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## **Competitiveness of Ukrainian higher education in the world aspect against the background of Russian armed aggression**

### **Competitividad de la educación superior ucraniana en el aspecto mundial en el contexto de la agresión armada rusa**

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## Abstract

The purpose of the article is to determine the competitiveness of higher education in Ukraine and the prospects for future development of university education against the background of the war with Russia. A number of theoretical methods were used to write the study, including analysis and synthesis, concretization method, prognostic method and SWOT analysis. In conclusions it is shown that the war of 2022 acquires distinct barbaric forms. However, higher education institutions in Ukrainian cities have not lost their potential. In addition, universities have retained their intellectual potential, which can be complemented by cooperation with Western institutions.

**Keywords:** Russian aggression, Ukraine, higher education, competitiveness, universities.

## Resumen

El objetivo del artículo es determinar la competitividad de la enseñanza superior en Ucrania y las perspectivas de desarrollo futuro de la educación universitaria en el contexto de la guerra con Rusia. Para redactar el estudio se han utilizado varios métodos teóricos, como el de análisis y síntesis, el de concreción, el de pronóstico y el análisis DAFO. En las conclusiones se muestra que la guerra de 2022 adquiere distintas formas bárbaras. Sin embargo, las instituciones de educación superior de las ciudades de Ucrania no han perdido su potencial. Las universidades han conservado su potencial intelectual, que puede complementarse con la cooperación con instituciones occidentales.

**Palabras clave:** Agresión rusa, Ucrania, educación superior, competitividad, universidades.

## 1. Introduction

The development of higher education in Ukraine is a dynamic system, which, like in any other country, develops according to its own rules and peculiarities. An important distinction of its modern state is that it functions in the conditions of military operations and partial occupation of territories. This additionally makes this research problem relevant because the experience of such work is unique for Europe and the United States of the XXI century. The review is presented on the basis of a brief definition of the legal framework, through which it is possible to trace the formation of modern higher education in Ukraine. Among the tasks are to demonstrate the impact of the beginning of Russian aggression in 2014, the significance of the loss of Crimea, and the partial occupation of the Donetsk and Lugansk regions for the university system. The deployment of Russian aggression from February 2022 also remains a relevant issue. The Russian Federation's attack on Ukraine on February 24, 2022, opened a new page in the history of Central and Eastern Europe. At the same time, the Ukrainian side, as the most affected by direct

military action on its territory, will also experience “postponed” difficulties associated with the difficulties of establishing postwar economic, social, cultural, and regional life. So, among the expected problems to be studied in detail are those related to the functioning of higher education. A valuable criterion for determining the prospects of higher education in Ukraine is a study of its competitiveness. Let us note that there are different methods for its calculation. We define that the competitiveness of Ukrainian universities is determined by both quality and price dimensions of educational services and, to a great extent, depends on several factors: financial and economic, organizational and legal, scientific and technological, personnel, management, cultural and theological (if we are talking about higher religious educational institutions), demographic and political. The competitiveness of higher education is determined only through research of objective data on the dynamics of internal processes. The main purpose of this article is to determine the competitiveness of higher education in Ukraine and the prospects for the future development of university education against the background of the unfolding war with Russia.

## 2. Theoretical Framework or Literature Review

The theoretical section of the paper is shaped by a systematic review of current literature and a synthesis of some of the researchers' experiences. Rajab (2018) compared the effectiveness of online learning with traditional forms through an analysis of the e-learning experience at Najran University. This educational institution has suspended traditional classes due to the ongoing war between Saudi Arabia, the Arab coalition, and Yemeni insurgent groups. The study determined the potential benefits of distance learning in crisis zones. The researcher's results demonstrated that there is no statistical or practical difference between distance learning or traditional learning, so using online technology can be used to teach in areas that have been devastated by wars.

Herbst, Aslund & Kramer (2022) summarized the effects of Russian aggression in Ukraine in 2014-2015, generally describing the social destruction suffered and noting the problems (including educational) faced by residents of the occupied. Mbah & Wasum (2022) examined the global consequences of Russian aggression on the entire world, not just Ukraine. Abassi (2022) also noted that the war goes far beyond regional confrontation and will have an undeniable impact on the entire world. Aladekomo (2022) analyzed the legal aspects of the Russian attack on Ukraine in February 2022.

