

ACCOUNTING SUPPORT OF MANAGEMENT DECISIONS ON MEASURES TO OVERCOME AND PREVENT THE CONSEQUENCES OF EMERGENCY SITUATIONS

Oksana Artyukh, Odessa National University of Economics
Tatiana Dobrunik, Odessa National University of Economics
Tetyana Murenko, Odessa National University of Economics
Lyudmila Horbach, Volyn Institute named after V. Lypynskiy MAUP
Larysa M. Soroka, Izmail State University of Humanities

ABSTRACT

The creation of the information space and the transformation in accordance with the changing economic realities cannot occur without meaningful and formal order of use of elements of the accounting method. Although that the system of accounts should reflect all aspects of economic activity, modern accounting legislation does not provide for the reflection of the actions of emergency situations and the impact on the performance indicators, which is contained in the financial statements. In particular, problematic issue is the allocation of costs, which are associated with the actions of emergency situations, but they are contained in production expenses or period expenses. The formation of analytic account for these accounts makes no sense from the position, that the information will not always be able to show all properties of an object. That is why just for this purpose it is proposed to use the approach of the transit item for the example of expenses on items, which are displayed on the accounts of the class "Expenses on items".

Keywords: Expenses on Items, Emergency Situations, Achieving Sustainable Development, Accounting Method, Integrated Object.

JEL Classifications: M21, O16

INTRODUCTION

Economic activity of enterprises is exposed to internal and external factors and can be a cause of emergency situations (hereinafter-emergency) of industry-related nature and suffer as a result of -emergency of manmade, natural and social nature.

The actions of emergency situations are a special object of business accounting, because they affect the entire system of economic activity of the enterprise. Management and accountable-analytical support of decision-making regarding economic activity in emergency situations is particular relevant both from the point of view of economic, social, environmental and legal approach. Emergencies of its own enterprise can have a number of social, economic and environmental actions for society.

The multi-faceted indication of the actions of emergency situations determines the properties as an integrated object of business accounting, because every aspect of the actions of emergency situations regardless of the level of the indication, affects the management system of economic activity. According to the international and state level of emergency management, it should be considered them as an institutional basis for regulating the management of economic activity in emergency situations and the accountable pattern. In

addition, at the of the occurrence at the regional or state levels, the enterprise and economic activity become the object of state management. That is why the actions of emergency situations have a set of properties of economic, social, legal, technical and natural nature, information about which is formed in business accounting systems and business economics. These systems generate information necessary for making management decisions on measures to overcome and prevent the actions of emergency situations.

REVIEW OF PREVIOUS STUDIES

Issues of business accounting and economic analysis of the actions of emergencies is a special but little-studied object of scientific research. These problems have been developed by scientists, in particular, (Drobyazko et al., 2019) in terms of accountable-analytical support for the management of the actions in emergency situations in the system of ecological and economic security of enterprises; Farazmand (2017) in terms of studying the business accounting system of economic activity under the risk of internal and external environment; Hilorme et al. (2019) regarding business accounting of ecological and economic actions of economic activity in ensuring sustainable development.

Scientists assess in more than one way the impact of actions of emergency situations on economic systems at different levels, in particular, a number of scientists study the actions of emergency situations from the standpoint of the impact on humanity and the level of security (Wang et al., 2017; Nesterenko et al. 2019).

The works of these scientists determine the basis for the development of business accounting in the world (Hosseinnia et al., 2018). However, some issues related to business accounting of the actions of emergency situations that require solutions today for the formation of the information space of the management and ensuring an appropriate level of economic security of enterprises (Lopez-Fuentes et al. 2018).

There are only fragmentary issues of management and accountable-analytical support for decision-making regarding economic activity in emergency situations in the works of scientists. We believe that the effectiveness of modern methods of business accounting and economic analysis of the actions of emergency situations is due to the lack of complex abstract theorems. It is necessary to identify the specific properties of the object to substantiate the abstract theorems of business accounting actions of emergency situations (Sakour & Hu, 2017; Yelisyeyeva et al., 2019).

METHODOLOGY

The methodological basis of the research is general-scientific and special methods of cognition of phenomena and processes in the business accounting system. Methods of theoretical generalization, analysis and synthesis, induction and deduction are applied to substantiate the impact of the actions of an emergency situation on the economic activity of enterprises and economic systems of different levels. The formed factual basis on the existing organizational and methodological regulations of business accounting is based on the use of method of enumeration, questionnaire, and data aggregation. The simulation approach of economic phenomena is used to identify the action of emergency situations. Methods of analogy, abstraction, analysis, synthesis were used to develop analysis procedures the impact of emergency situations on the economic activity of enterprises.

