


Fig. 11. The essence of efficient use of resources

Production efficiency is ensured by the appropriate economic mechanism (fig. 12).

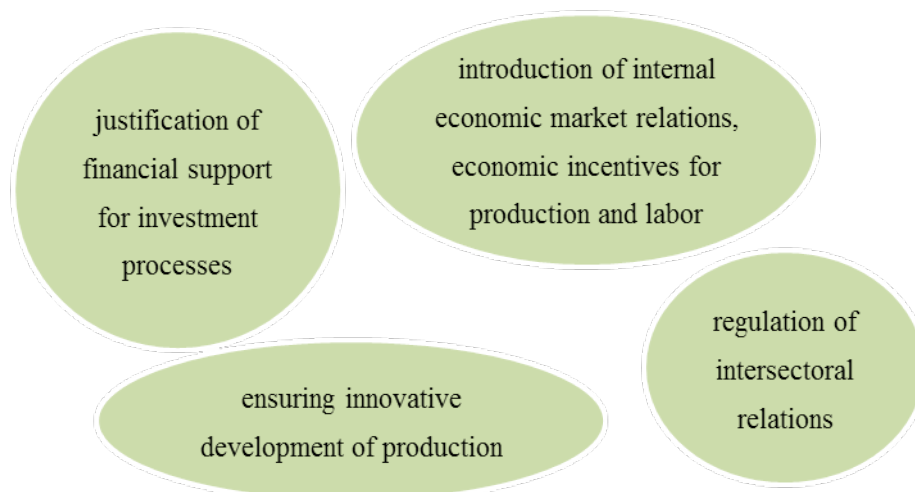


Fig. 12. Elements of an economic mechanism for efficient use of resources

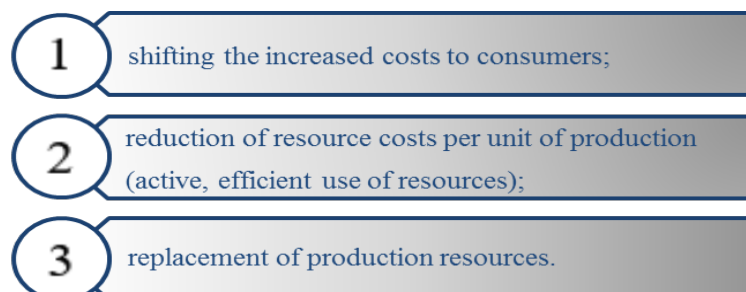
Achieving the goal of efficient use of resources in the system of an economic mechanism for improving production efficiency is carried out through the use of appropriate methods: organizational, economic, technical and technological, administrative. The criterion for effective use of resources is the maximum level of payback of resources (material, land, labor).

The problem of saving and reducing the consumption of raw materials, materials, and energy should be constantly monitored by relevant specialists of enterprises with material-intensive and energy-intensive production. The urgent task of efficient use of resources at enterprises can be positively solved by introducing low-waste and waste-free technology, increasing the yield of useful products or energy per unit of material used, the use of cheap and low-grade raw materials, improving the quality of materials through primary processing, replacing imported raw materials and materials with material resources of domestic production, rationalizing the management of production stocks and the development of effective sources of supply.

The need to move to a qualitatively new level of resource consumption is an objective and indisputable condition for improving the efficiency of social production. Access to the rational use of production resources is possible only if effective measures are taken to use resources through the use of both market levers and state regulation of the economy. To achieve this goal, it is necessary to create an economic mechanism for efficient use of resources, which would be based on the use of market levers and on the

principles of a unified state policy on this issue. The management of rational use of resources should be based on such conditions under which economical consumption of resources would be beneficial for all business entities, and the search and implementation of reserves for efficient use of resources would be comprehensively stimulated.

Creating an effective economic mechanism for the use of resources at the enterprise is an important task, since it should ensure high efficiency of resource consumption both at the stage of forming market relations and during the full functioning of market institutions. For an enterprise, there can be three strategic options for solving the problem of efficient use of resources (fig. 13).



**Fig. 13. Directions for solving the problem of efficient use of resources**

A certain combination of solutions is also possible. The first option is probably the simplest. The company offers consumers of its products to pay more – for example, in proportion to the increase in the cost of purchasing resources. There is a risk associated with the fact that consumer demand at new prices may acquire unacceptable indicators for the enterprise. The level of risk decreases under the condition of market dominance of the enterprise, that is, when the enterprise is a pure monopoly or a very strong oligopolist. In other cases, such a solution to the problem of resource constraints can have critical consequences for the enterprise. This is a variant of the company's "passive" perception of external influence on the cost of production. To implement the second option, the company first needs to introduce innovations, develop the latest resource-saving production technologies and purchase modern equipment. In this case, the minimization of waste and the possibility of recycling products can also be important factors. This option is an option for actively searching for areas of competitive support for the level of production costs.

**Conclusion.** So, the concept and essence of reserves and directions of efficient use of resources were considered, the types of reserves and ways to solve the problem of efficient use of resources at the enterprise were determined. The reserves are unused but real opportunities to increase labor productivity, which can be quantified and realized over a certain period of time. And efficient use of resources is the process of consistent and comprehensive implementation of organizational economic and technical measures aimed at ensuring savings and rational use of material and raw materials in all sectors of the national economy. The problem of efficient use of resources is of considerable importance for achieving which it is necessary to create an economic mechanism, the need to move to a qualitatively new level of resource consumption is an objective and indisputable condition. One of the most important factors for increasing production efficiency is the rational use of resources, which is associated with all these factors. Separately, the theoretical foundations of the formation of enterprise resources and the efficiency of their use were considered, namely: the concept and composition of enterprise resources; methodological assessment of enterprise resources and indicators that characterize them; reserves and directions for the effective use of these reserves.

