



PRINCIPLES OF FINANCING THE EDUCATION SYSTEM

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Abstract

The article describes financial resources, financing issues, problems and their importance in the education system. At the same time, analytical approaches to the effectiveness of financial resources of educational institutions and theoretical and methodological foundations for its study are presented.

Keywords: Education system, financing, state of financing, problems and effectiveness of financial resources, effective management of educational institutions, rating, financial stability, solvency, profitability

Introduction

It is well-established that the outcome of the educational system's activities is a set of educational services that possesses the ability to meet the specific needs of the consumer of these services. In contemporary terms, the practical result of educational services is assessed by the capacity to effectively apply the acquired knowledge and developed skills in real-life situations. In this context, it is necessary to differentiate between the set of educational services received by the student (the outcome being the product of the teacher's labor) and the collection of competencies acquired by the student (the result of the collaborative effort between the teacher and the student).

In our country, over 30 years of history and experience in educational policy have led to numerous significant achievements and outcomes. Firstly, the organization of education, the development of national education programs, and the right to education have been enshrined in the Constitution of the Republic of Uzbekistan. Over this period, the laws "On Education" (No. 464-I, dated August 29, 1997), "On the National Program for Training Personnel" (No. 463-I, dated August 29, 1997), and the new version of the Law "On Education" (No. URQ-637, adopted on September 23, 2020), as well as the decrees and decisions of the President of the

Republic of Uzbekistan concerning education policy, and the resolutions of the Cabinet of Ministers in the field of education, have created the legal framework for organizing and financing education. Changes in the legislative framework related to the financing of education have been closely linked with educational reforms, educational priorities, and addressing issues in the education sector.

The improvement of principles in financing the education system, the formation of state orders within the education system, and the accurate formation of student admission parameters based on the real capacity of educational institutions, in the form of budgets and fee-based contracts, are matters that remain unresolved and are waiting for solutions.

Analysis of Literature on the Topic

The development of the education services market and its infrastructure, financial stability within it, the formation and management of financial resources in the education system, and state regulation issues are reflected in the scientific research of scholars such as L.I. Abalkin, A.N. Leontiev, V.A. Yadov, L.V. Peregudov, V.P. Rozhin, I.A. Sasova, G.L. Smirnova, and V.P. Shubin.

The sources of financing educational institutions and the issues related to their reform have been studied by scholars such as D. Watson, B. Berendt, G. Niv, T. Chevalier, V.M. Bautin, I.N. Buzdalov, A. Dankevich, H. Johnson, and R. Lipsay. The correlation approaches to assessing national economic efficiency are also characteristic of American economists, including Edward F. Denison, who advanced the idea of the economic significance of education as a labor force.

In recent years, scientific research dedicated to management and marketing issues in the education services market in our country has been conducted by scholars such as S.S. Gulomov, Q.H. Abdurahmonov, B.Yu. Khodiev, A.Sh. Bekmurodov, M.Kh. Saidov, S.M. Buzrukhonov, A.V. Vahabov, T.S. Malikov, N.Kh. Khaydarov, D.H. Nabiyeu, O.O. Olimjonov, Z. Qoziev, D. Sagdullaev, A. Mahmudov, Kh. Rejapov, A. Sherov, and others.

The above-mentioned research comprehensively addresses the essence, formation, regulation mechanisms, and directions of the education services market. However, the issues related to improving the principles of financing educational institutions have not been thoroughly studied as an independent research object.

Several studies have approached the financial management of educational institutions from the perspective of regional economics and sectoral economics. In the context of modernizing the national economy, the effects of financial resources in educational institutions within specific directions, the forms and directions of financial practices have been reviewed. In these works, the content of financial resources in the education system, the conditions for their emergence, and the financial structure are substantiated.

Research Methodology

During the research process, monographic analysis, as well as expert and systemic analysis methods, were used to prepare recommendations for improving the methods of enhancing the financial independence of higher education institutions and increasing the efficiency of financial resources.

Analysis and Results

Educational services are the final result (product) of the educational process, where the knowledge and skills acquired by graduates constitute its core content and essence. Educational services are considered a unique, holistic process. Below, we will examine the characteristics that demonstrate its uniqueness.

