Olha Kirichenko

Assistant Lecturer,
Department of Economics, Management and Commercial Activity,
Central Ukrainian National Technical University, Kropyvnytskyi, Ukraine
E-mail: olgasuper2003@ukr.net
ORCID ID: 0000-0002-6479-3842
Researcher ID: https://publons.com/researcher/3680586/olha-kirichenko/

Human resources competitiveness of Ukraine: comparative analysis of the socio-economic prerequisites

Abstract

The paper is devoted to the analysis of the socio-economic preconditions of increasing the competitiveness of human resources of Ukraine in the international dimension taking into account the tendencies of globalization and digitalization in the world. In the process of viewing of the number of scientific publications, which are devoted to the problems of human resources competitiveness, the essence of the competitiveness in general and, in particularly, the components of staff competitiveness, the factors, which influence on the competitiveness of personnel, the role of human resources in ensuring the competitiveness of organizations were identified. It was emphasized that the human resources competitiveness depends on the quality of human resources themselves, as well as on the quality of jobs available and the socio-economic development of territories and countries. The low level of socio-economic development of territories and countries leads to the migration of the skilled employees. There were researched in the international comparison such components as skills of human resources, the level of labour market development, pay and productivity, cooperation in labour-employer relations, social capital, ICT adoption, the level of GDP per capita and average monthly salary of employees. There were developed the proposals of the socio-economic preconditions improvement which deals with forming the relevant conditions for decent pay for the human resources, their continuous professional development, the necessity of social capital forming, social dialogue and social infrastructure development, the quality of vocational education rising. It was marked out the importance of creative thinking, communication skills, emotional intelligence, flexibility, adaptability, self-organization, skills in the sphere of modern ICT using for human resources competitiveness increasing.

1 Statement of the problem

In the context of globalization of the socioeconomic relations in the world, the issue of ensuring the competitiveness of human resources in the labour market becomes particularly relevant. The level of socio-economic development of the world countries and territories within one state differs significantly, so the migration of skilled employees is intensified, there is a mass movement of labour force between countries and regions. As

Keywords

competitiveness, human resources, socio-economic development, skills, labour market, salary, productivity, social capital, information and communication technologies

JEL: J24, F66, O15, P52

a result, a large imbalance in the labour market exists, because, on the one hand, the low level of available human resources does not meet the quantitative and qualitative needs of employers, and on the other hand, low quality of jobs available does not meet the requirements and expectations of highly qualified employees. In both cases, the available human resources are uncompetitive in the labour market of the particular area.

The level of competitiveness of human resources in the labour market is influenced by the

number of social and economic aspects, such as wages, development of social partnership relations, qualification of labour resources, continuous professional development, formation of social capital and others. In recent years, due to digitalization, the impact of such an aspect as the level of staff skills in the using of modern information and communication technologies is rapidly increasing.

2 Latest scientific progress and publications review

Conceptually, the main emphasis and logic of competitiveness is the ability to withstand competition, have advantages over competitors, achieve socio-economic effect and promote further evolutionary development (Pliashko, O.S., 2014) [8]. The competitiveness of human resources could be considered at the international, macro-, meso- and micro-levels.

At the enterprise level researchers distinguish the following components of staff competitiveness: economic readiness of staff, individual professional skills, system of motivation and incentives, the presence of internal moral of the incentives, presence personal characteristics, the ability to develop and selfstudy (Lorvi, I.F., Kovtun, A.A., 2017) [6]. Nevkova. R.M., Prokopenko, O.V., Shcherbachenko, V.O. (2015) highlight such indicators of human resources competitiveness as qualification level, efficiency of work, pioneer work, responsibility, work experience, creativity, ability to make decisions [7].

The factors, which influence on the competitiveness of personnel of the enterprise, according to the research of Lehan, I.M. (2019), include internal (level of education and qualifications, professional competence, motivation and organizational skills, physiological factors, ethical and moral factors, life orientations) and external (economic, political, technological, social) [4].