Let us also note the works devoted to modern aspects of higher education competitiveness. Balan & Babenko (2020) investigated aspects of competitiveness formation and the management model of modern universities. Kwiek (2018) also resorted to similar problems. He drew attention to modern social and economic challenges that appear on the way of development of higher education (in the example of Poland).

The listed works are devoted to topical issues, but, we believe, do not cover the complexity of the situation in which higher education in Ukraine finds itself. Its competitiveness against the background of the unfolding Russian aggression has so far

remained without the attention of scholars, who have focused more on the social, economic, and legal side of the war. Although the above-mentioned researchers have considerable results and an established research methodology, the subject of the influence of Russian aggression on higher education in Ukraine has not been fully explored.

The methodological basis of the article is formed by the fundamental works of scientists who studied the development of higher education under the conditions of occupation. In particular, Hammond (2007) characterized the peculiarities of the functioning of universities in Palestine under conditions of war. Kretzmer & Ronen (2021) analyzed the situation of education in the occupied territories through a legal lens. Note that the scholars start their narrative from the time of World War I. Gordon (2022) analyzed the problem of the development of university education in Israel. This researcher notes that as early as the beginning of 1970, the Israeli authorities granted the Palestinians permission to establish institutions of higher education in the occupied territories. This should have normalized the negative situation in the then educational sphere. However, such decisions did not have a positive effect, since the universities established during the occupation quickly became places of political rather than educational interest. Consequently, we believe that the Palestinian experience serves as a valuable example for Ukraine. At the same time, Chankseliani et al. (2020) investigated the functional features of higher education in Georgia at different levels: local, national, and global. The experts paid special attention to the development of education in the Russian-occupied Georgian territories (Abkhazia and South Ossetia). They note that Russian aggression is actively celebrated in Georgian universities; in addition, students actively participate in activities that promote awareness of the Russian occupation of Abkhazia and South Ossetia.

### **3. Methodology**

A number of theoretical methods were used to write the study, among which we will distinguish general scientific analysis, synthesis, induction, and deduction. Due to the use of the method of concretization the clear stages of development of the higher school in Ukraine were demonstrated, which allowed to determine the weak and strong sides of its functioning. The article applied the method of abstraction, which provides for ascending from the abstract to the concrete (Balan & Babenko, 2020). It was used in the discussion when taking into account the problems and prospects of higher education development against the background of the deployment of Russian aggression in Ukraine.

We focused separately on the use of empirical methods of collecting and interpreting information. For example, the difficulties in the functioning of Ukrainian universities are traced based on the use of the prognostic method. The SWOT-analysis was also applied as a supplement to the predictive method. SWOT-analysis is conceptually simple, it is one of the most popular models for determining the ability of an educational organization to function in its environment, as well as a basis for the competent formulation of

development strategies. It is a generalized basis for assessing the external environment and managing the internal environment of educational organizations. This method allows you to highlight the main problems as a result of a detailed analysis of individual components, and (optionally) place them by level of importance. The value of this analysis lies in the fact that it is a method for assessing a large amount of information, does not require additional financial and technical costs and resources, and promotes convenient formatting and perception of systematized analytical information.

#### 4. Results and Discussion

By its structure, the higher school in Ukraine is rather conservative and changes slowly. After the emergence of independent Ukraine, the foundations of policy in the formation of higher education were laid in the Law of Ukraine "On Education", adopted back in 1991. The main achievement of this regulatory act was that it abolished the communist Soviet (ideological) coercion in education, but the control over higher education institutions was still in the hands of state structures (Balan & Babenko, 2020). An important novelty of this legislation was that non-state institutions of higher education, i.e., those established on private initiative, were allowed to emerge. In addition, all universities (private and public) adopted the same requirements for functioning: obtaining licenses, passing accreditation of specialties and institutional accreditation of institutions, etc. (Ostapenko, & Timchyk, 2020). According to the law, three levels of educational qualifications that can be obtained in higher education were introduced: associate, bachelor, and specialist/master. Higher education institutions of categories I-II (colleges and colleges) became those in which junior specialists (partially bachelors) were trained. Bachelor's, Specialist/Master's degrees could be obtained in institutions of higher education of levels III-IV - universities, conservatories, institutes, etc. The opportunity for religious institutions of higher learning is an important advance because ancient church art, iconography, etc., took place only from a secular point of view. The possibility of opening institutions of theological education had a significant impact on the post-Soviet structure of the university system.

