

# Estimated planning as an important element of management accounting of state institutions of higher education of Ukraine

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## Abstract

The article elaborates the problems of estimate planning as an element of the subsystem of budgeting the activities of state institutions of higher education, which, in turn, acts as a subsystem of management accounting of the specified business entities. It is motivated by the budgeting of the activities of state institutions of higher education to understand the subsystem of management accounting, which is implemented at the 4 levels of management by the specified economic entities in the form of a process whose components are the procedures for forming estimates and budgets, their implementation, analysis and evaluation of the latter, as well as adjustment of budgets and estimates and control of their implementation in the short term. In turn, the estimated planning of the activities of state institutions of higher education acts simultaneously as a subsystem of budgeting their activities and as a part of the budget process in general, which is implemented at the level of the Ministry of Education and Science of Ukraine and state institutions of higher education as managers of funds, which includes procedures for the formation of short-term financial plans of state institutions of higher education in terms of revenues and expenses and the provision of loans, their implementation, analysis and evaluation of the latter as well as adjustment of estimates and control of their implementation. It is motivated by the principles of estimated planning of the activities of state institutions of higher education to determine the following of them: scientific validity, continuity, unity, comprehensiveness, comprehensiveness, analyticity, probability, balance, participation, timeliness, detailing, transparency and publicity, target direction, trinity, controllability, flexibility. Recommendations for bringing the classification of expenditures into line with the 2014 GFSM are provided.

*Keywords:* management accounting; state institutions of higher education; estimate planning; budgeting, principles.

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## 1. Introduction

For a long time, the accounting system of the budget sphere was quite monolithic and did not provide for the separation of any subsystems. With Ukraine's choice of a course for the development of a market economy, the budgetary sphere faced the question of the harmonious inclusion of the latter in the new economic model of Ukraine, and therefore the formation of a new budget accounting system. The first reaction to the challenges and demands of the times was demonstrated by the budget execution subsystem, which has been beginning to take on a completely new form since the beginning of the new millennium. Adopted by order of the State Treasury of Ukraine №119 dated November 28, 2000. The regulation on the organization of accounting and reporting of the implementation of state and local budgets established completely innovative approaches in terms of the methodology, methodology and organization of the specified budget accounting subsystem [8]; in the context of the stated topic of the publication, it is worth emphasizing the structure of the Plan of accounting accounts of state and local budgets, section 8 of which was called «management accounting» [8]. Accounting for the implementation of the estimate gained reformation momentum much later, and the provisions of management accounting did not acquire a similar formalization, however, management accounting in the budgetary sphere is gaining momentum in its development. State

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institutions of higher education, which perform one of the most important functions in our country –, ensure high-quality and in-demand higher education in the modern labor market, are no exception. At the same time, due to the expanded capabilities of the specified budget institutions, it is state higher educational institutions that currently have the most developed subsystems of management accounting [14]. Budgeting is the primary element of the latter.

## **2. Literature review**

The issue of budgeting within the scope of activities of state institutions of higher education over the past 10 years has been considered by such scientists as [3, 4 – 7, 9, 12, 13, 15]: N.Ishchenko (2016), L.Korytnyk (2019-2021), R.Mann (2020), G.Nord (2016), I.Parasiy-Vergunenko (2019), N.Rudenko (2019), I.Svitlyshyn (2018), M.Slynko (2020), T.Trosteniuk (2018- 2019). In their publications, the authors worked out the issues of determinants of budgeting development, budgeting principles, functions and tasks, budgeting directions, types and forms of budgets, as well as organizational approaches to budgeting in state higher educational institutions.

## **3. Identification of previously unresolved questions and formulation of study hypotheses**

Paying tribute to the research of the above-mentioned authors in the field of budgeting of the activities of state institutions of higher education, we note that none of the authors has considered such a well-known element of the budget process as estimated planning. The identification of estimate planning as part of budgeting, which is the primary element of management accounting of state institutions of higher education, is the main hypothesis of the study.

## **4. Purpose, objectives and methods of the study**

The purpose of this publication is to substantiate and develop estimate planning as an important element of management accounting of state institutions of higher education of Ukraine. To achieve this goal, the article solved the following tasks: the concept of budgeting the activities of state institutions of higher education as a whole was clarified and the definition of estimate planning as an element of budgeting the activities of state institutions of higher education was formed; the principles of estimate planning as an element of budgeting the activities of state institutions of higher education are defined; the procedure for estimate planning in state institutions of higher education was worked out and recommendations for its improvement were formed.

