# Diana Kucherenko – Sergii Zakharin

# Financing Development in Higher Educationin The Ukraine



#### Summary

This article analyzes the process of development in higher education in the Ukraine. The organizational, economic and financial conditions of the higher educational functioning system were defined. Suggestions for the further optimization of the higher educational system were grounded.

Higher education should provide the national economy with highly skilled and creative professionals who are able to solve the challenges of technological development. Higher education is one of the areas that provide long-term national competitiveness.

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

*Review of the literature:* The current problems of higher education in the Ukraine are tackled by a large number of scientific studies.<sup>1</sup> Scientists perform deep analyses of the economic preconditions of development in higher education using proven scientific methods.

However, under modern conditions, which are characterized by the exhaustion of traditional sources of funding for higher education institutions, the organizational, economic and financial conditions of the system operating higher education must be identified and assessed, and the competitiveness of universities must be strengthened.

DIANA KUCHERENKO, PhD of Economics, Associate Professor, SERGII ZAKHARIN, Doctor of Economic Sciences, Associate Professor, Science and Research Institute of Economic Development, Kyiv, Ukraine.

The following methods were used for the study: logical synthesis, abstraction, induction and deduction, economic modeling, statistical analysis, peer reviews, analytical comparisons etc.

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

*Main material:* During the years since the Ukraine gained its independence in 1991, the scope of higher education has evolved at a faster pace that was manifest primarily in the expansion of higher education institutions and a corresponding increase in the number of students. This process was a natural consequence of two factors: independence (the need for training specialists in new institutions, which previously had not existed in the Ukraine) and radical socio-economic reforms (the opportunity to create private institutions). In addition, institutions of 1<sup>st</sup> and 2<sup>nd</sup> accreditation levels (college, technical and vocational schools) emerged from those that used to be part of special secondary education during Soviet times.

In the period between 2000–2011, the trend of reduction in the number of institutions continued. This was a result of high growth rates of institutions in the previous period (to 2000), and the aggravation of competitive disadvantage in the market of educational services due to the fact that these institutions were unattractive for consumers.

*Table 1* presents the number of higher education institutions and students (including trainees).

Indicators	1995/ 1996	2000/ 2001	2005/ 2006	2010/ 2011	2013/ 2014	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
Average number of students per institu- tion, thousand	1.48	1.97	2.84	2.92	2.60	2.54

Table 1: Higher education institutions and students (trainees)

Source: Government Service of Statistics of the Ukraine, 2015.

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 school (from 1.48 thousand in the 1995–1996 academic year to 2.92 thousand in 2010-2011). This is a positive trend because it allows concentration on preparing students and thus accelerating the process of creating powerful universities with modern physical infrastructure (Government Service of Statistics of the Ukraine, 2015).

Slight fluctuations in the number of the higher educational institutions of the 3<sup>rd</sup> and 4<sup>th</sup> accreditation levels were observed (from 345 in 2005–2006 to 353 in the 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 thou-

sand) with some decrease in the next period (1689.2 thousand in the 2014–2015 academic year). Moreover, decrease in the number of students and trainees was observed in all forms of learning (Government Service of Statistics of the Ukraine, 2015).

The average number of students in a high school of the  $3^{rd}$  and  $4^{th}$  accreditation level was 6.10 thousand in 2010–2011. At the same time, the average number of students at universities in the EU15 countries varies in the range of 14 thousand (Greece) to 23 thousand (Italy).<sup>2</sup>

The indicated evidence shows the feasibility of a decreasing number of higher educational institutions at 3<sup>rd</sup> and 4<sup>th</sup> accreditation levels, which is a key to the further concentration of the scarce resources and to the creation of opportunities for the formation of powerful institutions using modern educational technology.<sup>3</sup>

One of the features of the higher education system is that it also trains foreigners (export of educational services). According to the Government Service of Statistics of the Ukraine, in the higher educational institutions of Ukraine at the beginning of 2011–2012 studied 38,166 foreign students, including institutions of 3<sup>rd</sup> and 4<sup>th</sup> accreditation – 37,848 foreign students (Government Service of Statistics of the Ukraine, 2015), representing 1.78% of the total student number.

Interestingly, the largest number of foreign students does not study in the capital, but in the Kharkiv region (over 10 thousand), which can be explained by the higherquality work of the Kharkiv universities in terms of attracting foreign customers (consumers). Most foreign students attending higher educational institutions of 3<sup>rd</sup> and 4<sup>th</sup> accreditation levels are recorded at Kiev, Odessa, Lugansk and the Donetsk regions, in this descending order.

