JEL Classification: **HIGHER EDUCATION IN UKRAINE: REALITY** AND PERSPECTIVES I23: I25: P46 N. FASTOVETS<sup>1</sup> UDC 378.37.014.254

DOI: 10.30857/2415-3206.2020.2.13

Kyiv National University of Technologies and Design, Ukraine.

Background and objectives. Sustainable development of the country requires the establishment of a close dialogue between the three subjects of higher education - the university, business and the state. The need to strengthen cooperation is due to the discrepancy between the real state of development of the economy and education sector, the inconsistency of staff quality with modern labor market needs, lack of innovation and research component of universities, which negatively affects the state of the national economy and reflected in various international rankings. To solve this problem it is necessary to study the state of higher education in Ukraine and prospects for its development.

Methods. The graphical method is used to study the dynamics of higher education, logical - to build a system for monitoring the employment of higher education.

Findings. An effective model of cooperation in Ukraine should include several areas of activity. The state must ensure the financial independence of universities through government; to promote the creation of the appropriate material and technical base of the university; to create conditions under which business will be interested in cooperation with educational institutions as bases of practice and for the purpose of carrying out joint with university research works in priority spheres.

**Conclusion.** Business structures should provide information on the needs of the market in qualified personnel and on promising areas of activity. Universities must provide quality curricula, readiness to establish technology parks, innovative firms on the basis of universities in order to conduct research.

**Keywords:** higher education; applicants for higher education; employment.

NUMBER	NUMBER	NUMBER
OF REFERENCES	<b>OF FIGURES</b>	OF TABLES
21	3	0

	ВИЩА ОСВІТА В УКРАЇНІ: РЕАЛІЇ ТА ПЕРСПЕКТИВИ
УДК 378.37.014.254	
DOI: 10.30857/2415- 3206.2020.2.13	<sup>1</sup> Київський національний університет технологій та дизайну, Україна.

проблеми Постановка та сталого розвитку завлання. Для необхідне встановлення країни тісного діалогу між трьома суб'єктами сфери вищої освіти університетом, бізнесом та державою. Необхідність посилення співпраці обумовлена невідповідністю між реальним станом розвитку сфери економіки та освітньо-наукового сектора, невідповідністю кадрів якості сучасним потребам ринку праці, відсутністю інноваційнодослідницької складової діяльності університетів, що негативно впливає на стан національної економіки та відображається в різних міжнародних рейтингах України. вирішення цієї проблеми Для необхілно дослідити стан вишої освіти в Україні та перспективи її розвитку.

Методи. Графічний метод використаний для дослідження динаміки здобувачів вищої освіти, логічний – для побудови системи моніторингу працевлаштування здобувачів вищої освіти.

Результати. Ефективна модель співпраці в Україні має включати декілька напрямів діяльності. Держава шляхом владних повноважень забезпечити має фінансову незалежність університетів; сприяти створенню відповідної матеріально-технічної бази ВНЗ; створити умови при яких зацікавлений бізнес буде V співробітництві учбовими i3 закладами в якості баз практики та з метою проведення спільних університетами науково-дослідних пріоритетних робіт сферах. В Висновки. Від бізнес структур має надходити інформація щодо потреб ринку в кваліфікованих кадрах та стосовно перспективних напрямів боку університетів діяльності. З забезпечено мають бути якісні навчальні програми, готовність до заснування технопарків, інноваційних фірм на базі університетів з метою проведення науково-дослідних робіт.

Ключові слова: вища освіта; здобувачі вищої освіти; працевлаштування. This study analyzes the quantitative and qualitative indicators of the development of the higher education system in Ukraine. It highlights the vector of changes happening in higher education, as well as their outcomes. The main causes of issues in Ukrainian higher education are indicated. The significant reasons include the excess number of higher education institutions; lack of quality managerial human resources in higher education management, lack of established cooperation between universities and business structures, insufficient level of quality of teaching staff in higher education, lack of funds in higher education institutions to create conditions for operation of technological platforms in universities that would create opportunities for entering the market and profiting from a combination of academic and teaching activities, relatively low salaries of academic and teaching staff, lack of conditions for the implementation of research and innovation function of academic and teaching staff due to large teaching and administrative workload.