The study was generally conducted on the basis of a systematic approach to the study of economic phenomena and processes. To solve certain tasks, the following methods were used: system analysis – to clarify the content of the concepts «budgeting of the activities of state higher educational institutions» and «estimated planning of the activities of state higher educational institutions»; comparative analysis – to determine the principles of estimated planning of the activities of state higher educational institutions"; induction and deduction – to formulate conclusions and recommendations for improving estimated planning in state institutions of higher education.

## **5. Results and discussions**

Estimated planning has been known to mankind for quite some time: as early as ancient Rome, we find references to the *breviarium* – book, which reflected both estimated and actual government appropriations [2]. Over the years, the provisions of estimate planning have been improved, primarily due to the detailing of both income and expenditure items. It is also interesting that one of the first mentions of budgeting the activities of enterprises should be recognized as the work of F. Villa of 1857, in which the author presents the understanding of the latter as «the preparation of a preliminary estimate, which before the beginning of the planning period gives information about expected receipts and expenses, capital movements and all the results of business activity of enterprises» [9]. That is, initially, the basis of budgeting the activities of enterprises was not budgets, but estimates.

Taking into account the thousand-year scientific and practical experience of mastering the provisions of estimate planning, the lack of a clear established conceptual understanding of the specified dictionary construction is surprising, and therefore it is proposed to master it in the context of the object attention of the study.

Let us remind you that in the general sense «estimated planning is one of the methods of budget planning, namely the method of direct calculation, according to which a detailed planned calculation of each element of income or expenditure of the estimate is carried out»; at the same time, as the scientist Trosteniuk T. correctly notes, «the implementation of budgeting in the process of setting up management accounting of state institutions of higher education should be carried out taking into account the stable tradition of estimate planning» [13]. In the same work, the author motivates that the budgeting of the activities of state institutions of higher education acts as «the formation and implementation of budgets of various levels and object direction of the above-mentioned business entities in order to achieve the established short-term goals and strategic goal», and «estimated budget planning», in turn, presents as «the process of determining a set of indicators in value and in kind formation and implementation of estimates and budgets based on them in order to provide information to the management apparatus of the internal and external circle for making informed management decisions of various levels of subordination in order to achieve the established short-term goals and strategic goal» [13].

Emphasis on the heterogeneity of budgeting indicators, its levels and directions is seen as positive in these interpretations; in turn, the author contradicts himself in a certain way, since he considers estimate planning as part of budgeting the activities of state institutions of higher education, it should not be derived in the name of the specified component of management accounting.

Scientists G.Nord, N.Rudenko emphasize the advantages of budgeting, that «the implementation of the budgeting system in state universities will provide an opportunity to monitor and plan incoming and outgoing cash flows, control temporary shortages and surpluses of financial support. As a result, within the institution there will be competition between divisions for temporarily free resources, although the total amount of resources will not increase» [7].

However, the authors do not provide a definition of the concept of budgeting and in the future mainly consider the issue of rational use of funds from the special fund of state institutions of higher education.

Scientist N.Ishchenko, emphasizing the inseparability of budgeting from the life of a modern higher school in Europe, points to the following determinants of its formation: decentralization of higher school management at the level of each university itself and the need to form an effective mechanism for motivating structural units in general and each unit of the teaching staff in particular. The author points out that [3]: «budgeting – is the process of drawing up and adopting the budgets of the structural divisions of the university for the rational use of funds; ... its purpose is to create economic incentives for university employees and students to: improve the quality of education; ensuring the recruitment of applicants; preservation of the contingent of students studying; maintaining the timeliness of tuition fees; proper performance of work outside the educational process; conducting scientific and volunteer work that increases the image of the educational institution».

According to the given definition, the concept of «budgeting» can be seen as a correct emphasis on the rational use of budget funds, however, the latter is only one of the current tasks of implementing the estimates of state institutions of higher education, but by no means their goal.

Famous scientists V.Yevdokimov, D.Hrytsyshen claim that in the conditions of the introduction of elements of management accounting into the practice of the accounting process of budget institutions, the latter can draw up estimates by responsibility centers, which are plans for the activities of structural units for the coming year, expressed mainly in the monetary measure. Such financial and planning documents can determine the amount of expenses for the production of products of the activities of budget institutions by types of resources used, stages of production activity, levels of management and other areas of expenses, as well as income from the implementation of such activities, financial results and financial flows. The purpose of estimated planning by centers of responsibility is to ensure coordination, cooperation and communication in the activities of individual structural subdivisions of budget institutions through the implementation of systematic planning of the activities of the specified units. Estimated planning by responsibility centers is carried out in terms of the development of cost standards for individual types of activities and the preparation of actual estimates of responsibility cents based on them [2].

