## Sergii V. Zakharin<sup>1</sup>, Mykola P. Denysenko<sup>2</sup> FINANCING OF HIGHER EDUCATION DEVELOPMENT IN UKRAINE: PROBLEMS AND PROSPECTS

The paper analyzes the development state of higher education in Ukraine. Organizational, economic and financial framework for higher education system functioning are defined. Suggestions on further optimization of higher education system are grounded.

Keywords: higher education; management; educational policy.

### Сергій В. Захарін, Микола П. Денисенко ФІНАНСУВАННЯ РОЗВИТКУ СИСТЕМИ ВИЩОЇ ОСВІТИ УКРАЇНИ: ПРОБЛЕМИ І ПЕРСПЕКТИВИ

У статті проаналізовано стан розвитку системи вищої освіти України. Визначено організаційно-економічні та фінансові умови функціонування системи вищої освіти. Обґрунтовано пропозиції щодо подальшої оптимізації розвитку системи вищої освіти. Ключові слова: вища освіта; управління; освітня політика. Табл. 3. Літ. 11.

# Сергей В. Захарин, Николай П. Денисенко ФИНАНСИРОВАНИЕ РАЗВИТИЯ СИСТЕМЫ ВЫСШЕГО ОБРАЗОВАНИЯ УКРАИНЫ: ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ

В статье проанализировано состояние развития системы высшего образования Украины. Определены организационно-экономические и финансовые условия функционирования системы высшего образования. Обоснованы предложения по дальнейшей оптимизации развития системы высшего образования.

Ключевые слова: высшее образование; управление; образовательная политика.

**Research background.** Higher education is one of those areas that facilitate long-term national competitiveness.

Higher education should provide national economy with highly skilled and creative professionals who will be able to face challenges of technological development.

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

Literature review, the choice of methods. The current problems of higher education in Ukraine are studied in many scientific works (Bogolib, 2006; Gala and Kysherenko, 2013; Kaleniyk, 2003; Komarova, 2009; Kucherenko and Zakharin, 2013). Scientists deeply analyze the economic conditions of higher education development using well-known scientific methods.

However, under today's conditions, which are characterized by the exhaustion of traditional sources of funding for higher educational institutions, organizational, economic and financial conditions of higher education system operating have to be identified and assessed, as well as the perspectives of strengthening the competitiveness of universities.

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Within the study, the following methods were used: logic synthesis, abstraction, induction and deduction, economic modeling, statistical analysis, peer reviews, analytical comparisons.

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

**Key research findings.** During the years of independence (since 1990) the scope of higher education has evolved faster than the growth of higher educational 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 new institutions, which previously did not exist in Ukraine) and radical socioeconomic reforms (the possibility to create private ownership institutions). In addition, in the field of higher education there emerged the institutions of I–II accreditation levels (colleges, technical and vocational schools), which previously used to be a part of secondary special education in the Soviet times.

During 2000–2011 there was a trend of reducing the number of institutions. This was caused by high growth rates of institutions in the previous period (until 2000), and the aggravation of competitive situation at the educational services market, as a result the unattractive to consumers institutions cease to exist.

The data on the number of higher educational institutions and the number of students are presented in Table 1.

Table 1. Higher educational institutions and the number of students

Indicators	1995/	2000/	2005/	2008/	2009/	2010/
	1996	2001	2006	2009	2010	2011
Number of institutions, all units	1037	979	951	881	861	854
Number of students – total, ths	1540.5	1930.9	2709.2	2763.9	2599.4	2491.3
The average number of students	1.48	1.97	2.84	3.13	3.01	2.92
in one institution, ths	1,40	1,57	2,04	0,10	0,01	2,02

Source: State Service of Statistics of Ukraine (2012).

As a result of a decrease in the number of educational institutions and the simultaneous increase in the number of students and trainees the average number of students per one school grew (from 1.48 ths in 1995/1996 academic year to 2.92 ths 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 contemporary infrastructure (State Service of Statistics of Ukraine, 2012).

