Government funding for higher education: foreign and Kazakhstan experience

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Abstract. The main purpose of the study is to analyze the current system of public financing of higher education in Kazakhstan and the application of world existing forms of public financing of higher education in the country. This research article comprehensively examines the issues of public funding of higher education, particularly foreign and domestic experience with the using of methods and forms of public funding. The result of research scientifically validates the necessity of state participation in financing the country's higher education, as well as the regulation of market relations in the field; analyzes the current state of the system of public funding of higher education in Kazakhstan; reveals the methods and forms of public funding of higher education on the basis of the studied material.

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Introduction

The questions of funding and involvement of funds in the educational system from different sources are some of the key issues in the system of higher education, which are increasingly becoming a major sector of the economy both in terms of resource consumption, and in terms of contribution to economic and social progress. Many foreign scholars devoted their scientific works on reforming problems of the higher education sphere: Mestenhauser Josef A., Ellingboe B.J. [1], Schlossman S. [2], Harvey L., Greena D. [3], John M.W.[4]. If the works of Becket N., Brookes M. [5], Lorange P. [6], Levinski R. [7], B. R. Clark [8] mainly raise the questions of management and modern strategy governance of higher education development in Western countries, then the research studies of Terri K. [9], Harari M. [10], Soderqvist M. [11], Altbach P.G. [12], Lane J.E. [13] are dedicated to the questions of internationalization of higher education, particularly to the problems of academic mobility in the system of higher education and their

Formation of the system management by the sphere of higher education at the level which corresponds to world standards, particularly the development of funding system according to the requirements of international finance community, certainly provides a solution to the many problems existing in this field. However, with the development of market elements in higher education foreground, socially important industry issues that are solved and managed only with the participation of the state should always be emphasized. In this regard, the

article, which deals with the issues of public funding of higher education in Kazakhstan, certainly has high relevance.

The main results of the study

Due to the development of autonomy and independence of higher education institutions (HEIs), the main sources of funding for higher education can be considered the income from paid educational services, income from conducting scientific research works and other sources of income. However, a special place in the financing of educational services of HEIs belongs to the state budget. The need for state participation in the sphere of higher education has the following reasons: firstly. as well as all other social needs of society, education is a public good that the market fails to fully fund. The increasing role of the human factor demands the state involvement in solving higher education challenges in a number of urgent social problems. The preamble of the World Conference on Higher Education, held in Paris, July 2009 as part of UNESCO says that "... higher education as a public good is the responsibility of all stakeholders, especially governments. In front of today and tomorrow complex global challenges, higher education holds social responsibility for promoting our understanding in variety of problems, including social, economic, scientific and cultural aspects, and improving our ability to respond them". [14]

The second reason for the state's participation in the financing of higher education is related to its regulatory function. As world practice shows, the redistribution of income in higher education in the direction of increasing private investment was caused in many cases by the financial crisis of governments. The causes of these crises vary from the government priorities shifting to other public needs to tax collection problems.

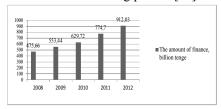
Third, the need for state participation in financing of higher education is explained by observance of the principle of justice, i.e. reallocation of funds, directed to the financing of higher education system between rich and poor. Government subsidies are needed to equalize the opportunities of potential students for admission to universities from different strata of the society. The system of state subsidies and grants primarily provides the access to higher education by the students from poor strata of the population and people with disabilities. [15]

Thus, by financing higher education, the state usually pursues several goals: 1) providing the "necessary" size of higher education system (the achievement of macro-effectiveness), 2) distribution of financial resources between higher educational institutions in accordance with state interests, concerns of students and employers (the achievement of macro-effectiveness); 3) providing accessibility to higher education for all socio-economic groups, that is the equality of educational opportunities.

Descended rise of private higher education worldwide over the past decade is a significant event. and funding models in this sector are important for all stakeholders, including students and society, in general. However, it should be noted that public funding of higher education still plays an important role in both developed and developing countries. For instance, in the UK there is The State Council on Higher Education Funding, from the budget of which all the universities of the country are being financed. In the UK around 50-60% of the university budget is made up by the funds, allocated from the state. The remaining 40-50% of the university budget is formed due to conducting of applied scientific research contracts with companies, execution of orders of municipal authorities, tuition fees from foreign students, sponsor contributions. [15] Also students of accredited private colleges and universities in the U.S. can receive government support in the form of federal student grants and loans. Public support for private higher education is provided also in India, as well as in such countries as The Philippines and Japan. [16, 17]

