humanities. 19, 135-140.

- 5. Samoylik, Yu. (2011). Strategic directions of enterprise social policy. Scientific Bulletin of Poltava University of Economics and Trade, 4 (49), 198-203.
- 6. Khandii, O. 2010. Enterprise personnel management: conceptual definition and mechanism of development. Human Resource Management company: concept definition and development mechanisms. Luhansk: Vyd-vo SNU im V. Dalia, 240.
- 7. Eduget. 2017. 10 key skills until 2020. [ONLINE] Available at: https://www.eduget.com/news/10\_klyuchevyx\_ navykov\_do\_2020-go-909. [Accessed 15 January 2020].
- 8. Raiffeisen Bank Aval. My business. 2019. Theory of generation: nobility until the next day. [ONLINE] Available at: https://msb.aval.ua/news/?id=28303. [Accessed 15 January 2020].
- 9. Kostenko, T. (2017). Generation theory: why we are different and how to hear each other [digital image]. [Viewed 3 July 2017]. Available from: https://ea.org.ua/2017/07/03 /theory/ [Accessed 15 January 2020].

## HIGHER EDUCATION: CURRENT CHALLENGES

### Nataliia Ivanova,

Ph.D. in Economics, Associate Professor, National University of Kyiv-Mohyla Academy, Kyiv, Ukraine, **Tetyana Kuznetsova**,

Ph.D. in Economics, Associate Professor, Institute of the Personnel Training of the State Employment Service of Ukraine, Kyiv, Ukraine

The changes taking place in the economic development of countries raise the question of the role of higher education in shaping innovative and creative economies. In order to provide an answer to this question, it is necessary to examine two major aspects of the functioning of modern higher education establishments. According to the authors, these include:

- higher education is a public or private benefit [1];
- financing of higher education [2].

Let us look into these aspects in detail.

Economic thought determines public goods as being non-exclusive and non-competitive. Non-exclusivity means that such goods cannot be provided exclusively to someone and cannot be excluded from consumption. Non-competition means that the consumption of goods by some people does not reduce its consumption by others. Public goods create a large number of externalities. They are accessible to everyone alike; the marginal utility is equal, and the marginal costs for the production of the public good are zero. It is also a commodity of collective consumption. Economists

share public goods that strictly satisfy all of the above conditions as pure public goods, and other public goods that do not necessarily fully satisfy all the conditions, are treated as semi-or quasi-public goods [9]. Moreover, if the benefits of public goods are geographically limited, they are called local public goods, and public goods, the benefits of which are aimed at the whole world, are called global or international public goods. Private goods are different; they do not satisfy any of these conditions.

Some scholars argue that higher education cannot be regarded as a public good, since it does not satisfy one of the first two demands, namely, non-exclusivity and non-competitiveness [4, p. 452].

J. Stiglitz argued that knowledge is a public good since higher education and research fulfill all characteristics of the public good. For example, the theorem is non-exclusive, since as soon as it is published, no one can be excluded from reading and using it, and non-competitive, since the use of the theorem will not affect the use of it by others. It is impossible for the knowledge to become a commodity, because the seller does not lose it by selling it [7, p. 308-309]. However, such an argument is based on a mistaken perception of the nature of property. Ownership is not a thing, but rather a set of rights, a social institution. Moreover, in the modern era, it makes no sense to speak of property as a social institution, not to mention the legislative nature of the nation-states. In the modern sense, there is no property without nation-states [8, p. 402]. It is worth noting that access to many scientific treasures is limited by copyright and patent laws, a free product accessible to everyone becomes something expensive or inaccessible because of geographic location, providing rent for copyright owners or patents [16, p. 137].

