Financial Analysis Models

Rubinshteyn Evgeniya

Vladivostok State University of Economics and Service, Russia

fineasusual@hotmail.ru

Abstract

According to the government policy the development of the higher education requires the solution of the series of the problems. The most important problems among them are related to the development of the new mechanism of financing. Recent economical position of the educational system is characterized as an insufficiency of the budgetary funding . That is the main problem for the higher education system now. The rest of the problems of the educational system such as the content and quality of higher education are the consequences of this insufficiency. Many researches state that conceptual basis of the transition of the institutes of higher education from managing of the expenses to managing of the results have to include methods for calculation and prognosis of the expenses for the training of the future graduates. We offer regression model for the forecast of the expenses for the training of the future graduate.

According to the government policy the development of the higher education requires the solution of the series of the problems. The most important problems among them are the related to the development of the new mechanism of financing. Recent economical position of the educational system is characterized as an insufficiency of the budgetary funding. This is the main problem for the higher education system now. The rest of the problems of the educational system such as the content and quality of education are the consequences of such insufficiency. Many technical, pedagogical, agrarian universities are now in very complicated situation. These universities accept now students with quite poor knowledge of mathematics and physics.

The method of budgetary funding of the institutions of higher education has changed dramatically during last five years from the liberalization to continuing strengthening of the federal component of the budgetary regulation. The higher education is transforming, and the methods of prognosis (forecast) and programming are renewing while reforms continue.

The structure of the budgetary funds is changing and becoming more diverse, the control for this structure is strengthening. Non-budgetary funds of the universities transformed into the budget income

with corresponding change of the way of its spending.

Along with that new forms of the funding of the institutions of higher education had been developed. Some researchers consider this practice obsolete and it is necessary now:

- transform public universities into autonomous institutions,
- join low ranking institutions with the higher ranking universities,
- change some standards of higher education,
- move the university funding for the undergraduate students to the per capita standards.

According to the funding method by per capita standards, the calculation of the federal funding of a university is made on the basis of the number of enrolled students and federal standards of expenses for the preparation of one graduate or some other quantitative parameters of the university activity. This method is the basis for the budgetary funding of the education in majority of the developed countries.

Some researchers [2] see the solution of the problem as grant funding, considering the programs of the university support of the following type. The contract is signed by the university, receiving grant, and government, and then federal government is funding university for 80% of the sum, written in the university statement for the contest. The rest 20 % of the money university has to add itself or

receive form the companies- partners of the university. Such program of funding usually works for two years, and university has to make a report to the Ministry of the Education every week while working on it. Positive sides of that kind of funding: government support the strongest research team, each university develops the innovation project itself taking into account local interests and features. It motivates universities to cooperate with regional businesses, the support of the local businesses is crucial. Main goal of the innovation program is to increase the quality of higher education and to reach marketability of the graduates with majors, which are on demand by the home and foreign companies. Such funds have to be used for purposes they were granted: new equipment for the labs, development and implementation of new technologies into the educational process.

During last two decades many countries moved to the budgeting system, aimed to the results. Change of the "expenses" model of budgetary funding to the "result" model, whose core advantage is reaching the planned results, is caused by the same reasons for all countries. The disadvantage of the "expenses" model is the absolute right of the people of higher level of power to make financial decisions, their lack of understanding of the priorities and goals of the development of the budgetary organization. As a consequence of all that – very low level of responsibility and interest in quality service from the side of the organizations with budgetary funding.

The raise of the effectiveness of the allocated budgetary resources is one of the main directions of Russian federal policy in the educational sphere. To evaluate the effectiveness of the budgetary resources it is necessary to define the concept of the effectiveness of the resources in education.

If effectiveness is considered as targeting the result, then it is the distance to the goal chosen. The choice of the goal and indicators, which allow finding out, how the achieved stage of the university corresponds to the targeted stage, how far is the distance. Thus, it is possible to compare different options of the goal implementation with fixed expenses.

If effectiveness is considered as productiveness, then it is the estimate of the impact of the resource into the process of the achieving the result, i.e. how the resource influenced the degree of the result achieved.

If we use effectiveness, then it is the ratio of the result (effect) and the resources, used for achieving this result.

In Russia budgetary process is still aimed to ensuring the activity of the budgetary organizations, i.e. to reproduce current stage of the organization, because the core of funding is planning of expenses, but not results, which leads to worsening of financial position of the budgetary organization in the situation of the scarcity of financial resources.

Now the problem of targeting the development of higher education becomes urgent, because the problem is posed to redirect budgeting process to the results. Although it is almost impossible to know what expenses leaded to which results due to the set of different factors, including inertia of the educational system.

Some researches [1] consider that conceptual basis of the transition of the institution of higher education from the management of the expenses to the management of the results, while reforming budgeting, should include methods of calculation and prognosis of expenses for the training student – future graduate, allowing to conduct rational financial policy and to manage financial results for the different educational programs and projects.

The methodology of these researchers is the following. The financial policy of the university with respect to the management of expenses provides:

-an optimization of the actual expenses for the preparation of one graduate of the specific major year by year,

-the analysis of the expenses,

-the plan of the educational programs and

-making decision for management in favor of this major.

This methodology of calculation of the expenses for the preparation of one student of the public university developed as an element of the mechanism of an implementation of the financial policy of the institution of higher education.

A part of the current expenses of the university and amortization of capital assets are included into the actual expenses. Calculation of the expenses includes calculation of the expenses by the items (completely or partially related to the preparation of the graduate), calculation of the amortization of the capital assets by the groups (less than 10000

rubles and greater than 10000 rubles). Direct expenses are calculated on the base of the schedule, teaching personnel, and number of the enrolled students.

We propose to simplify the approach to the prognosis of expenses for the preparation of the graduates using regression model. Independent variables of such model are salary, utilities, communication service, rent, transportation, amortization of the capital assets etc. Dependent variables are the costs for the preparation of future graduates. Regression models are quite precise compare to the mathematical models, where the knowledge of the properties of the objects under investigation is necessary. This preciseness is achieved by the large number of the models – candidates, which are used for the choice of the best model. Advantage of the regression model compare to the offered by the author in [1] is that such model, once developed may be reused with different data, allowing answering the question "What if …?"

1. Maltseva G. The concept of the transition of the institution of higher education from management of the expenses to the management of the results. *Siberian financial school*, 2007, vol 1

2. Models of funding for the institutions of higher educations: analysis and estimate. Beliakov S., 2005