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THE ISSUES OF FINANCIAL RESOURCES USING ASSESMENT IN UNIVERSITES

Abstract: By providing educational services, universities pursue the satisfaction of public interests on the one hand, and commercial benefits on the other hand. In this sense, a problem arises to evaluate the effectiveness of the financial resources, spent for the purpose of educational services. The article proposes approaches to evaluating the use of financial resources of universities with a combination of public and commercial interests.

Keywords: financial resources, university educational services, efficiency, resource consumption, financial control

JEL code; M 40, M41

Research aim: identify opportunities for comprehensive evaluation of the effectiveness of the use of financial resources in universities

Research novelty: an integral index for the evaluation of the efficiency of the use of financial resources in universities was proposed

Introduction

The evaluation of the effectiveness of the use of financial resources of higher educational institutions is connected with a number of methodological problems. By forming financial resources and applying them in the field of providing educational

services, the universities face a number of problems, the evaluation of the effectiveness of the use of financial resources depends on their solutions.

First of all, the efficiency of the universities should be considered from the point of view of public interests. From the provision of educational services, the state expects to receive not only qualified specialists, but also knowledgeable and patriotic citizens endowed with professional abilities and skills [1]. The national school is the mainstay of the state policy in the field of education, the main purpose of which is the formation of a person who has proper professional training and is comprehensively developed, brought up in the spirit of patriotism, statehood and philanthropy. The educational system of the Republic of Armenia is aimed at strengthening the spiritual and intellectual potential of the Armenian people, preserving and developing national and human values [2].

However, on the other hand, universities have not only public, but also private interests in providing educational services, which require special approaches when evaluating the effective use of financial resources. Thus, during their activities, universities strive to obtain commercial results, profit growth, accumulation of necessary financial resources in order to be able to gain competitive positions in the research market, improve the quality of provided educational services, making additional financial investments in their activities [3].

Research results

In turn, graduates who are key beneficiaries of educational services are interested in the quality of their professional skills and seek to obtain a quality education in order to become competitive

in the labor market. University graduates often present questions related to education. Why are they not competitive in the labor market, what was the point of wasting years in universities, what was the point of spending so many financial resources on education, if they cannot find a job after graduating from university? These questions become even more important these days, when university education is becoming further expensive every year, overload of many professions is observed in the labor market. It is with these considerations that universities face challenges, as they are unable to meet the expectations of graduates and are gradually pushed out of the competitive market of providing educational services.

Thus, different beneficiaries related to professional education services have different expectations from university activities (quality, profitability, professional skills, universal and national value system, etc.), which require special approaches when evaluating the effectiveness of financial resources of universities (see Figure 1).

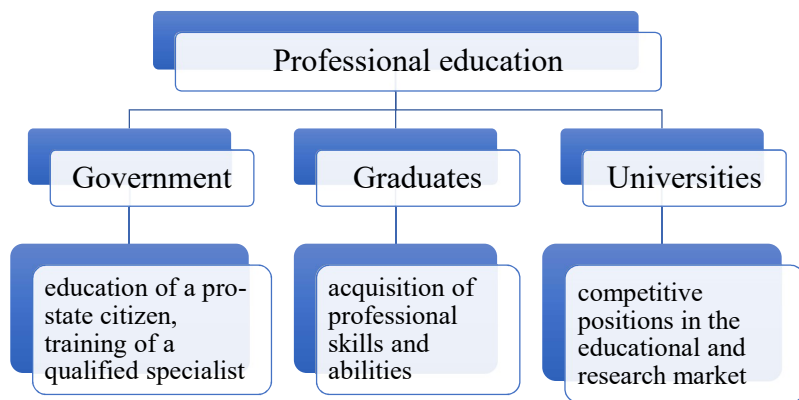


Figure 1. Expectations of key beneficiaries of professional education from university activities

In general, the use of financial resources of universities is discussed in the short-term, medium-term and long-term, and the task is to determine whether these resources have been effectively used according to their purpose. And since the expectations of the beneficiaries of education differ from university activities, it becomes somewhat difficult to evaluate the effectiveness of the financial resources in terms of measurability [4]. And since the manifestations of the use of financial resources are represented by different metrics: the average quality score of the graduate, university income, commercialization of research activities, etc., there is a need to transform these metrics into relative indicators and bring them into the field of comparison [7].

In this sense, we propose to measure the various manifestations of the effective use of financial resources of universities with relative indicators, more specifically with coefficients, which will make it possible to make them comparable and thus combine them within the framework of one integral indicator. In such a case, various aspects of the use of financial resources in different areas of providing scientific and educational services will become comparable in a factorial way, and by consolidating them, an opportunity will be created to evaluate the multifaceted effect of the process of providing professional educational services.

We recommend the creation of a combined indicator of efficiency with the relative values of the use of financial resources in several interconnected stages (see Figure.2).