Traditionally, the functions of higher education constitute the basis of life of the societies. First and foremost - higher education helps in creation, improvement, absorption and dissemination of knowledge through research and education. It has been established long ago that universities are a cradle of ideas, innovations and development, and gradually they become a reserve of knowledge. Secondly, higher education promotes the rapid industrialization of the economy by providing human resources with professional, technical and managerial skills. In the context of transforming society into knowledge society, higher education provides not only skilled workers but also workers prepared for the new knowledge that is necessary for the rapid growth of the economy. The supporters of the theories of endogenous economic growth argue that the groups of well-educated people who work together are more productive rather then if they all worked individually with less educated people. E-mail and the Internet are an example of this. Knowledge, which is free to access, has a great influence on overall productivity [11]. Thirdly, universities are institutions that help shape the person's character and morals; they embody ethical and moral values, formulate well-behaved habits and make possible changes in the views that are necessary for the socialization of individuals, encourage the modernization and general transformation of society through protection and strengthening of public

values. Fourthly, higher education also helps in the formation of a strong nationstate, promotes the development of democracy by educating active citizens who participate in the civil, political, social, cultural and economic activities of a society that understands, interprets, preserves, strengthens and promotes national, regional, international culture and history, in the context of cultural pluralism and diversity. It also has the potential to produce high-level social and political leaders. At the very end, recent studies have revealed many non-monetary benefits from higher education: longer life expectancy; reducing alcohol and tobacco consumption; less probability of obesity; more likely to be involved in prophylactic health care; better mental health; better general health; greater satisfaction with life; less crime; greater propensity to vote, volunteering, trust, and tolerance. Almost all of these provides wider social and individual benefits [15, p. 9].

However, the study of the essence of higher education showed that there is a rapid change in the paradigm of higher education. Even in economically prosperous countries, higher education systems are in a state of strong financial constraints: on the one hand, an increasing number of students, and a chronic lack of public funds on the other. In recent years, in most countries, this has led to serious consequences, caused by the reduction of the state allocation of higher educational institutions, respectively, and the cost per student [4, p. 456].

Externally, universities are increasingly approaching private governance models and public sector corporations.

Proponents of education modification movement argue that this process will transform higher education into a more flexible and efficient institute. Expansion of the market in the audience will provide better value and quality, and the university sector will become more efficient and more responsive to the needs of society, economy, students and parents. The political direction of creating a market for higher education is fundamentally ideological. However, the transformation of education into goods does not necessarily lead to the creation of a market for the sale and purchase of academic education. Indeed, it is not always clear what is being bought and sold. In this way, conditions are created for the institutions to compete for resources and funding. It is important to understand that the transformation of education into goods is equally a political, ideological process as an economic phenomenon. For example, governments often contribute to a well-defined policy through a market economy. This tendency is not a triumph of a free market economy. Indeed, it can be argued that the market-based trade in education has led not to a decrease but to increased interference and micro-management of university life. Governments are desperately mobilizing students and their parents to choose a university under pressure from the market and marketing tools. According to the logic of the market, the customer is always right, so universities are guided by the interests of students, and not the academic community.

Another important factor contributing to a radical change in thinking about the nature and role of higher education is the use of neoliberal economic policies

for stabilization, structural adjustment and globalization associated with the International Monetary Fund and the World Bank.

Many governments of exporting countries have encouraged higher education negotiations under the GATS and WTO, since trade in higher education is essentially seen as an important source of income for universities, thus reducing the obligation for governments to allocate most of their resources. For example, even some of the best universities in the world, such as Oxford and Cambridge, seen as the gold standard in higher education, are involved in business, trading and selling their degrees to students abroad [4, p. 457]. Creating the General Agreement on Trade in Services (GATS) reflects the formalization of the market processes, driven by the growing need for independence of public institutions and the procedures for international trade in services. The GATS covers all international services, including education. Within the education sector, GATS covers the following categories of education services: primary, secondary, higher, adult and «other». GATS education trade takes place in four modes: cross-border supply of services (where consumers remain within their own country); consumption abroad (where consumers cross the border); the commercial presence of a provider in another country (institutional mobility); the presence of persons in another country (staff mobility) [5, p. 9]. The GATS considers public goods as commercial goods and even global public goods as global commodities intended for trade and profit. It is equitable to fear that the nature of the benefits of general consumption will be revised and that public education will be a commodity for which GATS will provide a political and legal basis for deregulation and privatization [5, p. 58]. The transformation of education into commodities leads to a mass privatization of education that increases tuition fees and growing inequality because of the access restrictions. Moreover, as the driving forces of the national state and state control over higher education are reduced, the ability to plan the education sector for national needs will completely disappear, as education will be formed in the markets to meet the needs of the market, and international trade will prepare people to meet the requirements of the labor markets of the developed countries [5, p. 62]. Entry to the domestic market of foreign private institutions may also have a negative impact on domestic government institutions, especially in developing countries, which are not necessarily competitive and not fully oriented to the needs of the market and often serve the national interests of more influential countries [5, p. 65].