The largest number of students studying at higher educational institutions of the Ukraine come 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 the Ukraine, 2015).

The analytical data indicate an uneven territorial distribution of higher education institutions. Most institutions are concentrated in highly populated areas (Kyiv, Donetsk, Dnepropetrovsk and the Kharkiv region), which is justified in terms of the orientation of educational institutions to accommodate up to potential consumers. At the same time, the universities with the highest number of students are found in the Lviv and Odessa regions, which is a consequence of the human and scientific potential obtained in the past. The industrialized regions – including Kyiv, Donetsk, Dnipropetrovsk, Luhansk, the Kharkiv and the Odessa regions – are at the head in the number of higher educational institutions of 1<sup>st</sup> and 2<sup>nd</sup> accreditation levels (technical colleges), as a large number of industries that use specialised labour are concentrated on these areas.

During 1990–2012, the number of universities grew rapidly, exceeding the pace of increase in the number of scientific and pedagogical employees in higher education, including that of highly qualified specialists. As a result, some schools cannot meet the demand in terms of highly qualified teaching staff. This fact adversely affects the quality of teaching and reduces the research and innovation potential in higher education.

The adverse factors that hinder improvement in human resources in higher education include the fact that teachers are paid badly or not at all, the amount paid as social security contribution is low, and the prestige of teaching is also low.

One of the defects of higher education in the Ukraine is that it does not focus on meeting consumer needs according to "fashionable" or "rated" professions (economist, lawyer, manager, psychologist etc.). The major part of higher education institutions release non-core professionals, without a proper personnel, scientific and methodological support.

According to the specialists of the Institute of Higher Education NAPS of Ukraine, the country lags at least 2.5 times in terms of graduates, while it trains specialists in social sciences, business and law at an unnecessarily high number (the surplus being 41%).<sup>4</sup>

One of the economic factors that hinder the transition of the higher education innovation development model is the lack of funding. This is due to several factors: the global economic crisis, demographic trends, an insufficient number of competitive educational products, weak mechanisms of interaction between educational institutions and employers, foreign partners and international organizations, etc.<sup>5</sup>

Higher education financing is uneven. After growth, in absolute terms, in the consolidated budget for financing education and higher education in 2005–2009, due to increase in government revenues 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. Financing of education in general and higher education in particular from the budget is presented in *Table 2*.

Indicators	2000	2005	2010	2012	2014
Expenditures of the consolidated budget	48,148.6	141,989.5	377,842.8	492,454.7	364,087.7
Including: education	70,85.5	26,801.8	79,826.0	101,560.9	717,67.9
Including: higher edu- cation	2,285.5	7,934.1	24,998.4	29,335.9	20,483.0

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

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

In 2009, during the worst period of the crisis, the total expenditures of the consolidated budget decreased significantly, while expenditures on education and higher education increased. This shows the efforts of the government of the Ukraine to make adequate funding for educational activities in accordance with the commitments on priority principles.<sup>6</sup>

In comparison to the period between 2000–2007, budgetary financing for higher education relative to GDP and total expenditure had increased slightly during 2008-2010. While 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, respectively (Government Service of Statistics of the Ukraine, 2015). *Table 3* presents the calculated and analytical indicators on higher education funding in the Ukraine.

	2000	2005	2010	2012	2012
Spending on higher education: % of GDP	1.3	1.8	2.2	2.1	2.0
% 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

Table 3: Higher education financing from the consolidated budget, mln. HRN

Government Service of Statistics of the Ukraine, 2012

In 2010 the ratios of higher education financing from the budget slightly decreased, which was a natural phenomenon due to substantial cuts on numerous budgetary programs, including higher education, as there was a need to finance protected items.

From these data it appears that during 2008–2014, the downward trend in the number of students in higher education continued, including the available funding sources (other than local budgets). This is explained by demographic problems (rapid decrease in the number of young people, as fewer people were born in the first half of 1990s) and the lack of financial resources as a result of the economic crisis.<sup>7</sup>

The budget allocated to higher education is spent on salaries and their taxes, as well as scholarships. Social expenditure is mainly financed ("waste paper"). At the same time the investment costs of new construction, new educational technologies, purchase of teaching equipment, the performance of advanced research ("development") are hardly financed at all. One of the main reasons for this troubled situation in Ukraine is the large number of higher education institutions and their extra-structural units. Experts have repeatedly pointed out the excessive expansion of higher education in the Ukraine, which produces "useless" experts to society and to the market. Paradoxically, the licensed number of enrollment in 2012 for undergraduate programs amounted to 1.2 million people, twice the number of people who have finished secondary school. The state's requirement of specialist training in higher educational institutions of different ownership structures is transparent, without regard to the quality of educational services.