The adoption of the Constitution in 1996 established uncompromising new legal norms that regulated the field of education. Above all, it stated that the Constitution defined the principles of the rule of law and its norms had a direct effect. Article 53 established the right to receive free higher education - it was mainly the state higher education institutions, which could choose the best students for free education on a competitive basis, while private universities had the opportunity to decide on their own choice who should receive free education. It was not until 1996 that the Constitution of Ukraine established that the guarantee of the human right to education should be guaranteed exclusively by the laws of Ukraine, as well as the general principles of education.

Only in 2002, the Law of Ukraine "On Higher Education" was prepared and adopted, which is still in force with various amendments and additions (Ostapenko, & Timchyk, 2020). The law did not significantly change the already established form of higher education, did not introduce novelties in the definition of other types of higher education institutions, but clearly outlined the procedures for obtaining licenses and accreditation.

As a result, the number of institutions of higher education of III-IV levels of accreditation began to grow rapidly, as well as the total number of students. After the adoption of the law, the practice of granting licenses for the opening of new educational institutions and the expansion of old ones spread. As a result, back in 2013, there was a paradoxical situation when Ukrainian universities received licenses to train more than 2 million Ukrainian students, while the total number of school graduates was several times less. Probably this case further stopped the “extensive” development of higher education in Ukraine, and later initiated the principles of development based on the background of the competitiveness of universities.

The results of this process were embodied in the legislative decisions that continued Ukraine's integration into the Bologna System. In particular, some formal “vestiges” of the past (such as the “specialist” degree) were abolished, and universities received much more autonomous rights, so their management was able to improve (Puriy & Kuznetsova, 2020).

However, 2014 was a crisis year for the entire Ukrainian society. Russia's annexation of Crimea and the beginning of aggressive actions in eastern Ukraine led to the identification of deep problems in all spheres of public life. One of them was the unpreparedness of Ukrainian universities to the challenges of wartime. Budgetary programs were revised, and a formula was approved, according to which “funds moved by applicants,” meaning that universities actually began to compete for the best graduates to be assigned to their ranks. This, together with an increase in certain budget funding items, provided an opportunity to significantly strengthen the competitiveness of Ukrainian higher education institutions (Puriy & Kuznetsova, 2020). At the same time, the slowness of the higher education system led to a very slow transformation. Against the background of the unfolding military conflict in the Donbas in 2014-2021, the success of the Ukrainian higher education system (according to the ratings) was modest. The Ukrainian national system of higher education reacts to changes in educational processes due to Russian armed aggression. The Ukrainian national system of higher education is responding to changes in educational processes due to Russian armed aggression. Military crisis shocks have affected the state of the Ukrainian educational system and Ukrainian spirituality as a whole. Instability, political and social and economic were supplemented by spiritual difficulties. We believe that Ukrainian higher education today has the special task of demonstrating its difference from Russian in all manifestations of its existence.

Democratism and humanism are the main features of competitive Ukrainian education. While Russian education is built on the principles of totalitarianism, xenophobia, and medieval despotism.

The QS World University Rankings system was chosen to demonstrate the competitive advantages of the Ukrainian system of higher education. Thanks to their own system of calculations, experts identified 50 best and competitive higher education systems - QS Higher Education System Strength.

The methodology of formation of this list is based on 4 main factors:

1. The efficiency factor gives general impressions of any state's position in the overall ranking tables.
2. The Accessibility Factor aims to find out the opportunities for citizens of the country in question to enter top universities in all corners of the world
3. The “flagship factor” is also applied to determine the overall effectiveness of the system. That is, the effectiveness of the best university in the country is considered to be the merit of the entire educational system.
4. The economic factor is the reciprocal relationship between the state's monetary infusion into the system of training specialists and the result obtained.

