

UDC 336.6

FINANCING HIGHER EDUCATIONAL INSTITUTIONS OF THE REPUBLIC OF BELARUS**KRISTINA ODVAZHNA, SVETLANA IZMAJLOVICH****Polotsk State University, Belarus**

The article considers features of science and innovation activities of higher education institutions, aims and sources of funding for this activity. The costs of research and development in the Republic of Belarus and in the higher educational establishment "Polotsk State University" are analyzed.

Along with the traditional functions of higher education institutions – teaching, research and professional education, universities have appeared qualitatively new: innovation and entrepreneurship. Practice has shown that the new model of the university as educational, scientific and innovative complex that combines fundamental education, academic science with an extensive network of high-tech innovation structures and small enterprises is one of the most effective structural elements produced by the national innovation system. On the one hand, these systems have significant scientific, technical and innovative potential that can be realized with the creation and promotion of their innovations to market. On the other hand, they begin to train personnel for the innovation economy [1, p. 42].

The higher education system provides the main component of the innovation economy of the country – human resources – based on a combination of fundamental training with flexible response to the needs of current research directions and high technologies. In 2012, 12 % of higher education institutions carried out research and development in the structure of organizations engaged in research and development.

The policy of the Ministry of Education of the Republic of Belarus in the field of science and innovation is an integral part of the state innovation policy of the Republic of Belarus [2].

The scientific innovation in higher education need to be developed on the basis of the existing system of organization of scientific and technical activities in universities and research institutions of the Ministry of Education, based on the principles of continuity. This means not breaking the existing management of the sector, but rather complementing it with new elements to fill the existing gap between the creators and consumers of scientific and technical products [2].

The scientific production and innovation activities of universities should be carried out by institutions of all sizes and, consequently, with different legal status. The structure of innovation management institution should include both administrative divisions and structures of methodical, information and consulting support of subjects of scientific and innovation activities of universities. The scientific innovation sphere of universities is currently characterized by a variety of organizational structures, resulting from uncertainty as multi-variant and innovative processes and imperfections forms of commercialization and financing innovation [3].

The main purpose of scientific innovation of the education system is to provide training of scientific and scientific-pedagogical staff by international qualification requirements, the effective use of educational, scientific, technological and innovation potential for economic development and social objectives of the country [3].

When performing set goals, the most important is the issue of funding the research and innovation activities of universities. The main sources of funding can be [2]:

- a) the republican budget funds allocated for financing of scientific, technical and innovative activity of the university;
- b) the innovation fund of the Ministry of Education, funds of other national government bodies;
- c) the means of the Belarusian Innovation Fund;
- d) the personal funds of universities, including those obtained from the reference of economic contract work, foreign trade transactions;
- e) bank loans, including loans from the European Bank for Reconstruction and Development;
- f) venture capital funds and companies specializing in venture capital financing;
- g) the funds received by universities on projects of international funds and programs, including the Framework Programmes of the European Union, the Central European Initiative and others.

Let us consider the structure of domestic spending on research and development in higher education institutions of the Republic of Belarus for the period 2010-2012 by source of funding (Table 1).

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Table 1 – The structure of the of domestic spending on research and development of the higher education sector by source of funding in 2010 – 2012 years

Sources of financing costs	2010 year*	Sp. gr., %	2011 year*	Sp. gr., %	2012 year	Sp. gr., %	Structural changes, p.p.	
							2011/ 2010	2012/ 2011
The amount of funding of domestic spending on research and development, mln rub.	366 277	100	243 063	100	354 107	100	-	-
Of these sources of financing:								
personal funds	7 392	2,0	3 778	1,6	4 549	1,3	-0,5	-0,3
budget funds	245 112	66,9	161 404	66,4	233 668	66,0	-0,5	-0,4
extra-budgetary funds	84	0,02	290	0,1	191	0,1	0,1	-0,1
funds from foreign investors, including foreign credits and loans	19 273	5,3	18 544	7,6	29 919	8,4	2,4	0,8
funds from other organizations	94 396	25,8	59 046	24,3	85 780	24,2	-1,5	-0,1

Note: the information is presented in a comparable form.

Source: own elaboration based on data [4, p. 131].

