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# Higher education development in Ukraine and its regions in the context of the 21st century challenges

Education for sustainable development is an important institution of the integration process of the knowledge economy. This situation also concerns Ukraine, which is currently experiencing particularly difficult times of its state formation. This article investigates the state of the situation in the field of higher education in Ukraine, highlighting global and national of geopolitical, economic and other transformations of the 21st century. The purpose of the article is to identify the main factors, restrictions and improvement directions of institutional support for the development of higher education in Ukraine with regard to global and national challenges of the 21st century. The research presented in this article is based on the principles of systematic and comparative analysis, as well as methods of statistics and sociology. The empirical base of the research is data of national and international statistics and special sociological surveys on the issues of economy and management of higher education in Ukraine. The structure of the article includes the following sections: Ukraine in the international rankings, key global and national trends in the development of higher education, including business education, results of the national surveys concerning the quality of higher education in Ukraine and graduates' employability, conclusions.

Keywords: higher education, development, Ukraine, regions, challenges.

**Problem statement.** The Ukrainian society even in the most difficult times in its history has not lost faith in a better future. It has always aspired to be part of the European community and has grounds for that.

For reference:	
Area (total) – 603,500 km² (46th)  Water – 7%  Permanent Population  2018 (1.01) estimate: 42,216,766  available: 42,386,403  2001 census: 48,457,102  Density - 74,12/km²	GDP (PPP):2016 estimate — Per capita: \$7,361 GDP (nominal)2017 estimate — 2982,9 billion hryvnias; Per capita 70210 hryvnias Gini (2016): 25 low HDI (2016) Steady 0.743 high · 84 <sup>rd</sup> Currency: Ukrainian hryvnia (UAH)

Ukraine possesses the most fertile black earth and numerous minerals. With the territory of 0.4% of the world's land area and number of inhabitants of 0.8% of the total world's population, it extracts 5% of the world's minerals and refined products (in particular, 14% – iron ore, 30% – manganese and 7% – coal [1, p. 47.1 – 47.12]. It is an aerospace state. Its aviation industry has a complete cycle of aircraft production. It can quickly convert the production of "Electron" TV sets into trams of the same brand, produce high quality skiing equipment (particularly of such famous brands as "Fisher", "Blitsard"). It occupies the ninth position in the world among the biggest weapon exporters [2]. Our populations have surprised the world with the volunteerism scale.

At the same time, Ukraine is a leader on corruption. By the number of billionaires possessing the capital of doubtful origin, Ukraine is among the first ones in the world. The aggregate extent of their net assets equals the expenditure section volume of Ukraine's state budget). From the standpoint of business assessments, it could be positively perceived, if not incredibly low price of human labor (Figure 1).

The low price of human labor now is one of the decisive ones when modeling the European future of Ukraine.

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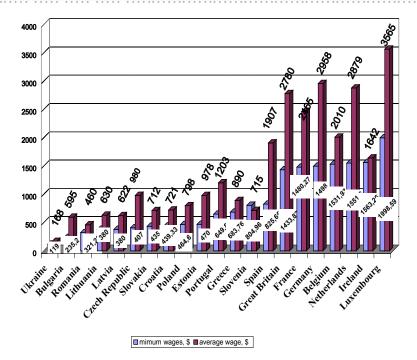


Fig. 1. Average and minimum wage in European countries: location of Ukraine (2017 year)

Source: [3; 4; 5].

Now, against the background of high European aspirations of the Ukrainian society, it is important to know "What do Europeans think of Ukraine?" Social surveys show that there is no Ukraine-phobia among EU citizens [6]. The doors of the European Union remain open to Ukrainians. ...But just in case Ukrainians can overcome the most painful diseases like corruption, oligarchs' influence, and poverty. So, the aspiration of EU citizens and Ukrainians who are also demanding radical reforms coincide.

The Ukrainian society is well aware that higher education is a crucial factor in solving problems and in achieving the goals of millennium development. Therefore, it is important to identify the unique problems facing Ukraine in the field of higher education considering the country's development possibility of a state and contemporary civilization changes.

Analysis of recent research. The processes of higher education system (HES) transformation, its institutional environment are the subject of study of numerous Ukrainian and foreign scholars, including P. Altbach [7], T. Dobko, S. Kalashnikova, K. Kalhoun, V. Kremen, V. Lugovy, T. McKovan [8], S. Panchyshyn [9], L. Shevchenko [10], etc. The researches V. Yefimov, A. Lapteva, J. Knight, J. Nilsson, L. Semiv [11], B. Sivinskaya are devoted to processes of internationalization as a special factor of the higher education system competitiveness, to problems of regulation of academic mobility at the regional and national levels.

Issues of improvement of the state policy of higher education development as the main area of intellectual capital formation are highlighted in the works of such Ukrainian scientists: E. Libanova [12], V. Bakhrushyn, A. Hrishnova [13], T. Finikov, etc. The works of D. Ilnytsky, S. Kvit [14], I. Revak, I. Timoshenkova, R. Fatkhuddinov, A. Shevchuk are devoted to the study of the concepts of HES competitiveness, its determinants, to policies of boosting HES competitiveness at the institutional, regional and national levels. The economic peculiarities of HES

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management, the problems of its funding, and to innovation activity are considered by N. Verkhohlyadova, O. Zhilinska, I. Kalenyuk, N. Lisitsa, O. Prokopenko [15], N. Savitska, etc.