The demonstrated general approach to budgeting in the budgetary sphere as a whole actually motivates the rejection of the budgeting subsystem and the appeal to estimated planning, which in a certain way will violate the general tradition of world management accounting.

Scientist I.Svitlyshyn indicates that «budgeting at a higher educational institution – is a process of planning its cash receipts and expenses, which ensures the achievement of strategic goals and objectives in the existing or projected environment» [15].

Obviously, when formulating the specified concept, the author focused exclusively on the traditional understanding of the process of drawing up an estimate, since he focused his attention on income and expenses, avoiding mentioning not only value indicators, but also natural ones.

The reasoning of the famous scientist I.Parasii-Vergunenko, who noted that «the budgeting system should contribute to more effective activity of state institutions of higher education (or their structural subdivisions) and increase their competitiveness based on the mechanism of effective management of financial resources, is interesting. The budgeting process at state institutions of higher education includes the formation of consolidated, operational, and auxiliary budgets with further analysis of planned and actual indicators and clarification of the causes of significant deviations. At the same time, the budget is understood as a quantitative plan of income, expenses in monetary terms or other indicators of activity in natural indicators approved for a certain time period» [9].

It is difficult not to agree with the moderate position of the specified scientist, who, nevertheless, does not mention the estimated planning within the framework of budgeting the activities of state institutions of higher education.

The reasoning of the scientist L.Korytnyk, who noted that the understanding of budgeting as a management technology of state higher educational institutions should take place in terms of three levels of budget funds management, which is dictated by a set of operational and strategic management requests that appear at each of the levels, in particular [4, 6]:

1) of the national (as a component of the budget process and budget policy of the state) – is aimed at balancing the performance indicators of all managers of budget funds and determining the need for the amount of state expenditures and finding sources of their coverage in terms of industries and the state as a whole in accordance with the priority directions of socio-economic development, taking into account national and international trends;

2) the level of the main managers of budget funds, which has two vectors: as a component of the budget process, which involves the rationalization of the amount of state financial resources for the performance of the functions assigned to it by the management entity within the framework of the implementation of budget and state target programs; as a component of management accounting, which ensures the coordination of budget resources between managers of budget funds of a lower level, taking into account the performance indicators of each activity and the concept of the general strategic goal;

3) of the level of managers of budget funds of a lower level (public sector enterprises and institutions) as a component of their management accounting system – budgeting is aimed at identifying sources of filling the revenue and optimizing the

expenditure parts of the budget, improving financial activities, increasing the efficiency of management in order to achieve financial efficiency and the performance of operational and strategic tasks".

Taking into account the proposed levels of management of budget funds, it should be stated that it is the approach of the scientist L.Korytnyk that actually establishes estimated planning as budgeting for the activities of state institutions of higher education with the complete replacement of the first with the second, which, however, does not meet the established budgetary practice and the requirement for drafting by each budget institution in general and state higher educational institutions in particular [1].

Let's start the formation of the definition of estimated planning of the activities of state higher educational institutions by clarifying the concept of «budgeting of the activities of state institutions of higher education».

Note, first of all, that budgeting the activities of state institutions of higher education:

- in general, it is a kind of traditional planning. Budgeting is a process that includes successive procedures for the formation of the budget, its implementation, analysis and evaluation of the latter, adjustment of budgets and control of the implementation of budgets;

- acts not only as a process, but also as a subcontracting system of the management accounting subsystem of state institutions of higher education or a subsystem of double subordination;

- should be carried out at all 4 above-mentioned levels of management, since according to the internal structure of the general state administration sector, budget subordination within the mechanism of managers of budget funds, as well as modern requests to the management system of state higher educational institutions under the conditions of successful completion of the European integration process in Ukraine, the management and accounting subsystem of the specified business entities today, taking into account the branching of internal and external levels of management, should be built at the following levels:

- 1st level of the state – as part of the general state accounting;
- 2nd level of the department – of the Ministry of Education and Science of Ukraine – as part of the general accounting system in the public sector;
- 3rd level of a state institution of higher education - as part of the accounting system of a specific state institution of higher education;

- 4th level of structural subdivisions of a state institution of higher education - as part of the accounting subsystem of such subdivisions (for decentralization of accounting) and as part of the accounting system of a specific state institution of higher education (for centralization of accounting). At the same time, the general result at the first level is the consolidated budget of Ukraine, which is a set of indicators of the State and local budgets, which act as a basis for forecasting the economic and social development of the state [1], at the second – the consolidated estimate of the Ministry of Education for Science, submitted to the Ministry of Finance of Ukraine, at the third – the estimates of the state institution of higher education under various budget programs and the consolidated estimate of the institution on the fourth – multi-disciplinary budgets of structural divisions;

- covers an annual or shorter term.