RESULTS AND DISCUSSIONS

We have studied the actions of emergency situations from the position of the indication at different levels of economic systems and determined the place in management

system of economic activity of the enterprise. The multi-faceted indication of the actions of emergency situations determines the properties as an integrated object of business accounting. Thus every aspect of the actions of emergency situations, regardless of the level of indication, affects the management system of economic activity. According to the international and state level of emergency management, it should be considered them as an institutional basis for regulating the management of economic activity in emergency situations and the accountable pattern. In addition, at the of the occurrence at the regional or state levels, the enterprise and economic activity become the object of state management. Examples of the situations are military emergency situations, when in the conditions of an anti-terrorist operation or defence emergency, state authorities have the right to intervene in the management of economic activity.

We can say that actions of emergency situations are a special object of business accounting, the system of which allows generating information about the properties and impact on economic activity.

The business accounting system of economic processes (acquisition, production, sale) is aimed at forming the cost of final products and other costs associated with the operating activity of the enterprise and generating information about all the components. Questions of the organization and methodology of business accounting economic processes at the enterprise never loses the relevance after all innovative development of economy and technology leads to transformation of technical processes, that in turn demands change of the mechanism of use of elements of a business accounting method. That is why it is difficult to reflect the actions of emergency situations from the position of influence on the production processes of the enterprise.

Modern regulations of the organization and methods of business accounting do not allow generating qualitative information about the actions of emergency situations in the context of economic processes. As a result, the user receives general information with which he cannot trace the cause-and-effect relationships in the change of economic indicators.

We will depart from the classical scheme of sequence of use of items of business accounting method, especially: documentation and inventory, evaluation and calculation, accounts and double entry, balance sheet and reporting for the development of organizational and methodological regulations of business accounting of economic processes in emergency situations. First of all, it is necessary to define the main user request regarding the impact of emergency situations on production. Thus, providing request going through the indicators of financial reporting (items of the methods: (balance sheet and reporting), which are formed due to reflection in the accounts (elements of methods: accounts and double entry), for the respective assessment (items of the method: evaluation and calculation), which is considered the primary document.

Thus, we propose reactive approach to the formation of organizational and methodological regulations of business accounting of the production process in emergency situations: from reporting to the primary document. It will allow approaching the accounting system in a comprehensive manner and solving a number of problems of generating information necessary for making management decisions. It should be noted that the production process is directly related to the object as the cost value which is further taken into account in the calculation in analytical indicators characterizing the financial status and economic strength of the enterprise. That is why, the development of directions of development of elements of the business accounting method for the specified object, we will carry out from the position of influence on the complex of analytical indicators.

We believe that financial reporting as the main source of information for the analytical evaluation of the financial status and economic strength of the enterprise should

provide a set of information on all impact factors the resulting indicators, including indicators characterizing the production process.

We propose to put forward the following requirements for financial reporting, which will provide an opportunity to carry out not only the calculation of analytical indicators, but also to carry out factorial analysis to establish cause-and-effect relationships, in particular due to emergency situations to fulfil the tasks set:

The financial reporting should contain information about the increase in productive costs, and, accordingly, cost value of final products, which arose as result of emergency situations. This information may be accumulated in the notes to the annual financial reporting in both table and description form, indicating the specific case of an emergency situation;

It is necessary to submit information on measures to eliminate or prevent emergency situations for the purposes of assessing to company's response to emergency situations. It will allow the user, in particular the potential investor to assess the probability of these situations in the future and accordingly to make a positive or negative investment decision;

It is necessary to provide information about the actions of emergency situations, in particular, the economics, measures to overcome and eliminate the actions of emergency situations in reporting, in particular, in reporting of financial results (Reporting of comprehensive income). This is possible by allocating separate items of expenditure or set of items of expenditure;

However, some areas of regulation of unpredictable events are not always associated with emergencies and even existing regulations regulate only certain aspects of business accounting. It can be argued that there is no mechanism for applying elements of the business accounting method for objects associated with the actions of emergency situations (Table 1).

Table 1 PROPOSALS ON THE PROCEDURE FOR APPLYING ELEMENTS OF BUSINESS ACCOUNTING METHOD TO REFLECT THE COST OF ELIMINATING THE ECONOMIC AND ENVIRONMENTAL ACTIONS OF EMERGENCIES (AUTHOR'S DRAWING- UP)		
Method element	Characteristic	Internal regulations
Canvass		
Inventory taking	Inventory taking of damaged objects of floating assets and capital assets, as a result of which is identified return waste products and non-transferable waste products	Accounting policy in terms of value judgment of waste products; Methodological recommendations on accounting of the waste products
Supporting material	Document forms are used in the section of items for recognition of expenses	The schedule of flow of documents
	Internal documents with extended details for accounting of waste products	
Measure		
Value judgment	Reflecting the actual charges, which are connected with dissolution of economic and ecological actions	Accounting policy in terms of methods of retirement of provisions (material expenses), forms and systems of remuneration of labor (remuneration of labor, social expenses), methods of depreciation. Methodological recommendations on calculation of services of auxiliary productions.
Calculation	When using auxiliary production services, the cost of these services is reflected according to the current calculation system	
Filing/grouping		
Accounts	Organization of analytic account, which will generate information in the section of activities and items	Working schedule of accounts
Double entry	According to the working schedule of accounts	Methodological recommendations for accounting of other expenses
Conclusion		