A majority of researches is devoted to determining the role of human resources in ensuring the competitiveness of organizations. So, Šikýř, M. (2013) highlights the following commonly applied best practices in human resource management: leadership, motivating jobs, selective selection, formal adaptation, performance management, performance-related pay, systematic training, talent management, work-life balance [9]. Another scholar - Harjo, E.B. (2015) - emphasizes that in the context of globalization, is growing the relevance of such important HR practices: recruiting global employee, training and development, and re-entry policy [2]. What many scientists have in common, is the recognition of the

extremely high role of human resources in ensuring the competitiveness of a particular business entity. In turn, a high level of competitiveness of enterprises is the key to increasing the competitiveness of territories and countries.

In the process of ensuring the competitiveness of human resources there is an interaction of various actors of the labor market - employers, employees, the state, the public employment service, educational institutions, intermediaries, etc. (Heraschenko, I.M., 2015) [3]. In modern conditions the effective cooperation stakeholders largely determines the conditions for increasing the competitiveness of human resources. Their cooperation should take into account the «Quadruple Helix» model, that is, to occur with the obligatory participation of the state, scientific and educational institutions, business structures and the public (civil society) (Levchenko, O.M and others, 2019) [5].

We agree with the statement by Sokolov, A.V. (2015), that from the point of view of national interests, high competitiveness of domestic human resources without the possibility of their implementation in their country leads to migration, leakage of the most skilled employees outside the country and, consequently, to the country's competitiveness decrease [10].

Thus, it should be taken into account that not only employees with a low level of quality training, skills and abilities may be uncompetitive in the labour market, but also highly skilled employees – if they are offered jobs with low pay and working conditions, or if socio-economic development of a particular area and social conditions do not satisfy them.

That is why at the macro and meso-levels there is a growing need to take into account migration aspects. Also, the defining feature of modern realities of ensuring the competitiveness of human resources is the increasing of the role of social aspects, the availability of professional and communication skills, high emotional intelligence, skills of using the modern information and communication technologies, networking due to the rapid spread of digitalization in all spheres of socio-economic life.

3 The purpose and problem of research

The purpose of the research is the comparative evaluation of the socio-economic prerequisites of providing the competitiveness of human resources and the development of the ways of its improving in the international dimension due to the trends of globalization and the rapid spread of information and communication technologies in the world.

From standpoint of the methodology of our research in first phase of implementation, which

are based on the research of foreign and Ukrainian literatures and the analysis of the results of one's own research, the comparative analysis was conducted.

In our own research, we used the descriptive method, the method of analysis and synthesis, induction and deduction, method of comparison, abstract-logical, analytical, graphical, rating methods. The international indicators, which were analyzed have been selected from the Global Competitiveness Report 2019.

4 Results of the research

In the international dimension the socio-economic aspects of improving the competitiveness of human resources could be estimated using data of the World Economic Forum, World Bank and

other international organizations reports. First of all, it is necessary to analyze such components as skills of human resources, the level of labour market development, pay and productivity, cooperation in labour-employer relations, social capital, ICT adoption. The next step is involved analyzing and comparing these indicators with the level of GDP per capita and average monthly salary of employees.

According to the Global Competitiveness Report (2019) [12], the ranking of 35 selected countries by the level of skills development in 2019 has the following form (Figure 1). As we can see, up to five leading countries from the selected group belong Switzerland (86.7; on a scale 0-100), Denmark (85.7), Finland (85.7), the Netherlands (84.6) and Germany (84.2).

As for Ukraine, the meaning of the level of skills

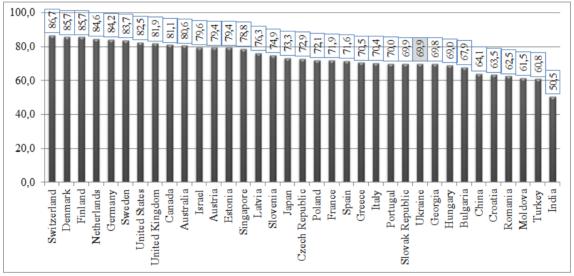


Figure 1 Ranking of 35 countries by the level of skills development, 2019 [12]

Source: The Global Competitiveness Report 2019 https://www.weforum.org/reports/global-competitiveness-report-2019

development in this country is 69.9, it borders with Portugal (70.0), the Slovak Republic (69.9), Georgia (69.8) and Hungary (69.0). For example, in India the level of skills development is quite lower – it's meaning is only 50.5.