- Intangibility (Non-material) characteristic:
- Indivisibility of educational services from the individuals who consume them (i.e., the individual nature of consumption);
- Inability to store educational services (a process that cannot be accumulated or transported).

As a service-based "educational service," it is distinguished by its unique characteristics and features. These include:

- Irrelevance (insignificance) characteristic;
- Indivisibility of educational services from the source (producer);
- Simultaneous production and consumption;
- Direct involvement of the consumer in both the service and production processes;
- Constant renewal and change in the value of educational services;
- The educational service consumer increases the product's price by enhancing "human labor" through the labor market.

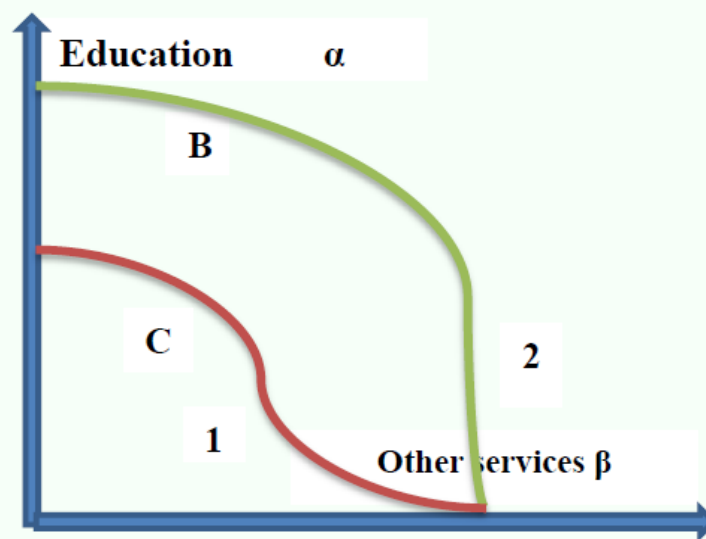
Human life's needs are always infinite. Needs refer to the lack of things necessary for maintaining and developing human life. According to the most well-known motivational theory in economics, Abraham Maslow's hierarchy of needs, human needs are divided into:

- Primary (inelastic);
- Secondary (elastic).

Consumers' needs are infinite. In the education sector, these needs are fulfilled through the provision of educational services. All economic agents operate under conditions of limited resources. The limitation of natural resources has a relative character, and it manifests itself in the impossibility of fully satisfying all consumers' needs at the same time.

We will examine the process of fulfilling needs in the consumption of educational services through the following graph.

The Production Possibility Curve (PPC) in the Education System.



The society initially resides at point C on the internal curve. To reach the outer curve of opportunities, new production capacities must be created. Achieving this requires transitioning from point C to point B. To implement this, it is necessary to reduce the production of other services and increase the consumption of these services. This, in turn, leads to the necessity of increasing the number of new schools and educational institutions that provide educational services. The society

may move towards the higher production possibilities frontier and select a point that corresponds to a larger volume of educational services and other services.

Opportunity costs are measured by the costs associated with a particular good that must be expressed in terms of another good, which must be considered in the decision-making process. These are referred to as opportunity costs.

In the context of forming the production possibility curve in the education system, the number of production factors and the level of knowledge have been considered as non-fixed.

Each point on the production possibility curve in the education system represents a specific maximum volume of two goods' production. The curve depicted in the graph indicates a certain boundary.

Regarding resource constraints, any production combination located outside the production possibility curve in the education system is not permissible.

A point inside the production possibility curve in the education system indicates that resources are not being fully or optimally utilized. This curve is convex upwards.

The law of increasing opportunity costs reflects the relationship between increasing the production of one good at the expense of reducing the production of another. When one resource is limited, and the economy is operating at its production possibility frontier, to increase the production of one good, the production of the other must be continuously reduced in an increasing amount.

In researching the principles of financing the education system and educational institutions, it would be appropriate to first examine the models of financing systems and organizations.

• The model of financing educational institutions based on state orders as autonomous institutions:

In this model, the state's budget pays for a certain number of students to be educated in specific fields of study as a form of state order. This represents the budget financing in an autonomous form, which should be considered as an elementary version of the budgetary institution model. At the same time, many experts agree on distributing state tasks for training specialists through a competitive process, with the possibility of paying based on a contract (tuition fee). However, the contract model is viewed as an additional admission process to fulfill the assigned tasks.