Higher education in the Ukraine cannot demonstrate the high quality seen in the international system evidenced by the independent ranking of higher education institutions, carried out on a regular basis by recognised international organizations.<sup>8</sup>

It is a special feature of higher education in the Ukraine that educational institutions (universities) of state and municipal ownership are both present in the market and simultaneously serve as public institutions (receiving funds from budgets at 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 faced by the higher education system of the Ukraine have been established as the needs for systematic reforms, namely the need for the refusal of outdated teaching methods, overcoming the isolation of Ukrainian higher educational achievements in global science and real market needs, strengthening the skills of the staff members, retraining those who have no computer skills, the adoption of interactive teaching methods and foreign languages (special attention is needed to coaches of retirement age, representing more than 28% of the university staffs in the Ukraine); improvement of the educational infrastructure; improvement in the quality of educational services, the adaptation of higher education in the Ukraine to the demographic challenges (i.e. reduction in the number and change in the age composition of students); achieving a balance between the educational services market and the needs of a rapid labour market development in the Ukraine (taking the trends of internal and external migration into account); focusing higher education on the targeted (professional) employment of young specialists; the need for continuing education ("education for life") in the Ukraine, which is consistent with the objective of building an innovative society and the formation of a "knowledge economy", etc.

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

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

In order to improve the educational market, it is indispensable to determine the needs of the labour market and the public-sector demand for training in terms of specialties and levels of education. However, this task is complicated by the lack of actual research and relevant forecasts concerning medium- and long-term demand for professionals.

Increased funding for higher education is a necessary, but not sufficient precondition of high-quality educational services and of raising graduate competitiveness to a higher level. 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 institutions and by 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 maintain 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 Diana Kucherenko - Sergii Zakharin: Financing Development in Higher...

educational services provided by universities should be developed. Efficient models of public-private partnerships should be established in financing training.

*Prospects for further research:* In the future, research should be done to develop econometric models to enable the prediction of the economic characteristics of higher education.

## Notes

- <sup>1</sup> I. Kalenyuk: Ekonomika osvity: navchalnyi posibnyk. Znannya Ukrainy, Kyiv, 2003; T. Bogolib: Finansove zabespechennya rozvytku vyshchoi osvity i nauky v transformaziynyi period. Kyiv, 2006; O. Komarova: Osvitnij potenzial: teoretyko-metodologichni aspect formuvannya. DLAU, Kirovograd, 2009; Ekonomichni osnovy innovazijnogo rozvytku vyshchyh navchalnych zakladiv Ukrainy. Za redakzieyu V. Lugovogo. Pedagogichna pressa, Kyiv, 2009; Ekonomichni aspekty problem rozvytku vyshchoi osvity v Ukraini. Monografiya, za redakzieyu I. Gryshchenka, KhNU, Khmelnytskyi, 2010;
- <sup>2</sup> Recognized Analytics Education Provide. www.statistics.com/informs-provider/
- <sup>3</sup> Bogolib, op. cit.
- <sup>4</sup> Ekonomichni osnovy..., op. cit.
- <sup>5</sup> D. G. Kucherenko S. V. Zakharin: *The role of business education in the innovative development of society.* Racja stanu Studia i materiały, Półrocznik nr 2-1, (12-13), 2012–2013, Wrocław, 2013, 247–255.
- <sup>6</sup> Ekonomichni aspekty..., op. cit.
- <sup>7</sup> S. Zakharin et al.: Financing of higher education development in Ukraine: problems and prospects. Strategy of Quality in Industry and Education, Volume III, Varna, 2013, 313–317.
- 8 Komarova, op. cit.

### References

Osnovni pokaznyky diiyalnosti vushchuh navchalnyh zakladiv na pochatok 2013/14 navchalnogo roku. Statystuchne vydannya, Derzstat, Kyiv, 2014.

Ukraina u vymiri ekonomiky znan. Za redakzieyu V. Gejtsya, Osnova, Kyiv, 2006.