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## **A SOCIAL SCIENCES**

AA	PHILOSOPHY AND RELIGION
AB	HISTORY
AC	ARCHAEOLOGY, ANTHROPOLOGY, ETHNOLOGY
AD	POLITICAL SCIENCES
AE	MANAGEMENT, ADMINISTRATION AND CLERICAL WORK
AF	DOCUMENTATION, LIBRARIANSHIP, WORK WITH INFORMATION
AG	LEGAL SCIENCES
AH	ECONOMICS
AI	LINGUISTICS
AJ	LITERATURE, MASS MEDIA, AUDIO-VISUAL ACTIVITIES
AK	SPORT AND LEISURE TIME ACTIVITIES
AL	ART, ARCHITECTURE, CULTURAL HERITAGE
AM	PEDAGOGY AND EDUCATION
AN	PSYCHOLOGY
AO	SOCIOLOGY, DEMOGRAPHY
AP	MUNICIPAL, REGIONAL AND TRANSPORTATION PLANNING
AQ	SAFETY AND HEALTH PROTECTION, SAFETY IN OPERATING MACHINERY



## COMPETITIVENESS OF HIGHER EDUCATION IN THE PROCESS OF EUROPEAN INTEGRATION OF UKRAINE

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**Abstract:** The modern higher education market poses the task for universities to ensure a strong competitive position. The relevance of the presented study is determined by the objective need for a theoretical understanding of the essence of global competitiveness of universities and the factors determining its formation, as well as a comprehensive analysis of state scientific and educational policy designed to increase the competitive potential of higher education in Ukraine in the context of European integration. The possibilities of using strategic marketing tools to assess the competitiveness of universities in the labor market and within the framework of the triple helix model, as well as assessing the attractiveness of universities for applicants are outlined.

**Keywords:** higher education; competitiveness; attractiveness; strategic position.

### 1 Introduction

The modern world is a world of competitive relations. Globalization, on the one hand, has become a powerful incentive for the development of interuniversity connections, academic mobility, joint educational programs and scientific projects. On the other hand, it has sharpened to the extremum the rivalry not only of individual universities, but also of national educational systems as a whole. Both of them are trying to form and declare obvious advantages in relation to other universities and states in the field of the educational process, scientific research, and innovation.

Competition inevitably gives rise to the problem of competitiveness. The latter applies both to national education systems and to specific universities that claim to occupy a worthy place in global educational networks. Universities are forced to compete for segments of influence, reputation, resources, for the opportunity to establish rules for regulating the educational services market, and so on.

This raises the question: What is meant by a competitive university? By definition, which we can agree with, this is “a higher educational institution capable of occupying and maintaining stable positions in certain segments of the global market of educational services and intellectual products thanks to the effective implementation of intellectual potential, a developed innovation system and sufficiency of financial resources ensuring a high level and quality of teaching and research” [14].

The most striking examples of a competitive university can be considered the so-called “World Class Universities” (WCU). Strictly speaking, all universities included in well-known international rankings are world-class universities. According to the creator of the concept of “world-class universities” J. Salmi, these universities are characterized by the presence of three main characteristics: 1) concentration of talent - talented teachers, researchers and students, 2) abundance of resources and modern infrastructure, 3) effective system of university management [14]. “Concentration of talent” is the ability of a university to attract talented students, teachers, researchers, while “abundance of resources” refers to significant amounts of government funding, private capital, tuition funds, research grants, etc. Finally, “effective management” is the productive management of a university institution, achieving high results, promoting at the legislative level the institutional independence of the university, its autonomy and academic freedom, the presence of

a strong management team, strategic thinking and a leadership culture.

Competition in the global education and science market has stimulated the emergence and intensive development of tools for comparing universities on a number of indicators recognized as the most important ones for assessing the success of their activities [5; 6]. These indicators vary from ranking to ranking depending on the comparison methodology used by their creators, however, experts recognize that in fact international university rankings form models and set standards for a modern university, which many universities around the world are trying to follow.