According to the proposed counting system, the overall result and the determination of the respective place of the higher education system of different countries is influenced by the position of the best national universities (those educational institutions that are part of the rankings of the respective ranking systems) (Kwiek, 2018). This aspect of the work is determined by its own criteria and contains quite clear characteristics, which should also be emphasized:

- the overall vision of the academic community (in fact, the academic reputation of the institution (30%);
- stakeholders' vision and their impressions of the working and practical skills and abilities of the graduates (20%);
- the percentage of faculty and students (20%);
- number of faculty members with teaching or academic titles (10%);
- the number of scientific publications per teacher per year (10%);
- the number of citations of scientific publications (5%);
- the number and percentage of foreign professors (2,5%);
- the number of foreign students.

Analysis of Ukrainian indicators in this system showed that Ukraine ranked 45th in the QS Higher Education System Strength ranking in 2016. Then Ukraine, according to experts, was ahead of the Philippine, Egyptian, Estonian, Pakistani university systems, as well as the UAE. In 2018 the situation has changed slightly - in the mentioned rating system, which determines the competitiveness of Ukrainian higher education, the position of Ukraine has even strengthened somewhat. The Ukrainian system took 44th place, ahead of Belarus, Pakistan, Greece, Poland, Estonia, and the Philippines. It should be noted that 2018. - is the fourth year of Ukraine's confrontation with the Russian aggressor, which by that time - had already announced its annexation of the Crimean Peninsula, and its subordinate puppet entities had occupied power in powerful industrial regions in eastern Ukraine. First and foremost, in terms of the purpose of our article, the loss of Simferopol, Sevastopol, Luhansk, and Donetsk - extremely influential university centers - has dealt a powerful blow to the system of higher education in Ukraine. Therefore, even in the face of tangible territorial, economic, and social losses, the Ukrainian system of

higher education has at least retained its retained position in competitiveness rankings, and some individual institutions of higher education have entered international lists of the best universities.

We should note that the preservation of the competitive potential of the Ukrainian system of higher education was facilitated by the dynamic activities of universities, military, and state authorities aimed at the evacuation of the staff and property (as far as it was realistic) of the seized universities, that is, to preserve the teaching staff and pedagogical base. In subsequent years, there was also an active propaganda campaign aimed at getting applicants from the occupied territories to transfer or enroll in Ukrainian higher education institutions. More than 5,000 people took advantage of this opportunity during 2016-2019 - not as many as expected, but initiative and motivated young people prevailed among them. In addition, since the beginning of the COVID-19 pandemic, the training has been conducted remotely, a method that has proven to be quite effective in maintaining a decent level of education in a war-torn environment (Rajab, 2018).

The state of affairs in 2022, however, is different from the situation in 2014. On the one hand, Ukrainian society is generally accustomed to the view of the threat or deployment of a full-fledged Russian attack in the East or South of Ukraine, which has been repeatedly stated on Russian TV channels from quite official persons (Aladekomo, 2022). On the other hand, the shock of the barbaric methods of warfare proposed by the Russians, the bombing and destruction of peaceful Ukrainian cities and populations-justifiably led to the emergence of repressed sentiments in society. More and more young people are interested in going abroad (Abassi, 2022). In addition, European universities, in their efforts to accommodate Ukrainians, offer an expanded selection of majors and training areas for which free or partially free tuition is announced (Mas-Verdu, Roig-Tierno, Nieto-Aleman, & Garcia-Alvarez-Coque, 2020). As hostilities continue, higher education in Ukraine will be hampered.

As of today, much of the territory is still outside the control of the Ukrainian government. Accordingly, the universities of the largest captured cities, Kherson and Mariupol, are outside the control of the ministerial system. Similarly, Starobelsk, where the university evacuated from Luhansk was operating, was seized. Out of control were quite a few institutions of I-II accreditation level located in the occupied territory. So far, it is known that military operations are ongoing and will continue, the results and methods of which will require further evaluation. It can also be stated that the process of education with reservations may begin in the powerful university centers of southern Ukraine. Perhaps it will begin in Odesa, Zaporizhzhia, and Dnipro, unlikely in Mykolaiv (Puriy & Kuznetsova, 2020). A tragedy for Ukraine was the barbaric destruction of Kharkiv and local universities, which requires time and considerable funds to rebuild. Higher schools in Chernihiv and Sumy, which also suffered material losses, suffered to a somewhat lesser extent. Against this background, the provision and financing of university centers is problematic, because the budget sequestration and its fair focus on military operations significantly limit the possibility of restoring scientific and educational centers. At the same time, we should



note that part of the financial assistance of European and U.S. partners will be directed by the Ukrainian government to meet the needs of pedagogical workers in general. In particular, the question was about restoring the full-fledged (as far as possible) work of universities.