Individuals with average and higher incomes are more likely to profit from the state financing of higher education rather than low-income groups, thereby exacerbating uneven distribution. Although this argument is true to a certain extent, the situation in developing countries is changing rapidly: access to higher education is no longer limited to middle-level groups, and the level of engagement of poor social and economic groups is increasing, albeit slowly. On the other hand, the adoption of neoliberal arguments on state funding for higher education and the withdrawal of state will reduce the participation of socio-economically weak sectors of society

in higher education and will further emphasize their inequality in accessing higher education services [4, p. 459]. The transformation of education into goods and its internationalization leads to the brain drain and a serious shortage of skilled labor in developing countries. Higher tuition fees paid by foreign students, relatively low wages in their home countries, and better job markets in developed countries will even more potentially contribute to the brain drain [5, p. 65].

With regard to academic research at universities, there is a steady increase in private interests. Knowledge, which is essentially non-exclusive and non-competitive, has been privatized. An argument for the privatization of codified knowledge is the possibility of obtaining high benefits, which in the future encourages more investment in research and creativity [16, p. 139].

Thus, it remains ambiguous whether higher education is a public good or a commodity. Studying at high school is usually a combination of both. Public goods include individual non-market benefits and acquired knowledge that is not excluded or non-competitive. However, when studying creates additional value, it acquires a new feature, which is competition. Apart from that, admission to higher educational institutions with high demand is exclusive. This creates prerequisites for higher education market emergence. The transformation of higher education into goods is caused by the need for institutional independence of universities, as a consequence of neoliberal policies, trade agreements, and bolstered up competition.

As it has already been noted, the second major factor in the functioning of higher education is its funding.

As studies have shown, requirements and expectations to universities and, in particular, to the process of teaching and research, are growing rapidly. However, public investment in higher education is still small, and the costs associated with university activities are increasing, thus, ensuring financial sustainability is a major challenge for universities. The first step for universities in responding to these challenges is to determine the real cost of their activities.

The financing of higher education in Europe, as in the rest of the world, has undergone significant changes over the past decade [14, p. 1]. These trends vary both in different countries and within each country and constitute the context for the current widespread financial rigidity of higher education, as well as new policy decisions that, although constantly changing both between the countries and within them, are nevertheless, very clear and similar [6, p. 4].

The first trend is the increase of the cost of training per one student. The fundamental financial problem of higher education worldwide and the reason that even rich institutions may need to save money begins with the fact that universities face annual cost increases [6, p. 4]. Such a trend of increasing costs per student over inflation is the production function of higher education, more specifically, its natural resistance to continuous replacement of labor by capital, which is the main source of productivity and growth in the general economy. The increase in the cost of higher education is also caused by the creation of new programs and the initiation

of new research, accompanied by enormous technological costs.

The second trend is the fluctuation of the state, namely tax revenues.

Governments around the world are more often struggling with an increase in the tax burden on social insurance and rising costs for primary and secondary education, healthcare, public infrastructure, security and other social security costs.

In Ukraine, during 2017-2019 the GDP spending on education is being reduced. Namely, a decrease in financing from 5.9 % of the GDP in 2018 and 6.2 % in 2019 to 5.6 % of the GDP in 2020.