Summarizing the works of foreign and domestic scholars on the subject of study, it is important to note that, firstly, higher education as a special type of economic activity became the subject of study of economic and management sciences only in the second half of the XX century, secondly, due to the combination of socio-cultural, political and economic functions, higher education needs an interdisciplinary approach to efficiency problem solving, thirdly, in each country, in spite of the global trends of development, the system of higher education has national peculiarities and requires the identification and assessment of national reserves for improving competitiveness.

The paper purpose is to identify the main factors, restrictions and improvement directions of institutional support for the development of Ukraine's higher education system with regard to global and national challenges of the 21st century.

Major research findings. Ukraine in the international rankings. Ukraine now occupies not the best positions in the international rankings of economic freedom (Index of Economic Freedom), ease of doing business (Doing Business / ease of doing business) and global competitiveness (The Global Competitiveness Index). This is illustrated by Figure 2.

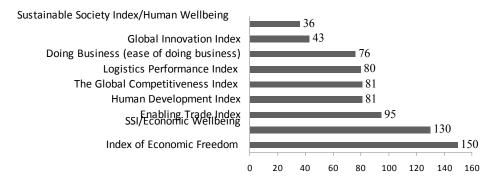


Fig. 2. Ukraine in the international rankings (2016 year) *Source*: [16; 17; 18; 19; 20; 21; 22; 23].

However, on the other hand, Ukraine occupies better position in the world rankings concerning human development, just thanks to education.

Therefore, among the consideration in the complex political, social, and economic factors, which may affect the advancement of Ukraine's position in the international sustainability rankings through business, reforming of higher education institutions (HEIs) plays a special role, particularly in the area of business education.

In the 19<sup>th</sup> and 20<sup>th</sup> centuries in Ukraine quite a different culture of entrepreneurship was formed and thus of business education environment as well. For example, in Western Ukraine the activity of the Metropolitan of the Ukrainian Greek Catholic Church, the ethnic Pole Andrii Sheptytskyi had a huge influence. With his support in Galicia immediately after the First World War the active development of national and religious life began. In less than 10 years, Galicians became a real modern nation with their banks, schools, the Academy of Sciences (Shevchenko Scientific Society), the National Museum, developed agriculture and their own industry. The slogan "Buy Ukrainian Products" was practical only on condition of full self-providing of the nation with everything needed [24].

In the 20<sup>th</sup> century the Ukrainian HES met the turbulent 1990s, the years of the "wild capitalism" having only five specialties ("Economic Cybernetics", "Planning and Organization of the Economy", "Accounting and Audit", "Automated Control Systems" and "Construction Economy") at economic faculties of HEIs. Only with the development of Ukraine as an independent state in 1991 came with the formation of the private ownership institute, development of small and medium business and also of financial institutions. During 1991-2015 in Ukraine (1997, 2006, 2007, 2010 and 2015) the list of specialties changed five times. In April 2015 the Cabinet of Ministers of Ukraine approved a new draft on the list of disciplines and specialties, in which the number of the specialties are reduced from 160 to 100 [25; 26; 27].

Analysis of the dynamics of the student number in Ukraine shows that despite economic, socio-cultural and political problems Ukrainians traditionally try to get higher education. The evidence of this is the international statistics on the educational level in the human development index by the method of UNDP. In 2016, just in terms of "Expected years of schooling" Ukraine improved its ranking in the evaluation of national human capital (Table 1).

Table 1 Human Development Index in Ukraine and some other countries (2016 year)

		velopment lex	Its components							
	Ranks	Value	Life expectancy at birth, years	Expected years of schooling, years	Mean years of schooling	Gross national income (GNI) per capita				
VERY HIGH HUMAN DEVELOPMENT										
Norway	1	0.949	81.7	17.7	12.7	67,614				
Australia	2	0.939	82.5	20.4	13.2	42,822				
Switzerland	3	0.939	83.1	16.0	13.4	56,364				
Poland	36	0.855	77.6	16.4	11.9	24,117				
Russian Federation	49	0.804	70.3	15.0	12.0	23,286				
HIGH HUMAN DEVELOPMENT										
Belarus	52	0.796	71.5	15.7	12.0	15,629				
Ukraine	84	0.743	71.1	15.3	11.3	7,361				

Source: [21]

The modern development of Ukraine HES is stipulated by the influence of both traditional and new factors. Determent factors include globalization and increasing migration mobility of the population, regionalization of the public development, demographic situation, institutional changes in the country etc.

Key global and national trends in the development of higher education

- 1. Globalization and increasing migration mobility of the population. According to the dynamics of foreign educational migration Ukraine today is among the twenty countries. According to the UN data 75,5% of the import of higher education services Ukraine is provided by student migration to Poland, Russian Federation and Germany (Figure 3).
- 2. Regionalization of the social development. Among the important factors of educational migration, which define its main directions in Ukraine and other countries, there is disproportional regional development. Factors impacting this development include opportunities for obtaining quality education, educational opportunities in others countries and regions of the world, employment problems in rural areas or depressed regions. The study of higher education competitiveness of the regions in

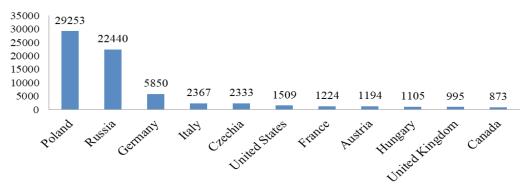


Fig. 3. Where do Ukrainian students go to study abroad (2016 year)?