The necessity to create conditions for development of integration of business with education and science in order to make students, teachers and lecturers focus on studying and practically solving economic issues, and implementing research innovations.

The paper substantiates the necessity to establish a triple model of partnership dialogue between universities, businesses and the government in order to create conditions for increasing research and innovation functions of domestic higher education institutions and to develop an updated system of higher education institutions (business HEIs) in Ukraine that will meet the requirements of current domestic and global employers, to generate scientific and industrial designs, to promote economic development and progress through the use and generation of new knowledge and innovative activities of economic entities.

Education ensures the quality of human capital assets, which is the basis of any country's economic condition. In 2006, the European Union (hereinafter the EU) recognized Ukraine as a market economy country. In 2014, Ukraine and the EU also concluded the Association Agreement. According to Chapter 23 "Education, Training and Youth" of Ukraine – EU Association Agreement, the parties shall bear responsibility for the education content and the organization of educational systems, as well as their cultural and linguistic diversity. The parties shall facilitate cooperation in education, training and youth policy in order to improve mutual understanding, scale up intercultural dialogue and enhance knowledge of relevant cultures. The parties shall scale up cooperation in higher education, in particular for the following purposes: reforming and modernizing higher education; promoting convergence in higher education under the Bologna Process; improving the quality and importance of higher education; deepening cooperation between higher education institutions; capacity building of higher education institutions (hereinafter referred to as HEIs); activating the mobility of students and teachers/lecturers (Association Agreement between Ukraine...: International document dated June 27, 2014).

The experts from the Organization for Economic Co-operation and Development (hereinafter OECD) assessed the higher education sector in 2014 as a very important part of the public sector in Ukraine in terms of the following indicators: expenditures, public employment and the number of population it served. In 2014, public expenditures on education accounted for 5.9% of Ukraine's GDP, while public and private expenditures on education combined accounted for 6.9% of the GDP or USD 9,211 million (OECD, 2017).

Corruption of teachers/lecturers, global non-recognition of degrees awarded by Ukrainian universities, failure of teaching to meet the labor market requirements; weak material and technical base of HEIs were emphasized as the main shortcomings of higher education in 2015/2016. Noreover, there were also problems with management and funding.

In early 2015, the Ministry of Education and Science of Ukraine started the process to optimize the number of universities by checking the compliance of educational activities of universities and their branches with the licensing conditions. Some of them were closed. Indicators of the number of HEIs over time are presented by a graph in Fig. 1. According to the State Statistics Service of Ukraine, the number of higher education institutions decreased by 5.1% during 2014/2015–2019/2020 (State Statistics Service of Ukraine. Institutions of higher education, www.ukrstat.gov.ua).

Starting from 2019, the strategy of the Ministry of Education and Science of Ukraine suggests the incorporation of universities, encouraging them to do so through increased funding: the new funding system should become a tool to incorporate universities. Sufficient funding will be provided to large higher education establishments (hereinafter HEEs).

According to the statistical data of the State Statistics Service of Ukraine, (State Statistics Service of Ukraine. Institutions of higher education, <u>www.ukrstat.gov.ua</u>), starting from 2008, Ukraine has been experiencing a gradual decrease in the number of students, postgraduate students and PhD students. At the beginning of the academic year of 1990–1991, there were 881,300 degree-seeking applicants. Starting from the academic year of 2007–2008, the number of degree-seeking applicants has been dropping (see Fig. 1).

The decrease in the number of HEEs, demographic and economic crisis, the annexation of Crimea and the military aggression of the Russian Federation in eastern Ukraine are the reasons for the decrease in the number of degree-seeking applicants.



www.ukrstat.gov.ua.