The third factor affecting the financing of higher education in almost all countries is an increase in the share of world production, especially in developed countries, whose main economic sector is services, or the so-called knowledge economy based on cutting-edge technologies, design, finance and governance. The result of the knowledge economy is the increase of value for both the country and for individuals, or at least for some forms of higher education (especially management, finance, law, mathematics, technology and technology). The financial outcomes of this knowledge-based economy for higher education are manifested through new educational programs and the redistribution of faculties and students among these new programs. These two effects contribute not only to further accelerating growth, but also to the growth of training costs. This creates the basis for increasing investment by both students (or parents) and, where possible, governments [4, p. 7-8].

Strengthening globalization phenomena is the next reason for changes in education.

Decentralization, devolution, and deregulation are the final trends or set of related trends in most countries and reflect state's movement towards reducing the public sector, decentralizing government, privatizing agencies, and encouraging private organizations to provide services that were previously provided by certain government agencies. Although the large public sector and tax redistribution are preserved in many countries, such as the Scandinavian countries, new effective state governance replaces state ownership of all means of production and the domination of the state bureaucracy [6, p. 9].

At long last, the impact of decentralization, devolution and deregulation on the financing of higher education is to encourage the development of private higher education and the privatization of state higher education. Universities around the world, both state and private, move from the status of state institutions to the status of state-owned corporations and carry out all the functions inherent in private ownership, regardless of the legal direction of their missions or their constant dependence on government revenues [3, p. 2].

In Ukraine, state form of ownership of universities is prevailing. In 2014, there was a decrease in the number of both public and private universities. As of the 2017/2018 academic years, the number of private higher education establishments amounted to 157, i.e. 23.7 %. In general, the number of universities of both forms of ownership has somewhat declined.

With consideration for the global trends in higher education, universities have taken measures on costs and incomes. Cost decisions often raise questions about whether they affect the quality of education; income decisions often mean an unprecedented burden for households, that is, the families of students. Simple short-term solutions in regard with costs are increasing the size of groups and training load, differentiating the load on the faculty by hiring part-time workers and reducing low priority programs. Universities can freeze salaries or scholarships for students; reduce wage costs, maintenance and repairs. [6, p. 11]. The decision of the financial economy of higher education, which involves reducing costs, appeals to many political and economic rights. Reducing costs does not mean increased efficiency or productivity. In many countries, there is still the idea that much more fundamental changes are needed, if not necessarily for all institutions, then at least for some institutions or some higher education systems. These more fundamental, radical and systemic changes, for example, may include: a more radical diversification of the industry, mergers, technically equipped training, e-learning and virtual universities.

There is more radical diversification of the industry, especially in those countries (e.g. Italy, Spain and other Southern European countries), where the classical research university still dominates with its leading faculties, and where practically all faculties are more focused on research and disciplines, and not really on university and students, is quite complicated to implement. The sector's diversification or relative change in the short-term is less expensive, less selective, more professional-oriented, and involves more hierarchically driven universities whose faculties are focused on learning rather than on research, often considered as a partial solution for the needs of higher education institutions [6, p. 14].

A merger, at least theoretically, can reduce the prime costs by increasing the scale of operations and obtaining cost savings for such departments as libraries and administration. But for real reduction of expenses it is necessary to reduce faculties and employees, including the highest management, additional services, elimination of some academic programs and the rejection of precious institutional identities – measures that universities resist both institutionally and politically. If the merger is only nominal, that is, most programs and faculties are preserved, and simply the president or rector and several other top-level administrators are eliminated, the result will be more difficult and less effective management, demoralized faculties (both institutions) and the inability to realize significant savings as a real merger, and the complete closure of one of the supposedly «united» institutions. At the same time, institutional mergers may be both necessary and feasible and have actually taken place in countries where many universities are developing on a narrow scale [6, p. 14-15].

Technically equipped training, e-learning and virtual universities are the third option of a radical change in the University's cost cutting strategy. In most countries, there is an explosion in technological and remote learning, although the most successful programs were mostly outside of higher education and not in the direction of radical transformation of existing universities. New virtual universities

sometimes attract a lot of interest, which eventually abates, as students of traditional higher education still want to get more complete experience within the university. Yet, there is definitely a great deal of interest from existing universities in all types of educational technologies, mainly as an addition to traditional teaching methods, as well as to provide a real e-learning. In developing and low-income countries, the potential may be greater than those who study in remote locations where the main costs of higher education are out-of-home spending (although lack of personal computers and good Internet connectivity may continue to be the main obstacle).