It is obvious that world university rankings are a reflection of competition not only between individual universities, but also the competition of national education systems. In various countries, university rankings serve as a guideline for the implementation of policies for the development of education systems [1]. The strategy for a particular university to achieve a level of competitiveness that makes it possible not only to get into the international rankings and gain a foothold in it, but also to rise up, is directly related to the national (state) strategy for the development of higher education. Ukraine, being in the process of European integration, is a country for which the problem of competitiveness of higher education is of great relevance. Meanwhile, extremely alarming trends are being observed in Ukraine today. According to the information of the State Statistics Service of Ukraine, in Ukraine, since 2008, there has been a process of gradual reduction in the number of students, graduate students, and doctoral students. Thus, at the beginning of the 1990-1991 academic year, 881,300 students of higher education studied at Ukrainian higher education institutions (universities, academies, institutes). This figure reached its peak in the 2007-2008 academic year - 2,372,500 people, after which it began to gradually decrease (see Figure 1) [34].

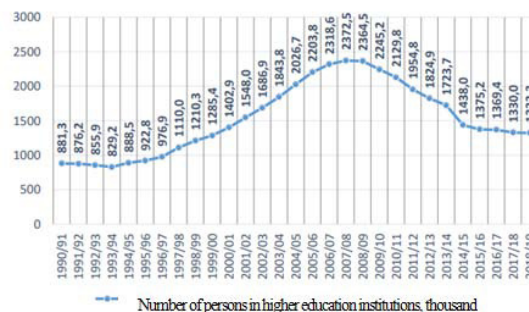


Figure 1. Number of students in higher educational institutions in Ukraine, in dynamics of 1991-2019 [16].

For comparison, in 2020, 41% of the European Union (EU)'s population aged 25-34 years had completed tertiary education. The EU Member States have set themselves a target of increasing the share of the EU population aged 25-34 who have completed tertiary education to 45% by 2030 [16]. The dynamics of tertiary educational attainment in EU-28 for the period of 2002-2015 is shown in Figure 2.

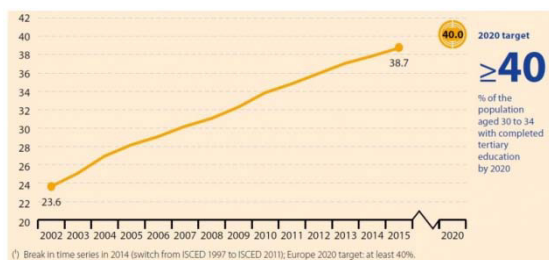


Figure 2. The dynamics of tertiary educational attainment in EU-28 for the period of 2002-2015 [17]

Thus, clear discrepancy between the situation in Ukraine and pan-European trends is obvious.

At the same time, planning and forecasting in the field of higher education at the stage of European integration acquires qualitatively different features: increased flexibility of higher education and the introduction of new forms of management. In this regard, higher education institutions must enter into closer relations with the national labor market, bring the content of education closer to the needs of sectors of the economy and society, and also eliminate imbalances between them [4; 7]. Accordingly, the education system must be constantly improved taking into account changes in the economy and society, that is, focus on the principle of continuous adaptation to future changes. To do this, it is necessary to take into account factors influencing the development of the educational services system: demand for educational services, the structure of specialties, the competitive environment, changes in the volume of government orders, the requirements of consumers of educational services, and the economic opportunities of the population.

The transformation of the Ukrainian economy in the direction of European integration involves fundamental changes in the content, principles, and forms of organization and methods of training of highly qualified specialists who are competitive in the modern labor market. The new economy is based on human capital, which provides high returns in the form of intellectual rent.

Ukraine officially joined the Bologna process, that is, the process of structural reform of higher education and bringing its standards into line with pan-European ones, at a meeting of education ministers of 45 countries in the Norwegian city of Bergen back in May 2005. However, there are obvious gaps in the competitiveness potential of Ukrainian higher education in the European and global education markets. First of all, there is an urgent need to replace the existing "reproductive" form of education with a creative and research one [12; 13]. One should not forget also that in the context of the rapid introduction of new technologies and even the emergence of new scientific fields, there is an increasing need for the integration of a number of disciplines that were previously considered independent and unrelated to each other, which involves the introduction of interdisciplinary and multidisciplinary training programs. Thus, a systematic study of the problem of competitiveness of Ukrainian higher education in the process of European integration of Ukraine is an urgent scientific task.