It should be emphasized that the indicator of skills level is integral and includes such components as current workforce, skills of current workforce (in particular, extent of staff training, quality of vocational training, skillset of graduates, digital skills among active population, ease of finding skilled employees), future workforce and skills of future workforce. All these indicators are extremely important for increasing the competitiveness of human resources in the world's countries. Therefore, these growth reserves must be taken into account while working out national strategies, plans and programs of human resources development.

Figure 2 is presented the results of ranking of

35 selected countries by the level of labour market development in 2019. By this indicator the leaders are Singapore (81.2), Switzerland (79.5), Denmark (78.2) and the United States (78.0), while quite lower level is in India (53.9), Turkey (52.9) and Greece (52.7). In Ukraine the level of labour market development is estimated by value 61.4, the nearest neighbors by the meaning are Romania (61.6) and Spain (61.1).

In turn, the level of labour market development contains 12 indicators, which are divided into two groups: first group deals with the flexibility, the second group – with meritocracy and incentivization. According to the purpose of this research, the greatest practical interest constitute such subindexes as level of pay and productivity, and, also, the level of cooperation in labour-employer relations. So, pay and productivity are the most important economic aspects of the competitiveness of human resources increasing.

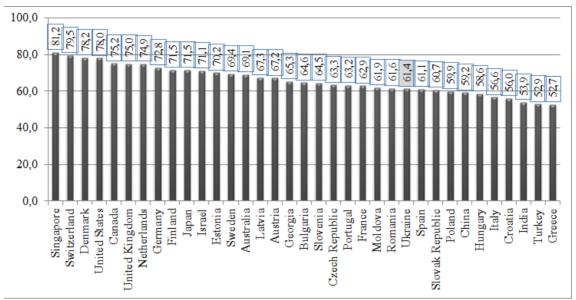


Figure 2 Ranking of 35 countries by the level of labour market development, 2019 [12]

Source: The Global Competitiveness Report 2019 https://www.weforum.org/reports/global-competitiveness-report-2019

While, low wages lead to a lack of interest of staff in highly productive work and strengthen the migratory dispositions of the population. On the other hand, low level of staff productivity (which could be related, for example, with insufficient technological level and outdated equipment) leads to impossibility of salaries raising.

As we can see (Figure 3), best values by the level of pay and productivity in 2019 are demonstrated Singapore (74.6), Switzerland (74.6), the United States (71.1) and Germany (69.8), the worst from the selected group the following countries – Greece (41.4), Hungary (41.0), Croatia (39.8) and Italy (35.5). The meaning of this indicator in Ukraine is at the middle level (55.6).

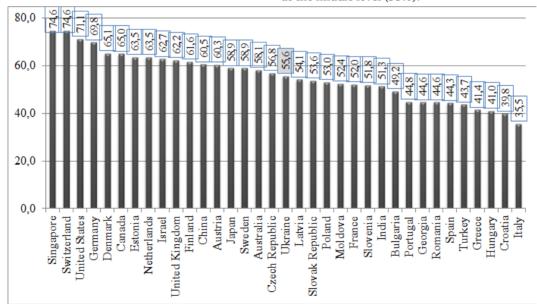


Figure 3 Ranking of 35 countries by the level of pay and productivity, 2019 [12]

Source: The Global Competitiveness Report 2019 https://www.weforum.org/reports/global-competitiveness-report-2019

The ranking of 35 selected countries by the level of cooperation in labour-employer relations in 2019 is characterized by the following form (Figure 4).