Source: [28]

Ukraine shows significant imbalances of its development on the criteria of quality, social responsibility and economic efficiency (Figure 4)

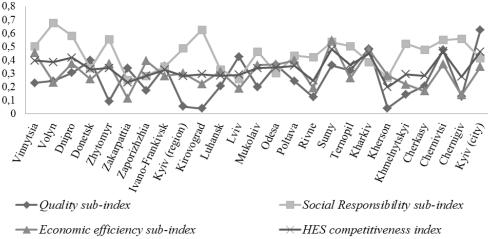


Fig. 4. Integral assessment of the HES competitiveness in the regions of Ukraine (2016 year) Source: [29, p. 461]

3. Demographic situation. In Ukraine, this factor practically reflects temporary "collapse" of educational services market capacity due to the natural losses of Ukraine's demographic potential. The decline in the birth rate since the early 1990s of the last century has led to the negative dynamics of the volumes of entering Ukrainian higher educational establishments since 2007 (Figure 5).

On the basis of the correlation-regression analysis the authors did a forecast of the dynamics of the admission volumes to Ukrainian higher educational establishments by 2031. The forecast estimates indicate an annual decrease in the number of students and saving the negative dynamics of this indicator by 2020 (Figure 6).

The decrease in admission numbers in Ukraine universities is happening on the background of quite a high number of different types of establishments (Figure 7), and, respectively, leads to more relevant problems of competitiveness management in higher education.

4. Institutional transformations in Ukraine. This factor is related to the introduction of the Law of Ukraine "On Higher Education" in the July of 2014. For the first time since the independence the new Law declares in the preamble the importance of

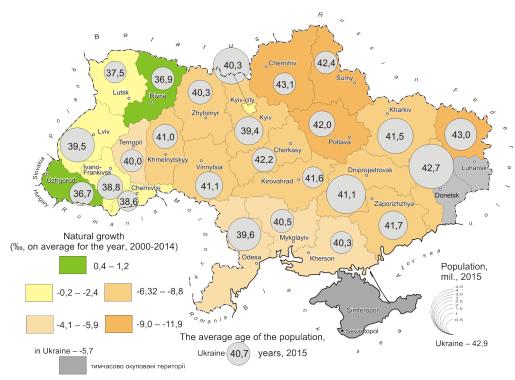


Fig. 5. Demographic situation in the regions of Ukraine

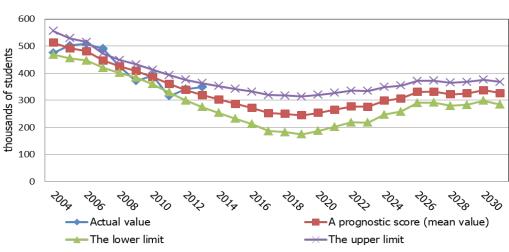


Fig. 6. Forecast estimates of the students enrolment dynamics to Ukrainian HEIs based on a regression model depending on the birth rate Source: [31].

creating legal and organizational conditions of "increasing the cooperation of state authorities, business and higher education on the principles of universities' autonomy" [33]. The law provides a legal basis for the harmonization of educational activity in Ukraine with relevant international and European standards, gives more autonomy to HEIs, especially in determining the content of educational curricula and provides their students with the opportunity of a real subject choice.

Source: [30].

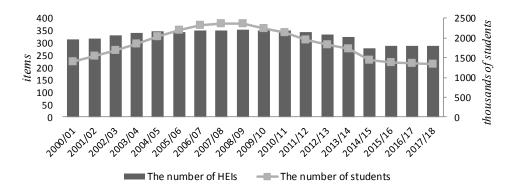


Fig. 7. Dynamics of Ukraine's HEIs (Universities, Academies, Institutes) and the number of students Source: [32].

Results of national surveys the quality of higher education in Ukraine and graduate employability

As for the rankings of World University in 2017 six Ukrainian universities were included into the list of the best universities in the world for the first time since the independence (V. N. Karazin Kharkiv National University (382), Taras Shevchenko National University (431-440), National Technical University of Ukraine "Kyiv Polytechnic Institute" (551-600), Sumy State University (701+), National Technical University "Kharkiv Polytechnic Institute" (701+) and Donetsk National University (701+) [34].

We distribute main tools, which can improve the quality and competitiveness of higher education in Ukraine:

- Survey of the quality of higher education.
- Using of non-financial tools: creating new professional standards.
- Using of financial tools: cooperation with private companies.
- Survey of employment and unemployment of graduates.

First, monitoring of the quality of higher education. In March 2015 within the project "Reforming of Higher Education", which is funded by the International Renaissance Foundation, a nationwide survey of students about the quality of higher education was held. The results showed that Ukrainian students began demanding much concern for quality education they get. If in 2011 almost half of the respondents considered Ukrainian higher education of high quality, in 2015 their number decreased by more than two and a half times (Figure 8).

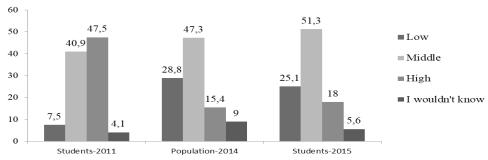


Fig. 8. Evaluation of the Ukraine's higher education quality in (2011-2015) by students and population (percentage of respondents, %)

Source: [35]

According to a five-point scale, Ukrainian students who study in the area of business education evaluated the quality of education in this area at 3.2. Most students think that the most serious problems of higher education, which require urgent solution, are the following ones [35]:

- non-recognition of diplomas of most domestic universities in the world (51%);
- teaching non-conformity with market requirements (41%);
- corruption of university teaching staff (39%);
- low quality education in Ukrainian HEIs compared with the global level (32%).
   Second, non-financial instruments of improving the quality of higher business education. The analysis of priority measures to solve this problem in Ukraine (Figure 9) points to the need for the development and implementation of professional educational standards. For leading Ukrainian universities international cooperation with employers, business schools and public associations, in particular International Society for Business Education (for the formation of a modern system of external evaluation of business education quality) is very important.

