JEL Classification: I220 УДК 658.532:658.27	FUNDING FOR THE OPERATION AND DEVELOPMENT OF HIGHER EDUCATION IN UKRAINE: TRENDS, PROBLEMS AND PROSPECTS					
	M. DENISENKO <sup>1</sup> , S. ZAKHARIN <sup>1</sup> , I. ODOTUK <sup>1</sup> <sup>1</sup> Kyiv National University of Technologies and Design					
Keywords:	ABSTRACT					
higher educational system,	This article analyzes the process of the development of the					
management, higher	higher education in Ukraine. Organizational, economic and					
	ingher education in Oktaine. Organizational, economic and					
educational institution,	financial conditions of the higher educational functioning					
e e						

**Statement of a problem.** Higher education should provide the national economy with highly skilled and creative professionals who will be able to solve the challenges of the technological development. The higher education is one of the areas that provides long-term national competitiveness.

Consequently, the government should take measures to optimize organizational, economic and financial conditions of the higher educational functioning system. This explains the relevance of the study.

**Review of the literature**. With the current problems of the higher education in Ukraine appears a lot of scientific works (I. Kalenyuk [4]; T. Bogolib [1]; O. Komarova [4]; V. Lugovoy [3]; I. Grischenko [2]; V. Andrushchenko). Scientists deeply analyze the economic conditions of the higher educational development using proven scientific methods.

However, in the modern terms, which are characterized by the exhaustion of the traditional sources of the funding for the higher education institutions, organizational, economic and financial conditions of the higher education operating system has to be identified and assessed, as well as the perspectives of the strengthening the competitiveness of the universities. During the study, the following methods were used such as: logic synthesis, abstraction, induction and deduction, economic modeling, statistical analysis, peer reviews, analytical comparisons etc.

*The purpose of the article* is to present research results upon the organizational, economic and financial conditions of the higher education in Ukraine analytical evaluation.

The main results of research. During the years of the independence of Ukraine since 1991 the scope of the higher education has evolved faster pace that was manifested primarily in the growth of the higher education institutions and a corresponding increase in the number of students.

The specified process was a natural consequence of two factors: independence (the need for training specialists in the new institutions, which previously did not exist in Ukraine) and radical socio-economic reforms (the possibility to create private ownership institutions). In addition, in the field of the higher education began to appear institutions of I-st-II-nd accreditation levels (college, technical and vocational schools), which were the part of the secondary special education in Soviet times.

During 2000-2011 trend of the reducing the number of institutions continued. This depends on high growth rates of institutions in the previous period (until 2000), and aggravation of the competitive situation in the market of educational services, as a result unattractive institutions to consumers have to cease to exist.

Data on the number of the higher education institutions and the number of students (trainees) are presented in Table 1 [7].

Table 1

inglici culcation institutions and the number of students (trainces)						
Indicators	1995	2000	2005	2010	2013/	2014/
malcators	/1996	/2001	/2006	/2011	2014	2015
Number of institutions, all units	1037	979	951	854	767	664
Number of students - total, thousand	1540.5	1930.9	2709.2	2491.3	1992,9	1689,2
The average number of students in one institution, thousand	1,48	1,97	2,84	2,92	2,60	2,54

Higher education institutions and the number of students (trainees)

The source of the information (Government service of statistics of Ukraine, 2015), is expected by authors.

As a result of a decrease in the number of educational institutions and the simultaneous increase in the number of students and trainees grew the average number of students in one school (from 1.48 thousand in 1995/1996 academic year to 2.92 thousand in 2010/2011 academic year). This is a positive trend because it allows concentrating the possibility on preparing students and thus accelerating the process of creating powerful universities with modern physical infrastructure (Government service of statistics of Ukraine, 2015).

Slight fluctuations in the number of the higher educational institutions with III-rd-IV-th accreditation levels were observed (from 345 in 2005/2006 to 353 in 2008/2009 academic year). At the same time significant variations in the number of students and trainees were fixed - an increase to the 2008/2009 academic year (2364.5 thousand) with some decrease in the next period (1689,2 thousand in 2014/2015 academic year).