Despite the fact that innovation in teaching technology can ease the sense of financial constraints, the experience of more affluent industrialized countries suggests that educational technologies can enrich training, but significantly increase, at least in the short-run, the cost of training of a single student. If the goal is to give students access to curricula, remote learning can bring significant savings compared to alternative student placement in classrooms. However, for a single institution or even a national system that seeks to cope with disparate cost and income trajectory, most remote learning programs can enrich learning, but will in fact cost more than traditional training in case of creating an independent platform [6, p. 15].

Measures for increasing income include raising tuition fees, encouraging philanthropy, democratizing knowledge and access, relying more on the market, the private sector, and encouraging entrepreneurship in the faculties. Another opportunity for boosting cash inflow of universities is the establishment of a foreign campus or the encouragement of foreign students. It is believed that an increase in income is a better method than relying on a tuition fee that may fluctuate over time. High tuition fee involves certain contribution from parents. It is often difficult to determine paternal readiness to contribute to higher education [6, p. 43]. High tuition fees may sometimes hold back low-income students, especially in countries with underdeveloped crediting system. In some countries philanthropy has made a significant contribution to education. The tradition of charity may be stronger in some cultures than in others. For example, in the United States, philanthropy has been very helpful in providing grants and helping low-income families [6, p.13]. In the UK, philanthropy accounts for 10 percent of university profits. In Europe, there are still psychological obstacles to raising funds with which charity is associated.

Traditionally, universities had the key to knowledge both in the physical and philosophical sense. University libraries, faculties and research institutes, where knowledge was created, store and share it. Now knowledge is open to anyone who has a device and a connection, which makes it possible not just to receive facts and figures, but also to conduct analysis, interpret knowledge. Back in 2007 OECD proposed the «Open Educational Resources» program. The OER project aims to promote access to learning for all, as well as for unconventional student groups, and, consequently, to expand participation in higher education. This can be an effective way to promote life-long learning for both individuals and the government, helping to bridge the gap between informal and formal education. Although there

are no statistics yet, there is a rapid expansion of the number of OER projects, as well as the number of people involved and the amount of available resources. In January 2007, the OECD identified over 3,000 open academic programs from 300 universities around the world. Although English is the dominant language to date, translation of resources in combination with the growing number of non-English OER projects will have the potential to increase global use. The benefits of open educational resources include the following: education is available to anyone; access free of charge, ideally; students can try the course before registration; flexible study periods not related to weekly schedules or calendar semesters; students work at their own pace; access from anywhere in the world; access to a huge amount of training materials; Intellectual capital is available for repeated use.

The PPP is the next method of increasing university profits. The PPP can be defined as an agreement that the state concludes with a private service provider for certain services in order to purchase a specific service at a specified amount and quality at an agreed price for a certain period. This definition covers several different types of contracts that allow you to purchase various services and vary in their complexity. These services comprise educational services (management, maintenance and support, such as transport), maintenance services and infrastructure. There are 4 main types of contracts: vouchers, subsidies, private management and operations and private financial initiatives. The ultimate goal of the PPP is to increase the number of enrolled students and to improve the educational outcomes, in particular, the number of students from low-income families [11, p.17-18].

