

Thematic heading:

Governance of the national economy: modern challenges and perspectives

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**HIGHER EDUCATION RESEARCH SECTOR' FINANCING SYSTEM
AS A CONDITION OF THE NATIONAL ECONOMY'S DEVELOPMENT**

Ukraine's choice of a European vector of development requires urgent changes aimed at creating the prerequisites for intellectual and innovative upgrading of the national economy and ensuring the necessary level of personnel potential of the country. This, in turn, updates the need for modernization of the system of higher professional education, an innovative breakthrough in the search for organizational structures and financing mechanisms that ensure the competitiveness of higher education, is recognized at all levels and by all participants in the educational services market.

The development of higher education in Ukraine and the formation of the newest mechanisms for its financing are an important priority of the state policy in the context of the "Europe 2020" strategy. Among strategic directions of higher education in Ukraine, which should be directed to public policy is advisable to allocate improving the effectiveness of the national research sector, aimed at providing innovative development of the national economy.

Regulation mechanism of innovative development of research sector of the higher education system

The purpose of this part of publication is to generalize and deepen the scientific approaches to defining the essence of the state regulation of the innovative development of the research sector of the higher education system (SRID RS HES); to develop the classification of the forms and models of the SRID RS HES; to explore the main areas of the SRID RS HES; to summarize the current national and international experience of using forms of the SRID RS HES to use it in the economy of Ukraine; to analyze and evaluate the features of the SRID RS HES the interregional and regional levels of the national economy; to develop the author's model of rating evaluation of the competitive positions of the universities oriented on the innovative development; to develop the strategic directions of the SRID RS HES in Ukraine; to develop the proposals for improving the organizational and economic bases (mechanism) of the adjustment of the SRID RS HES; to form the financial conditions for the innovative leading of the higher education institutions in terms of the research activity under conditions of the integration processes in the higher education system

Current understanding of the essence of the innovation is the implementation of the approach, which is based on the universalization of the update process, the transformation of the traditional activities in any field that is replacing components of the more perfect or enriched with fundamentally new ones to resolve the contradictions between the desired and actual state of the facility.

Per this approach, the innovative segment of the national economy – a set of types of the social activities that do not take a direct part in the creation of wealth, but produce nonmaterial consumer value, which are necessary for the functioning of the material production – both as a separate phase of the production of goods and as a sphere of the social division of labor to provide the realization of the product of the research in material production. One of the most important elements of the national innovation system is a complex of RS HES.

Methodological basis of the study of the peculiarities of functioning of the RS HES and their state regulation are systematically considered in the works of Ukrainian

scientists O. Amosha [1], L. Antoshkina [2], T. Boholib [3], V. Heiets [17], N. Verkhohliadova [5], O. Hrishnova [7], I. Kaleniuk [8], O. Levchenko [12, 25], A. Pavlenko [11], O. Romanovskyi [14], O. Shnyrkov [18] etc.

Well-known foreign scientists, including J. Alden [19], Sh. Valiev [4], O. Galaida [6], Ia. Neimatov [10], K. Popper [13], Ph. Altbach [20], G. Becker [21], P. Drucker [23], A. Merten [26], N. Perry [27], J. Salmi [29], S. Yusuf [30], paid attention to the features of funding of the research sector of high school. Various aspects of the innovative development of the HES are considered in the works of M. Kastels [9], V. Slastenin [15], A.-E. Birks [22], M. Gibbons [24], W. Saint [28] and so on.

It should be emphasized – the innovative development of the RS HES, based on attracting high technologies, is settled in conditions of the continuous strengthening of the level of the global competition, strategic transition to the postindustrial knowledge economy – in scientific and methodical plan is not developed.

During the study of theoretical and methodological foundations of the SRID RS HES in Ukraine the theoretical bases of the innovative development of the system of higher education institutions (ID SHEI) are investigated, the classification criteria of the applicable forms and models of the state regulation of the practice of their scientific research sector (SRS) are defined, the peculiarities of the international experience of the SRID HES in terms of the transition to the model of the post-industrial knowledge economy are generalized.

The definition of the category “scientific research sector of the system of higher education institutions” (SRS SHEI) as a set of units of universities of the III-IV levels of the accreditation engaged in scientific, technical and innovative activity, technology transfer within the organization of the activity of the system of the providers of the educational services with the goal of implementing the research component in the process of quality assurance of higher education, is formulated.