## 2 Method

The theoretical and methodological basis of the work consists of works on the economic theory of various economic systems, scientific developments of scholars on the issues of assessing the competitiveness and potential capabilities of a higher education institution. The subject of the research is socio-economic and managerial relations in the field of marketing in higher education, which determine the conditions and ways to increase the competitiveness of educational services, as well as scientific and methodological principles for forming the structure of competitiveness indicators and relationships, taking into account the peculiarities of the educational activities of universities.

## 3 Results and Discussion

The global competitiveness of universities is determined by their international competitive advantages in carrying out scientific research, providing educational services, and fulfilling important social tasks. To maintain a high competitive status, the nature of the competitive advantages that higher education institutions achieve due to certain factors is important: highly productive intellectual capital (talented researchers, teachers and students), capable of generating unique results of scientific research in breakthrough areas of knowledge; developed material, financial, and infrastructural base, ensuring high research productivity and the highest educational standards; a transparent and effective management system, built on the principles of academic freedom and autonomy of the university and allowing for the full and productive use of its internal potential; carrying out breakthrough research in priority areas of world science; ensuring high educational standards based on the systematic integration of research into the educational process; institutional and financial support from the state, designed to contribute to the modernization of the university sector and its qualitative evolutionary development. These are the factors most often mentioned by researchers [45; 57].

In our opinion, when developing and implementing state policy in the scientific and educational sphere, aimed at the formation and development of globally competitive universities, it is necessary to take into account the potential of all factors of competitiveness without exception and ensure the achievement of their synergistic interaction.

In modern conditions of globalization, three main models of development strategies for world-class universities are practiced in different countries of the world [14]. The first one is a breadth-strategy: from high-quality mass higher education to the creation of world-class universities. The "breadth" strategy implies the country' achieving of the highest standards of higher education in the field of teaching, expanding general access of the population to high-quality educational services, increasing the research potential of universities, and the gradual formation of university institutions capable of competing in the global market [9-11]. This strategy is used mainly in Western European countries. The second strategy, the depth-strategy, means the development of world-class universities based on a limited number of universities capable of breakthrough research and development, while maintaining high standards of education. This strategy is being implemented with the active participation and financial support of the state. It was used by East Asian countries (China, Japan, Taiwan, South Korea, etc.) in the second half of the 20th century. Currently, regulators are trying to apply this model in Saudi Arabia and Brazil. The third, combined breadth-depth-strategy, is a combination of the first two. Today it is used in the USA, China and is becoming widespread in some Western European countries.

In the coming decades, we should expect a significant increase in the role of higher education in China and India in the global dimension, both in terms of participation in the global market of educational services and in the development of technology. Universities in Brazil will serve as regional centers for the development of education and technology. Universities in Malaysia, the Persian Gulf, and Jordan are vying for the role of international higher education hubs [15]. The sharp increase in the internationalization processes of universities in Tunisia, Morocco, Egypt, Lebanon, Thailand, Argentina, Mexico, Chile, and South Africa will allow them in the next decade to reach a level of quality training in a number of areas vital for national economies, comparable to leading countries.

The strategies that states choose in terms of emphasis and methods for creating world-class universities based on their national universities depend on the existing institutional forms, as well as the cultural characteristics and traditions of the state.

However, from the standpoint of the rating approach, this idea turned out to be debatable. Many authors and experts believe that rankings, as a tool used to compare universities on a global

scale, actually measure the degree to which universities correspond to the largest universities in the US (and partly in the UK) - successful, rich, conducting large-scale scientific research and having a significant portfolio of educational programs in a variety of disciplines [14]. As a result, universities in developing, and even developed, countries tend to emulate the American model rather than “develop their own unique character”. Largely because of the orientation of leading university rankings towards the American standard, many universities that play an important role within their countries do not fall into the top groups [2].