Online education, which still remains to be cutting-edge among social technologies, has been used to improve distance learning by adding various enhancements, changes or blending of new pedagogical approaches and technologies. Technologies used for distance learning and online learning include: correspondence classes, postal and printed publications; telephone and / or sound recordings; television and / or video recordings; computer auxiliary instruction; group communications (asynchronous and synchronous); web and multimedia materials; simulation and games; coeducation; asynchronous learning networks (ALN); common knowledge systems; immersed simulation; and wireless and portable devices. Most modern distance courses include one or more of these technologies or methodologies. Technology itself has not radically changed the basic concepts of distance learning or university education from the point of view of the basic social function of education. However, there is a substitution process that can modify higher education. Gradually higher education is driven by direct communication with the use of teacher-oriented pedagogy offered by dozens of local, regional and national universities to online and hybrid digital technology courses to support constructivist, joint, student-centered pedagogy offered by several «mega universities» working in global scale. [13, p. 59-60]. Digital technologies will not cause the disappearance of the traditional university. Campuses will continue to exist as places of teaching and learning, research, community involvement and diverse

forms of student activity. But digital technology transforms the way education is provided and maintained, for example, through real-time feedback programs and education in remote areas, both in developed and in developing countries.

Digital technologies also fundamentally transform the way of creating value within higher education and related industries [7, p. 9]. At present, the two most common types of distance learning are provided online: MOOCs and SPOCs, which differ, first and foremost, in the number of students they provide services to. MOOC is an online open access course (i.e. without a special limitation of participation), which allows you to participate without restrictions, that is massively. Many MOOCs provide interactive elements to encourage interaction between students and between students and teachers, although the latter is not a mandatory attribute. The MOOC, with the exception of unlimited size, traditionally includes students, separated by both space and time, which allows students to study independently at their own pace without being required to adhere to a particular schedule [13, p. 6]. SPOC is an online course that offers only limited number of seats and, therefore, requires some form of enrollment. SPOCs often have a competitive admission and can charge a tuition fee. Despite the fact that the creation of MOOC is not cheap, it can bring significant savings, for example, for courses taught in several specialties in parallel throughout the year or in different places. The last approach applies to institutions with university campuses in different regions. The MOOC can also help to ensure a sufficient level of audience coverage by in-service lecturers, whose work sometimes costs more than the work of the freelancers. In addition, the introduction of the MOOC may also create a potential for new revenues, for example, in case of fees charged for obtaining a certificate or, if other institutions use MOOC, for your own training. Branding is important not only for the sale of consumer goods, but also for the sale of education. Universities today find themselves in an increasingly competitive environment and in a constant struggle to attract the brightest students, the best teachers and cash. MOOC can help to create the right positioning and distinguish the university from others, like a viral marketing campaign or effective advertising.

The need to study the efficiency of public funding for universities is becoming increasingly important for a number of reasons. The growth of social demand for higher education, the globalization and the internationalization of higher education, the recognition of the need to improve the quality of research coincides with the financial aspects of the activities of higher educational institutions. Financing of the system of higher educational institutions is one of the most important elements that determines the whole system of higher education - both institutional and qualitative, its accessibility and other parameters [10, p. 336]. In accordance with the interaction of funding sources and the impact of funding recipients on the system of higher education, bureaucratic, collegiate and market financial models can be distinguished [10, p. 336].

The basic principle of the bureaucratic financial model of higher education is the full financing of the budgets of higher educational institutions from public

resources. In this case, the state directly influences all spheres of activity of the higher educational institution through legal and financial instruments, which accordingly determines the structure of the higher education institution, in particular the number of departments, employees and the number of students enrolled, the need for certain branches of study and research. Government institutions control the use of financial resources. Higher educational institutions do not have the authority to manage their long-term tangible assets and, in essence, carry out state orders. The state can delegate certain functions to different supervisory bodies, where members of the academic community usually take part [10, p. 337].

One of the main advantages of this model is that in this way, the state can fully satisfy its needs by training and controlling the required number of specialists. The state also obtains opportunities and mechanisms for ensuring the qualitative research provided by legal acts. However, this model has more disadvantages than advantages. First, strict and centralized financing (usually accompanied by an elaborate regulation by the state) almost completely limits the real institutional autonomy and academic freedom of higher education institutions in solving issues related to the activities of the university. The system of higher education, too, becomes dependent on political power and can often become a hostage to various questionable political decisions. As a rule, educational institutions, where such a model of financing is implemented, is not allowed to dispose of financial resources on its own. Resources are allocated on the basis of data of the previous year, which, in turn, contributes to the ill-considered use of them, ignoring the daily needs of the university, which may change in the course of annual financial activity. It is also problematic to introduce changes that require rapid decision-making, as the decision-making process is usually regulated in detail, followed by numerous bureaucratic procedures. Despite the fact that the quality of education is regulated by the state, this reveals the weakness of such a model, because the quality assessment system should be legitimized and carefully described by both internal and external regulatory standards [10, p. 338].

