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## **FINANCIAL RESOURCES ACCOUNTING ISSUES IN UNIVERSITIES**

**Abstract:** Obtaining information to evaluate the effective use of financial resources of universities has always been a problem in management departments. In the article, a methodology of managerial accounting of the efficiency of financial resources is proposed, which enables solving a number of problems in universities. An information system for efficient use of financial resources is recommended, according to responsibility centers. In this case, with the information registered in the accounts, management reports are regularly presented, which reveal which departments of the university's activity have failed in the field of effective use of financial resources and who are responsible for them.

**Keywords:** financial resources, responsibility centers, managerial accounting, administrative reports, scientific and educational activities

**JEL classification:** M40, M41

**Research aim:** identify ways of evaluating the effectiveness of the use of financial resources presented to universities.

**Research novelty:** a managerial accounting methodology for the efficient usage of financial resources accessible in universities was proposed.

### **Introduction**

The process of measuring the effectiveness of the use of financial resources will be carried out in a more methodical approach, if it proceeds with the coordination of relevant information flows, which can be carried out using accounting methods [1]. Double-entry bookkeeping forms an information system, in which the separate financial components presented are interconnected and balanced. In this case, it is possible to create systematic information flows and present reports on the financial and economic results of the organization's activities [2].

However, until now, accounting for the effectiveness of financial resources of universities has not been used in practice, and the information flows related to the process have not been coordinated, the presence of which will significantly increase the usefulness of the accountability of the use of finances. If the accounting of the efficiency of the use of financial resources finds its practical application in universities, then the beneficiaries will receive a clear report on which areas of scientific and educational activity there were deficiencies in the effective use of financial resources, in which departments of responsibility they were formed and who are responsible for the occurrence of negative results.

### **Research results**

It is reasonable to solve the problem of coordination of information flows of the efficiency of financial resources using the

administrative accounting methodology. Currently, the managerial accounting used in universities only solves the problems of coordination of cost flows, which is regulated by the 8th class of the chart of accounts of accounting in organizations [3]. In this case, the integrated system of managerial and financial accounting is used, because the accounts represented by class 8th are interconnected with other account groups of the chart of accounts. Naturally, this correlation is carried out in monetary terms, since ultimately the management accounting information is conveyed in the financial statements published by the organizations.

With this approach, it is not possible to calculate the information flows of the efficiency of the use of financial resources [4], because the results of scientific and educational activities have different measurements (person, day, drams, etc.). Therefore, we propose to apply not an integrated, but a localized system of managerial accounting of the efficiency of the use of financial resources, where the use of financial resources of the university and the various results of scientific and educational activities are only offset against each other, which are brought to the same dimension, expressed with deviation coefficients.

In this case, the goals and actual results of the use of financial resources are consolidated within the framework of one local solidarity (see table 1). However, "usage-outcomes" comparisons of financial resources still do not provide prerequisites for the accounting of information flows in managerial accounting, as they appear with different metrics.

Therefore, before entering into the management accounting system, we suggest the implementation of the calculation of coefficient deviations of the component of the use of financial

resources according to separate scientific and educational paths (see table 2).

**Table 1. Objectives and actual results of the use of financial resources in the university**

Financial resources (mln AMD)	Proposed	Actual	Purposes of Use	Proposed	Actual
Education fees	80	70	Student quantity	250	240
Grants	45	60	Commercialization of research results (mln drams)	50	65
Quality improvement resources	20	30	Average quality assessment of students (points)	70	80

At the same time, in order to organize double ledger management accounting, we also propose to balance the coefficient deviations of the use of financial resources and their directions, which will create an opportunity to coordinate the necessary information flows. In table 2, the deviations of the actual results from the goals of the use of financial resources presented on the left side are balanced with the actual deviations of the expected goal from the use of financial resources presented on the left side, which is the object of the management accounting of the effectiveness of the financial resources of the university. Moreover, as a result of such combinations of deviations, the "Balanced deviation" indicator

is formed, which can be recorded both on the right and on the left side of the table. In general, it is not recorded in the management accounting reports, but in a certain sense it is an analytical indicator when evaluating the efficiency of the use of financial resources.