The theoretical generalization of the category “the innovative development of the research sector of the system of higher education institutions” (ID RS SHEI) allowed to formulate a definition of the nature of its state regulation as practical organizational, administrative and management influence of the government on the

relations, processes and structural elements of the (NE), which covers the scientific research activities HES, in order to arrange them, saving and transforming forms, which relies on the powers of the state, creating conditions for lasting and smooth functioning in order to obtain the expected significant social and economic results.

The basis for the SRID SR HES, that only under certain conditions acquires characteristics of the perfect consistency and functions as a multi-level, hierarchical, partly self-regulatory, needing forecasting and management of the long-term economic development set of the interrelated elements, should be based on the process of the planned development of the RS consisting of the commercial, marketing and investment components of the integrated innovation potential, as well as the set of the methods of solving tasks of the strategy development, mechanisms, tools and forms of the development of the research activity with the possibility of receiving world-class results and their further use in the profile (educational) activities. During the effective regulatory intervention, the possibilities to adjust the direction, speed of the implementation and the nature of target marks of the development of the RS as an object of control are realized, there is their assessment in terms of the compliance to the requirements of the satisfaction of the economic interests of stakeholders.

As the strategic directions of the activity of the public administration bodies (PAB) in the process of implementation of their regulatory functions, including the RS HES we considered: the creation and implementation of the legislative framework and the legal field for the free development of the subjects of the economic process, combined with the control of the compliance with the regulatory acts; creating and ensuring conditions of fair competition by means of price regulation policies; selective stimulation of producers of the strategic goods (services); implementation of the effective social policy by means of the regulations of the level of employment, distribution of resources and income between the individuals; realization of the effective state policy of adaptation of the subjects of activities to changing conjuncture in the markets including creation of the favorable conditions for the activation of industrial activity.

The SRID RS HES is based on the universal methods – means of influence of the PAB on its object: the direct administrative influence in the form of the regulatory

instructions with the status of the compulsory execution, which aims the operative obtaining economic result (payments, contributions, purchases); indirect methods to create conditions for the independent choice by objects of management options for action that meet the strategic goal of the economic policy of the state (programming, informing) (Fig. 1).