Thus, it can be argued that the budgeting of the activities of state educational institutions is a subsystem of management accounting, which is implemented at the 4 levels of management of the specified business entities in the form of a process whose components are the procedures for forming estimates and budgets, their implementation, analysis and evaluation of the latter, as well as adjustment of budgets and estimates and control of their implementation in the short term.

Regarding the estimated planning, let us remind you that the estimate is «the main planned financial document of the budget institution, which for the budget period establishes the authority to receive revenues and allocate budget allocations for making budget commitments and making payments for the performance of the budget institution's functions and achieving the results determined in accordance with budget allocations» [1].

Thus, taking into account the above arguments, the estimated planning of the activities of state institutions of higher education acts simultaneously as a subsystem of budgeting their activities and as a part of the budget process in general, which is implemented at the level of the Ministry of Education and Science of Ukraine and state institutions of higher education as managers of funds, which includes procedures for the formation of short-term financial plans of state institutions of higher education in terms of revenues and expenses and the provision of loans, their implementation, analysis and evaluation of the latter as well as adjustment of estimates and control of their implementation.

Estimated planning of the activities of state institutions of higher education as part of budgeting in particular and management accounting in general should be based on a set of principles, which, taking into account the already formed proposals of various authors, should include [1, 2, 4-6, 8, 9 - 13]:

- scientific validity (scientifically based methods and techniques are used in the process of estimate planning);
- continuity (the process of estimated planning should continue throughout the entire period of existence of the state institution of higher education);

- unity (the process of estimated planning of the activities of state institutions of higher education demonstrates the unity of the methodology, the measure (value), the monetary unit (hryvnia), the components of the estimate in particular and the stages of the process in general);

- comprehensiveness (estimated planning must demonstrate the characteristics of both the system and the process);

- comprehensiveness (the process of estimated planning should cover all spheres of activity of a state institution of higher education);

- analytical features (formed estimate indicators must have a basis in the form of analytical calculations);

- probabilities (real and reliable data should be the basis for the formation of estimated indicators);
- equilibria (the amount of income and the amount of expenses and the provision of loans according to the estimate must correspond to each other);
- participation (a wide range of employees of a state institution of higher education should be involved in all stages of estimate planning if possible);
- timeliness (all procedures of the estimate planning process must take place within clearly established deadlines);
- details (estimated indicators of a state institution of higher education are detailed first by budget programs and formalized in the form of separate estimates for each budget program, and then by types of funds (general and special) and by types of income and expenses and lending (codes));
- transparency and publicity (estimated indicators must be made public with the necessary justification and explanations for their understanding both by the staff of the state institution of higher education and by the general public);
- targeted direction (implementation of the estimate is carried out in accordance with the requirements of the targeted use of budget funds);
- trinity ((implementation of the estimate is carried out in accordance with the requirement of proper management of budget funds, and therefore effective, economical and productive use of budget funds);
- controllability (the process of estimate planning involves control at all its stages);
- flexibility (the ability to take into account fundamental changes and make the necessary adjustments in time and space);

Regarding the methodology of estimate planning of the activities of state institutions of higher education, it should be noted that its provisions are actually reflected in such standardized documents as: Budget Code of Ukraine, Resolution of the Cabinet of Ministers of Ukraine dated 28.02.2002 №228 «On approval of the Procedure for drawing up, considering, approving and basic requirements for the implementation of estimates of budget institutions» and Order of the Ministry of Finance of Ukraine dated 28.01.2002 №57 «On approval of documents used in the process of budget implementation» [1, 2, 10, 11]. Its analysis indicates its scientific validity, clarity and verifiability; however, there is a certain lag in the structural provisions of the estimate in the part of expenses, which is proposed to be brought into line with the Guidelines for Public Finance Statistics 2014 (GFSM 2014).

The implementation of the proposed provisions in the practice of estimate planning will contribute not only to the improvement of estimate dominance, but also to budgeting in particular and management accounting of state institutions of higher education in general as systems of a higher order, and therefore will contribute to increasing the efficiency of management of state institutions of higher education.