In the first stage, the expectations and goals of the beneficiaries related to the process of professional scientific and educational services are defined, which can be formed both in the public and in the private sector. At the same time, these goals may

not coincide with different beneficiaries, so they consider it appropriate to form a complex and comprehensive approach to the measurement of the efficiency of the use of financial resources [5].

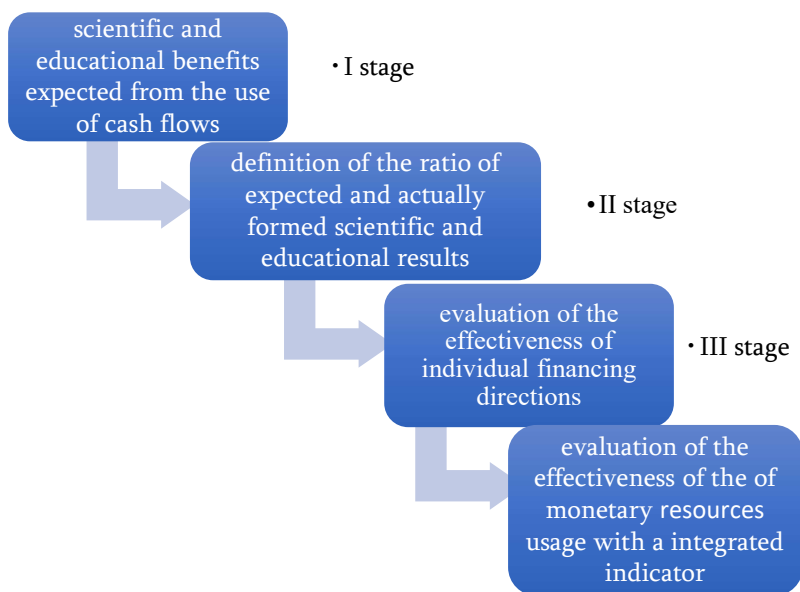


Figure 2. Suggested steps for evaluating the effectiveness of the use of financial resources in the university system

In the second stage of the calculation of the combined efficiency index with the relative amounts of the use of financial resources, a comparison of the actual and intended results of the scientific and educational activities of the university is carried out according to individual directions. Moreover, this comparison is carried out by means of relative coefficients, which creates an opportunity to compare the indicators with different metrics and to present them in the form of unified coefficients. In this case, the closer these coefficients are to point one, the more effective will be the targeted

use of financial resources in carrying out scientific and educational activities. And the further the deviations of the calculated coefficients from point one, the lower will be the ratio of the use of financial resources in this or that field of scientific and educational activity of universities.

At the last stage of measuring the efficiency of financial resources, an integral indicator is already built in the form of a fraction, which shows the consolidated part of the use of financial resources. At the same time, the denominator of the integral (E) index characterizing the efficiency represents the coefficient deviations of the target and actual magnitudes of the formation of financial reserves, and the numerator - the coefficient deviations of the target and actual magnitudes of the university's scientific and educational activities.

$$E = \frac{\sum_{i=1}^n (S_{1i}/S_{0i})}{\sum_{i=1}^n (F_{1i}/F_{0i})} \quad (1)$$

where:

F_{1i} - is the actual cost of the i -th financial stock,

F_{0i} is the expected cost of the i -th financial stock,

S_{1i} – the actual results of scientific and educational activities,

S_{0i} - intended results of scientific and educational activities.

Thus, table 1 presents information on the calculation of the effectiveness of the use of financial resources aimed at the scientific and educational activities of the university, which is used in the proposed formula (1). In fact, the formula proposed by us for the efficiency of the use of financial resources combines the total costs of the implementation of scientific and educational programs and

their value from the point of view of access, and the higher the values it accepts, the higher the efficiency is estimated.

Table 1. Indicators of evaluation for the effectiveness of the provision scientific and educational services

Indicators	Inten- ded	Actual	Coefficient of availability
Collected tuition fees (million AMD)	820	800	$800/820 = 0,98$
Number of students	3420	3550	$3550/3420 = 1,03$
Research grants (million AMD)	73	68	$68/73 = 0,93$
Research completion rate (%)	100%	93%	$91/100 = 0,91$
Student mobility financing (million AMD)	12	9	$9/12 = 0,75$
Degree of implementation of student exchange programs	100%	83%	$85/100 = 0,83$
Funding for the organization of distance education (million AMD)	54	49	$49/54 = 0,91$
Degree of completion of distance learning implementation	100%	96%	$96/100 = 0,96$

Thus, the coefficient of the fraction characterizing the efficiency of the use of the university's financial resources increases when the diversified actual results expected from the funded educational and scientific research programs approach their intended results and

strive for one. And if there is an actual saving of financial reserves and they deviate from their planned sizes, then in that case the denominator is reduced, as a result, the size of the fraction increases.

$$(1.03+0.91+ 0.83+0.96)/(0.98+0.93+0.75+0.91) = 1.044$$

Therefore, the higher the fractional indicator proposed by us for the evaluation of the efficiency of the use of financial resources of the university, the higher the ratio and efficiency of the use of cash and their equivalents is recorded, because the increases in the fractional numerator indicate financing a high degree of actual availability of the consolidated results of scientific programs, and denominator deductions about the management of financial resources.