Moreover, the reduction in the number of students and trainees is observed for all forms of learning (Government service of statistics of Ukraine, 2015). The average number of the students in a high school of III-rd-IV-th accreditation was 6.10 thousand people in 2010/2011. At the same time, the average number of students in universities in the EU-15countries varies in the range of 14 thousand (Greece) to 23 thousand (Italy) (Recognized Analytics Education Provide, 2013).

The indicated evidence shows the feasibility of a decreasing number of higher educational institutions with III-IV accreditation levels, which is key to the further concentration of scarce resources and creating the opportunities for the formation of powerful institutions that are using modern educational technology (T. Bogolib [1]).

One of the features of higher education system is that it prepares foreigners (export of educational services). According to the State Statistics Service, in the higher educational institutions of Ukraine at the beginning of 2011 /12 studied 38,166 foreign students, including institutions of III-rd-IV-th accreditation – 37848 foreign students (Government service of statistics of Ukraine, 2013), representing 1.78% of the total student number.

Interestingly, the largest number of the foreign students doesn't study in the capital, but in the Kharkiv region (over 10 thousand), which can be explained by more high-quality work of Kharkiv universities in terms of attracting foreign customers (consumers). Leadership positions in the number of foreign students who get higher education in higher educational institutions of III-rd-IV-th accreditation levels occupy Kiev, Odessa, Lugansk, Donetsk regions.

The largest number of students in higher educational institutions of Ukraine study from the following countries: China (4.7 thousand), Turkmenistan (4.5 thousand), Russia (3.5 thousand), India (2.4 thousand), Jordan (2.2 thousand), Iran (1.2 million people) (Government service of statistics of Ukraine, 2013).

Analytical data indicate a territorial uneven distribution of higher education institutions. Most institutions are concentrated in areas with high population (Kyiv, Donetsk, Dnepropetrovsk, Kharkiv region), which is justified in terms of the orientation of educational institutions to accommodate up to potential consumers. At the same time the number of the universities in leading positions occupies Lviv and Odessa regions, which is a consequence of the acquired human and scientific potential in previous years. Industrialized regions – Kyiv, Donetsk, Dnipropetrovsk, Luhansk, Kharkiv, Odessa region keep leadership in the number of higher educational institutions of I-st-II-nd accreditation levels (technical college), which concentrate a large number of industries that use skilled labor. During 1990 - 2012, the number of universities grew rapidly, exceeding the pace of the scientific and pedagogical workers for higher education training, including highly qualified specialists. This has led to that some schools do not meet the demand in terms of the provision with higher qualification teaching staff. This fact affects adversely the quality of teaching and reduces the research and innovation potential of the higher education.

One of the negative factors that hinders the human resources development of the higher education is insignificant (lack of) wages of teaching staff, low level of social security and low prestige of teaching work (Greece and etc, 2006).

One of the defects of higher education in Ukraine is the orientation of higher education to meet the needs of consumers who want to receive the socalled "fashion" or "rating" specialty (economist, lawyer, manager, psychologist, etc.). Great part of higher education institutions prepare non-core professionals, not having the proper personnel, scientific and methodological support [8].

According to specialists of the Institute of Higher Education NAPS of Ukraine, our country is at least 2.5 times remains behind with the share of graduates, while the surplus trains specialists in social sciences, business and law (41%) (V. Lugovoi [3]).

One of the economic factors that hinder the transition of the higher education innovation development model is the lack of funding. Because of several factors: general economic crisis, demographic trends, the lack of sufficient competitive educational products, weak mechanisms of interaction of educational institutions and employers, foreign partners and international organizations, etc. (D. Kucherenko [9]).

Higher education financing is uneven. After the growth in absolute volume of the consolidated budget for the financing of education and higher education in 2005-2009, because of government revenue and expenditure increase, in 2010 funding for education and higher education decreased, which was due to the rapid drop in income and expenditure budgets of different levels as a result of the financial crisis (S. Gala [8]). Financing of education in general and higher education in particular from the budget is presented in Table 2 [7; 10].

Significantly, in 2009, the worst period of the crisis, the total expenditures of the consolidated budget decreased, while expenditures on education and higher education increased. This shows the efforts of the Government of Ukraine to make adequate funding for educational activities in accordance with the commitments on priority principles (I. Grischenko [2]).