The best results of cooperation in labouremployer relations are demonstrated in Singapore (85.3), Switzerland (85.2), Denmark (81.0), the Netherlands (80.8) and Japan (79.9). The lowest meaning among the selected countries took place Bulgaria (49.4), Italy (49.4), Turkey (47.3) and Croatia (39.8). As in the previous case, the meaning of this indicator in Ukraine has also at the middle level (54.8).

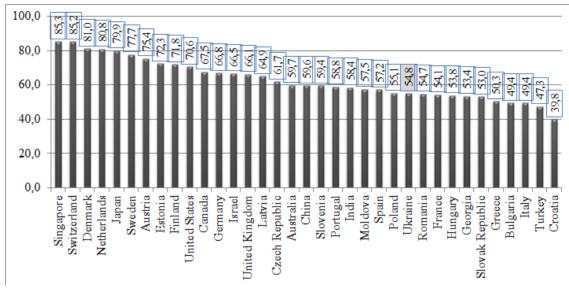


Figure 4 Ranking of 35 countries by the level of cooperation in labour-employer relations, 2019 [12] Source: The Global Competitiveness Report 2019 https://www.weforum.org/reports/global-competitiveness-report-2019

The best results of cooperation in labouremployer relations are demonstrated in Singapore (85.3), Switzerland (85.2), Denmark (81.0), the Netherlands (80.8) and Japan (79.9). The lowest meaning among the selected countries took place Bulgaria (49.4), Italy (49.4), Turkey (47.3) and Croatia (39.8). As in the previous case, the meaning of this indicator in Ukraine has also at the middle level (54.8).

Another important indicator of the competitiveness of human resources increasing is the level of social capital (Figure 5).

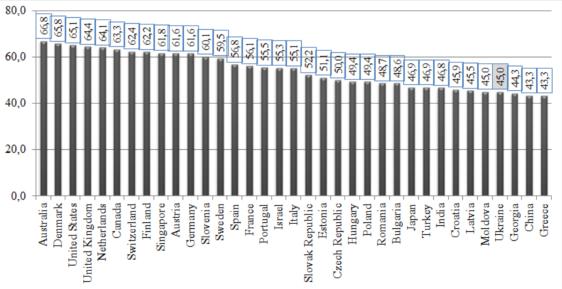


Figure 5 Ranking of 35 countries by the level of social capital, 2019 [12]

 $Source: The \ Global \ Competitiveness \ Report \ 2019 \ https://www.weforum.org/reports/global-competitiveness-report-2019 \ https://www.weforum.org/report-2019 \ https:$

So, by the level of social capital the leading positions are occupied by Australia (66.8), Denmark (65.8), the United States (65.1), the United Kingdom (64.4) and the Netherlands (64.1). In this case, Ukraine became one of the outsider countries among the selected group of them. Thus, the level of social capital got the value: in Ukraine and Moldova – 45.0, in Georgia – 44.3, in China and Greece – 43.3. The results of the

ranking certified that nowadays Ukraine should focus considerable efforts on social capital forming and development.

It is worth to emphasize that in terms of digitalization the skills of information and communication technologies (ICT) using become one of the most important and necessary at the labour market. The importance of these skills is also growing rapidly due to the significant spread of

remote employment during the global coronavirus pandemic. That's why we decided to analyze such indicator as the level of ICT adoption (Figure 6).

The highest level of ICT adoption is

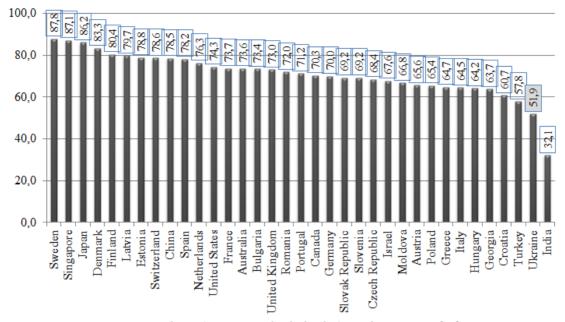


Figure 6 Ranking of 35 countries by the level of ICT adoption, 2019 [12]