We should also note that the situation does not look unpromising. Higher educational institutions in Kyiv, Dnieper, Cherkasy, Poltava, and western Ukrainian cities have not lost their potential. In the long term, proper handling of the distribution of financing will enable a rethinking of some aspects of university work and a refocusing on promising research areas. In addition, it should not be forgotten that universities have retained a powerful intellectual potential - the vast majority of teachers have not left the country out of a sense of patriotism and their own responsibility (also the departure of men of conscription age from Ukraine is limited) (Ostapenko, & Timchyk, 2020). Many students remain in Ukraine, which allows us to hope that they will remain competitive in the future.

We should also note the cultural component that distinguishes, for example, Ukrainian higher education from Russian higher education. The Russian Orthodox Church, led by Patriarch Kirill, promotes the educational and clerical ideology of the "Russian world," which is alien to Ukrainian consciousness, education, and spirituality. Thus, Russian church-political ideology questions and criticizes Ukrainian education, culture, and art. Ukraine, on the state level, is building a strategy of absolute independence from the Russian aggressor.

The difference between Ukrainian and Russian cultures can be traced through culture and art. For example, Ukrainian icon painting, unlike Russian, absorbed the best features of the European Renaissance, Baroque, and Classicism, while Russian is frozen on the medieval model of the ancient "Byzantine canonical style". Today Ukrainian art remains, unlike Russian art, competitive and interesting for Western European countries, because it has combined the aesthetic principles of the East and the West.

An important aspect is the establishment and deepening of cooperation with Western universities and government institutions. Some experience of joint activities since 2014 has been gained. Back in 2021, at the 23rd Ukraine-EU Summit, the Agreement on Ukraine's participation in the Horizon Europe Research and Innovation Framework Program and the European Atomic Energy Community Research and Training Program "Euratom" was officially signed. When all formal procedures were followed, scientists, researchers, and entrepreneurs from Ukraine were able to use support and grants to conduct joint research. During the time when Ukraine was among the associated members and actively participated in the projects of the previous Horizon 2020 framework program, grant support was received for more than 45 million euros (the seventh place overall among the associated countries) (European Commission, 2018). The vast majority of these grant funds were also raised for individual projects at institutions of higher education because their employees were actively involved in the competition for the grants. By the way, the meeting of this place in passing indicates that the competitiveness of Ukrainian scientists and university professors is at a fairly decent level. Note that the

representatives of the National Academy of Sciences of Ukraine, who participated in the Horizon 2020 projects, also work at universities in parallel, so they can also be referred to the general number.

So, in the discussion, we will try to summarize and determine the potential of competitiveness of Ukrainian higher education against the background of Russian aggression.

We believe that in order to take into account the position of the Ukrainian higher education system in the context of international competitiveness against the background of Russian aggression it is better to conduct a SWOT-analysis. This method will reveal the reserves for retention of competitive positions in the market of educational services and scientific research. The results are summarized in the Table.

**Table 1.**  
*SWOT-analysis of competitiveness prospects Ukrainian higher school*

<b>Negative aspects and consequences</b>	<b>Positive aspects and consequences</b>
1. The low level of funding for higher education, which significantly reduces the motivation of scientific and teaching staff against the background of budget sequestration in the near future.	1. The preservation of a fairly strong intellectual potential among the scientific and pedagogical staff and from among students and potential students. Nevertheless, the vast majority of teachers, scientists, and applicants for higher education remained in Ukraine. As the figures analyzed above show, even in the face of confrontation in 2014-2022, higher education continued to function and be competitive.
2. Potential demographic crisis caused by the departure abroad of a considerable number of potential applicants. Social problems caused by macroeconomic processes in the Ukrainian economy may lead to a sharp drop in the living standards of the population, which may lead to the next negative step - the loss of the ability of the part of the population to obtain higher education (at least in Ukraine)	2. Participation in international grant programs and academic mobility programs. Maintaining active international cooperation will not allow us to lose touch with the scientific and educational potential of advanced countries, and will allow us to obtain additional funding, which is not forthcoming. Since motivated and experienced students and professors participate in grants and exchange programs, this will also be a bonus to the competitiveness of Ukrainian higher education.
3. The excessive bureaucratization and conservatism of administrators at the state	3. Establishing cooperation and interaction with potential employers, which will

level, limiting the development of higher education. Even in peacetime, the reform of university affairs did not move forward very quickly. There is a danger that the state apparatus will not be able to respond to the challenges in time.