Slight fluctuations in the number of higher educational institutions of III—IV 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 ths) with some decrease in the next period (2129.8 ths in 2010/2011 academic year). Moreover, the reduction in the number of students and trainees is observed for all forms of learning (State Service of Statistics of Ukraine, 2012).

The average number of students in schools of III–IV accreditation levels was 6.10 ths people in 2010/2011. At the same time, the average number of students in the

universities of the EU-15 varies from 14 ths (Greece) to 23 ths (Italy) (Recognized Analytics Education Provide, 2013).

The indicated evidence shows the feasibility of a decreasing number of higher educational institutions of III—IV accreditation levels, which is key to further concentration of scarce resources and creating opportunities for the formation of powerful institutions that are using current educational technologies (Bogolib, 2006).

One of the features of higher education system is that it is open for foreigners (export of educational services). According to the State Statistics Service, in higher educational institutions of Ukraine at the beginning of 2011/12 38,166 foreign students, studied including the institutions of III—IV accreditation — 37848 foreign students (State Service of Statistics of Ukraine, 2012), representing 1.78% of the total students number. Interestingly, the largest number of foreign students doesn't study in the capital, but in the Kharkiv region (over 10 ths), which can be explained by a higher quality 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—IV accreditation levels occupy Kyiv, Odesa, Lugansk, Donetsk regions.

The largest number of foreign students in higher educational institutions of Ukraine are from the following countries: China (4.7 ths), Turkmenistan (4.5 ths), Russia (3.5 ths), India (2.4 ths), Jordan (2.2 ths), Iran (1.2 mln people) (Government Service of Statistics of Ukraine, 2012).

Analytical data indicate a territorial uneven distribution of higher educational institutions. Most institutions are concentrated in the areas with high population (Kyiv, Donetsk, Dnipropetrovsk, Kharkiv regions), which is justified in terms of the orientation of educational institutions to accommodate potential consumers. At the same time the number of universities in leading positions, except for the above, occupy Lviv and Odesa regions, which is a consequence of the acquired human and scientific potential previously. Industrialized regions — Kyiv, Donetsk, Dnipropetrovsk, Luhansk, Kharkiv, Odesa keep leadership in the number of higher educational institutions of the I—II accreditation levels (technical colleges), which concentrate a large number of industries that use skilled labor.

During 1990–2012, the number of universities grew rapidly, exceeding the pace of preparing scientific and pedagogical staff for higher education training, including highly qualified specialists. This has led to the fact that some schools do not meet the demand in terms of the provision with qualified teaching staff. This fact affects adversely the quality of teaching and reduces the overall research and innovation potential of higher education.

One of the negative factors HR resources development of higher education is insignificant (level of) wages of teaching staff, low level of social security and low prestige of teaching work (Geyets et al., 2006).

One of the basic drawbacks of higher education in Ukraine is the orientation of higher education to meet the needs of consumers who want to receive the so-called "fashionable" or "rating" specialty (economist, lawyer, manager, psychologist etc.). Great part of higher educational institutions prepare non-core professionals, not having proper personnel, scientific and methodological support.

According to the specialists from the Institute of Higher Education NAPS of Ukraine, our country is at least 2.5 times behind with the share of graduates, while the surplus trains specialists in social sciences, business and law is around 41% (Lugovoi et al., 2009).

One of the economic factors that hinder the transition of 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. (Kucherenko, 2013).

Higher education financing is uneven. After the growth in absolute volumes of consolidated budget for financing of education and higher education in particular in 2005–2009, because of government revenue and expenditure increase, in 2010 the funding of 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 (Gala, 2013). Financing of education in general and higher education in particular from the budget is presented in Table 2.

Table 2. Education and higher education financing from the consolidated budget, mln UAH

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Indicators	2000	2005	2007	2008	2009	2010	
Expenditures from the consolidated budget	48148.6	141989.5	226054.4	309230.7	307399.4	262428.0	
Including: education	7085.5	26801.8	44333.6	60959.4	66773.6	55620.9	
Including: higher education	2285.5	7934.1	12827.8	18552.9	20966.3	17057.9	

Source: Government Service of Statistics of Ukraine (2012).