A collegiate model usually envisages state-funded activities of higher education institutions and retains the right of universities to raise funds for individuals (through tuition fees, remuneration for services provided in projects, for research, for the funding of certain programs or scholarships) it also includes the right of academic institutions to freely dispose of their resources. Such system of financing requires an appropriate management system for each particular model that can be described as a professional management model, where professionals, selected staff and students of the university manage the higher education institution. Such financing models and management models have their advantages and disadvantages. When the resources at the disposal of the university coincide with the academic needs, there is a high quality of academic services and strong academic solidarity. The prerequisite for this model is that higher education institutions have the right to full institutional autonomy, especially in the processes of management and distribution of resources,

which undoubtedly positively affects academic freedom, higher education quality and optimal use of financial resources [10, p. 339-340].

Notwithstanding all the benefits, the use of a collegiate model of higher education funding may inevitably have some negative consequences. One of the most frequent negative aspects (also inherent in the bureaucratic model) is that the state budget is redistributed to the system of higher education from all members of society, but only for representatives of a certain social status, which are socially meaningful and financially privileged [10, p. 340].

The third model of financing higher education, the so-called market model, is becoming more prevalent. It is characterized not only by its ability to attract alternative financial resources, but also by its commitment to cooperate and coordinate the work of all participants in the system of higher education institutions, in particular those providing academic services (lecturers and scholars), using services (students and their employers) and a state representing the interests of society, the governing bodies of universities, which are responsible for the efficient, high-quality functioning of the institution. The plurality of interests and financial resources, as well as the mechanism of their distribution, creates favorable conditions for expanding activities that are in the interests of different groups of society. It is believed that such a model of financing may not be the main contractor of higher education services, which, by regulation, will determine priorities. Universities are looking for and attracting more and more diverse funding sources that will ensure a high-quality and efficient functioning of an institution that meets the needs of the market. At the same time, the market-based financing model requires higher education institutions to provide sufficient information about their activities and foresees maximum financial and high-quality accountability, as investors (state, enterprises, private organizations, etc.) are interested in co-operating with clearly defined academic and managerial processes [10, p. 343].

This model emphasizes the balance between public and private funding, where the latter is a priority. One of the main benefits of this model is the competition between higher education institutions for private sector resources, which will allow universities to lower tuition fees, seek better quality, respond in a timely manner to market demand. The weakness of a market model is that, as a rule, rapid academic and scientific results are required, which may be incompatible with academic freedom [10, p. 344].

The analytical assessment of various university funding models and the analysis of the state-funding model for higher education institutions in Ukraine suggests that Ukraine has already moved away from the bureaucratic financial model of higher education, but has not yet fully implemented a collegiate model. Currently, the national funding model for higher education is now being sought. The proposal of the CEDOS analytical center on the replacement of the mechanism of public procurement model of state funding of higher education institutions by performance (based on performance) is interesting [12].

Thus, the conducted research proves that higher education is becoming increasingly commercialized and acquiring signs of a private good. And this requires dramatic changes in the policy of public financing of higher education.