Source: The Global Competitiveness Report 2019 https://www.weforum.org/reports/global-competitiveness-report-2019

demonstrated in Sweden (87.8), Singapore (87.1), Japan (86.2), Denmark (83.3) and Finland (80.4). At the same time, in Ukraine the meaning of this indicator is quite lower – 51.9 in 2019. The lowest meaning of ICT adoption was marked in India – only 32.1. So, it could be stated, that the further development of ICT is an extremely valuable and most urgent for Ukraine.

Among the most significant economic

preconditions of improving of human resources competitiveness is the level of countries' economic development in general. During the process of countries ranking by the level of GDP per capita it was underlined a very significant differentiation (Figure 7).

As we can see, in the most developed countries of the world the size of GDP per capita is very high. For example, in Switzerland – US\$ 82950.3, in

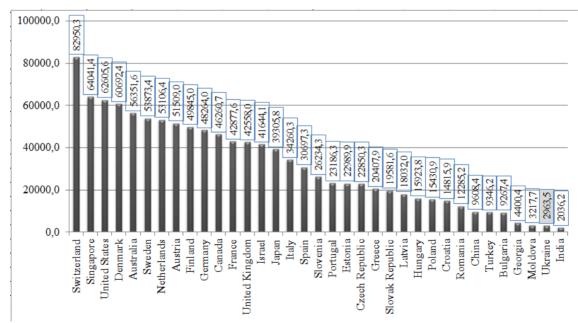


Figure 7 Ranking of 35 countries by the level of GDP per capita US\$, 2019 [12] Source: The Global Competitiveness Report 2019 https://www.weforum.org/reports/global-competitiveness-report-2019

Singapore – US\$ 64041.4, in the United States – US\$ 62605.6, in Denmark – US\$ 60692.4, in Australia – US\$ 56351.6 in 2019. The smallest values of GDP per capita demonstrate Georgia – US\$ 4400.4, Moldova – US\$ 3217.7, Ukraine – US\$ 2963.5 and India – US\$ 2036.2. So, the difference between GDP per capita in Switzerland and in Ukraine is nearly 28 times.

The low size of GDP per capita becomes the reason of migration of the qualified specialists

abroad from Ukraine and has a direct impact on the level of salaries. In particular, the level of average monthly salary in Ukraine reached only US\$ 261.2 in 2017, while in neighboring countries – US\$ 1285.6 in the Czech Republic, US\$ 1122.5 in Poland, US\$ 819.4 in Romania. In the most developed countries of the world the level of average monthly salaries is much higher: in Switzerland – US\$ 7351.7, in Denmark – US\$ 5487.1, in the United States – US\$ 5046.5 (Figure 8).

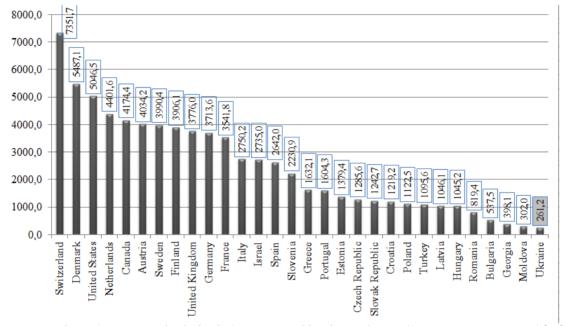


Figure 8 Ranking of 30 countries by the level of average monthly salary US\$, 2017 (for some countries – 2016) [11]

Source: Statistical Yearbook of Ukraine 2018 http://www.ukrstat.gov.ua/

Thereby, the conducted comparative analysis is allowed to determine the ways of enhancement of socio-economic preconditions, competitiveness of Ukraine in the international dimension.