contribute to a more effective transfer of knowledge

4. Military destruction and losses. As noted, many university centers have been destroyed or are now occupied. In addition, hostilities are ongoing and cannot be stopped at this stage.

4. A wide network of higher educational institutions, which opens up opportunities for evacuated students from other parts of Ukraine to receive an education or continue their studies. We should also note the experience gained since 2014, when, for example, it was possible to remove several universities to the controlled territory. This experience could be valuable in overcoming the consequences of the war and Russian military aggression in 2022.

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Therefore, the sector of Ukrainian higher education is an important element of social development and at the same time reflects the situation in the country because it marks the objective influence of the political and economic situation. Undoubtedly, all this affects the competitiveness of universities in Ukraine against the background of Russian aggression (Mbah & Wasum, 2022). However, based on the above positive aspects of higher education institutions, we can state that a complete collapse at this stage is not expected, and the problems caused by the war can be solved, or eliminated with fewer consequences.

At the same time, we should note that it will be difficult to assess the competitiveness of the Ukrainian higher school based on ratings in the future. Although we are aware that at the current stage of rankings formation it is one of the most popular ways to assess.

International ranking systems' conclusions imply a weighted summative evaluation of different areas of university life, with particular emphasis on research and educational achievements (Kelly, 2021). At the same time, while improving, international methodologies of ranking lists began to take into account the teaching process and pedagogical activity, internationalization, and implementation (or at least availability) of regional and social programs. That is, rating list methodologies are changing over time, trying to take into account modern approaches to performance assessment. We believe that the orientation of the compilers of these lists on the study of the cooperation of the university environment with industrial or other private structures, self-analysis of curricula, questionnaires and surveys of students, and the like, are the advantages of such systems.

At the same time, we consider it necessary to focus on the following criteria. Among certain disadvantages of concluding ratings is the possibility of using unreliable data. In

the conditions of the Russian-Ukrainian war and insane information confrontation, there are likely to be cases of deliberate misinformation, hacking of websites, where there should be information about educational programs, distorted perception of their essence, etc. One should also take into account a rather high level of subjectivity in assigning “points” for the fulfillment of some or other rating requirements. It is no secret that many “adherents of the Russian world” can still influence decision-making through expert environments - not in favor of the Ukrainian side.

In general, it is quite ambiguous to compare and obtain an integral assessment. For example, with the physical destruction of the university buildings, the overall scientific and material base would significantly decrease, so that its assessment could also be negative. At the same time, the teaching staff is able to show results that in general can be comparable with their pre-war performance. So, on this criterion, the university's evaluation may be at the standard level. In fact, with a noticeable decline in the scientific and pedagogical working conditions, the achievements and demonstration of even the pre-war level in the evaluation should be taken into account positively. Therefore, in our opinion, when calculating the level of competitiveness of the Ukrainian higher school the use of an assessment made solely based on the ranking is insufficient. It is much more expedient to use a comprehensive approach, which will more objectively take into account the extreme conditions.

## 5. Conclusions

Thus, the competitiveness of higher education in Ukraine is an important element of the country's development, the preservation of its innovative and technological potential, and the way to solve economic, social, and cultural problems. As a result of Russian aggression, the university system in Ukraine suffered a powerful blow. True, such a blow first came in 2014, when Crimea was occupied and the war in Donbas began. However, the war of 2022 is taking expressively barbaric forms - primarily because of the actions of the Russian federation. Overall, however, the situation does not look unpromising. Higher education institutions in Kyiv, Dnipro, Cherkasy, Poltava, and western Ukrainian cities have not lost their potential. In the long term, proper handling of the distribution of financing will make it possible to rethink some aspects of the university's work and focus on promising research areas. In addition, we should not forget that the universities have retained a strong intellectual potential, which can be supplemented by cooperation with Western institutions, grant funds, and framework programs. All these aspects allow us to positively assess the future competitiveness of Ukrainian universities.