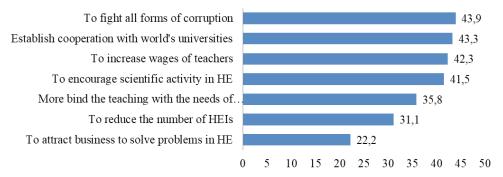


Fig. 9. Priority measures in solving the problem of Ukraine's higher education quality (percentage of students interviewed, %)

*Source:* [35].

Third, financial instruments of improving the quality of higher business education. To form the national system of external evaluation of higher education in Ukraine is important for stimulating cooperation with private companies / businesses. The main financing agents in higher education of Ukraine are budget administrators (central and regional / local government institutions) and households. The results of expenditures analysis in higher education show that the biggest share of expenditures in 2016 was in the state sector 62.4%. The share of the private sector was 30.5%, of which only 1.6% was connected with the expenditures of private companies. Over the last six years, the situation in financing higher education has had a similar structure, the biggest specific weight of spending on higher education accounts for the public sector and households (Table 3).

The analysis of financing sources of higher education in Ukraine gives grounds to assert practical absence of direct influence on the development of this sector of the economy by private companies. In our opinion, this fact largely explains the problem of weak relationships between the content and organizational forms of obtaining higher education in Ukraine, including in the business area with its real needs.

Low participation of private companies in financing higher education does not motivate business to a more responsible relationship with universities in training area and employment of graduates. This conclusion is confirmed by the results of a national survey of graduates and employers to study the experience and employment problems of university students. By the level of employment in the speciality graduates who have received business education have the worst indicator (total 46%). The

Table 3

Expenses sharing in Ukraine's Higher Education, by the financing sources

Expenses sharing in Oxiaine's Higher Education by the inflancing sources										
	Genera	General expenses, mln hrn.			General expenses structure, %					
	2010 y.	2013 y.	2016 y.	2010 y.	2013 y.	2016 y.				
Total	39152,3	45108,4	52343,9	100,0	100,0	100,0				
including by financing sources										
Central Government	23319,7	27808,6	32652,5	59,6	61,6	62,4				
Regional budgets/Local authorities	2561	3344,6	3746,2	6,5	7,4	7,2				
Private companies	781,7	703	832,5	2,0	1,6	1,6				
Households	12489 9	13252.2	15112.8	31.9	29.4	28.9				

Source: [36].

overall employment indicator of graduates with a higher business education diploma in 2013 was 74% [37].

Fourth, marketing of higher business education. The vast majority of employers (55%-57%) believe that domestic universities produce economists and lawyers in excess [37]. At the same time representatives of universities and some employers noted that, despite the excess of graduates with economic and legal education in the labor market, to find a highly-qualified young employee of these specialties' can still be a daunting task. According to 72% of the representatives of companies-employers, current graduates have overestimated expectations on wages, 53% overestimated ideas of their ability, 51% overestimated career expectations, 31% overestimated expectations concerning working conditions.

In general, the problem of effective employment remains the most urgent among the young, as evidenced by the official statistics on the unemployment rate in Ukraine (Figure 10).

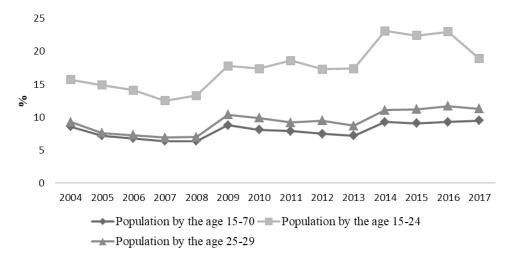


Figure 10. Unemployment rate in Ukraine by distinct groups (according to the ILO methodology)

Source: [38].

The problem of effective employment and unemployment of the young is topical not only for Ukraine. According to Euro statistics data, in 2014 the unemployment rate among young people under 25 years in the Euro area countries was 16.8%, ranging from 6.8% in Germany to 46.8% in Greece [38].

Conclusions. 1. Modern Ukraine as a European state, despite the complexity of geopolitical, economic and other transformations, is demonstrating its commitment to European ideals and values of the education priority as a factor of society's sustainable development. The evidence of this European loyalty is the indicators of the educational level of the population, and also the expenditures of the Central Government and most Ukrainians on higher education.

- 2. The Dignity Revolution in Ukraine in 2013 accelerated transformation processes of all public institutions in the country, including higher education areas. Today Ukraine is doing everything possible to reintegrate into the European realm, from which it was forcibly ousted in the 17<sup>th</sup> century. The approval of the new Law of Ukraine "On Higher Education", a new classification of educational specialties' consistent with international standards (ISCED), the establishment of the National Agency for Quality Assurance in Higher Education, the National Employment Agency are key institutional factors that are designed to ensure the integration of the Ukrainian higher education into the European educational space.
- 3. The Ukrainian HES getting rid of inferiority complex declares improving the quality and competitiveness of Ukrainian higher education in the world educational space as its main goal. In this way, Ukraine has to overcome a huge number of obstacles. The inertia of educational organizations, insufficient activity of the academic community in defending their rights and freedoms, unwillingness of universities' administrative management in many cases to implement European principles of academic freedom, autonomy, and therefore responsibility for the results of educational activity are among the most significant ones.
- 4. One of the determining factors of implementation of national development tasks of business education in the context of sustainable development global goals is to strengthen the cooperation between public authorities, business and higher education on the principles of universities' autonomy. In this context the following steps are extremely important for Ukraine: increasing social responsibility of business at all stages of human capital formation: joint development of new standards in the business education area, identification of prospective staffing needs for the business sector of the economy; development and implementation of special certificate programs in business education for different categories of the consumers of educational services, including professors of Ukrainian universities.