Information in Table 1 indicate the important role of budgetary financing of science and innovation of high school. This is proved by the fact that about 66% of the funding for the period from 2010 to 2012, was carried out at the expense of the budget. It should also be noted that a considerable role in financing of domestic spending on research and development in the higher education sector is given funds to organizations.

Consider the internal and external costs of research and development in the educational establishment "Polotsk State University" (Table 2).

Table 2 – The costs of research and development in the "PSU" in 2011 – 2012 years

Costs	2011 year*	Sp. gr., %	2012 year	Sp. gr., %	Absolute change, mln rub.	Growth rate, %	Structural changes, p.p.
The costs of research and development - total (mln rub.).	4 801	100	3 095	100	-1 706	64,5	-
Including:							
domestic expenditure on research and development	4 698	97,8	2 865	92,6	-1 833	61,0	-5,2
external costs of research and development	104	2,2	230	7,4	126	222,2	5,2

Source: own elaboration based on reports of research sector of "PSU".

The costs of research and development in 2012 decreased by 1 706 mln rub. compared to the year 2011 and amounted to 3 095 mln rub. Gross domestic expenditure on research and development for the largest share in the structure of the cost of research and development - 97.8 % in 2011 and 92.6 % in 2012. Thus, domestic expenditure on research and development decreased by 1 833 mln. rub. in 2012 compared to 2011 and amounted to 2 865 mln. rub. External costs for research and development amounted to 230 mln. rub. in 2012, it is more by 126 mln. rub., than in 2011, the growth rate of these costs amounted to 222,2 %.

Consider the composition, structure and dynamics of the internal current expenditure on research and development in the higher educational establishment "Polotsk State University" (Table 3).

Table 3 shows that as part of the intramural current expenditure on research and development is dominated by cost of labor - 70.3 % in 2011 and 70.4 % in 2012. Despite the increase in the share of labor costs by 0.1 %, the absolute value of these costs decreased by 1 295 mln rub. in 2012 compared to 2011. Social contributions also decreased in absolute terms by 429 mln rub. and in 2012 amounted to 670 mln. rub., in the structure of internal current expenditures on research and development, they occupy 23.5 % in 2012. Other material costs in 2011 amounted to 4.9 %, in 2012 they decreased by 1.9 percentage points and amounted to 2.9 % of the intramural current expenditure on research and development. In absolute values, other material costs decreased in 2012 compared to 2011 by 145 mln rub. and was 83 mln. rub. Other expenses increased by 23 mln rub. and amounted to 91 mln rub. in 2012.

Table 3 – Structure and Dynamics of intramural current expenditure on research and development in "PSU" in 2011 – 2012 years

Costs	2011 year*	Sp. gr., %	2012 year	Sp. gr., %	Absolute change, mln. rub.	Growth rate, %	Structural changes, p.p.
Current domestic expenditure on research and development (excluding amortization), mln rub.	4 698	100	2 852	100	-1846	60,7	-
Including:							
cost of labor	3 303	70,3	2 008	70,4	-1295	60,8	0,1
allocations to social needs	1 099	23,4	670	23,5	-429	61,0	0,1
other material costs	228	4,9	83	2,9	-145	36,4	-1,9
other costs	68	1,4	91	3,2	23	133,4	1,7

Source: own elaboration based on reports of research sector of "PSU".

Consider the sources of funding for of domestic spending on research and development in the educational establishment "Polotsk State University" (Table 4).

Table 4 – Structure and dynamics of sources of financing of domestic spending on research and development in "PSU" in 2011 – 2012 years

Sources of financing	2011 year*	Sp. gr., %	2012 year	Sp. gr., %	Absolute change, mln. rub.	Structural changes, p.p.	Growth rate, %
The amount of funding of domestic spending on research and development, mln. rub.	4 698	100	2 865	100	-1 833	-	61,0
Including sources:							
personal funds	-	-	-	-	-	-	-
budgetary funds - total	931	19,8	1 249	43,6	318	23,8	134,2
Including:							
funds from the republican budget	838	17,8	1 085	37,9	247	20,1	129,5
local budget funds	28	0,6	31	1,1	3	0,5	110,7
Union State budget	65	1,4	133	4,6	68	3,3	206,0
extra-budgetary funds	-	-	-	-	-	-	-
funds from foreign investors, including foreign credits and loans	-	-	98	3,4	-	3,4	-
credits and loans	-	-	-	-	-	-	-
funds from other organizations	3767	80,2	1 518	53,0	-2249	-27,2	40,3

Source: own elaboration based on reports of research sector of "PSU".