Meanwhile, the Bologna process is a voluntary and multi-subjective process. It is based on the values of European education and culture, but does not neutralize the national characteristics of the educational systems of different European countries. For Ukraine, with its traditionally powerful educational industry, this is especially important [19; 20]. After all, while for countries that do not have developed fundamental education and science, which are focused primarily on consuming foreign technologies and goods and selling their own natural resources to other countries, copying models well-established in states that are more developed in the scientific and educational sense is optimal, for Ukraine, with its strong scientific and educational traditions, this path is unacceptable. Moreover, for the domestic higher education system, unconditional borrowing of some formal procedures and abandonment of own developments can actually lead to its degradation [67]. Therefore, reforms should be approached wisely, at the same time, however, following the general vector and best practices for the development of modern advanced higher education.

Some one optimal, or “golden” path, i.e., the best strategy for the development of world-class universities, does not exist and cannot exist in principle (“No golden development path” [22]). Each country is distinguished by its economic potential, available resources, cultural characteristics, and mental values. As a result, there are several regional educational systems in the world that are building different trajectories for strengthening the competitiveness of their universities and bringing them to the top of international rankings: American (USA) - there are 137 universities in the Shanghai Ranking, including 50 of them in the top hundred; Westminster (Great Britain, Australia, New Zealand) - 64/14; European - 164/19; countries of the Confucian tradition (Japan, Korea, China, Hong Kong, Taiwan and Singapore) - 83/7; Gulf states and Saudi Arabia - 4/212. Among the identified regional educational systems, Ukrainian education certainly belongs to the European system [21]. At the same time, cultural, institutional, economic, and political characteristics determine the specific features of the domestic strategy to ensure the competitiveness of Ukrainian higher education system.

Taking into account all the challenges and circumstances described above makes to think once again about the chosen strategy for increasing the competitiveness of Ukrainian universities, i.e., improving their place in global rankings. It seems that in Ukraine it is quite possible to transform the guidelines and turn to the strategy “in depth” in the form of universities focusing on advancement in disciplinary global rankings [25; 26]. It is obvious that only a small number of the largest Ukrainian universities can realistically qualify for inclusion in the top groups of global university rankings, but a much larger number of universities (both public and private) are capable of being successful in disciplinary global rankings. The transition to a promotion strategy in disciplinary (subject) rankings fully correlates with the target scenario of scientific and technological development of Ukraine: ensuring competitiveness by gaining leadership in selected areas of scientific and technological development within the framework of both traditional and new markets for technologies, products, and services and building a holistic national innovation system [65]. Examples here include the Hong Kong University of Science and Technology, Pohang University of Science and Technology in South Korea, etc.

In the interpretation of representatives of economic sociology, competitive higher education supplies society with positional goods [31], providing people with access to social prestige and receiving decent incomes. From the point of view of American researchers J. Macionis and L. Gerber, universities, in particular, constitute an integral system of social institutions - an educational system, which, along with economics, politics, and religion, forms the social structure of society [49]. At the same time, the status of a world-class university makes it possible to maximize the production of positional goods and fulfill the important social task of facilitating the well-being of the entire society and its individual regional communities (the so-called “third role of the university”) [31].

An innovative system of vocational education must correspond to a knowledge-based economy. Essentially, it is currently about a paradigm shift in education. Changes in its orientation, goals, and content are focused on “free human development”, creative initiative, independence of students, competitiveness, and mobility of future specialists [23]. It is possible to rise to a qualitatively new level of technological development only with a correctly chosen overall strategy. Over the past decades, the working conditions of engineers and technical specialists, as well as the essence, content, methods, and forms of their engineering activities, have fundamentally changed. Modern production technologies are rapidly progressing, continuously increasing their knowledge intensity, requiring all participants in the technological process to have competencies not only at the appropriate level, but also at a necessarily advanced level, making it possible to anticipate, predict, and evaluate possible options for action [66].