In addition, the proposed methodology makes it possible to evaluate the efficiency of funding of individual scientific and educational directions, comparing the performance of the planned degree of use of monetary resources for each of them with the actual degree of formation of compensation. And the greater the degree of comparison, the more effective the use of financial resources is in a specific direction:

- ✓ efficiency of using tuition fees = $1.03/0.98 = 1.05$
- ✓ research funding efficiency = $0.91/0.93 = 0.97$
- ✓ financing of mobility efficiency = $0.83/0.75 = 1.11$
- ✓ distance education financing efficiency = $0.96/0.91 = 1.05$

Conclusion

Thus, the methodology proposed by us for evaluating the effectiveness of the financial resources usage in universities provides an opportunity.

First, to apply a unified measure for various features of financing, when using coefficients for the results obtained by different metrics from the use of financial resources, a field of comparability of evaluation is formed and, therefore, the possibility of using an integral indicator of efficiency.

Second, to take into account the expectations of internal and external beneficiaries related to the scope of the provision of scientific and educational services, not only in terms of targeted but also effective uses of financial resources.

Third, to combine the indicators of the efficiency of the use of financial resources in separate directions with an integral indicator, which will reveal the degrees of formation of the component of funding of separate scientific and educational programs.

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Գայանե Ավայան
տ.գ.թ., ՀՊՏՀ

**ՀԱՄԱԼՍԱՐԱՆՆԵՐՈՒՄ ՖԻՆԱՆՍԱԿԱՆ ՌԵՍՈՒՐՍՆԵՐԻ
ՕԳՏԱԳՈՐԾՄԱՆ ԱՐԴՅՈՒՆԱՎԵՏՈՒԹՅԱՆ ԳՆԱՀԱՏՄԱՆ
ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ**

Բանալի բառեր – ֆինանսական ռեսուրսներ, համալսարանական կրթական ծառայություններ, արդյունավետություն, ռեսուրսների օգտագործման հատույց, ֆինանսական վերահսկողություն

Համալսարանները, մատուցելով կրթական ծառայություններ, մի կողմից հետամուտ են լինում հանրային շահերի բավարարմանը, մյուս կողմից, ձգտում են նաև կոմերցիոն օգուտների: Այս առումով, հիմնախնդիր է ծագում գնահատելու կրթական ծառայությունների նպատակով ծախսվող ֆինանսական ռեսուրսների արդյունավետությունը:

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

Նախ և առաջ, բուհերի գործունեության արդյունավետությունը պետք է դիտարկել հանրային շահերի տեսանկյունից: Կրթական ծառայությունների մատուցումից պետությունը ակնկալում է ստանալ ոչ միայն որակյալ մասնագետներ, այլև մասնագիտական կարողություններով ու հմտություններով օժտված, բանիմաց և հայրերնանվեր քաղաքացիներ: Կրթության բնագավառում պետական քաղաքականության հենքն ազգային դպրոցն է, որի գլխավոր նպատակը մասնագիտական պատշաճ պատրաստվածություն ունեցող և համակողմանիորեն զարգացած, հայրենասիրության, պետականության և մարդասիրության ոգով դաստիարակված անձի ձևավորումն է: ՀՀ կրթական համակարգը նպատակաուղղված է հայ ժողովրդի հոգևոր և մտավոր ներուժի ամրապնդմանը, ազգային և համամարդկային արժեքների պահպանմանն ու զարգացմանը:

Սակայն, համալսարանները կրթական ծառայություններ մատուցելիս ունեն ոչ միայն հանրային, այլև մասնավոր շահեր, որոնք պահանջում են առանձնահատուկ մոտեցումներ ցուցաբերել ֆինանսական պաշարների արդյունավետ օգտագործումը գնահատելիս: Այսպես, բուհերը ձգտում են իրենց գործունեության ընթացքում ստանալ նաև կոմերցիոն արդյունքներ, շահույթի աճ, ֆինանսական անհրաժեշտ պաշարների կուտակումներ, որպեսզի կարողանան մրցակցային դիրքեր գրավել գիտահետազոտական աշխատանքների շուկայում, բարելավել մատուցվող կրթական ծառայությունների որակը՝ լրացուցիչ ֆինանսական ներդրումներ անելով իրենց գործունեությունում:

Հոգվածում առաջարկվում է համալսարանների ֆինանսական ռեսուրսների օգտագործման արդյունավետության համալիր գնահատման մեթոդաբանություն:

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