**Table 2. Coefficients deviations of the component of the use of financial resources according to directions**

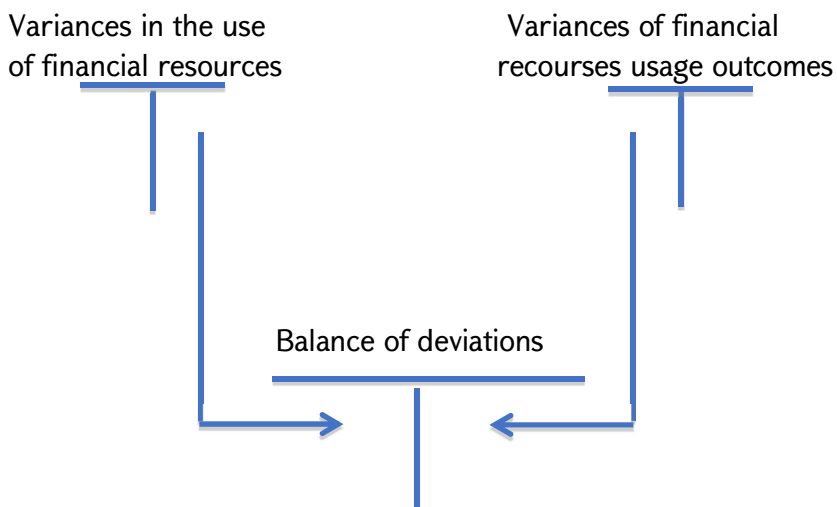
Inventory Usage	Variance	Inventory usage outcomes	Variance
Education fees	0,875	Student quantity	0,96
Grants	1,333	Commercialization of research results (mln drams)	1,30
Quality improvement resources	1.5	Average quality assessment of students (points)	1,14
Balanced variance			0,308
Total	3,708		3,708

Obviously, the organization of localized managerial accounting of the effectiveness of financial resources also implies the use of special accounts and accounting correspondence [5]. And as a consequence, there is a need to form a mechanism for regulating information flows of managerial accounting.

Thus, based on the data in table 2, for the managerial accounting of the effectiveness of the financial resources of the university, we propose a number of new accounts, such as "Tuition-fee deviations", "Grants deviations", "Quality improvement resources deviations", "Students' deviations in number", "Variances

in the commercialization of scientific results", "Variances in the students' grading".

The information recorded in the listed accounts are summarized in the "Variances in the use of financial resources" and "Variances in the use of resources" accounts, which do not have a residual balance, because the information included in them is completely transferred and balanced in a separate management account. As a result, the "Balance of deviations" account is also closed at the beginning of the month, comparing the deviations of the actual results of the use of financial resources and the resulting scientific and educational activities from the planned values (see Figure 1).



***Figure 1. The proposed mechanism of managerial accounting for the formation and use of financial resources***

In this case, the necessary information flows are formed by the principle of continuity and double registration in the management

accounting system, which characterize the efficiency of the use of financial resources in universities, applying the following accounting reports offered by us:

- the deviations of the actual use of financial resources for grants from the planned ones were formulated;

*DR Variances in the use of financial resources...1,333*

*CR Variances of Grants .....1,333*

- the deviations of the actual use of financial resources for tuition fees from the planned ones were formulated;

*DR Variance in the use of financial resources ...0.875*

*CR Tuition deviations .....0,875*

- the deviations of the actual use of the reserves from the planned quality improvement resources were formulated;

*DR Variance in the use of financial resources....1,5*

*CR Variances of Quality Improvement Resources ....1,5*

- the deviations of the actual part of the financial resources usage for ensuring the number of students from the planned ones were formulated;

*DR Deviations of the number of students.....0.96*

*CR Variance of resources usage component....0.96*

- the deviations of the actual part of the usage of financial resources in the field of scientific and research works were formulated;

*DR Deviations in the results of commercialization .1,3*

*CR Variances of the resources' usage component...1,3*

- the deviations of the actual part of the financial resources' usage for the provision of students' grading level were formulated.

*DR Students' GPA deviations.....1,14*

*CR Variances of the resource usage component...1,14*

- the accounting correspondence of the balance of recorded deviations was formulated.

*DR Resource usage variances.....0,308*

*CR Balance of deviations .....0,308*

*DR Resources usage variances .....3,4*

*CR Balance of deviations .....3,4*

*DR Balance of deviations .....3,708*

*CR Variances in the use of fin. resources ... 3,708*

By formulating the correspondences offered by us in the accounting related to the information on the efficiency of the use of financial resources in the double registration method, an opportunity is created to coordinate the information flows related to the efficiency and to submit a management report within the university (see table 3).

***Table 3. Management accounting report on the effectiveness of the use of financial resources***

Financial resource's	Responsibility center	Resources deviations	Deviations of outcomes
Tuition fees	Education Department	0,875	0,96
Grants	Department of Science and Innovation	1,333	1,30
Provision funds	Internal Quality Assurance Department	1.5	1,14



Table 3, which is an internal report on the effectiveness of the use of financial resources of the university, is compiled with information on the new accounts and accounting correspondence, that we offer for management accounting. And it gives an opportunity to present such a report not only on the basis of interrelated information, but also on the principle of continuity. Thus, the work of the proposed mechanism for the formation of information flows for the management accounting of the effectiveness of financial resources is ensured by such accounts, that constantly record in which circles the financial resources supporting the scientific and educational activities of the university were formed and in what directions and proportions received their results.