Fig. 1. Number of higher education establishments

During academic years of 2014/2015–2019/2020, the number of degreeseeking applicants decreased by 5.4% as compared to the previous academic year (Fig. 2).

According to the data from the register of subjects of educational activity of the Unified State Education Database (hereinafter USED) (Data from the register of subjects of educational activity, registry.edbo.gov.ua), there were more degree-seeking applicants enrolled in Ukrainian HEEs on contract-based form of education than at the expense of the public budget: out of 1.3 million degree-seeking applicants, 56% study on the contract bases, while 44% study at the expense of the public budget (see Fig. 3).

According to statistical data from the State Statistics Service of Ukraine, in 2018, 260,000 students received scholarships in Ukrainian higher education establishments, which is only 20% of the number of people studying at the expense of the public budget.



*Source:* Data from the register of subjects of educational activity, registry.edbo.gov.ua. *Fig. 2.* **Dynamics of the number of degree-seeking applicants** 



Source: Data from the register of subjects of educational activity, registry.edbo.gov.ua. Fig. 3. Number of degree-seeking applicants according to the form of education This situation is caused by the changes in the scholarship system carried out in 2017 by the Ministry of Education and Science of Ukraine. A student performance ranking was introduced with an emphasis on qualitative indicators of educational, academic, social activities, and not only quantitative ones. The main difference from the old system was that academic scholarships were now awarded not to all students who passed their exams with "good" and "excellent" marks, but only to those who scored high (up to 45% of the total number of students) in the HEE's ranking. The minimum scholarship in universities today amounts to UAH 1,300, while the so-called increased scholarship is UAH 1,660.

Employment indicators are among the indicators of the quality of educational services. Ukraine does not have an employment monitoring system. Therefore, it is impossible to tell the percentage of young people who have found a job at all and according to their major in particular. According to the data published by the Ministry of Education and Science of Ukraine, in December 2019, almost 50% of the officially registered unemployed people were people with higher education. For comparison, the share of unemployed people with vocational education is only 30% (vnz.org.ua, 24.12.2019).

The employment monitoring system is expected to start working in the academic year of 2021/2022. This is due to innovations in the system of funding higher education establishments. The employment rate of degree-seeking applicants will become one of the indicators that will significantly affect the funding of educational institutions.

An updated principle of public funding of institutions in accordance with the results of their work has been applied to the higher education system. Thus, bigger financial support will be awarded to higher education establishments, which, inter alia, will have higher employment rate of their graduates, more international grants and which will be included in international rankings.

According to the data of the State Statistics Service of Ukraine (State Statistics Service of Ukraine, 02.07.2020), at the beginning of the academic year of 2019/20, the teaching staff of universities, academies and institutes included 133,459 people. Of those, 5,966 persons were research officers, 104,710 – researchers and teachers/lecturers, – 22,783 – teachers/lecturers.

78,680 teachers/lecturers of HEEs have an academic degree (59% of their total number), incl. the degree of Doctor of Sciences – 15,584 (11.7%), Doctor of Philosophy / Candidate of Sciences – 63,096 (47.3%) (Kvit, S., Yeremenko, O., ed., 2021).

Throughout 1991-2020, the system of higher education in Ukraine experienced unsystematic changes, which resulted in its lack of competitiveness. There is still an excessive number of HEEs. According to the criteria of the leading world Shanghai ranking, as of early 2021, Ukraine has no world-class

higher education institutions (in the top 500 group) and sub-world class universities (candidates for world class, group 501–1000).

The reason for the low competitiveness of Ukrainian higher education can be attributed to its imperfect network and the low level of interconnection between businesses, universities and research institutions, low level of technology transfer, mismatch between education quality and content and market needs.

In order to improve the quality of higher education, HEEs should actively cooperate with businesses.

Cooperation between universities and businesses is very important for the development of human capital assets and economic growth in the world. Such cooperation brings educational institutions and companies closer, which allows for better distribution and comparison of skills in the economy and leads to a more efficient distribution of labor and increased productivity.