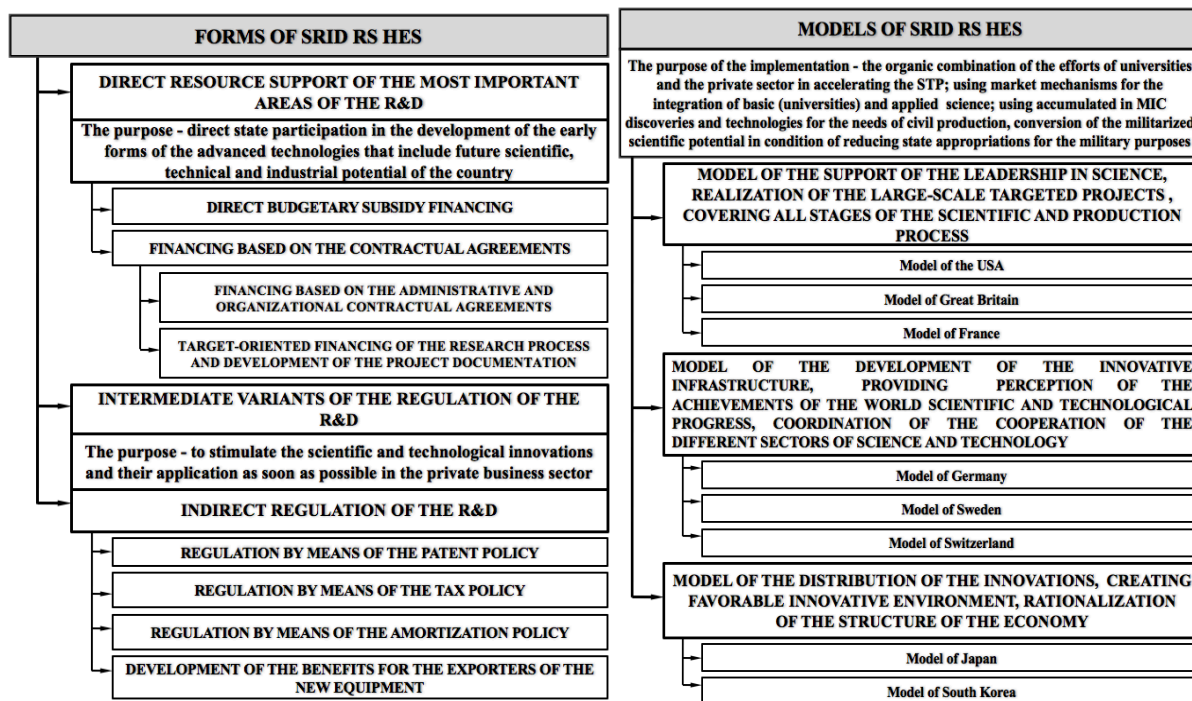


Fig. 1. Forms and models of the SRID RS HES

Source: developed by the author

Based on the analysis of the experience of the SRID SR HES we drew conclusions about the suitability of using the specific form of the direct, indirect or intermediate variant of the intervention of the PAB in the process, depending on the positioning of their degree and extent of participation in the development of the advanced technologies, and interest in their dissemination in the business sector of the NE. The basic types were determined and the detailed analysis of the national models of the regulation was made that despite all the differences, united with the aim of the implementation.

The main directions of the state regulation of the innovation development of the scientific research sector of the system of higher education institutions that guarantee the realization of their objectives to reform and reorganize management system of the research activities, transformation of the universities into the innovation active

competitive institutions which effectively and dynamically linked to the labor market, adapted to the requirements of the world and European educational and scientific space and in perspective fully integrate with them, they are able to achieve this goal: to ensure absolute leadership in science, the implementation of targeted projects, covering all stages of the research and production process; to promote the development of the innovation infrastructure, adapting advances of the global science and technical progress; to ensure the diffusion of the innovation, to create a favorable environment for the innovation rationalization of the structure of the NE in compliance with the post-industrial model of its functioning.

Comparing the experience of the state regulation of the ID RS SHEI led to the conclusion that its tendencies significantly differ for countries, and the current situation in Ukraine does not cause a significant impact on the development of the NE. It is stated that influential international rating assessments indicate an average level of the efficiency of the state regulation of the ID SRS SHEI, and about Ukraine – as a state-innovator that only begins to form.

Overall, the state of functioning of the SRS is characterized as having a low level of the public utility; structural elements of the SRS are limited in the feasibility of the realization of the innovative capacity, which indicates the improper implementation of the functions of the SRID RS HES by the PAB.

To establish the degree of the effectiveness of the means of the SRID RS HES in the scales of the NE, their impact on the formation of the resulting indexes of functioning of the innovation economy, we proposed to use the method of forming subaccount of the scientific research and development works (R&D), in the structure of the satellite account of the education of Ukraine. The introduction of the subaccount of the R&D provides the methodological framework and serves as a factual basis for determining the scope and extent of the direct, indirect and induced impact of the innovation active high schools, and in their composition RS HES, on the formation of indicators of the employment and enterprise development in terms of the state regulation of the formation of the post-industrial model of knowledge economy (Table 1).

Table 1

The scheme of forming of the subaccount of the R&D in the structure of the satellite account of the education

Distribution of the costs on the R&D by funding sources and service providers				
Financial agents		Providers		
		ER. 4.1	ER. 4.2	ER. 5
State sector				
The central government / ministries	Total, including:			
	Education and Science			
	Internal Affairs			
	Culture and Tourism			
	Defence			
	Health Care			
	Labor and Social Policy			
	Agricultural policy / Agro industrial Development			
	Transport and Communications / Infrastructure			
	Family, Youth and Sports			
	Finance			
	Income and Charges			
	Other ministries and departments			
Regional budgets / local government				
Non-governmental sector				
Private firms and corporations				
Households				
Another world				
Total	by providers			
	during the year			
Cost allocation of the providers on the R&D on the functions of the educational activities				
Stage of the education	Providers	Function of the education		
		ES. 1	ES. 2	
First	ER 4.1			
Second	ER 4.2			
	ER. 5			
In total on the higher education (HE)				
Total national expenditure on education by functions				
The share of the HE in expenditure on education by functions				

Note: Providers: ER4.1 – Universities of the I-II levels of accreditation, ER4.1 – the same III-IV, ER4.1 – Universities and scientific institutions with post-graduate, doctoral / universities and other post-graduate education institutions; functions of the education: ES.1 – basic services in education, ES.2 – secondary activities within educational institutions;