## 6. Conclusions and prospects for further research in this area

This study made it possible to deepen the theoretical foundations of budgeting as a subsystem of management accounting of state institutions of higher education through the formulation of the concepts of «budgeting of the activities of state institutions of higher education» and «estimated planning of the activities of state institutions of higher education» through the development of their characteristics. The introduction of developed principles of estimated planning of the activities of state institutions of higher education will allow to strengthen the methodological component of budgeting the activities of state institutions of higher education. The established recommendation on bringing the domestic classification of budget expenditures into line, as a basis for structuring information according to the expenditure part of the estimate, with the classification of expenditures according to the Guidelines for Public Finance Statistics 2014, will contribute to the approximation of estimate planning to international analogues.

## References:

1. Verkhovna Rada Ukrainy (2025), *Biudzhetni kodeks Ukrainy*, dokument 2456-VI, redaktsiia vid 05.03.2025, pidstava – 4225-IX, [Online], available at: <https://zakon.rada.gov.ua/laws/show/2456-17>
2. Yevdokimov, V.V., Hrytsyshen, D.O. and Svirko, S.V. (2017), *Accounting in the sector of general public administration of Ukraine. Volume 1: Accounting in budget institutions of Ukraine*, O.O. Evenok, Zhytomyr, 1380p.
3. Ishchenko, N.M. (2016), «Budgeting of university activities as a factor in the modernization of the national economy», *Scientific works of the Black Sea State University named after Peter Mohyla of the «Kyiv-Mohyla Academy» complex. Seriiia economy*, Iss. 275, Vol. 263, pp. 24–28.
4. Korytnyk, L.P. (2021), *Accounting for the reform of higher education in Ukraine*, monograph, Acad. fin. management, Kyiv, 380 p.
5. Yefimenko, T.I. and Korytnyk, L. P. (2019), «Peculiarities of management accounting in the field of higher education», *Public finance management: fiscal rules, risks, international standards*, monograph, Acad. fin. management, Kyiv, pp. 300–309.
6. Korytnyk, L.P. (2019), «Conceptual principles of budget formation in management accounting of higher education institutions», *Finance of Ukraine*, No. 8, p. 75–88.
7. Nord, G.L. and Rudenko, N.O. (2016), «Elements of budgeting in state universities in conditions of financial autonomy», *Scientific works of the Black Sea State University named after Peter Mohyla of the «Kyiv-Mohyla Academy» complex. Seriiia economy*, Iss. 275, Vol. 263, pp. 42–46.
8. Svirko, S.V. (2004), *Accounting of budget implementation*, KNEU, Kyiv, 290 p.
9. Parasiy-Vergunenko, I.M. (2019), «Organizational mechanism for the implementation of budgeting in institutions of higher education», *Finance of Ukraine*, No. 3, pp. 92–102.
10. Ministerstvo Finansiv Ukrainy (2024), *Pro zatverdzhennia dokumentiv, shcho zastosovuiutsia v protsesi vykonannia biudzhetu*, Nakaz vid 28.01.2002 r. No. 57, [Online], available at: <https://zakon.rada.gov.ua/laws/show/z0086-02#Text>

11. Kabinet ministriv Ukrainy (2002), *Pro zatverdzhennia Poriadku skladannia, rozghliadu, zatverdzhennia ta osnovnykh vymoh do vykonannia koshtorysiv biudzhetnykh ustanov*, Postanova vid 28.02.2002 r. No. 228, [Online], available at: <https://zakon.rada.gov.ua/laws/show/228-2002-п#Text>
12. Svirko, S.V. and Trosteniuk, T.M. (2018), «Budget reporting as an element of management accounting in the context of the subordination system of the DZVO», *Business Inform*, No. 11, pp. 434–440.
13. Svirko, S.V. and Trosteniuk, T.M. (2019), «Budgeting of the activities of state institutions of higher education: place and prerequisites of implementation», *Economic space: Collection of scientific works*, No. 146, pp. 161–175.
14. Svirko, S.V. and Trosteniuk, T.M. (2018), «Prerequisites for the introduction of management accounting in state institutions of higher education. Problems of theory and methodology of accounting, control and analysis». *International collection of scientific works. Series Accounting, control and analysis*, ZhDTU, Zhytomyr, No. 3 (41), pp. 55–61.
15. Svitlyshyn, I.I. (2018), «Features of budgeting in higher educational institutions of Ukraine», [Online], available at: <https://conf.ztu.edu.ua/wp-content/uploads/2018/01/273.pdf>
16. Mann, R. and Slynko, M. (2020), «Budgeting and planning in higher education institutions», *Thesis XVII international scientific and practical conference of young scientists, graduate students and students «Actual problems of the financial system of Ukraine»*, ChDTU, Cherkasy, pp.146–149.