There are different levels of cooperation depending on how deep the interaction is.

As a rule, cooperation between universities and businesses is divided into cooperation in research and development activities and cooperation in education. Research and development is more common because its results are clearer and faster than results from cooperation in education.

For universities, the following factors can serve as incentives for cooperation: the need to improve work capacities of students by providing practical experience; attracting more (as well as talented) students to universities; understanding the importance of research, as new discoveries, devices or other innovations can be directly and immediately applied and put into production to help people in need; access to funding.

For business, the following factors are important: personal relationships that can contribute to the development of the company in the future; demand for productive employees as curricula become more tailored to market needs and awareness of the company among students rises; improvement of the corporate image as investing in education benefits society as a whole.

Cooperation between universities and businesses is important for a number of reasons. Thus, cooperation between universities and businesses increases the work capacity of students. The university, which aims at teaching its students the skills needed by the labor market, is interested in such cooperation that allows students to gain practical experience. The availability to cooperate with businesses attracts more students to HEEs. Universities that work with businesses to provide more opportunities for their students can use this as a competitive advantage to attract more students.

By actively cooperating with businesses, universities receive practical and financial support for research.

Lack of funding or resources from both businesses and universities can be obstacles to business-university cooperation. In a situation of limited funding, both universities and businesses need to cut non-core investments. As many types of cooperation, such as scientific cooperation or entrepreneurship support, may require large investments, funding for such activities may be reduced (Halan-Muros, Pleva, 2016).

Cultural differences can also be a problem. The working culture of businesses and universities is different. While the business is primarily profitoriented, universities pursue such goals as generating and disseminating new knowledge. Such differences in fundamental motivation lead to differences in all aspects of work culture, from communication styles to differences in bureaucratic levels, as well as to different time horizons used in planning. All these differences complicate the understanding and cooperation between businesses and universities.

Specific characteristics of a particular business can be another obstacle to cooperation. Business people want privacy and therefore oppose the publication of any research results, while dissemination of research results can be a major goal for universities.

While cooperation between universities and businesses has many advantages, it is important to note that there are also some disadvantages, especially in Ukrainian context. Firstly, sometimes, when companies are too active in attracting students, the latter start working full-time before graduating from universities and sacrifice the quality of knowledge acquired to keep the job. Secondly, teachers and researchers can also leave the university and move to the private sector, after gaining new skills through cooperation and seeing that salaries in the private sector are much higher. Thirdly, there may be some form of informal cooperation where businesses pay university administrations for product promotion or the use of their facilities for research. And such informal payments mean tax evasion and lack of transparency.

Establishing a constructive dialogue between the government, business and universities is possible only if the interests of all parties are consistent and there is interest in productive and mutually beneficial cooperation. The government has the greatest role as a party that should provide the necessary conditions for partnership for both universities and business organizations, develop a system of motives and incentives for research and development, which should be further reflected in designs, company activities and innovative development of the country's economy in general. In the current context of the development of the knowledge economy, the university acts as a source of innovations that results in the necessity of having more academic and financial independence, and also freedom.

Conclusions. The study demonstrates that there is a need to establish a close dialogue between the three actors in higher education – the university, the business and the government. The need to enhance cooperation is driven by the mismatch between the actual condition of the development of the economy and the education and research sector, the non-compliance of the quality of human resources with the latest needs of the labor market, lack of innovation and research component in university activities, which negatively affects the national economy and is reflected Ukraine's place in in various international rankings. An effective model of cooperation in Ukraine should include several areas of activity. The government, through its powers and authorities, must ensure the financial independence of HEIs; promote the establishment of an appropriate material and technical base of the universityies create conditions under which businesses will be interested in cooperation with educational institutions as practice bases and for the purpose of carrying out joint research activities in priority areas with universities. Business structures should provide information on the market needs in qualified human resources and on promising areas of work. Universities should ensure quality educational programs, willingness to establish technology parks, innovative companies on the basis of universities in order to conduct research and development.