Source: developed by the author based on generalization [3, 16]

In the research process it is found that the adequate current state and requirements of the research sector of the higher education system in Ukraine is a set of tools to stimulate the innovative activity, which includes in its list: the organizational mechanisms to attract leading scientists and teachers with experience in scientific, research and institutional collaboration with leading universities in the world; management of the IHE involving stakeholders and based on the collective and manager approaches; providing academic and financial autonomy of the state

universities with forming their status as beneficiaries of the budget while preserving all the benefits of the budgetary institutions, but with the gradual transfer of the property order in the property; the regular diagnostics of the labor market in terms of the rational use of the budget funds to finance the university; ensuring the competition in the education market based on the quality evaluation of the educational activities (QEEA) and financial mechanisms of the transformation of budget financing of universities based on the competitive approach and objectify QEEA evaluation system; facilitating the integration of universities and research institutions; increasing of the social status of the educational and scientific researchers engaged in the innovative activities; concentration of the budgetary resources of the state in major university centers combined with funding of the industry leading regional universities; encouraging the private investment in the higher education and research.

In the process of determining the financial conditions for the innovative leading for science and research sector (department) (SRS (D)) of the HEI it is found that it is advisable to put the process of the innovation and technological budgeting of R&D into its basis, considering the specifics of the limited funding from the budget. The creation of the conditions for the leading provides the implementation of the comprehensive assessment of the efficiency levels of the development process and the implementation of the innovative product. The sequence of calculation of costs and prices of the research should provide effective incentives for SRS (D) innovation development.

Higher education research sector' financing system in Ukraine

Taking into account the significant development of the financial support of the development of education in Ukraine, it should be noted that the issue of the organizational restructuring of the higher education system, the formation of new effective financing mechanisms and the provision of the innovative development of the research sector of the higher education system of Ukraine are still underdeveloped. The insufficient degree of the study of the issues updates the expediency of continuous development of scientific views on the issues of financial provision of the innovation development of the research sector of the higher education and the need to take into account the dynamic socio-economic changes taking place in the world, and in particular in the national economy and society.

The purpose of the publication is a study on the development of the innovative research sector of higher education in Ukraine and study of new mechanisms of financing, given the nature of current market transformations.

Transition of Ukraine to the innovation model of the national economy is an essential condition for improving the competitiveness of the country, which includes the development and implementation of measures to balanced development of all subsystems of the national economy, including support and financial support for scientific research, innovative programs, creation advanced information system, availability of qualified personnel and creation of the favorable conditions for their professional preparation.

The most significant circumstances that determine the innovative development of the research sector in higher education (RSHE) and the formation of the newest mechanisms for its financing are:

- globalization and Europeanization processes, particularly in the education system and, consequently, the formation of a common European higher education.
- the need for constant updating of knowledge and practical skills of personnel in order to maintain its competitiveness in conditions of acceleration of the world scientific and technological progress and the innovative development of the national economies;

- raising the level of education in connection with the trend of increasing the length of the active (labor) phase of human life and raising the middle age of the professional competence;
- structural changes in the national economy and enhancement of the innovation activity in such sectors of the economy as services, IT technologies, energy saving technologies, etc.

In the conditions of deepening of the European integration processes in Ukraine the development of the RSHE should take into account the experience of the developed countries of the world, which already have developed strategies. Thus, in the strategy “Europe 2020” three priorities are identified – smart, sustainable and inclusive growth [31]. The first of these priorities includes intellectual growth and the promotion of a knowledge-based economy and innovation. Sustainable growth is ensured by the efficient use of resources and increased competitiveness, and inclusive development is aimed at raising the level of employment of citizens, their social and territorial cohesion. This approach will allow higher education institutions (HEIs) to integrate into the latest scientific developments and effective economic strategies, monitoring the processes of the socio-economic development of both individual regions and the national economy as a whole.

Management of the innovation development of the RSHE requires practical organizational, administrative impact as the manager of government relations, processes and structural elements of the national economy, which covers research activities with a view to ordering, storage and conversion forms. This effect is based on the powers of the state, creating conditions for lasting and smooth functioning in order to obtain the expected significant social and economic outcomes. Introduction of new models of public policy in higher education in the context of Ukraine's integration into the European educational and scientific space and the simultaneous reduction of public spending on higher education necessitates for the improvement of the financial mechanism of realization of state policy in this area, division of financial responsibility between the state and customer research.