The Ukrainian academic community, being aware of joint responsibility for the implementation of global goals of sustainable business development needs special international support. We are interested primarily in the implementation of international projects of social responsibility of all social relations entities. One of these projects can be study and implementation of positive practices of the cooperation of universities, business and government authorities in solving urgent problems of sustainable business development.

5. Further research can be carried out concerning the assessment of positive and negative consequences of the increase in the number of students' international education migration.

It is desirable to conduct a special survey of Ukrainian students getting higher education abroad (the USA, Canada, Great Britain, Germany, Austria, Poland, etc.) to determine effective teaching methods in the field of business education.

The issue of the development of international educational programs in the field of business education that can meet the educational needs of students, taking into account cultural differences in their countries of origin still remains urgent.

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#### References

- Brininstool M. (2011). The Mineral Industry of Ukraine. In U.S. Geological Survey Minerals Yearbook (pp. 47.1-47.12). U. S. Department of the Interior. Retrieved from http://minerals.usgs.gov/minerals/pubs/country/2011/myb3-2011-up.pdf
- Stockholm International Peace Research Institute (2015). Ukraine is included into top ten of the biggest weapon exporters. Website BBC. Ukraine News. Retrieved from http://www.bbc.com/ukrainian/ politics/2015/03/150313\_arms\_transfers\_database\_vs
- 3. Srednyaya zarplata po stranam mira 2017 [Average salary for the countries of the world 2017] (2017). Website *Shkola investora [Investor School]*. Retrieved from http://investorschool.ru/srednyaya-zarplata-po-stranam-mira-2017 [in Russian].
- Fischer R. (2017). What's Minimum Wage in European Union. Retrieved from https://www.reinisfischer.com/ whats-minimum-wage-european-union-2017
- 5. State Statistics Service of Ukraine (2017). Average salary in Ukraine. Statistical Information. Retrieved from http://www.ukrstat.gov.ua [in Ukrainian].
- 6. Hetmanchuk, A. (2015). Shcho yevropeytsi dumayut' pro Ukrayinu? [What do Europeans think of Ukraine?]. Presentation. *Website of the Institute of World Policy*. Retrieved from http://iwp.org.ua/ukr/public/1584.html [in Ukrainian].
- 7. Rumbley, L., Altbach, P., Stanfield, D., Shimmi, Y., Gayardon, A., & Chan, R. (Eds.) (2014). *Higher Education:* A Worldwide Inventory of Research Centers, Academic Programs, and Journals and Publications. 3rd ed. Bonn, Berlin, New York: Center for International Higher Education, Boston College, and Lemmens Media.
- 8. McCowan, T. (2017). Higher education, unbundling, and the end of the university as we know it. *Oxford Review of Education*, 43, 733-748. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/03054985. 2017.134371
- 9. Panchyshyn, S. M., & Hrynkevych, O. S. (2017). Ponyattyevyy aparat instytutsiynoho analizu konkurentospromozhnosti systemy vyshchoyi osvity [The conceptual apparatus of institutional analysis of higher education system competitiveness]. *Ekonomika rozvytku Economics of Development*, 1 (81), 50-58. [in Ukrainian].
- 10. Shevchenko, L. S. (2016). *Universytetska osvita: ekonomichni priorytety ta upravlinnya rozvytkom [University education: economic priorities and development management]*. Kharkiv: Pravo. [in Ukrainian].
- 11. Semiv, L. K. (2013). Osvitnya mihratsiya yak faktor rozvytku terytorial'nykh mihratsiynykh system: natsional'nyy ta yevropeys'kyy kontekst [Educational migration as a factor for the development of territorial migration systems: national and European context]. In Sotsial'no-ekonomichni problemy suchasnoho periodu Ukrayiny [Socio-Economic Problems of the Modern Period of Ukraine]: Vol. 101(3). Terytorial'ni mihratsiyni systemy: teoriya i praktyka [Territorial migration systems: Theory and practice] (pp. 244-253). [in Ukrainian].
- 12. Libanova, E., Tsymbal, O., Yarosh, O., & Lisohor, L. (2016). Perekhid na rynok pratsi molodi Ukrayiny [The transition to the labor market of Ukrainian youth]. The results of the international study "School-to-work transition surveys" in Ukraine in 2013 and 2015. Zheneva: International Labor Office. Retrieved from http://www.ilo.org/wcmsp5/groups/public/--ed emp/documents/publication/wcms 536293.pdf [in Ukrainian].
- 13. Hrishnova, O. A. & Brintseva, O. H. (2018). Konkurentospromozhnist' vyshchoyi osvity i konkurentospromozhnist' pratsivnykiv: de stvoryuyet'sya fiktyvnyy lyuds'kyy kapital? [Competitiveness of higher education and the competitiveness of workers: where creates fictitious human capital?]. Rynok pratsi ta zaynyatist' naselennya Labor market and population employment, 1, 13-21. [in Ukrainian].
- 14. Kvit, S. (2015). The Battlefront of Civilizations: Education in Ukraine. Kyiv: Kyiv-Mogyla Academy.
- 15. Prokopenko, O. V. (Ed.). (2016). Marketing obrazovatel'nykh uslug [Marketing of educational services]. Ruda Śląska: Drukarnia i Studio Graficzne Omnidium (Poland). [in Russian].
- 16. Ease of doing business in Ukraine (2018). *Website Doing Business*. Country Ranking. The World Bank. Retrieved from http://www.doingbusiness.org/data/exploreeconomies/ukraine
- 17. The Global Innovation Index (2018). Country Ranking. Retrieved from www.globalinnovationindex.org/Home
- 18. The Global Competitiveness Report (2017-2018) (2018). *Website of the World Economic Forum*. Retrieved from https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018.
- 19. The Global Enabling Trade Report (2016). Website of the World Economic Forum. Retrieved from http://reports.weforum.org/global-enabling-trade-report-2016/economy-profiles/#economy=UKR
- The Heritage Foundation (2018). Index of Economic Freedom. Retrieved from https://www.heritage.org/index/ranking
- 21. United Nations Development Programme (2016). Human Development Index and its Components. Retrieved from http://report.hdr.undp.org
- World Bank (2016). Logistics performance index. Retrieved from https://lpi.worldbank.org/international/global/2016
- 23. Sustainable Society Foundation (2016). Sustainable Society Index your compass to sustainability. Retrieved from http://www.ssfindex.com/results/ranking-all-countries
- Inzhuvatova, Kh. (2014, Oct 02). Sviy do svoho po svoye [Buy Ukrainian Products]. Ratusha City hall: newspaper of Lviv, Ukraine. Retrieved from http://www.ratusha.lviv.ua/index.php?dn=ne>s&to=art&id=3726 [in Ukraine].