## **References:**

Uhoda pro asotsiatsiiu mizh Ukrainoiu, z odniiei storony, ta Yevropeiskym Soiuzom, Yevropeiskym spivtovarystvom z atomnoi enerhii i yikhnimy derzhavamy-chlenamy, z inshoi storony  $N_{9}$  984\_011, potochna redaktsiia vid 30.11.2015, pidstava v2980321-15: Mizhnarodnyi dokument vid 27.06.2014 [Association Agreement between Ukraine, of the one part, and the European Union, the European Atomic Energy Community and their Member States, of the other part  $N_{9}$  984\_011, current version of 30.11.2015, basis v2980321-15: International document dated June 27, 2014]. URL: <u>http://zakon0.rada.gov.ua/laws/show/984\_011</u> [in Ukrainian].

OECD (2017). Ohliady OESR na temu dobrochesnosti v osviti: Ukraina 2017 [OECD reviews on integrity in education: Ukraine 2017]. Translation from English Institute for the Development of Education for the Ukrainian edition. Kyiv: Takson. 184 p. URL: <u>http://iro.org.ua/uploads/OECDrev\_ua\_K+P293\_out2\_(1).pdf</u>.

State Statistics Service of Ukraine. Zaklady vyshchoi osvity [Institutions of higher education]. URL: <u>http://www.ukrstat.gov.ua/operativ/operativ2005/osv\_rik/osv\_u/vuz\_u.html</u> [in Ukrainian].

Unified state electronic database on education. Dani z reiestru sub'iektiv osvitnoi diialnosti [Data from the register of subjects of educational activity]. URL: <u>https://registry.edbo.gov.ua/</u>[in Ukrainian].

vnz.org.ua (24.12.2019). Ganna novosad prezentuvala reformu finansuvannja ta upravlinnja universytetamy [Ganna Novosad presented the reform of university funding and management]. URL: <u>http://vnz.org.ua/novyny/podiyi/11100-ganna-novosad-prezentuvala-reformu-finansuvannja-ta-upravlinnja-universytetamy</u> [in Ukrainian].

State Statistics Service of Ukraine (02.07.2020). Vyshcha osvita v Ukraini u 2019 rotsi [Higher education in Ukraine in 2019]. URL: <u>https://www.ukrstat.gov.ua/operativ/operativ2020/osv/vush\_osv/ush\_osv\_19.xls</u> [in Ukrainian].

Kvit, S., Yeremenko, O. (ed.) (2021). Richnyi zvit Natsionalnoho ahentstva iz zabezpechennia yakosti vyshchoi osvity [Annual report of the National Agency for Quality Assurance in Higher Education]. Kyiv: National Agency for Quality Assurance in Higher Education, 2021. 364 p. URL: <u>https://naqa.gov.ua/wp-content/uploads/2021/02/%D0%A0% D1%96%D1%87%D0%BD%D0%B8%D0%B9-%D0%B7%D0%B2%D1%96%D1%82-2020.pdf [in Ukrainian].</u>

Halan-Muros, V., Pleva, K. (2016). Shcho spryiaie ta strymuie spivpratsiu mizh universytetamy ta biznesom u krainakh Yevropy? Kompleksna otsinka [What promotes and hinders cooperation between universities and business in European countries? Comprehensive assessment]. *Upravlinnia naukovo-doslidnoiu diialnistiu = Management of research activities*, No. 46, Vol. 2, P. 369–382 [in Ukrainian].

Osvita v Ukraini: vyklyky ta perspektyvy. Informatsiino-analitychnyi zbirnyk [Education in Ukraine: challenges and prospects. Information-analytical collection]. Kyiv, 2020. 292 p. [in Ukrainian].

The Global Competitiveness Report 2015–2016. World Economic Forum. Geneva, Switzerland. URL: <u>http://reports.weforum.org/global-competitiveness-report-2015-2016/competitiveness-rankings</u>.