#### References:

- 1. Ivanova, N., Kuznetsova, T., Khoma, I. (2019). Market aspects of higher education. Modern Science, Prague, 1, 21-30.
- 2. Ivanova, N., Kuznetsova, T., Khoma, I. (2019). Modern trends in higher education funding. Modern Science, Prague, 3, 44-54.
- 3. Jandhyala, B. G. (2005). Global Trends in the Funding of Higher. International Association of Universities, World Higher Education News, 1 (1), 1-3.
- 4. Jandhyala, B. G. (2009). Higher education: a public good or a commodity for trade? Commitment to higher education or commitment of higher education to trade. Springer, UNESCO International Bureau of Education, 38, 449-466.
- 5. Jandhyala, B. G. 2011. Trade in higher education: The role of the General Agreement on Trade in Services (GATS), Paris: UNESCO: International Institute for Educational Planning, 158.
- 6. Johnstone, B. D. Worldwide Trends in Higher Education Finance: Cost-Sharing, Student Loans, and the Support of Academic Research, [ONLINE] Available at: https://www.kiva.org/cms/worldwide\_trends\_in\_higher\_education\_finance.pdf [Accessed 27 December 2019].
- 7. Kaul, I. 1999. Global public goods: international cooperation in the 21st century. Oxford University Press, 546.
- 8. Kauppinen, I. (2014). Different Meanings of 'Knowledge as Commodity' in the Context of Higher Education. Critical Sociology, 40 (3), 393-409.
- 9. Maxime Desmarais-Tremblay Musgrave, Samuelson, The crystallization of the standard rationale for public goods, [ONLINE] Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2805397 [Accessed 27 December 2019].
- 10. Pranevičienė, B. (2010). The Financing Methods of Higher Education System. 8, 335-356.
- 11. Romer, P. M., (1994). The Origins of Endogenous Growth. Journal of Economic Perspectives, 8 (1), 3-22.
- 12. Stadnyi Y. The conceptual model of public funding of HEIs by performance. [ONLINE] Available at: https://cedos.org.ua/en/articles/kontseptualna-model-derzhavno ho-finansuvannia-vnz-za-reultatamy-dialnosti [Accessed 20 December 2019].
- 13. Starr, R. H. (2005). Education Goes Digital: The Evolution of Online Learning and the Revolution in Higher Education. Communication of the ACM, 48(10), 59-64.
- 14. Schwarzenberger, A. 2008. Public/private funding of higher education: a social balance. Hannover, HIS: Forum Hochschule, 177.
  - 15. Willetts, D. 2015. Issues and ideas on higher education: Who benefits? Who

pays?. London: The Policy Institute at King's College London, 51.

16. Williams, G. (2016). Higher education: Public good or private commodity? London Review of Education, 14 (1), 131-142.

# ANALYSIS OF MODERN TECHNOLOGIES OF MANAGEMENT OF PERSONNEL SAFETY OF THE ENTERPRISES

## Volodymdr Tkachenko,

Postgraduate student, Poltava State Agrarian Academy, Poltava, Ukraine

In today's conditions, domestic enterprises have to operate in unstable market conditions, unpredictable political, economic and social processes, which on the one hand creates a dynamic and unstable environment for work on the other. All this encourages managers of enterprises to find and implement effective technologies and measures to solve economic, technological, information and other problems that arise from the outside, and to adapt the enterprise to work in these conditions.

The theoretical foundations of the technography of personnel safety management of enterprises were considered by such authors as I. L. Dobrotvorsky, V. G. Kozachenko, N. Kozachuk, O. E. Kuzmin, S. G. Pirogov, O. V. Sakharova, I. M. Sochinsk-Sibirtseva, etc. However, the theoretical aspects of HRM require more detailed consideration and generalization.

Personnel security is one of the main components of economic security of any enterprise, because it means people who are the most important and at the same time the most complex resource of the enterprise.

Specificity of the human factor in comparison with other factors of economic development is that, firstly, people not only create, but also consume material and spiritual values; secondly, the multifaceted nature of human life is not limited to work activity, and therefore, in order to use human labor effectively, one must always take into account the needs of the individual as a person; thirdly, scientific and technological progress and social orientation of social life are rapidly increasing the economic role of knowledge, morality, intellectual potential and other personal qualities of workers, who are formed for years and generations, and are revealed by man only under favorable conditions [9].

In today's sense, enterprises should be considered in the aspect of interrelated elements. This system can only reproduce its inherent properties based on its own system-creating resources. An important factor is the ability to influence and manage these resources.

The processes that occur when making certain managerial decisions can be called the technologicalization of management activities. The technologicalization of