## 6. Bibliographic references

Abassi, K. (2022). Russia's war: Why the BMJ opposes an academic boycott. *BMJ*, o613. doi: <https://doi.org/10.1136/bmj.o613>

- Aladekomo, A. (2022). Russian aggression against Ukraine, sovereignty and international law. SSRN Electronic Journal. <http://dx.doi.org/10.2139/ssrn.4064020>
- Balan, V., & Babenko, D. (2020). Competitiveness management model of research universities. *Efficient economy*, (5). <http://dx.doi.org/10.32702/2307-2105-2020.5.84>
- Chankseliani, M., Qoraboyev, I., & Gimranova, D. (2020). Higher education contributing to local, national, and global development: New empirical and conceptual insights. *Higher Education*, 81(1), 109-127. <https://doi.org/10.1007/s10734-020-00565-8>
- Gordon, N. (2022, July 15). Palestinian universities are once again under attack. *Breaking News, World News and Video from Al Jazeera*. <https://www.aljazeera.com/opinions/2022/7/15/palestinian-universities-are-once-again-under-attack>
- Hammond, K. (2007). Palestinian universities and the Israeli occupation. *Policy Futures in Education*, 5(2), 264-270. <https://doi.org/10.2304/pfie.2007.5.2.264>
- Herbst, J., Aslund, A., & Kramer, D. J. (2022). Global strategy 2022: Thwarting Kremlin aggression today for constructive relations tomorrow. *Atlantic council.org*. Retrieved July 6, 2022, from <https://bit.ly/3nLKwkC>
- European Commission (2018, January 3). *Horizon Europe*. [https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)
- Kelly, A. (2021). Measuring competition and competitiveness. In *Dynamic Management and Leadership in Education* (pp. 218–224). Routledge. doi: <https://doi.org/10.4324/9781003217220-22>
- Kretzmer, D., & Ronen, Y. (2021). International human rights law. *The Occupation of Justice*, 83-98. <https://doi.org/10.1093/oso/9780190696023.003.0005>
- Kwiek, M. (2018). Building a new society and economy: High participation higher education in Poland. In *High Participation Systems of Higher Education* (pp. 334–357). Oxford University Press. doi: <https://doi.org/10.1093/oso/9780198828877.003.0012>
- Mas-Verdu, F., Roig-Tierno, N., Nieto-Aleman, P. A., & Garcia-Alvarez-Coque, J.-M. (2020). Competitiveness in European regions and top-ranked universities: Do local universities matter? *Journal of Competitiveness*, 12(4), 91–108. <https://doi.org/10.7441/joc.2020.04.06>
- Mbah, R. E., & Wasum, D. (2022). Russian-Ukraine 2022 war: A review of the economic impact of Russian-Ukraine crisis on the USA, UK, Canada, and Europe. *Advances in Social Sciences Research Journal*, 9(3), 144–153. <https://doi.org/10.14738/assrj.93.12005>
- Ostapenko, O., & Timchyk, M. (2020). The state of military-patriotic education of high school students in conditions of ideological-worldview confrontation: analysis of research result. *Theoretical and Methodical Problems of Children and Youth Education*, 24–2, 56–71. <https://doi.org/10.32405/2308-3778-2020-24-2-56-71>

- Pinkovetskaia, I., Arbeláez-Campillo, D., Rojas-Bahamón, M., Novikov, S., & Veas Iniesta, D. (2020). Social values of entrepreneurship in modern countries. *Amazonia Investiga*, 9(28), 6-13. <https://doi.org/10.34069/AI/2020.28.04.1>
- Puriy, H., & Kuznetsova, M. (2020). Competitiveness of higher education institutions: Essence and main factors of its provision. *Economy and the State*, 10, 150. <https://doi.org/10.32702/2306-6806.2020.10.150>
- Rajab, K. D. (2018). The effectiveness and potential of E-learning in war zones: An empirical comparison of face-to-face and online education in Saudi Arabia. *IEEE Access: Practical Innovations, Open Solutions*, 6, 6783–6794. <https://doi.org/10.1109/access.2018.2800164>