As a rule, funding institutions for education in Ukraine are budget administrators, as well as private (non-governmental) sectors represented by

households. State financing of the most important areas of research and development (R&D) is aimed at the prompt receipt of the economic result (payments, deductions, purchases (Fig. 2).

Responsible executor of the government target programs (GTP) and the main distributor of budget funds in education and science, which has a separate account and balance sheet, and is defined by a written agreement with the Ministry of Finance of Ukraine at the stage of drafting the state budget, is the Ministry of Education and Science (MES) of Ukraine. The last one for 2010-2016 years carried out GTP – complex of measures to achieve the goals, objectives and expected results according to its functions.

State financing of the most important directions of the R&D
Direct budget subsidized financing
Financing on the basis of the contractual agreements (CA)
Financing on the basis of the administrative and organizational CA
Program-targeted financing of the research process and development of project documentation

Fig. 2. Forms of state financing of the research sector of the system of institutions of the higher education

The Ministry of Education and Science of Ukraine acts as the largest central budget administrator and controls 81.5% of central funding (22.4% of all public-sector expenditures), while the remaining funds are distributed by the Ministry of Health (9.3%) and other central government agencies (Ministry of Internal Affairs cases (3.5%), the Ministry of Culture (2.5%)). The remaining financial intermediaries, among the public administration bodies, controlled only 3.2% of the state budget funds aimed at education. But more significant role in allocating funds to the education system was played by regional and local governments that directly financed education at the expense of local budgets, which was 2.6 times higher than the state budget funds. Local governments divided in 2015 72.5% of all state funds and 60.5% of total expenditure on education [32].

In Ukraine, the final consumption of financial resources of the higher education system is carried out by the educational institutions providing services for obtaining the first and second stages of the higher education (ISCED5-6). Educational institutions that provide education at the level that corresponds to ISCED5 is the largest consumer of the financial resources (36.8%). To provide the second stage of the higher education (ISCED6), only 1.5% of the total expenditure on the education system is consumed. Accordingly, among all the expenditures for higher education, universities of III-IV levels of accreditation of ISCED 5 consume 79.4%, and universities of ISCED6 – 4.17% of funding.

It should be noted that the providers of services for the acquisition of the educational levels for ISCED0-ISCED4 during 2015, mainly, receive funds from the public sector (88-96%). Institutions that train ISCED5-ISCED 6 educational levels use state (66%) and non-state sectors (34%). Moreover, universities, which provided training for ISCED level 5, are 33% funded at the expense of households.

If you compare the cost structure for financing agents and providers of higher education (EP.4.1 – Universities and II levels of accreditation, EP.4.2 – Universities III-IV accreditation, EP.5 – Universities and research institutions with postgraduate doctoral/Universities and other post-graduate education institutions) in 2008 and 2015, it can be noted that in 2008, 9 central government agencies (ministries) financed the first (EP.4.1) and the second (EP.4.2) higher levels education. In 2015 fewer government allocated funds continued both the first and the second stages of tertiary education (ISCED5) – Ministry of Education, Ministry of Interior, Ministry of Culture and Tourism, Ministry of Health. Regional and local authorities mainly directed resources to finance initial (ISCED0-1) (49.6%) and secondary education (ISCED2-3) (38.1%%). The share of funds allocated to the ISCED4-6 funding by these regional authorities was 7.9, respectively; 3.9 and 0.5%.

The functional structure of the total expenditure on education in 2014 shows the state of affairs in which their 80.4% are represented by education services, the latter 19.6% occupy, respectively, administrative services/utilities, finance, business trips, construction and repairs (capital expenses) (8.0%); food services (6.7%); financial services/transfers to the population, scholarships, subsidies, current transfers, capital

transfers (2.2%); inventory and equipment costs (1.8%); textbooks and stationery (0.8%); other activities in the field of education (0.1%) [33]. For comparison, the corresponding indicators in 2010 amounted to 77.2%; 8.5%; 7.8%; 3.0%; 2.6%; 0.8%; 0.1% [32].