In 2009, the worst year 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 in providing adequate funding for educational activities in accordance with the commitments on priority principles (Grishchenko et al., 2010).

The level of budget financing of higher education relative to GDP and total expenditure during 2008–2010 compared to 2000–2007 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 the 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, 2012). Table 3 presents the calculated and analytical indicators on higher education funding in Ukraine.

Table 3. Analysis of higher education financing at the expense of the consolidated budget, mln UAH

	2000	2005	2007	2008	2009	2010	
Spending on higher education							
% of GDP	1.3	1.8	1.8	2.0	2.3	2.2	
% of total expenditure	4.7	5.7	5.7	6.0	6.8	6.5	
% of total education expenditures	32.3	29.6	28.9	30.4	31.4	30.7	

Source: Government Service of Statistics of Ukraine (2012).

Significantly, in 2010 the financial ratios of higher education from the budget slightly decreased, which was a natural consequence of substantial limitations on many budget programs including higher education.

From these data it is evident that during 2008–2011, there was a 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 (Zakharin et al., 2013).

In higher education the amount of the allocated budget goes to salaries and scholarships. At the same time investment costs for new construction, new educational technologies, purchase of teaching equipment, advanced research are barely 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 labour market. Paradoxically, the licensed number of enrollment in 2012 for undergraduate programs amounted to 1.2 mln people, twice exceeding the number of people who have finished secondary school (Kaleniyk, 2003). The state order for training specialists in higher educational institutions is often held without consideration of the quality of educational services.

Higher education in Ukraine cannot demonstrate high quality and this is proved in particular by the independent ranking of higher education institutions, carried out regularly by influential international organizations (Komarova, 2009).

Special feature of higher education in Ukraine as an economic activity is the presence of educational institutions (universities) of state and municipal ownership at the market, which simultaneously serve as public institutions (that receive funds from 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 at competitive markets).

Key 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 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 university staff in Ukraine); ensuring 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.

As a result of this research we can draw the following **conclusions and generaliza- tions**:

- 1. 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 educational institutions and to preserve the best university traditions and ensure the training of qualified personnel.
- 2. It is extremely important for the educational market development to determine the needs of the labor market and the formation of state order for training in terms of specialties and levels of education. However, this task is complicated by the lack of relevant research and forecasts for medium-and long-term demand for professionals.
- 3. Increased funding for higher education is necessary, but not sufficient for receiving high-quality educational services, and thus a high level of graduates' competitiveness of higher education institutions. There is a need to carry out a number of fundamental structural and organizational, financial and economic events and change management techniques.

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

4. Financial resources should be concentrated in higher education by reducing the number of higher educational 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 at world markets.

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

5. It is necessary to clearly define the basic concepts of higher education as an economic activity, including the terms "educational service", "educational product", "educational services market" and other. 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 financing.

**Prospects for further research.** In future, the research should be delivered on developing econometric models that enable the prediction of economic characteristics of higher education.

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#### книжковий світ



# СУЧАСНА ЕКОНОМІЧНА ТА ЮРИДИЧНА ОСВІТА ПРЕСТИЖНИЙ ВИЩИЙ НАВЧАЛЬНИЙ ЗАКЛАД

#### НАЦІОНАЛЬНА АКАДЕМІЯ УПРАВЛІННЯ

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Фінансова складова економічної безпеки: держава і підприємство: Наук. монографія. — К.: Національна академія управління, 2010. — 232 с. Ціна без доставки — 40 грн.

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У монографії розкрито місце і засади фінансової безпеки в системі економічної безпеки на двох рівнях управління економікою країни: держави і підприємства. Розкрито роль економічної безпеки в розвитку економіки України, визначено і обгрунтовано шляхи забезпечення фінансової безпеки на рівні держави.

Викладено методологічні основи фінансової безпеки підприємства та управління нею. Визначе-

но форми і методи удосконалення механізму управління фінансовою безпекою на рівні підприємства.