## Table 2

at the expense of the consolidated budget, mln.hrn						
Indicators	2000	2005	2010	2012	2014	
Expenditures of the consolidated budget	48148.6	141989.5	377842.8	492454.7	364087.7	
Including: education	7085.5	26801.8	79826.0	101560.9	71767.9	
Including: higher education	2285.5	7934.1	24998.4	29335.9	20483.0	

## Education and higher education financing t the expense of the consolidated budget, mln.hrn

The source of information (Government service of statistics of Ukraine, 2015), is expected by authors.

The level of the budgetary financing of higher education relative to GDP and total expenditure during 2008-2010 compared to 2000-2007 has increased slightly. For example, in 2000-2007, the expenditure on higher education amounted to 1.3 - 1.8% of GDP and 4.7 - 5.7% of total expenditure, in 2008-2010, these figures increased to 2.0 - 2.3% of GDP and 6.0 - 6.8% of budget expenditures (Government service of statistics of Ukraine, 2015). Table 3 presents the calculated and analytical indicators on higher education funding in Ukraine [7; 10].

Table 3

## Analysis of higher education financing at the expense of the consolidated budget, mln.hrn

Indexes	2000	2005	2010	2012	2014
Spending on higher education:- % of	1.3	1.8	2.2	2.1	2.0
GDP					
% of total expenditure	4.7	5.7	6.5	5.9	5.6
% of total education expenditures	32.3	29.6	30.7	28.9	28.5

The source of information (Government service of statistics of Ukraine, 2012), is expected by authors.

Significantly, in 2010 the financial ratios of higher education from the budget slightly decreased, which was a natural phenomenon of substantial limitations on many budget programs, including in higher education due to the need to carry out expenditure to finance the protected items.

From these data it appears that during 2008-2014, continued downward trend in the number of students in higher education, including in the context of available funding sources (other than local budgets). This is explained by demographic problems (rapid decrease in the number of young people, born in the first half of 1990) and the lack of financial resources as a result of economic crisis (S. Zakharin [11]).

In the higher education the amount of the allocated budget goes to salaries and charging for it, as well as scholarships. Social expenditure is mainly financed ("wasting paper"). At the same time investment costs for new construction, new educational technologies, purchase of teaching equipment, carry out advanced research ("development") almost are not financed. One of the main reasons for this troubled situation in Ukraine is a large number of higher education institutions and their extra-structural units. Experts have repeatedly pointed to the excessive expansion of higher education in Ukraine, which produces "useless" experts to society and market. Paradoxically, the licensed number of enrollment in 2012 for undergraduate programs amounted to 1.2 million people, twice exceeded the number of people who have finished secondary school. The state order for training specialists in higher educational institutions of different ownerships is held transparently, without regard to the quality of educational services.

Higher education in Ukraine cannot demonstrate the high quality of international origin system that is proved in particular by the independent ranking of higher education institutions, carried out regularly by influential international organizations (O. Komarova [5]).

Special feature of higher education in Ukraine as an economic activity is the presence of educational institutions (universities) of state and municipal ownership in the market area, which simultaneously serve as public institutions (that receive funds from the budgets of different levels for the production of public goods), and as entities of economic activities (focused on achieving management positive results by developing educational services and its sales in a competitive market).

The basic challenges, which face the higher education system of Ukraine were distinguished with regard to the need of systematic transformations in this area, namely: the need for refusal of old teaching methods; overcoming the isolation of Ukrainian higher educational achievements in the world science and real market needs, strengthening the skills of the staff members, retraining those who have no computer skills, interactive teaching methods, and foreign languages (special attention is needed to coaches of retirement age, representing more than 28% of the universities staff in Ukraine); ensuring the educational infrastructure development; improving the quality of educational services, the adaptation of higher education in Ukraine to demographic challenges (i.e., to reduce the number and to change the age of students); achieving a balance between the educational services market and the needs of a dynamic labor market development in Ukraine (taking into account the trends of internal and external migration).