The Global Competitiveness Report 2016–2017. World Economic Forum. Geneva, Switzerland. URL: <u>https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1</u>.

Pro osvitu: Zakon Ukrainy № 2145-VIII vid 05.09.2017 [On education: Law of Ukraine № 2145-VIII of 05.09.2017]. URL: <u>http://zakon.rada.gov.ua/laws/show/2145-19/page</u> [in Ukrainian].

Vorobiova, O., Debych, M., Lynova, I., Luhovyi, V., Orzhel, O., Sliusarenko, O., Talanova, Zh., & Tryma, K. (2018). Analiz providnoho vitchyznianoho ta zarubizhnoho dosvidu shchodo otsiniuvannia yakosti vyshchoi osvity v umovakh yevrointehratsii (chastyna I): analitychni materialy [Analysis of the leading domestic and foreign experience in assessing the quality of higher education in the context of European integration (part I): analytical materials]. Ed. V. Luhovyi, Zh. Talanova. Kyiv: IVO NAPN Ukrainy. URL: https://bit.ly/2Ctk3Ei [in Ukrainian].

Kontseptualni zasady reformuvannia publichnoho finansuvannia ta upravlinnia zakladamy vyshchoi osvity [Conceptual principles of reforming public funding and management of higher education institutions] (2019). URL: <u>https://osvita.ua/vnz/reform/69080/</u> [in Ukrainian].

Ministry of Education and Science of Ukraine (June 28, 2020). Pro utvorennia robochoi hrupy z rozroblennia proiektu Stratehii rozvytku vyshchoi osvity Ukrainy na 2021–2031 roky (974) [About formation of working group on development of the project of Strategy of development of higher education of Ukraine for 2021–2031]. URL: <u>http://reform.org.ua/</u> [in Ukrainian].

osvita.ua (2020). Reitynhy VNZ [University rankings]. URL: <u>https://osvita.ua/vnz/rating/</u> [in Ukrainian].

President of Ukraine (July 3, 2020). Pro vdoskonalennia vyshchoi osvity v Ukraini [On the improvement of higher education in Ukraine]. URL: <u>https://www.president.gov.ua/documents/2102020-34045</u> [in Ukrainian].

Lugovyi, V., Orzhel, O., Slyusarenko, O., & Talanova, Zh. (2018). Education and research duality – the deter-mining characteristic of higher education. *Education: Modern Discourses*, (1), 71–88. <u>https://doi.org/10.32405/2617-3107-2018-1-8</u>.

Lugovyi, V., Slyusarenko, O. & Talanova, Zh. (2019). University rating & development: challenges and opportunities for Ukraine. *Education: Modern Discourses*, (2), 60–77. https://doi.org/10.32405/2617-3107-2019-1-8.

Shanghai Ranking Consultancy (2019, August 15). Shanghai Ranking's Academic Ranking of World Universities 2019 Press Release. <u>http://www.shanghairanking.com/Academic-Ranking-of-World-Universities-2019-Press-Release.html</u>.

Shanghai Ranking Consultancy (2020, June 29). Shanghai-Ranking's Global Ranking of Academic Subjects 2020 Press Release. <u>http://www.shanghairanking.com/ShanghaiRankings-Global-Ranking-of-Academic-Subjects-2020-Press-Release.html</u>.

## AUTHOR (S) BIOSKETCHES



*Fastovets Nataliia*, PhD, Associate Professor, Associate Professor at the Department of Private and Public Law, Kyiv National University of Technologies and Design, Ukraine.

http://orcid.org/0000-0001-8619-8975 Researcher ID: Q-4516-2016 *E-mail: kulak.nv@knutd.edu.ua* 

## COPYRIGHTS

©2020 The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.

## HOW TO CITE THIS ARTICLE

Fastovets, N. (2020). Higher education in Ukraine: reality and perspectives. *Management*, 2(32): 153–164. <u>https://doi.org/10.30857/2415-3206.2020.2.13</u>.