The key goal of modern higher education is to prepare graduates who are capable of offering and implementing new types of activities, creating modern and ahead-of-time products and services, solving problems that previously had no solution, and flexibly adapting to the conditions of a changing environment. Only under these conditions, will the scientific and educational community be interesting for real production.

In accordance with global trends, in Ukraine, a university acquires the features of not only a scientific and educational organization, but also an economic entity which offers to the market a very specific product that is in demand [29]. On the one hand, this can, to some extent, ensure its academic freedom; in addition, the university acquires such additional features as innovativeness, entrepreneurship, and orientation to the labor market. On the other hand, the university risks turning into a “diploma-issuing factory”, forgetting about the fundamental principles of its existence in the pursuit of economic efficiency indicators [30]. The interests of making a profit are beginning to take center stage, and leadership is moving from representatives of the academic community to “purely managers” from education. Large corporations interested in training specific specialists for the tasks they need are beginning to influence the development of directions for the development of universities. “Corporate universities”, created to meet the needs of economic and social groups, are another phenomenon of modern higher education. Often, commercialization intentions can also come from the state, which seeks to reduce its financial burden on supporting the activities of universities.

The report “UNESCO Science Report: towards 2030” [58] notes that the most noticeable trends in the world are increased investment in science and technology, an increase in the number of large international projects in the field of science, high mobility of scientists, and a shift in focus towards sustainable development and energy, increasing the number of scientific publications. The main conclusion that the authors of the report make is that most countries around the world perceive research and innovation as a factor in economic growth and achieving sustainability. Experts have discovered several new phenomena that were not previously noticed, and the first among them is that there is the impressive role of universities in the world, which have become literally global development institutions [32; 33]. Competition for students and the quality of education has



brought universities to an unprecedented level of development and influence.

It is interesting to address, in particular, the U.S. experience. It is no longer true that basic research conducted in the United States will inevitably benefit American firms or American workers in a global innovation environment, even though most people agree (and econometric evidence supports) that federal R&D funding contributes to U.S. economic growth. Instead, the financial gains are contingent upon the extent to which academic institutions - as well as businesspeople, venture capitalists, and corporations - are able to convert the findings of fundamental research into commercially viable technologies. The advantages now also rely on how businesses decide to use international networks to generate and market those inventions. It is no longer a given that the innovations, factories, or jobs developed here will result from the research being done here [8].

While this does not imply that federal R&D investment is a waste of money, it does make one consider the ways in which it encourages innovation in the US. "If knowledge is universal, why should it matter where it is produced?" is the question posed. From the standpoint of a peer review panel, location might not be important, but a wealth of research indicates that location is important to someone attempting to commercialize information. For instance, venture capital is very regional, and creative activity often "spills over" from institutions into the surrounding areas [3].

The primary reason is that the most valuable knowledge is frequently implicit knowledge, or knowledge that cannot be evidently expressed in papers or patents. More than in equations or machines, cutting edge scientific and technical knowledge is embodied in individuals. Additionally, it moves through unofficial networks that are frequently concentrated in one place. Innovation is a contact sport, as Randall Kempner, a specialist in regional economic development, loves to emphasize [27]. Furthermore, the knowledge gained from economic geographers and regional economic developers is that innovation is facilitated by the interpersonal relationships that exist between academics, business researchers, venture investors, and entrepreneurs. These networks can take decades to evolve and are exceedingly difficult to imitate.

In terms of higher education, this indicates that the amount of innovation which is fostered depends not just on the volume of inputs but possibly even more on the interactions that faculty members have with the community, especially in their local area [35; 36]. In this domain, the involvement of government regulations is minimal, and independent institutions are having difficulty coming up with more effective strategies to promote novel forms of behavior. It necessitates reconsidering how students are taught and how faculty members are compensated.

An ever-widening spectrum of scientific and technology capabilities have almost become commodities as nations throughout the world have enhanced science education, boosted R&D investments, and encouraged multinational firms to participate in high-technology manufacture or research. Global access to high-tech manufacturing, skilled engineers, PhD researchers, and state-of-the-art laboratory facilities is now commonplace [37; 38]. These elements no longer offer the same competitive advantage when taken alone. National governments now relentlessly seek originality and innovation in an effort to carve out a new market niche.

