

## TRANSFORMATION OF THE HIGHER EDUCATION BY DIVERSIFICATION OF SOURCES AND FORMS OF ITS FINANCING

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**Annotation.** The article defines the directions of transformation of the system of financing higher education in accordance with the demands of the present. The emphasis was placed on the expediency of using alternative, modern sources of funding for the education system, which justifies the need to diversify the funding sources of universities as a necessary factor that affects the quality of the training of specialists and the development of the country as a whole.

**Key words:** financing of higher education, diversification of sources of financing of universities, quality of training of specialists.

The 21st century is characterized by the emergence of a knowledge economy, which greatly enhances the role of education and science not only in the public but also in economic life. Knowledge, turning into a resource displayed in the form of employee competencies, or a product that serves as an innovation, intellectual capital competes with financial and material assets. The needs for reforming the national system of higher education, which serves as an institutional and economic platform for the development of intellectual resources, are limited in scope of financing. Public funding often provides "simple reproduction" of education, which allows maintaining existing trends and trends in scientific and educational processes. Therefore, the search for new forms and additional sources of funding for higher education institutions is urgent taking into account the processes of globalization of the educational space.

**Presenting main material.** Over the past 10-15 years, globalization has greatly increased the impact on the transformation of national systems of higher education. Thus, according to one of the well-known university education theorists, vice chancellor of Kensington University P. Scott, globalization is the most fundamental challenge faced by a high school over a thousand-year history of existence [7, p. 3].

The decisive trend in the development of the global education system is the constant rapid growth of educational budgets over the past 15 years. The total volume of the world market for educational services in 2012 amounted to more than 4.4 trillion dollars (almost three times more than the total military budget of all countries of the world), while in 2000 - 2.3 trillion dollars. According to the forecasts of specialists, which presuppose the preservation and even increase of high current growth rates of the world educational market, in 2017 its volume will exceed 6.3 trillion dollars, while the largest volumes of financing growth will come to the higher education and public and corporate education during the lifetime [9].

The key feature of the development of society is the creation of a new model of the economy - the knowledge economy, under this condition education becomes one of the key factors of economic growth and sustainable development of the state. According to experts from the World Bank, one of the four main conditions for the formation of the knowledge economy is education and training that characterizes the availability of an educated and professionally trained population capable of producing, distributing and using knowledge.

Consequently, the problems of the educational system are exacerbated by the impact of globalization and the intensification of economic, international, scientific and technical, educational and cultural relations; rapid development and intensive dissemination of computer technology and information technologies; the increasingly pronounced orientation of social production to man, to meet its rapidly changing needs, aspirations and interests; displacement of the problems of resource supply of business structures in the sphere of awareness and recognition of the decisive role of the human factor in ensuring the proper efficiency of production and management [4, p. 13].

Universities are the main generators, drives and distributors of knowledge, information, experience and cultural wealth and today they become the key public institution in modern conditions. Evidence of their significant role in the modern social progress is, in particular, confirmed by western scholars of the existence of close interconnectivity between the development of universities and the economic growth of countries. It is no coincidence that those countries that recognized the priority of the development of university education were able to move on to the development of an innovative economy, which for a long time provided them with high competitive positions in world markets.

But all the components of the transformation of higher education in Ukraine face a range of problems, as concrete as economic ones, and general civilizations. First of all, it is the growing internationalization of educational activities. The emergence of international forms of organization and financing of education, increasing the need to address the problems of standardization of education, determine the need to ensure and improve the quality of educational services in the face of growing openness of the economies of countries, the increasingly free movement of people, capital and goods between countries. Consequently, global competition intensifies, which is why the national educational system of any country should be oriented not only to train qualified personnel for the development of its economy, but to train personnel who, along with this important goal, will also ensure the competitiveness of its economy in today's global environments.

The second problem is due to the fact that the decisive role of education in social development and the formation of the knowledge economy requires a powerful diversified mechanism for its functioning and financial support. In Ukraine, during the transformation period, there are diversification processes: and in relation to sources of funding (along with public resources, private, corporate funds, external resources are involved) and in relation to the forms of organization of educational activities, content

and technologies of the educational process. At the same time, the experience of the advanced countries of the world proves that economic mechanisms can be more effective, effective, aimed at concrete results.

In order to solve the problems that today is facing the system of higher education of Ukraine in particular, a substantial increase in the financing of education will be required. This will ensure the dynamic development of the educational sector, stimulate the processes of commercialization of knowledge, promote the growth of market positions of state universities, increase their competitiveness, because only with the availability of reliable and stable sources of funding, education will fulfill its mission of developing the human potential of the country.

The structure of funding sources on higher education varies widely among countries and was not unambiguous in its historical development. In the last decade of the 20th century, the tendency of diversification of funding sources on education became widespread in all countries. Thus, the main funding sources for higher education in Ukraine are the state budget funds, tuition fees for individuals and legal entities, grants from private, national, and regional funds of entrepreneurial structures in the field of innovation (Table 1).