Orientation of higher education on the target (professional) employment of young specialists; the need for use of continuing education ("education for life") in Ukraine, which is consistent with the objective of building an innovative society, the formation of "knowledge economy", etc.

**Conclusions**. As a result of this research we can draw the following conclusions and generalizations:

State policy of higher education development should be clearly defined by law and provided with adequate financial resources (budget and off-budget). The specified policy must be designed to support scientific research capacity of higher education institutions and to preserve the best university traditions and ensure the training of qualified personnel.

It is extremely important for the education market development to determine the needs of the labor market and the formation of the state order for training in terms of specialties and levels of education. However, this task is complicated by the lack of actual research and relevant forecasts for mediumand long-term demand for professionals.

Increased funding for higher education is necessary, but not sufficient condition for receiving high-quality educational services, and thus a high level of graduates' competitiveness of higher education institutions. It is necessary to carry out a number of fundamental structural and organizational, financial and economic events and change management techniques.

It is necessary to restore proper competitive level of teaching staff salaries.

Financial resources should be concentrated in higher education by reducing the number of higher education institutions and their consolidation. This is important in terms of improving the quality of education and its role in ensuring the development and competitiveness of Ukraine on world markets.

It is reasonable to hold the "inventory" of existing universities and reduce the number of licensed training. One of the main criteria for issuing licenses for educational activity should take into account the profile of higher education.

It is necessary to clearly define the basic concepts of higher education as an economic activity, including the term "educational service", "educational product", "educational services market" and others. The guidelines for determining the cost of educational services provided by universities should be developed. Effective models of public-private partnerships should be established in the area of training process financing. **Prospects for further researches.** In the future, the research should be done on the developing econometric models that enable you to predict the economic characteristics of higher education.

## **References:**

1. Bogolib, T. (2006) Finansove zabespechennia rozvytku vyshchoi osvity i nauky v transformaziynyi period [Financial providing for the development of Higher Education in transformation period]. Kyiv: KNEU [in Ukrainian].

2. Gryshchenko, I. (Eds.). (2010). Ekonomichni aspekty problem rozvytku vyshchoi osvity v Ukraini: monografiia [Economic aspects of problems of higher education development in Ukraine: Monograph]. Khmelnytskyi: KhNU [in Ukrainian].

3. Lugovogoi, V. (Eds.). (2009). Ekonomichni osnovy innovaziinogo rozvytku vyshchyh navchalnych zakladiv Ukrainy [The economic fundamentals of innovation development of Ukraine Higher Educational Institutions]. Kyiv: Pedagogichna pressa [in Ukrainian].

4. Kalenyuk, I. (2003) *Ekonomika osvity: navchalnyi posibnyk [Economics of education: tutorial]*. Kyiv: Znannya Ukrainy. [in Ukrainian].

5. Komarova, O. (2009) Osvitnii potenzial: teoretyko-metodologichnyi aspect formuvannia. [The educational potential: theoretical and methodological aspects of formation] Kirovograd: DLAU [in Ukrainian].

6. Osnovni pokaznyky diialnosti vushchuh navchalnyh zakladiv na pochatok 2013/14 navchalnogo roku / statystuchne vydannia. [Basic indicators of higher education institutions activity at the beginning of 2013/2014 academic year / statistical publications] Kyiv: Derzstat [in Ukrainian].

7. Geits, V. (Eds.). (2006). *Ukraina u vymiri ekonomiky znan [Ukraine in terms of economic knowledge]* Kyiv: Osnova [in Ukrainian].

8. Gala, S. V. & Kucherenko D. G. (2013) The quality of higher education and main methods of their financing: *IX International conference "Strategy of quality in industry and education"*. (pp. 221-224).Varna. – Bulgaria.

9. Kucherenko, D. G. & Zakharin, S.V. (2013) The role of business education in the innovative development of society. *Racja stanu Studia i materiały*. *Półrocznik, 2-1 (12-13), 247-255.* 

10. Recognized Analytics Education Provide [Electronic resource] (n.d.). *statistics.com.* Retrieved from http://www.statistics.com/informs-provider/

11. Zakharin, S. (2013) Financing of higher education development in Ukraine: problems and prospects. *Strategy of Quality in Industry and Education*, *III*, 313-317.