The amount of funding of domestic spending on research and development in 2012 decreased compared to the year 2011 to 1 833 mln rub. and amounted to 2 865 mln rub. Of these, the budget amounted to 1 249 mln rub. in 2012, representing 43.6 % of the total amount of financing. The growth rate of the budget amounted to 134.2 %. Means of foreign investors, including foreign credits and loans in 2012 amounted to 98 mln rub., That is 3.4 % of the volume of funding. Due to other organizations held 80.2 % of the total volume of financing of domestic spending on research and development in 2011, in 2012 the share of the funding source was 53.0 %.

Universities need to work actively to diversify the sources of financing of scientific innovation, reduce the share of budgetary financing by increasing the off-budget.

It should be noted that the system of higher education is the most promising in building on its base Belarusian innovation and investment network, which should serve as a bridge connecting science and production in all regions and sectors. This is determined by the capabilities of the national high school: the distribution of universities in all regions; high scientific and technical potential; universality of the higher education system, by its interdisciplinary nature: scientific schools of the universities in Belarus cover all areas of the economy; by links between higher education through its graduates with all regional and industrial structures; a relatively high level of information management system for high school, including global and local computer information networks connected into a single system; public support of high school; a flexible system of high school [5, p. 9].

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The purposeful and systematic use of the advantages of the higher education system will effectively integrate the results of university, academic and industrial science for the development of innovation, the creation of the country's effective innovation economy [5, p 10].

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UDC 338+334.72+334.012

CONCESSIONS IN THE ECONOMIC RELATIONS OF THE STATE AND PRIVATE SECTOR

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In this article the special attention is paid to the essence and forms of implementation of the public-private partnership (PPP) in the Republic of Belarus. Concession as one of the most effective and applicable public-private partnership mechanisms in the international practice is revealed. The scheme of functioning of the concession mechanism is shown. Advantages and disadvantages of the concession mechanism are disclosed.

Thematic justification is that at the present stage in the Republic of Belarus there is an urgent need for structural changes and closer interaction of the state and private sectors. In this connection, such effective structure as the public-private partnership (PPP) has arisen and started playing an increasingly important role [1].

One of the main directions of transformation of economy and public life in the Republic of Belarus at the present stage is further reforming of state ownership for the purpose of its more organic inclusion in the system of market relations. The successful solution of this problem depends not only on implementation of programs of privatization, but also on the use of other mechanisms and forms which don't assume the transfer of property rights to private organizations to the full extent. An effective way of increasing efficiency and providing quantitative and qualitative characteristics of state ownership functioning is the development of partnership of the state and private sectors: joint organizations, a contract system, production sharing agreements. The most important form of economic partnership is concessions [2].

Concessions allow attracting additional resources to the public sector of economy, first of all, investments, weakening the sharpness of budgetary problems, shifting the main part of risks to a business sector and at the same time keeping objects transferred to concession in state ownership. In concession system of the relations there is an association of resources and potentials of two economic entities - the state in the form of its property and business in the form of enterprise principles of managing, investments, management, and innovations. In essence transition to concessions means partial privatization of some functions of the state determined by the legislation and a concession contract.

As concessions are a public-private partnership form, we considered the concept "public-private partnership". In economic literature there is no unanimity of opinions on the definition of the essence of this concept.

Deryabin M. [3] holds the opinion that public-private partnership is an institutional and organizational alliance of the government and private business for the purpose of implementation of socially significant projects in a wide range of fields of activity - from the development of strategically important branches of economy to providing public services on a country scale or on certain territories.

Vologina Zh.Yu. [4] considers that public-private partnership is a legal mechanism of coordination of interests and ensuring equality of the state and business within the implementation of economic projects directed to the achievement of the objectives of public administration.