Thus, if the education department still managed to collect less than planned tuition fees (deviation 0.875) and still not allow a drop in the number of students equivalent to it (deviation 0.96), then the degree of financial resources usage in this direction should be considered as effective. The same cannot be said for the use of grant resources, when the financial resources allocated to research work were formed more, than planned (deviation 1.33), but their feature, i.e. the commercialization of the obtained scientific results, did not provide adequate progress (deviation 1.30).

Naturally, such information obtained from accounting accounts on a continuous basis can be the basis for making timely and sound management decisions on increasing the efficiency of the use of financial resources.

## Conclusion

Thus, the mechanism proposed by us for the calculation of the efficiency of financial resources provides an opportunity to solve a number of problems in universities.

First, an information system for the formation and usage of financial resources is formed, which, unlike financial accounting, presents not only indicators with monetary measurements, but also non-monetary information flows, which enables accounting monitoring of the efficiency of the usage part of financial reserves, according to the university's scientific and educational in various fields of activity.

Secondly, an information system for efficient use of financial resources is formed according to responsibility centers. In this case, with the information registered in the accounts, management reports are regularly presented, which reveal which departments of the university's activity have failed in the field of effective use of financial resources and who are responsible for them.

Thirdly, such a reporting system is formed, when feedback is provided between the beneficiaries related to the effective use of financial resources and the university's administrative departments, which makes it possible to implement sound managerial decisions in terms of increasing the financial, economic and social aspect of scientific and educational activities [6].

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**Գայանե Ավայան**

տ.գ.թ., ՀՊՏՀ

## **ՖԻՆԱՆՍԱԿԱՆ ՌԵՍՈՒՐՍՆԵՐԻ ՀԱՇՎԱՌՄԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ ՀԱՄԱԼՍԱՐԱՆՆԵՐՈՒՄ**

**Բանալի բառեր** – ֆինանսական ռեսուրսներ, պատասխանատվության կենտրոններ, կառավարչական հաշվառում, կառավարչական հաշվետվություններ, գիտակրթական գործունեություն

Բարձրագույն ուսումնական հաստատությունների ֆինանսական պաշարների օգտագործման արդյունավետության գնահատումը փոխառնչվում է որոշ մեթոդաբանական հիմնախնդիրների հետ: Համալսարանները, ձևավորելով ֆինանսական պաշարներ և դրանք կիրառելով կրթական ծառայությունների մատուցման ոլորտում, հետամուտ են լինում մի շարք խնդիրների, որոնց լուծումներից է կախված ֆինանսական միջոցների օգտագործման արդյունավետության գնահատումը:

Հոդվածում առաջակվում է ֆինանսական պաշարների արդյունավետության կառավարչական հաշվառման կառուցակարգ, որը հնարավորություն է տալիս բուհերում լուծելու մի շարք խնդիրներ:

Առաջին, ձևավորվում է ֆինանսական պաշարների ձևավորման և օգտագործման տեղեկատվական մի այնպիսի

համակարգ, որը, ի տարբերություն, ֆինանսական հաշվառման, ներկայացնում է ոչ միայն դրամային չափիչներով ցուցանիշներ, այլև ոչ դրամային տեղեկատվական հոսքեր՝ հնարավորություն տալով հաշվապահական մոնիտորինգի ենթարկելու ֆինանսական պաշարների օգտագործման հատույցի արդյունավետությունը՝ ըստ բուհի գիտակրթական գործունեության տարբեր ոլորտների:

Երկրորդ, ձևավորվում է ֆինանսական պաշարների արդյունավետ օգտագործման տեղեկատվական համակարգ՝ ըստ պատասխանատվության կենտրոնների: Այս դեպքում, հաշվապահական հաշիվներում գրանցված տեղեկատվությամբ պարբերաբար ներկայացվում են կառավարչական հաշվետվություններ, որոնք բացահայտում են, թե բուհի գործունեության որ օղակներն են թերացել ֆինանսական պաշարների արդյունավետ օգտագործման ոլորտում, և ովքեր են դրանց պատասխանատուները:

Երրորդ, ձևավորվում է հաշվետվական այնպիսի համակարգ, երբ հետադարձ կապ է ապահովվում ֆինանսական պաշարների արդյունավետ օգտագործմանն առնչվող շահառուների և բուհի վարչակառավարչական օղակների միջև, որն էլ հնարավորություն է տալիս իրականացնելու հիմնավոր կառավարչական որոշումներ գիտակրթական գործունեության ֆինանսատնտեսական և սոցիալական հատույցի բարձրացման գծով:

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