Balance	Information on the costs of elimination of economic and environmental actions in the financial reporting; notes to the annual financial reporting; sustainable development reporting in terms of reporting on environmental performance; statistical reporting in terms of waste reporting.	Methodological recommendations for the formation of reporting of sustainable development enterprise
Financial statements		

Financial statements is the main source of information for making management decisions regarding the economic activity of the enterprise both in normal economic conditions and in emergency situations. Today, accounting report is one of the most dynamic elements of the business accounting method. This is primarily due to the fact that the content should meet the needs of various users, who want to get information about the economic reality, which is changing rapidly. Great quantity of operations can be carried out within a minute with help of information technology.

RECOMMENDATIONS

We propose to use accounts of the class “Expenses to items”, which is possible when changing the structure and the order of the use to ensure the process allocating the actions of emergencies from operating business expenses. In particular, in order to expand the information space of management of economic activity of the enterprise in the scientific community for a long time is discussion about the use of accounts of this class, which are not associated with cost elements. But proposals of research workers were largely determined by the introduction of a new account that corresponded to the black box, without justifying the need to change the utility of the entire class of accounts. Typically, this class of accounts was used to determine the impact of risks on business accounting objects and to generate information about them in the financial reporting. However, this position is regimental without changing the purpose of the accounts section for subject matter and form.

CONCLUSIONS

Thus, as a result of the research, we have developed organizational and methodological regulations of business accounting for the actions of emergency situations, providing for the improvement of the order of use of these items of the method as value judgment, accounts and double entry. In particular, the directions of expansion of the accounting scheme and instructions are substantiated for the application; it is developed the order of analytical accounting for accounts of the class “*Expenses to items*”; it is developed the order of reflection on accounts of business accounting concerning expenses of operating business; it is developed the mechanism of distribution of manufacturing expenses. The application in the practical activity of enterprises and efficiency in the formation of information space of management of economic activity in emergency situations indicates the effective strength, use value and scientific validity.

This approach to the structure of business accounting accounts will highlight the actions of emergencies, as well as other objects of reflection, which are important for management and decision-making by internal and external users. In particular, it is possible to expand the financial reporting in terms of the reporting of financial results (reporting of comprehensive income) and notes to the annual financial reporting.

REFERENCES

- Drobyazko S., Okulich-Kazarin V., Rogovyi A., Goltvenko O., & Marova S. (2019). Factors of influence on the sustainable development in the strategy management of corporations. *Academy of Strategic Management Journal*, 18(1).
- Farazmand, A. (2017). Crisis and Emergency management. *Crisis and Emergency Management: Theory and Practice*, 1.
- Hilorme, T., Shurpenkova, R., Kundrya-Vysotska, O., Sarakhman, O., & Lyzunova, O. (2019). Model of energy saving forecasting in entrepreneurship. *Journal of Entrepreneurship Education*, 22(1S).
- Hilorme, T., Zamazii, O., Judina, O., Korolenko, R. & Melnikova, Yu. (2019). Formation of risk mitigating strategies for the implementation of projects of energy saving technologies. *Academy of Strategic Management Journal*, 18(3).
- Hosseinnia, B., Khakzad, N., & Reniers, G. (2018). Multi-plant emergency response for tackling major accidents in chemical industrial areas. *Safety science*, 102, 275-289.
- Lopez-Fuentes, L., van de Weijer, J., González-Hidalgo, M., Skinnemoen, H., & Bagdanov, A.D. (2018). Review on computer vision techniques in emergency situations. *Multimedia Tools and Applications*, 77(13), 17069-17107.
- Nesterenko S., Drobyazko S., Abramova O., & Siketina N. (2019). Optimization of factorial portfolio of trade enterprises in the conditions of the non-payment crisis. *IBIMA Business Review*, 2019 (2019).
- Sakour, I., & Hu, H. (2017). Robot-assisted crowd evacuation under emergency situations: A survey. *Robotics*, 6(2), 8.
- Yelisyeveva, O., Nesterenko, S., Drobyazko, S., Abramova, O., & Siketina, N. (2019). Strategic model of factoring portfolio of debtors of the enterprise. Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020, 7504-7514.
- Wang, L., Wang, Y.M., & Martínez, L. (2017). A group decision method based on prospect theory for emergency situations. *Information Sciences*, 418, 119-135.