Nonetheless, the argument in the US keeps centered on the need to graduate an increasing amount of scientists and engineers in order to boost American competitiveness. "While we must continue to improve standards and encourage more students to study science and engineering, we need to acknowledge that we will never win the race to produce the highest test scores or the most engineers. Simple demographics dictates that we will never outproduce China in engineers. But that does not mean that America's innovation capacity is doomed" [3]. The top test-takers are not usually the best inventors, and a number of high test-scoring nations, including China, Singapore, Japan, and

Korea, are growingly concerned that their educational systems place too much emphasis on conformity at the expense of originality. Training the scientists, engineers, anthropologists, and managers who can most effectively collaborate within the global innovation system to produce innovative and valued products and services is the problem, not training the largest number of scientists and engineers.

For instance, Georgia Tech, like most universities, was seeing a decline in computer science enrollment, and its graduates were up against more competitive graduates from emerging countries who were highly competent and much less expensive. They were having difficulty redefining the value of a degree in computer science. One employer remarked, "Don't send me engineers who can be duplicated by a computer. I am sending that work to India. Send me engineers who are adaptable, who can think across disciplines." Georgia Tech remade their computer science curriculum using the concept of "threads" [3]. Eight alternatives remain for a computer science major: Foundations, Embodiment, Intelligence, Computational Modeling, Platforms, Information Internetworking, People, and Media. Currently, there are two threads available. Every thread outlines a problem - such as how humans can connect with machines or how computers can mimic natural phenomena - that gives computer science courses, as well as those from other disciplines, like anthropology or design, context and significance [40]. Maintaining student engagement and assisting them in acquiring the abilities necessary to address challenges in the actual world are the two main objectives.

Today, foresight education is gaining popularity. An example of foresight education is the European Science Link project, focused on the potential opportunities provided for engineering activities and real business by European science [41; 42]. Opportunities are grouped into seven main areas: agriculture and food industry, chemical industry, construction and engineering design, energy and transport, production of personal care and sanitation products (cosmetics, perfumes, etc.), materials science, and nanotechnology. The list of possibilities can easily be used when creating the content of educational programs.

Of particular importance may be the creation of a sustainable system of student research work (SRW), which provides for the participation of students in the implementation of scientific and contractual work of the university together with teachers.

In addition to combining scientific research, modern educational methods with their practical implementation, universities become a place for the development of new social practices, global and local social projects. At universities, structures aimed at developing their innovativeness are beginning to appear - business incubators, technology parks, scientific and educational clusters [43; 44]. The leaders of this process, commonly called "world-class universities," are turning into influential players in the global economic market, acting as flagships of innovation in the most promising areas. The most advanced universities participate in triple helix models, which is also a very important factor in university competitiveness in the 21st century. Thanks to interaction within the framework of the triple helix, the university creates a stable, predictable social environment in which it is possible to build long-term development strategies. Secondly, it becomes attractive to applicants who can be confident that the knowledge they receive will be in demand in the regional or national economy [46; 47]. Thirdly, it provides important social competencies for students who are involved in real processes in the economy and social sphere of their country or local community.

In terms of competitiveness, it is also important that many university rankings include indicators of scientific and innovative activity as indicators of competitiveness [62; 63]. It is obvious that the research activities of universities in their interaction with the state and business within the framework of triple helix can increase the relevance of the university, its attractiveness.

Empirical work shows that applicants are guided by the choice of a university under the influence of ranks, that is, high

positions in rankings are a factor in the demand for a university [68]. Accordingly, universities are changing their functions in order to be more in demand. Meanwhile, for Ukrainian universities, research and innovation activities were not previously a priority, and therefore were not considered as an indicator of competitiveness [48]. However, in the 21st century, the situation is changing dramatically, and Ukrainian universities are faced with the need to adapt to a new environment in order to ensure their competitiveness in the European educational space, especially taking into account the ongoing process of European integration.