In Kazakhstan the state budget is one of the main sources of funding for higher education. According to the Statistics Agency of the Republic of Kazakhstan, in general during 2008 - 2012 from the state budget 3345.53 billion tenge was allocated for educational sphere. The dynamics of growth of

government funding for education in 2008-2012 can be seen in the following picture [18]:



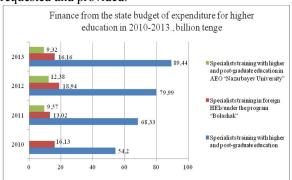
Picture 1. The amount of finance from the state budget for education system in 2008 - 2012

From picture 1, we can observe a tendency of growth of public financial resources allocated for education. If in 2009 the amount of funding from the state budget in comparison with 2008 increased by 16.4%, then in 2012 this indicator achieved 91.7%, i.e. the amount of state funding for the education system in 2012 increased by almost 2-fold compared to 2008.

From the expenditure on higher education, funded by the state, the most significant expenditure items can be considered such as "training of specialists with higher education, postgraduate education and social support to students", "training of specialists in foreign universities in the framework of the program "Bolashak", "services for the preparation of specialists with higher and postgraduate education in the AEO "Nazarbayev University". For this purpose from 2010 to 2013 327.96 billion tenge was allocated from the republican budget. Predominant part of them was spent to the training of specialists with higher and postgraduate education. From the picture 2, we can see 89,44 billion tenge was allocated by the state in 2013 from the republican budget for training specialists with higher and postgraduate education. This is by 11.8% higher than in 2012, by 30.9% higher than in 2011, and by 65% more than financial resources, aimed at training specialists with higher and postgraduate education in 2010.

"Bolashak" program, which includes the training of specialists in leading foreign universities and has an important significance for the state, both in terms of training of specialists that meet international standards, and in terms of their financial resources consumption. For instance, in 2010 the state spent 16.13 billion tenge for the training specialists in foreign universities under the program "Bolashak". This is 2.6% of total government expenditure on education system, including elementary, secondary, secondary professional, higher and postgraduate education. In 2012 this indicator increased by 17,4%, amounting to 18.94 billion tenge, and share of expenditures on training specialist abroad under the program "Bolashak" in total education funding is 2%.

Today support of discussion and exchange of experience in gaining access to various sources of funding is a key task for all countries in the world, because in reality, very few countries are able to provide sufficient public funding for all higher education as much as they would like. Diversification of funding mechanisms does not mean, however, that higher education is no longer a state responsibility. The responsibility of public authorities is not limited by the provision of direct funding. The system of state support for higher education also includes the production of forms, rules and methods of financing according to which alternative financing may be requested and provided.



Picture 2. The dynamics of the growth of government funding, aimed at financing costs of higher education during 2010-2013.

In world practice a variety of models, forms and methods of financing state expenditure on educational services in higher education are considered in the sphere of research of public funding issues of higher education.

N.G.Kuzmina in her article "Foreign Experience of Financing Education in terms of Increasing Autonomy of HEIs" distinguishes three groups of funding models operating in the systems of higher education in the world. According to this classification, the first model, i.e. financing model of HEI is type A, assuming the state support of HEI at which the budget comes directly from the state to the university includes two components: model, that focuses on the needs of the state (A1), and the model, that needs the HEI participation in competitions to have a state order for training specialists, which provides efficient allocation of public jobs and reduce state costs. The order gets that university, the educational services of which are best met by the conditions of the competition, and the cost of training is optimal (A2). Such models are valid in the countries of Southern, Central and Eastern Europe, Africa, Latin America, and Russia.

Funding model of type B is focused on the status of the university, assumes the allocation of

public funds, depending on the results of its operations. Amount of funding is determined by the number of graduate students, students, who are admitted to the first year, by the results of monitoring of students' knowledge, the complexity of the training courses, the number of defended dissertations, etc. These models are implemented in Romania, Denmark, and The Great Britain. In Sweden and the Netherlands the universities are funded on the basis of awarded degrees and the positive evaluation of their activities. Advantage of this model is in expanding the powers of higher education institutions in the financial and administrative management. But funding universities on the "status" indicators provides the government by an effective management tool.