From one perspective, the model in which the state sets financing standards for each specialization and determines the number of specialists to be trained at a given educational institution for each specialization seems logically aligned with the model under study. However, according to the established law, the state order can only be distributed based on a competitive process. In this case, the subject of the competition is not fully clear. The terms proposed by the educational institution for training a specific contingent, including the total costs for preparing one student as a specialist, or the number of students entering the institution for each specialization, should be proportionally formed.

The optimal distribution model for the state order (state order model) can be expressed in the following formula.

$$\begin{aligned} \sum_j c x_j &\rightarrow \max; i = \overline{1, N} \\ x_i &\in A_i, \\ x_i &= (x_{i1}, \dots, x_{im}), \\ \sum_j x_j &= X \\ cX &= V, \\ x_j &\geq 0, \end{aligned}$$

Here, x_{ij} -represents the number of students accepted into the i -educational institution for the j - specialization (educational field); X_j is the state order for training specialists in the j -field (specialization); A_i is the production capacity of the i -educational institution; X is the number of students admitted on the basis of the budget funds; and V is the education budget, which finances the education of first-year students.

The distribution of state orders between educational institutions indicates that the updated state order system is based on the targeted indicators for student admission. As a result, educational institutions indicate how many students they can accept (or wish to accept) in the competitive process and obtain the right to admit a certain number of students, close to the announced number. In essence, the state order distribution experience requires determining the demand for specialized professionals in the labor market. This is a very complex task, as forecasting the demand for professionals requires medium-term (4 years or more) planning for

both state and business organization structures. However, for most budgetary organizations, such planning typically extends only 2-3 years.

The creation and practical application of educational programs, considering the capital capacity, can be carried out by differentiating financing standards per capita, as an example. If this approach is followed, the state order model-1 would appear in the following form:

$$\begin{aligned} \sum_{ij} c_{ij} x_{ij} &\rightarrow \max; \\ x_i &\in A_i; x_i = (x_{i1}, \dots, x_{im}); i = \overline{1, N} \\ \sum_i x_{ij} &= X_j; j = \overline{1, m} \\ \sum_i x_j &= X \\ cX &= V, \\ x &\geq 0. \end{aligned}$$

The state order model, as well as the optimal structure of the State Order Model 1, typically differs in terms of the solutions and benefits that educational institutions can obtain within the frameworks of models (2) or (5), and even more so within models (6) and (7).

From this perspective, if educational institutions, functioning as autonomous entities, can attract students under a payment-contract system, their applications for student admissions based on budget funds will not be considered in resolving the State Order or State Order Model 1 issues. In this regard, adapting the competitive procedures for distributing state tasks to the existing practices does not effectively increase the efficiency of public spending on the budget.

At the beginning of each fiscal year (in January or February), it is necessary to carry out precise forecasting aimed at improving the efficiency of budget spending for the allocation of state orders. This, in turn, creates a foundation for the implementation of model (3.11). First, parameters for admitting students to state-funded education institutions must be distributed based on competitive criteria for preparing specialists. This will allow educational institutions to set the number of student admissions based on the available student capacity while taking into account the payment-contract system.

However, in any case, when transitioning to the state order practice, conflicts of interest arise within the system, or there are cases where the acceptable values for budgetary admissions in various specializations and educational fields are exceeded, or the structure of study programs in the budget and payment-contract systems leads to situations that are inefficient in terms of utilizing the institution's overall resources at the micro level.

Conclusion

1. Improvement of the Education Financing Principles: Based on the actual demand for specialists by the state, it is necessary to further refine the mechanisms for forming state orders. This will, in turn, ensure the proper implementation of financing principles at both macro and micro levels in educational institutions, as well as the correct establishment of student capacity and the parameters for student admissions under the payment-contract system. All of this will create the foundation for aligning educational practices with real-life implementation and lead to increased education quality. It will also contribute to the comprehensive development of specialists required by society.

2. The Need for Reform in the Financing Principles of Education: The principles of education financing in our country, like the education system itself, require substantial reform. Today, the education system, primarily characterized by extensive development, faces the challenge of forming a solid resource base. The issuance of inevitable decisions regarding the improvement of financing principles and the review of existing ones remains a pressing demand for today.

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