The functional structure of the total expenditure on education in 2015 shows that most of the functions are paid by the public sector. Thus, medical and transport services, as well as financial services in the form of transfers to the population, are financed exclusively at the expense of the public sector. Moreover, if financing of services in the form of transfers is carried out at the expense of state and local budgets almost at the same level, medical and transport services are mainly financed at the regional level (91.3% and 74.4% of the total public expenditures, respectively). Households carry out basic nutrition expenditures (41.4%), which relate to secondary activities within educational institutions; purchase of inventory and uniforms (69.2%), textbooks and stationery (41.4%) (secondary education-related activities). Private firms and corporations carry out at the expense of funds of employers financing only basic services in education.

The lack of education budgets, irregular budget revenues and the lack of transparency in their distribution at the regional and local levels have consequences for reducing the quality and effectiveness of educational services. Moving a large part of the expenses to parents seems to be a double burden, since they have already paid taxes. All this, as well as the lack of proper control over the targeted use of the budget leads to a drop in public confidence in the state regulation of the higher education system.

The financing of education from the state budget revenues is effective provided that the funds allocated by the state for financing education are allocated in sufficient volumes and on a stable, objective basis. And even in this case, the system of centralized funding should be supplemented by public control over the use of resources and the quality of service provision at the local level.

There is no single rule for the proportion of local budgets that cities or regions have to allocate to education from their own income. This means that cities that seek to compensate for the lack of attention to education from the state are forced to reduce

their utilities and curtail investment programs. At the same time, local governments are in different environments and have different educational funding opportunities.

Data from the overall analysis of the satellite account of education show that the share of public sector spending on education in Ukraine was 5.3% of GDP, which corresponds to the level of developed countries of the European Union. This indicates that the funds allocated for financing education are in line with the country's economic development. In addition, the analysis of the secondary education account revealed the dependence in Ukraine of private funding for higher education levels. Moreover, both the first stage of higher education (ISCED5) and the second stage of higher education (ISCED6) are funded mainly by households – 97 and 76% of non-state sector expenditures at the corresponding levels of education. At the same time, it should be noted that over 2008-2015, the share of public funding for the education system in Ukraine has changed from 63.5% to 84%.

The quantitative characteristics of the branch structure of research organizations that carried out scientific and scientific and technical work (hereinafter SSTW) can be described by the following trends:

- overall reduction in the number of organizations since 2005, thereby reducing the total number from 1510 to 978 units (532 units) by institutions with scientific profile research: natural sciences – 87; technical sciences – 428; social sciences – 30; multidisciplinary institutions – 5; partial compensation was made at the expense of humanitarian research institutions (+18);

- the most significant decrease in the number of scientific organizations took place in the following areas: physical and mathematical sciences, entrepreneurship sector – from 837 in 2005 to 394 in 2015, the number of them in the public sector, which is mainly represented by institutions of national academies, significantly decreased Sciences, during 2005-2015, in 1,2 times to 433 units, as well as in the sector of higher education – from 172 to 151 units;

- from 2013 in Ukraine there were no organizations that implement the SSTW in the private non-profit sector [34-39].

In 2015, the sectoral structure of organizations has become final: 433 institutions (44.3%) – public sector, 394 institutions (40.3%) – private entrepreneurship, 151 institutions (15.4%) – institutions of higher education.

The main executives of fundamental and applied research in 2010 were public sector organizations (81.4% and 64.2% respectively), scientific and technical developments and scientific and technical services – entrepreneurial (92.1% and 78.4%). Performers of similar works in 2015 left the organizations of the public sector (89.4% and 51.9%), scientific and technical developments and scientific and technical services – entrepreneurial (92.7% and 74.5%).

In 2015, the total amount of internal expenses for the implementation of scientific and scientific and technical works (IEISSTW) by the own forces of organizations in Ukraine amounted to 12223.2 million UAH. IEISSTW share of total GDP amounted to 0.61% at the expense of the DB – 0.21%.

The bodies of state administration are constantly searching for the optimal proportions of the use of sources of financing for the costs of scientific and scientific and technical work.

At the same time, the availability of static data on the use of IEISSTW funding by regions as well as by individual branches of science makes it possible to carry out their multivariate analysis, to determine the actual rather than declarative, local and subject-research priorities of the state scientific and scientific-technical policy, to identify the peculiarities of clusterization territorial and sectorial studies taking into account various sources of financing.

The most important in terms of funding SSTW throughout the observation period source of funds serves the business sector (52.6% -62.0%), the next – state (32,7-40,5%). The third significance is the ECS (5,3-6,9%). Virtually zero is in the process of forming IEISSTW private non-profit sector.