### U. Ya. Sadova, O. S. Hrynkevych

- 25. Cabinet of Ministers of Ukraine (2015). Pro zatverdzhennya pereliku haluzey znan' i spetsial'nostey, za yakymy zdiysnyuyet'sya pidhotovka zdobuvachiv vyshchoyi osvity [On the list of disciplines and specialties, according to which candidates of higher education are trained]. Adopted on 2015, Apr 29, 266. Retrieved from http://zakon3.rada.gov.ua/laws/show/266-2015-%D0%BF. [in Ukrainian].
- 26. Cabinet of Ministers of Ukraine (2006). The list of areas according to which experts in higher education institutions by the educational level of the bachelor degree are trained. Adopted on 2006, Dec 13, 17124. [in Ukrainian].
- 27. Cabinet of Ministers of Ukraine (1997). The list of areas according to which experts in higher education institutions by the relevant educational level are trained. Adopted on 1997, May 24, 507. [in Ukrainian].
- Global flow of tertiary-level students. (2016). Website UNESCO. Retrieved from http://uis.unesco.org/en/uisstudent-flow
- 29. Hrynkevych, O. S. *Upravlinnya konkurentospromozhnistyu vyshchoyi osvity v Ukrayini: instytutsiynyy analiz i monitorynh [Governance of the Higher Education Competitiveness in Ukraine: Institutional Analysis and Monitoring]*. Lviv: Ivan Franko National University of Lviv. [in Ukrainian].
- 30. Naselennya ta mihratsiya v Ukrayini (2000-2016) [Population and Migration (2000-2016)] (2017) (Statistical Information). Website of the State Statistics Service of Ukraine. Demographic and Social Statistics. Kyiv. Retrieved from http://www.ukrstat.gov.ua [in Ukrainian].
- 31. Hrynkevych, O. S. (2016). Prohnozuvannya popytu na rynku osvitnikh posluh v Ukrayini [Forecasting demand in the market of educational services of Ukraine]. *Ekonomichnyy chasopys Skhidnoyevropeys'koho natsional'noho universytetu imeni Lesi Ukrayinky Economic Journal of Lesya Ukrainka Eastern European National University*, 2, 83-89. [in Ukrainian].
- 32. State Statistics Service of Ukraine (2018). Higher Education Institutions in Ukraine: Statistical Information. Retrieved from http://www.ukrstat.gov.ua. [in Ukrainian].
- 33. Supreme Council of Ukraine (2014). Pro vyshchu osvitu [On higher education]. Law of Ukraine, adopted on 2011, July 01. Retrieved from http://zakon1.rada.gov.ua/laws/show/1556-18. [in Ukrainian].
- 34. World University Rankings. Who rules? (2018). Website Top Universities. Retrieved from https://www.topuniversities.com/university-rankings/world-university-rankings/2018
- 35. Vyshcha osvita v Ukrayini: hromads ka dumka studentiv [Higher education in Ukraine: public opinion of students] (2015). Website of Ilko Kucheriv «Democratic Initiatives» Foundation. Retrieved from https://dif.org. ua/article/vishcha-osvita-v-ukraini-gromadska-dumka-studentiv [in Ukrainian].
- 36. Natsional'ni rakhunky osvity Ukrayiny u 2016 r. [National Accounts of Ukraine in 2016] (2017) (Statistical Information). Website of the State Statistics Service of Ukraine. Kyiv. Retrieved from http://www.ukrstat.gov. ua [in Ukrainian].
- 37. Dosvid pratsevlashtuvannya vypusknykiv vyshchykh navchal'nykh zakladiv: pohlyad vypusknykiv i robotodavtsiv [The experience of university graduates' employment: graduates' and employers' view] (2013). Project of the System Capital Management. Retrieved from http://www.slideshare.net/bestuniverua/ss-27208268 [in Ukrainian].
- 38. Youth Unemployment statistics (2017). Official site of the Statistical Service of the European Union (Eurostat). Retrieved from http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment\_statistics#Youth\_unemployment