Funding model of type C is aimed at implementing the labor market needs, and suggests payment of educational services by direct consumers, and oriented to the demand and internal needs of the institution. This model uses state obligations transmitted as coupons, certificates (vouchers) directly to consumers of educational services. Significant limitation for the student is the validity of the voucher. Many countries have introduced fees for higher education by implementing various schemes for the model of type C (Australia, Austria, Brazil, China, Hungary, Kenya, New Zealand, Tanzania, etc.). In some of them the state allows universities to enroll a certain percentage of students on the basis of full fees. [19]

N.Barr in scientific work "Higher Education: Methods and Sources of Funding" by describing the experience of state funding for higher education in developed countries (USA, UK, Sweden, Australia), distinguishes such forms of financing of higher education institutions such as: a) funding of educational institutions through transfers, the size of which is determined depending on the cost of educational services; b) funding on the basis of education; c) funding on the basis of certain agreements and political situation; d) funding of students through vouchers or grants for education, as well as through educational loans (repayment conditions is in cash, or in the form of mining on the distribution). [20]

K. Solerno, in his research work, identifies the following forms of financing of educational services of higher education institutions, which are assessed in the distribution of expenditures on higher education in developed and developing countries: a) subsidies for tuition fees. This form of financing operates in many countries of the world, including both developed and developing countries; b) student loans and grants. The article also suggests the ways to finance educational costs of students with disabilities. K.Solerno distinguishes possible alternatives to the

existing system of distribution costs - the transition from the subsidizing system of HEIs on the basis of students' performance to the subsidizing system of needy students; establishment of a mechanism of more equitable distribution of subsidies, or student loan schemes using non-traditional forms of loan repayment (due to debt, bills, withholding taxes). [21]

Tilak Y.B.G., identifying several trends, related to the financing of the costs of higher education institutions, offers such forms of public funding of educational expenses as a) government grants, which are provided by "total amount" or "block" grant depending on the amount of coupon; b) financing, taking into account the number of students, plus subsidies for research; c) funding through a competitive grant; d) funding through the provision of student loans; e) funding from extra budgetary funds organization through the of public-private partnerships. [22]

In B.Dzhongbloed's article "Netherlands: Innovations of Recent Years" views the scheme "supply-driven", which provides funding for educational and research activities by the formula based on the number of graduates. [23]

"Public Funding of Higher Education" edited by I.V. Abankina and B.L.Rudnika offers a threecomponent model of budgetary financing of education: 1) Funding according to regulations per one student. 2) Stimulant-funding grants on a competitive basis, national projects and similar measures at the regional level. 3) Software development funding - the development of the material base, informatization of education, social infrastructure development, etc. [24]

Analyzing the results of scientific research in the field of methods and forms of educational services financing of higher education institutions, the most common forms of budgetary allocations to universities include the following: 1) Direct financing of recurrent and capital expenditures of higher education institutions; 2) Allocation of budgetary funds between HEIs through a voucher system, i.e. voucher funding of high school graduates; 3) Funding by qualitative results of higher education institutes' activities; 4) Funding through grants, subsidies; 5) Preferential student loans; 6) Provision of tax incentives to parents of students.

In Kazakhstan from the above forms of financing the most developed form is the form of funding through allocation of government grants. The country has introduced a system of government educational grants to the best students with the right to have education at any university of their choice. These grants are provided by Ministry of Education and Science of the Republic of Kazakhstan under the state order to winners of "Altyn Bel'gi" (the gold medal),

winners of international Olympiads (on school subjects), as well as on the base of competition and under the state order for specific disciplines and instruction languages for applicants, who successfully passed Unified National Testing (ENT). Over the past 5 years (2009-2013) the state grants have been allotted in total to 174,679 students.

The financing expenses form of higher education institutions as "direct budgetary financing of current and capital expenditure of HEIs" in our country mostly applied to state and national universities. This form of financing involves the mechanism of financial activity of the higher educational institutions by items of expenditure. Also, the form of public funding, focused on quality performance of universities has developed in the national system of higher education. This form is mainly used in post-graduate education. That is to say, focusing on the qualitative indicators of higher education institutions, the number of educational grants for the training of master's and doctoral specialists in higher education institutions is determined at the ministry level.

Conclusion

Higher education institutions are as subjects of economic system of state and consumers of state resources act as producers of educational services. One of the main indicators that directly affect the condition of the system for providing educational services is amount of funding. Availability of the necessary amount of funding enables to provide the field of higher education by quality labor, material, informational, and other types of resources that meet international standards.

Upon the recommendations of UNESCO, the amount of financial resources allocated to the financing of higher education of the country should be at least 6-7% of country's GDP. [25]. To achieve this figure in the national system of higher education, the level of public funding which in the last 10 years did not exceed 1-1.5% of GDP, it is necessary to take the following measures: gradually increase the amount of public funding in proportion to GDP growth; conduct public policy, which presupposes the involvement of the state extra-budgetary funds in the field of higher education; develop additional sources of financing industry, for instance, private financing, corporate financing (sponsorship from major industrial companies) and others.

Thus, the implementation of such activities as attracting additional sources of financing, the introduction of rational methods and forms of financing in the sphere of higher education will enhance the competitive advantages of higher educational institution, strengthening its position in

the market of educational services, and, respectively, and to the increase its competitiveness.

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