#### **REFERENCES:**

1. Cheah, J. Amran, A. & Yahya, S. (2019), "External oriented resources and social enterprises' performance: The dominant mediating role of formal business planning", *Journal of Cleaner Production*, vol. 236, pp. 117-693.
2. Zhang, G. Zhao, S. Xi, Yu. Liu, N. & Xu, X. (2018), "Relating science and technology resources integration and polarization effect to innovation ability in emerging economies: An empirical study of Chinese enterprises", *Technological Forecasting and Social Change*, vol. 135, pp. 188-198.
3. Shirazi, B. (2018), "Towards a sustainable interoperability in food industry small & medium networked enterprises: Distributed service-oriented enterprise resources planning", *Journal of Cleaner Production*, vol. 181, pp. 109-122.

4. Cheah, J. Amran, A. and Yahya, S. (2019), "Internal oriented resources and social enterprises' performance: How can social enterprises help themselves before helping others?", *Journal of Cleaner Production*, vol. [211](#), pp. 607-619.

5. Abo Abdo, S. Aldhoiena, A. and Al-Amrib, H. (2019), "Implementing Enterprise Resource Planning ERP System in a Large Construction Company in KSA", *Procedia Computer Science*, vol. [164](#), pp. 463-470.

6. Farkas, M. Kersting, L. and Stephens, W. (2016), "Teaching and educational notes Modern Watch Company: An instructional resource for presenting and learning actual, normal, and standard costing systems, and variable and fixed overhead variance analysis", *Journal of Accounting Education*, vol. [35](#), pp. 56-68.

7. Aslan, B. Stevenson, M. and Hendry, L. C. (2012), "Enterprise Resource Planning systems: An assessment of applicability to Make-To-Order companies", *Computers in Industry*, vol. [63/7](#), pp. 692-705.

8. Aslan, B. Stevenson, M. and Hendry, L.C. (2015), "The applicability and impact of Enterprise Resource Planning (ERP) systems: Results from a mixed method study on Make-To-Order (MTO) companies", *Computers in Industry*, vol. 70, pp. 127-143.

УДК 338

JEL F 1

**Чичуліна Ксенія Вікторівна**, кандидат технічних наук, доцент. **Олешко Каріна Вікторівна**, студентка. Національний університет «Полтавська політехніка імені Юрія Кондратюка». **Аналіз поняття «ресурси» та механізму їх ефективного формування.** Розглянуто поняття й суть резервів і напрямів ефективного використання ресурсів, визначено види резервів та шляхи розв'язання проблеми ефективного використання ресурсів на підприємстві. Так, резерви – це невикористані, але реальні можливості підвищення продуктивності праці, які можуть бути виражені кількісно і реалізовані протягом певного часу. А ефективне використання ресурсів – процес послідовної й комплексної реалізації організаційно-економічних і технічних заходів, спрямованих на забезпечення економії та раціонального використання матеріально-сировинних ресурсів у всіх галузях народного господарства. Проблема ефективного використання ресурсів має чимале значення, для досягнення якої необхідно створити економічний механізм. Необхідність переходу до якісно нового рівня споживання ресурсів, є об'єктивною і незаперечною умовою. Одним з найважливіших чинників зростання ефективності виробництва є раціональне використання ресурсів, що пов'язано з усіма переліченими факторами. Окремо було розглянуто теоретичні основи формування ресурсів підприємства й ефективність їх використання, а саме: поняття та склад ресурсів підприємства; методичне оцінювання ресурсів підприємства й показники, що їх характеризують; резерви та напрями ефективного їх використання. Дослідження поглядів українських та зарубіжних вчених показало, що поняття «ресурси» є досить дискусійним, існує багато різноманітних поглядів та визначень. Вивчення економічної літератури засвідчило, що існує багато різних визначень і видів ресурсів залежно від виду діяльності підприємства, джерел формування чи напрямів використання. Охарактеризовано основні показники, які характеризують ресурси підприємства, виявлено резерви та напрями їх ефективного використання.

**Ключові слова:** ресурси, механізм, ефективне формування, резерви, підприємство.

UDC 338

JEL F 1

**Chychulina Kseniia**, Ph.D., Assoc. Professor. **Oleshko Karina**, student. National University "Yuri Kondratyuk Poltava Polytechnic". **Analysis of the Concept "Resources" and the Mechanism of Their Effective Formation.** The article examines the essence, types, meaning and composition of enterprise resources, conducts a theoretical study of the classification of resources and their significance for the enterprise. Such concepts as "enterprise resources" and the main indicators that characterize it are revealed. The study of the views of scientists has shown that the concept of "resources" is quite controversial. The study of literature has shown that there are many different definitions and types of resources, depending on the type of activity of the enterprise, sources of formation or directions of use. The main indicators that characterize the company's resources are described and reserves and directions for their effective use are identified.

**Keywords:** resources, mechanism, effective formation, reserves, company.