#### Список використаних джерел

- Brininstool M. The Mineral Industry of Ukraine // U.S. Geological Survey Minerals Yearbook. 2011 / U. S. Department of the Interior. P. 47.1-47.12. Retrieved from http://minerals.usgs.gov/minerals/pubs/country/2011/myb3-2011-up.pdf
- 2. Ukraine is included into top ten of the biggest weapon exporters // Website BBC. Ukraine News. Stockholm International Peace Research Institute, 2015. Retrieved from http://www.bbc.com/ukrainian/politics/2015/03/150313 arms transfers database vs
- 3. Средняя зарплата по странам мира 2017. Сайт «Школа инвестора». 2017. Режим доступа: http://investorschool.ru/srednyaya-zarplata-po-stranam-mira-2017
- Fischer R. What's Minimum Wage in European Union. 2017. Retrieved from https://www.reinisfischer.com/ whats-minimum-wage-european-union-2017
- 5. Заробітна плата в Україні: статистична інформація // Сайт Державної служби статистички України. Режим доступу: http://www.ukrstat.gov.ua
- 6. Гетьманчук А. Що європейці думають про Україну?: презентація. *Сайт Інституту світової політики*. 2015. Режим доступу: http://iwp.org.ua/ukr/public/1584.html
- 7. Rumbley L., Altbach P., Stanfield D., Shimmi Y., Gayardon A., Chan R. (Eds.). *Higher Education: A Worldwide Inventory of Research Centers, Academic Programs, and Journals and Publications.* 3rd ed. Bonn, Berlin, New York: Center for International Higher Education, Boston College, and Lemmens Media, 2014. 360 p.
- McCowan T. Higher education, unbundling, and the end of the university as we know it // Oxford Review of Education. 2017. Vol. 43. P. 733-748. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/0305498 5.2017.134371

## Higher education development in Ukraine and its regions in the context of the 21st century challenges

- 9. Панчишин С. М., Гринькевич О. С. Поняттєвий апарат інституційного аналізу конкурентоспроможності системи вищої освіти // *Економіка розвитку*. 2017. № 1 (81). С. 50-58.
- Шевченко Л. С. Університетська освіта: економічні пріоритети та управління розвитком: монографія. Харків: Право, 2016. 188 с.
- 11. Семів Л. К. Освітня міграція як фактор розвитку територіальних міграційних систем: національний та європейський контекст // Соціально-економічні проблеми сучасного періоду України. 2013. Вип. 3(101). Територіальні міграційні системи: теорія і практика. С. 244-253.
- 12. Перехід на ринок праці молоді України. Результати міжнародного дослідження «School-to-work transition surveys» в Україні у 2013 та 2015 роках / Е. Лібанова, О. Цимбал, О. Ярош, Л. Лісогор. Женева: Міжнародне бюро праці, 2016. Режим доступу: http://www.ilo.org/wcmsp5/groups/public/--ed\_emp/documents/publication/wcms\_536293.pdf
- 13. Грішнова О. А., Брінцева О. Г. Конкурентоспроможність вищої освіти і конкурентоспроможність працівників: де створюється фіктивний людський капітал. *Ринок праці та зайнятість населення*. 2018. № 1. С. 13-21.
- 14. Kvit S. The Battlefront of Civilizations: Education in Ukraine [Фронт цивілізацій: освіта в Україні]. Kyiv: Kyiv-Mogyla Academy, 2015. 207 р.
- 15. Маркетинг образовательных услуг: монография / ред. О. В. Прокопенко. Ruda Śląska: Drukarnia i Studio Graficzne Omnidium (Poland), 2016. 168 с.
- 16. Ease of doing business in Ukraine // Website Doing Business: Country Ranking. The World Bank, 2018. Retrieved from http://www.doingbusiness.org/data/exploreeconomies/ukraine
- 17. The Global Innovation Index: Country Ranking, 2018. Retrieved from www.globalinnovationindex.org/Home
- 18. The Global Competitiveness Report (2017-2018). *Website of the World Economic Forum*. 2018. Retrieved from https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018
- 19. The Global Enabling Trade Report. *Website of the World Economic Forum*. 2016. Retrieved from http://reports. weforum.org/global-enabling-trade-report-2016/economy-profiles/#economy=UKR
- 20. Index of Economic Freedom. The Heritage Foundation, 2018. Retrieved from https://www.heritage.org/index/ranking
- 21. Human Development Index and its Components. United Nations Development Programme, 2016. Retrieved from http://report.hdr.undp.org
- Logistics performance index. World Bank, 2016. Retrieved from https://lpi.worldbank.org/international/global/2016
- 23. Sustainable Society Index your compass to sustainability. Sustainable Society Foundation, 2016. Retrieved from http://www.ssfindex.com/results/ranking-all-countries
- 24. Інжуватова X. Свій до свого по своє. Ратуша: Львівська газета. 02.10.2014. Режим доступу: http://ratusha.lviv.ua/index.php?dn=news&to=art&id=3726
- Перелік галузей знань і спеціальностей, за якими здійснюється підготовка здобувачів вищої освіти: затверджений Постановою Кабінету Міністрів України від 29.04.2015 р. № 266. Режим доступу: http:// www.kmu.gov.ua/control/uk/cardnpd?docid=248149695
- 26. Перелік напрямів, за якими здійснюється підготовка фахівців у вищих навчальних закладах за освітньо-кваліфікаційним рівнем бакалавра: затверджений Постановою Кабінету Міністрів України від 13.12.2006 р. № 17124. Режим доступу: http://zakon2.rada.gov.ua/laws/show/1719-2006-%D0%BF
- 27. Перелік спеціальностей, за якими здійснюється підготовка фахівців у вищих навчальних закладах за освітньо-кваліфікаційними рівнями спеціаліста і магістра: затверджений Постановою Кабінету Міністрів України від 27.08.2010 р. № 787. Режим доступу: http://zakon2.rada.gov.ua/laws/show/787-2010-%D0%BF
- 28. Global Flow of Tertiary-Level Students. Statistical Information. *Website UNESCO*. 2016. Retrieved from http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx
- Гринькевич О. С. Управління конкурентоспроможністю вищої освіти в Україні: інституційний аналіз і моніторинг: монографія. Львів: ЛНУ імені Івана Франка, 2018. 462 с.
- 30. Населення та міграція в Україні (2000-2016). *Сайт Державної служби статистики України*. Демографічна та соціальна статистика. 2017. Режим доступу: http://www.ukrstat.ov.ua
- 31. Гринькевич О. С. Прогнозування попиту на ринку освітніх послуг в Україні // Економічний часопис Східноєвропейського національного університету імені Лесі Українки. 2016. № 2. С. 83-89.
- 32. Вищі навчальні заклади в Україні. *Сайт Державної служби статистики України*. 2018. Режим доступу: http://www.ukrstat.ov.ua
- 33. Про вищу освіту: Закон України від 01.07.2014, №1556-VII. Режим доступу: http://zakon3.rada.gov.ua/laws/show/1556-18
- 34. QS World University Rankings. Who rules? // Website Top Universities. Retrieved from https://www.topuniversities.com/university-rankings/world-university-rankings/2018
- 35. Вища освіта в Україні: громадська думка студентів. *Сайт Фонду «Демократичної ініціативи» імені Ілька Кучеріва*. 2015. Режим доступу: https://dif.org.ua/article/vishcha-osvita-v-ukraini-gromadska-dumka-studentiv