Since 2011, statistical generalization of financing SSTW in Ukraine is carried out by satellite accounts compilation methodology of science. The score allows a comparison of SSTW agents not only in terms of their participation in shaping personalized IEISSTW and their use, but also make a generalization of this activity on the scale of the national economy, formulate quantitative proportion of the national

model of state regulation of the innovative development of the research sector of higher education.

Note that in contrast to international practice in Ukraine in 2012-2015. The phenomenon of “relative isolation” in the course of institutional sectors SSTW process is observed. This is evidenced by the growth in total IEISSTW self-made, internal current and capital spending activity sectors and the corresponding decrease in R & D spending, the implementation of which involve subcontractors.

Need to take a series of measures to reform the economic foundations of the education system, including its funding by the National doctrine of education [40]. We note a significant increase in the role of extra-budgetary funds of financing of the science and research sector of the system of higher education that, unlike commercial organizations cannot quickly respond to changing market conditions. In such circumstances, the diversification of funding sources should be a priority activity of financial institutions.

To optimize extra budgetary funding research of the science and research sector proposed to adapt the experience of foreign countries can be successfully used in the organization of universities in Ukraine, namely the involvement of private funds of funds business, donations, sponsorship positions, income from business school, income from property, loans, contracts for research, receive financial grants or subsidies allocation of grants through competitive procedures for research programs etc.

A promising mechanism for attraction of investors for private sector of Ukraine supports public-private partnership. For example, the option would be implementation model of local/foreign partnership in the field of information technology and communications, due to the creation of companies to provide information technology and communication services. Another option may be a lesson in commerce or trade. Activities in this area could help expand the higher education sector, and more closely link the universities economically attractive investment.

Certain problems of financing of the science and research sector will solve their participation in the development of technology platforms (TP), the main purpose of which, according Fedulova [41, p.30] is that:

a) to create a platform for interaction of the relevant sector of the respective universities to identify priority areas of research and development time frame and action plan in these strategic areas where future growth, competitiveness and sustainability depend on scientific and technological advances in the medium and long term;

b) to concentrate funding research and development in areas that are most important for the development of strategic sectors of the economy; while the TA should cover the entire production chain and engage the challenges of government and individual regions;

c) to form a strategic response to the technological challenges that can contribute to achieving the main goals of economic policy in the context of future competitiveness.

Financial mechanism of the commercialization of the innovation activity in the case of universities participating in the development of TA involves the creation of the site (innovative manufacturing plant) with sources of differentiation and refunds. Features of the financial mechanism of regulating university participation in the functioning of TA determined by the characteristics of methods to raise funds.

The effectiveness of funding means the ability to achieve defined policy objectives with the least expenditure of resources, and therefore is especially important [42, p.9]. Improved management of process-oriented approach to increasing the investment attractiveness of the sector of scientific research institutions of Ukraine, which fully correspond to the current realities of limited funding, also provides funding for research to improve the mechanism of higher education sector in Ukraine, according to which it is advisable:

- to use the mandatory procedures evaluating performance of each innovations developed by universities;
- to calculate commercial effectiveness for universities in general and its specific programs;
- to identify the organizational and economic mechanism of introducing innovations;
- to establish the level of commercial viability of the project for the customer;

- to evaluate the degree of probability of support options investment projects;
- to write business plan of the implementation of the potentially profitable investment business process innovation.

The realization of the proposed areas of improvement of the mechanism of funding of the research higher education sector Ukraine will allow to attract additional funding in higher education, will help to become more stable and independent in low state budget, will increase the competitiveness of the innovative activity and scientific research institutions.

An important aspect of the effective integration of the national system of higher education into the European educational and scientific space is to increase the investment attractiveness of the science-and-research activity of the universities of Ukraine in the conditions of limited public funding. The solution to this problem is the formation of an effective incentive system, support for higher education institutions and optimization of extra budgetary financing of the research sector.

Practical implementation of the innovative development of the RSHE involves establishing partnerships between the state and the public, employers, customers, research, and other stakeholders interested in investing in the development of research activities supported by the latest technologies and mechanisms of the interaction such as formation of technological platforms, universities and businesses. Referrals of the intellectual effort and financial resources to priority technologies developed in the framework of the TA allow governmental bodies to exercise indirect regulation of their activities through the use of financial techniques, leverage, the impact of regulatory and information-methodological support.

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