*Table 1*

**Gross Domestic Product and Consolidated Budget Expenditures  
on education in 2007-2016 [12]**

Indexes	2007	2009	2010*	2011*	2012*	2013*	2014*	2016*
GDP by production method, mln UAH	720731	913345	1079346	1299991	1404669	1465198	1586915	1979458
incl. education, mln UAH	33194	49239	53462	59377	71771	77986	76068	83285
- share on education in GDP, %	4.61	5.39	4.95	4.57	5.11	5.32	4.79	4.21
Total expenditures in the consolidated budget, mln UAH	226054.4	307399.4	377842.8	416853.6	492454.7	505843.8	523004.8	433159.8
incl. on education, mln UAH,	44333.6	66773.6	79826.0	86253.6	101560.9	105538.7	100105.6	75907.0
incl. for higher education, mln UAH	12827.8	20966.3	24998.4	26619.6	29335.9	30003.1	28340.5	21059.8
share of expenditures in the consolidated budget: - on education, %	19.61	21.72	21.13	20.69	20.62	20.86	19.14	17.52
- on higher education, %	5.67	6.82	6.62	6.39	5.96	5.93	5.42	4.86

\* - excluding the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and part of the zone of anti-terrorist operation (calculated by the authors).

The structure of the funding sources can be divided into the state budget (up to 60%), local and sectoral budgets (2%) and funds of individuals and legal entities (up to 40%). Speaking about the ratio of the proportion for universities of different ownership forms in Ukraine, it should be noted that initially there was an increase in the proportion of higher educational institutions with private ownership - up to 22.25% (maximum) at the beginning of the 2008/2009 school year. This indicator is slowly decreasing. As of 2015/16, the share of state and municipal higher education institutions is 79.67%, private - 20.33%.

The analysis of the tendencies of financing higher education in the EU makes it possible to state that the EU countries use different financing strategies for higher education, but do not have a universal mechanism for this. The funding of higher education institutions depends on both the quantitative (number of students) and the qualitative (number of credits, diplomas issued) indicators. There is a tendency to allocate public funds to higher educational institutions based on learning outcomes, as well as the tendency to combine different funding instruments.

Today, a significant amount of funding on the higher education system is based on market mechanisms: state resources are directed for the support of students rather than transferred directly to universities, as it is happening now in almost all countries of the world. In modern conditions, more and more countries are introducing a new type of financing for higher education - student loans. Recently, a rapid increase in the number of students became an overwhelming burden for the budgets of those countries where higher education in public universities was traditionally free or cheap. More and more countries begin to decrease budget funding. Providing educational credits, along with studying at their own expense, should prevent the transformation of higher education into the exclusive privilege of the rich sector in society. However, world experience suggests that such a way does not always give the desired results [2, c.132].

Although no country fully applies this type of financing, different tools may be used in the implementation of this approach:

- scholarships and grants. Most countries and universities offer financial assistance that does not need to be reimbursed, based on needs or scholarships for educational achievements;
- student loans. Student credits (loans) exist in different forms more than in 60 countries. A large number of HEIs arranges and finances student loans;
- Human capital contracts are offered by private firms and differ from student loans. The Student Participant agrees to repay a part of his/her income to investors who have a share of the student equity capital after graduation. Human capital contracts exist on a pilot basis in Chile, Colombia, Germany and the United States;
- vouchers. Among the six countries in the world, Bulgaria and Hungary have introduced the form of vouchers in higher education. Students receive the right to study at universities of their choice;
- Education savings accounts. Savings accounts on education (sometimes called "Individual Learning Accounts"), aimed at encouraging families or individuals to save

on higher education. The state (in Belgium (Flanders), the Netherlands, Spain, Sweden, Scotland and Wales) encourages families to put money on their children's savings accounts, offering either tax benefits or donations, such accounts are used for professional training purposes, employees and employers are encouraged to open accounts and use money for their further education [4].

Along with the above-mentioned tools (state financing of higher education institutions and elements of market allocation of funds individually for the benefit of students), a new system of financing higher education is being developed, which is reflected in the introduction of a multi-stage and multimodal system for attracting finance, including through the provision of additional educational services in higher education institutions.

Higher education leads to an increase in labor productivity, which should manifest itself in the growth of individual employee income. The higher is the level of education of all employed, the higher is the potential for growth in labor productivity in the national economy and the greater is the aggregate income of society. However, in a modern information society, one cannot learn once and for all life. Therefore, the most important skill for a modern person is the learning agility - the ability to learn, to forget unnecessary, to acquire difficult-related new knowledge quickly and to embed in the structure of personal experience. At the state level, the mass distribution of education is seen as a guarantee of its international competitiveness in the new global economy.

Over the last decade, the business environment changed considerably. As a result, the requirements for skills and abilities of employees, their education and professional experience change. There are professions that were unknown at all ten years ago, and in a few years, the labor market would again dictate its new demands, create new roles and seek for experienced professionals.