### U. Ya. Sadova, O. S. Hrynkevych

- Національні рахунки освіти України у 2016 р. Сайт Державної служби статистики України. 2017.
   Режим доступу: http://www.ukrstat.ov.ua
- Досвід працевлаштування випускників вищих навчальних закладів: погляд випускників і роботодавців.
   Проект System Capital Management. 2013. Режим доступу: http://www.slideshare.net/bestuniverua/ss-27208268
- 38. Youth Unemployment statistics (Statistical Information). Website of the Statistical Service of the European Union (Eurostat). 2018. Retrieved from http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment statistics#Youth unemployment

### Садова У. Я., Гринькевич О. С. Розвиток вищої освіти в Україні та її регіонах в умовах викликів ХХІ ст.

Динамічні зміни у способах генерації та поширення знань змінюють інституційний ландшафт і конкурентне середовище систем вищої освіти (СВО) країн і регіонів, потребують від політиків і менеджерів інноваційних управлінських рішень, обумовлюють актуальність нових теоретичних концепцій і прикладних моделей аналізу конкурентоспроможності національних СВО. Аналіз наукових публікацій вітчизняних і зарубіжних учених з проблем розвитку СВО дає підстави дійти висновку, що, по-перше, вища освіта як особливий вид економічної діяльності стала предметом вивчення економічних та управлінських наук лише у другій половині ХХ ст., по-друге, завдяки поєднанню соціокультурних, політичних та економічних функцій вища освіта потребує міждисциплінарного підходу до вирішення проблем ефективності; по-третє, у кожній країні, попри глобальні тенденції розвитку, система вищої освіти має локальні особливості, а відтак – потребує виявлення закономірностей розвитку і національних резервів підвищення конкурентоспроможності. Метою цієї статті є визначення основних чинників, обмежень і напрямів удосконалення інституційної підтримки розвитку системи вищої освіти України в умовах інтеграції у глобальний простір вищої освіти та викликів XXI ст. Основні положення і висновки, представлені у статті, базуються на принципах системного і порівняльного аналізу, статистичних і соціологічних методах. Емпірична база дослідження – дані національної і міжнародної статистики, спеціальних соціологічних досліджень з питань економіки та управління у вищій освіті. Структура статті містить такі розділи: позиція України в міжнародних рейтингах, глобальні і національні тенденції розвитку вищої освіти, у тому числі бізнес-освіти, результати національних досліджень щодо якості вищої освіти в Україні та працевлаштування випускників, висновки та пропозиції. Здійснено аналіз глобальних чинників трансформації національних СВО, внаслідок чого з'ясовано, що вплив демографічних чинників виявляється у структурних зрушеннях у віковому розподілі населення на користь осіб старшого віку, а відтак – зменшенні попиту на освітні продукти серед населення традиційного "студентського" віку, необхідності диверсифікації освітніх продуктів відповідно до концепції навчання протягом усього життя. Вплив соціально-економічних чинників пов'язаний з асиметрією показників якості життя та виявляється у зростанні процесів освітньої і трудової міграції, глобальній конкуренції за талановитих студентів і дослідників. Технологічні чинники зумовлюють диверсифікацію методів викладання і навчання, зростання кількості он-лайн освітніх продуктів, розвиток неформальної освіти і в підсумку – демократизацію СВО та ризики зменшення кількості закладів вищої освіти (ЗВО). Сформульовано висновок, що одним з визначальних факторів реалізації національних завдань СВО України у контексті глобальних цілей сталого розвитку є посилення співпраці державних і місцевих органів влади, бізнесу та вищої освіти на принципах автономії ЗВО. Тому для України важливими є такі кроки: підвищення соціальної відповідальності бізнесу на всіх етапах формування інтелектуального капіталу: спільна розробка нових стандартів у галузі вищої освіти, спеціальних програм сертифікації бізнес-освіти для різних категорій споживачів освітніх послуг, запровадження систем моніторингу працевлаштування випускників ЗВО та використання його результатів у підвищенні ефективності СВО України та її ЗВО.

Ключові слова: вища освіта, розвиток, Україна, регіони, виклики.

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