Currently, the competitiveness of an individual Ukrainian university, associated with the preferences of applicants, can be determined by the function of creating human capital ( $F_{HC}$ ) and the signaling function ( $F_{sign}$ ). The first function is associated with factors that describe a certain "real" quality of education, or the ability of a university to prepare highly productive personnel: characteristics of teaching staff, students, and university infrastructure. The second function is related to the perception of the university by applicants and potential employers, and the main factors are the cost of training, brand awareness, and the success of graduates.

However, taking into account the triple helix, it is necessary to include in the model the research and innovation activities of the university ( $F_{RD}$ ), as well as factors characterizing the interaction of the university with government agencies ( $F_{gov}$ ) and business (manufacturing enterprises, startups, business incubators, etc.) [56]. As additional proxy variables, one can use the characteristics of the region where the university is located (which is especially important in connection with the tangible differentiation of regional development in Ukraine) - ( $F_{reg}$ ) and its specialization ( $F_{spec}$ ). At the same time, the number of specialties (included in  $F_{spec}$ ) acts as an indicator of the diversity of the university's activities, which, other things being equal, increases the "flow" of knowledge between students of different specialties and leads to an intensification of innovative activity. Thus, the model describing the choice of enrollee ( $Ch_{enr}$ ) may include the following factors:

$$Ch_{enr} = f(F_{HC} + F_{sign} + F_{RD} + F_{gov} + F_{reg} + F_{spec}) \quad (1)$$

There is a well-known concept that assumes that the competitiveness of a higher educational institution is determined by the integral set of various types of its resources - material and technical, information, personnel, etc. This set is called differently: the competitive potential of the university, the business potential of the university, etc. [28]. It should be noted that in this model, cost indicators come to the fore, i.e., the principle "higher costs - higher competitiveness" is implemented. However, it seems to us that when analyzing the competitiveness of educational organizations it is necessary to operate not with cost assessments, but with effective (result) ones, because namely the results of a university's activities are important for determining its real competitive capabilities in the dynamic market of educational services.

In this context, the idea of using stakeholder theory as a starting postulate for forming the concept of competitiveness of a higher education institution may be fruitful.

In the modern interpretation of stakeholder theory, stakeholders are viewed not simply as groups and individuals affected by the activities of the organization, but as contributors to a certain type of resource. Stakeholders supply the organization with the resources necessary for its activities, since these activities allow them to satisfy their needs [50; 51]. At the same time, satisfying the stakeholder's requests represents his receipt of resources from the organization. Thus, the relationship between the organization and its stakeholders is built around resource exchange.

Stakeholder theory may be particularly useful to those organizations that have the greatest need to maintain relationships with a wide range of stakeholders. An example of such an organization is namely a higher education institution,

whose behavior, according to experts, can be described as "maneuvering between the interests of various stakeholders" [18].

The positioning of universities in terms of competitiveness can be carried out on the basis of a McKinsey matrix. In this case, the X axis represents the attractiveness of the university for applicants, and the Y axis is competitiveness, calculated as function (1), described above. This method will allow identifying three areas in the McKinsey matrix: 1) the area of leaders (universities have better or average values of indicators of attractiveness for students and competitiveness in the labor market and within the Triple Helix compared to others); 2) the area of outsiders (universities have at least one of the lowest and do not have any of the highest values of indicators); 3) border area (sectors of the main diagonal) - competitive sector (with low attractiveness), attractive sector (with low competitiveness), and neutral sector [52]. The analysis can be carried out both for the domestic education market, and for the European or even global one. This method of strategic assessment will enable universities to comprehensively assess their position in the educational services market, and will also allow municipal, regional, and national authorities to carry out scientifically based structural changes in higher education and plan the necessary education reforms.

Also, in the modern world, universities are called upon to play the most important role of reproducing culture and even "cultural creation", educating a person, his socialization, creating conditions for personal self-realization, ensuring sustainable development and preserving cultural continuity in society [53]. The social role of universities is to counteract social fragmentation, acting as an integrator in the face of weakening traditional political institutions.