Therefore, state policy in the field of higher education development should be aimed at achieving its current world level, which is reflected in the introduction of a multi-stage and multidimensional system of higher education, the provision of additional educational services by higher educational institutions, in particular, within the framework of implementing the concept of life-long education; state funding is not the main form of providing retraining for employees or training in the training program for labor force throughout the working life.

Employers are the source of funds for the implementation and dissemination of lifelong education and continuing training of the workforce. Thus, the world's leading universities are private, they create trust funds - endowments, which accumulate donations from sponsors and patrons, invest profitable and use profits according to their academic needs. In the fierce struggle for sponsorship, Western universities defend their reputation, improve educational programs, and build profitable partnerships with businesses. the prevalence of an entrant abroad fully justifies itself: universities decide on themselves what specialties are demand and purposefully use sponsorship money. As a rule, the main part of contributions from endowment funds is one-time donations from individuals or corporations: a philanthropist can create a separate fund for financing a particular direction, program or scholarship. For this, the leadership of the university

provides the patron with honorary status or post in universities after retirement.

There are also annual "fundraising campaigns" when each university is competing for its sponsor - this is where the image, reputation and business relationships of an educational institution play an important role. In addition to the direct contributions of individuals, a significant part of the proceeds of the entanglements is made up of funds transferred under the will, with the share of these assets in private universities reaches 50%. Unlike private universities, state universities have endowments, although they accumulate significant amounts, but are not the main source of income.

Thus, the country needs to create the necessary socio-economic conditions for more efficient use of budget funds. It is unlikely that the budget funds will cover all the prospective directions of development of the system of higher education. The state must fulfill all the conditions for legislative improvement and facilitate the implementation of the use of alternative sources of funding for these areas, on which the future economic development depends. The developed countries of Europe currently offer many educational programs that promote the development of not only all parts of national education and training systems, but also the development of national business structures. Therefore, the special significance in our time, the significant need for additional funds for the improvement of the educational system is cooperation with enterprises - potential employers and international funds, foreign higher educational institutions.

The most striking example of business collaboration and universities is the collaboration between Siemens and Lincoln University (UK) and Transylvanian University (Romania). For more productive and effective interaction, the corporation has located its headquarters directly on the basis of university campuses, which allows them to adapt students to the real needs of production, to involve the company's experts in teaching, to hold contests, to select scholars, to provide advisory services, to join the joint work with academy in R & D. At the initiative of Siemens, the Master of Science at Lincoln University has been complemented by a new program on renewable energy sources (MSc Energy Renewables and Power), and the University of 2015, as a result of the collaboration, has been recognized as a Global Lead Partner. Such cooperation greatly improves the quality of educational services, ensures the competitiveness of universities, promotes the mobility of students and teachers in the educational space, which already provides the country's economy with new high-quality specialists with knowledge and training at the world level.

Consequently, the tasks of transforming the system of higher education in the modern conditions are as follows: the training of specialists taking into account the requirements of employers and the needs of the labor market and economy; realization of measures aimed at introduction of programs of retraining specialists, in particular directly at enterprises (by means of intensifying cooperation between higher educational institutions and employers); with the assistance of the state and with the help of various funds, the expansion of the network of retraining centers at universities.

Therefore, it is advisable to involve employers more actively in the scientific and educational process, which will allow to optimize the system of preparation of specialists



in higher education in demand in the national economy and to bring education programs closer to the needs of the real economy sector, to take into account the European experience of planning the training of higher educational institutions of the diploma specialists for the economy as a whole, developed in the developed countries, innovative research universities, to ensure the priorities of educational policy in international science technical cooperation, as well as provide a new impetus for the active participation of entrepreneurship in the development of higher education.

Government regulation measures should focus on creating a multi-channel financing system based on the expansion of the list of extrabudgetary sources, including the attraction of charity funds, which could be a promising direction for financing higher education institutions and a significant increase in investment for the provision of the scientific and educational process. Considering that the structure of investment in the field of higher education of Ukraine can be considered ineffective, at the national level it is proposed to develop measures to stimulate business structures to increase investment in the process of training specialists for specific industries and conducting research work, by optimizing the structure of costs of business -structures and acceleration of cash flow.

**Conclusions.** Globalization has become an effective factor in the development of civilization, economics and education. In a globalized environment, innovation and the development of the competitiveness of the economy can only be sustained if there is a high quality education system and a high quality of human capital. The overcoming of artificial obstacles and the destruction of autarkic systems in the information society is just a matter of time. Higher education can no longer be limited to the training of specialists for a local or national labor market. In fact, for the students, the whole world is open, and therefore the need to ensure their competitiveness is becoming a strategic task for all universities.

The current state of national higher education allows us to recognize the fact that the existing system of financing higher education institutions does not ensure its development. The effectiveness of the system of higher education is closely linked with the harmonization of relations between all its stakeholders, which in turn can ensure its effective financing. Reorienting on a high-tech path for further progress, the state should focus exclusively on human capital, rather than on natural, infrastructural or industrial resources, to include competitive science and advanced education among the main engines of its economy.

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