The above-mentioned "third role" or "third mission" of universities combines social, entrepreneurial, and innovative components. The social component is an area in which profit-making or economic effect is not expected. This is the area of providing social services, university participation in the development of urban spaces, interaction with the local community, cultural environment, student activity [54]. The entrepreneurial component is associated with conducting scientific research under contracts with the state and business, commercialization of intellectual property, paid educational programs, and the use of university facilities on a commercial basis. The innovation component involves the introduction of scientific developments of universities, consulting authorities and government organizations [39].

Often, the "third mission" is interpreted as the entrepreneurial activity of the university, the commercialization of intellectual resources [31]. The social orientation of activities is as important as the commercialization of scientific knowledge or the development of advanced training programs. Others include social programs and projects implemented by the university in the region [24]. Still others complement this with a system of continuous education and innovative development." However, the very concepts of "lifelong education", "continued education", in various national education systems also require in-depth study and comparative analysis. The interpretation of the concept of "third mission" depends on a particular university's understanding of its role and essence in a dynamically developing, constantly changing society and world. However, in general, the "third mission" can be understood as a set of specific services based on actions and capabilities that serve the benefit of society.

Many modern researchers identify two models for defining and implementing the third mission of universities: European and American, which differ in the priority of components: the European one is focused on the social component, while the American one is focused on technology transfer [57; 64]. For Ukrainian specifics, taking into account the increasing importance of both the socio-cultural and innovative-technological components in conditions of military conflict and

the prospects for post-war reconstruction, it seems appropriate to combine these two models.

At the same time, the social aspect of the activities of universities is not sufficiently recognized by the administration and staff of Ukrainian universities as an independent direction. Rather, it is perceived either as one of the forms of social and educational work, the development of educational services, applied scientific research, and other “traditional” channels of communication between the university and the external environment [55]. Often work is carried out, but fragmentarily, unsystematically, without an ultimate goal, without reliance on scientific methodology. In addition, universities are not always ready to change based on the needs to implement new tasks, the university community is quite conservative, and the administration is not always capable of taking decisive steps to change traditional operating principles. For example, work to develop innovation requires a revision of approaches to the training load for certain categories of workers and the wage system [60]. On the other hand, the scientific activities of teams are not flexible enough to adapt to the needs of partners (enterprises, business, government). It is not uncommon for universities to have nothing to offer that might interest potential investors, and it takes considerable time to develop something new. The development programs of most universities do not contain direct references to the implementation of the “third mission”.

However, a number of universities have consciously chosen development models for themselves as entrepreneurial or innovative universities, and the results of this work are manifested, among other things, in their effective implementation of the “third mission.”

Responding to the challenges of the time, universities strive to join the general information field and find their place in it. The informatization and digital transformation factor leads to the emergence of new methods of education, individual educational programs, the emergence of network universities, a departure from the classical forms of organizing study groups, which can physically be located in different parts of the world (similar to distributed teams principle) [60; 61]. The possibility of instantly obtaining any information leads to a revision of approaches to the personality of the teacher, who ceases to be a repeater and acquires the functions of a mentor, a coach, performing not only an educational, but also an educational function.

In today's situation, ensuring the enough enrollment of students and the effective functioning of any university has become impossible without implementing activities related to special issues of marketing research on the competitiveness of the university. In the context of European integration of Ukraine, this is one of the most pressing problems, since higher education is an industry that constitutes the main vector for the development of human capital production. It is necessary to eliminate the significant imbalances in the higher education system that exist in Ukraine. Its main problems are now the non-optimality of the network of universities, the lack of consistency of educational and qualification levels of bachelor's and master's with the requirements of employers, the uncertainty of the place of these levels in the labor market, and the excessive number of directions, specialties, and specializations of higher education. To ensure a worthy place for Ukrainian universities in the European educational market, it seems appropriate to conduct a comprehensive strategic assessment of the competitiveness factors of universities, encourage and expand opportunities for the introduction of triple helix models on a national and regional scale, as well as study and adapt the best practices in teaching and organizing the educational process, both in didactics and in terms of technical support (primarily based on the latest digital technologies and platforms, many of which are publicly available and do not require significant capital investments from the university).

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