Firstly, it is the necessity to create the relevant conditions for decent pay for the employed population, especially highly skilled employees. This includes ensuring the relationship between the level of wages and productivity, raising the level of wages of intellectual employees (scientists, inventors, researchers), which is especially relevant in the forming of the innovative model of the economy. It is also advisable to create new high-performance jobs available and increase the level of technical equipment of existing ones.

Secondly, this is the necessity to ensure the continuous professional development of human resources as a key factor of ensuring their competitiveness in the face of constant changes in the external and internal environment. Nowadays, a growing necessity in developing not only hard skills of specialists, but also their soft skills exists. Accordingly to the Davos Forum (2020), 10 Top soft skills for the future include: solving of complex problems, critical thinking, creativity, people

management, coordination with others, emotional intelligence, analysis and decision-making, service orientation, negotiation, cognitive flexibility [1]. For human resources in Ukraine the skills of using information and communication technologies are also important.

Thirdly, in the social sphere the development of social capital and the effective cooperation in the field of social and labour relations are very important. So, the development of the network economy actualizes the resources that people receive through their social connections, forming of the institution of trust. At the labour market there is a need for further development of social dialogue. Also, the existing social infrastructure needs a significant development and renewal.

Fourthly, in context of improving of human resources competitiveness it is necessary to improve the quality of educational services in the field of vocational education, to provide an application of innovative forms and methods of training in order to ensure readiness of future professionals for innovative activities, to improve the practical orientation of educational services, to promote the implementation of

scientific researches.

4 Conclusions

Summarizing the above, we can underline that in modern conditions the level of human resources competitiveness is a key factor of achieving competitive advantages of enterprises, territories, countries as a whole. A significant amount of different internal and external factors makes influence on the opportunities for improvement of human resources competitiveness. The conducted analysis is showed that in the international dimension Ukraine has the meanings at the middle level of such indicators as the skills of human resources, state of the labour market, pay and productivity, the cooperation in labour-employer relations. At the same time, among the selected group of countries Ukraine has a fairly low positions by indicators of social capital development, level of ICT adoption, GDP per capita and the worst situation with the level of average monthly salary.

There were suggested four main directions of

socio-economic preconditions enhancement in accordance to the necessity of solving the problem of human resources competitiveness. These directions include: creating the relevant conditions for decent pay to the human resources, ensuring the continuous professional development of human resources, developing of social capital and the effective cooperation of all actors at the labour market, improving the quality of vocational educational services.

As a result, in the future the level of human resources competitiveness will grow up with helping of such qualities as: possess interdisciplinary knowledge, good skills in using of information and communication modern technologies, an ability to work quickly with large amounts of information in the conditions of information loading increasing, provide their own continuous professional development, are able to use of various remote communication platforms, have high level of creative thinking, communication emotional intelligence, flexibility, adaptability and self-organization.

References

- [1] 10 Top Soft Skills for 2020: What They Are and How to Train Them 2020 **E-source:** https://www.gamelearn.com/top-soft-skills-2020-how-to-train-them/
- [2] Harjo E B 2015 Gaining Competitiveness in the Global Business World through the Implementation of International Human Resource Management
- [3] Heraschenko I M 2015 Otsiniuvannia rivnia konkurentospromozhnosti liuds'kykh resursiv na rynku pratsi na osnovi kompetentnisnoho pidkhodu [Assessing the level of competitiveness of human resources in the labour market based on the competency approach] Naukovyj visnyk Uzhhorods'koho natsional'noho universytetu. Seriia: Mizhnarodni ekonomichni vidnosyny ta svitove hospodarstvo **3** 71-6 (in Ukrainian)
- [4] Lehan I M 2019 Konkurentospromozhnist' personalu pidpryiemstva: teoretyko-metodolohichnyj aspekt [Competitiveness of enterprise personnel: theoretical and methodological aspect] *Vcheni zapysky Tavrijs'koho natsional'noho universytetu imeni V I Vernads'koho. Seriia: Ekonomika i upravlinnia* **30**(69) **2** 127-32 (*in Ukrainian*)
- [5] Levchenko O, Tkachuk O, Tsarenko I 2019 Strategic priorities of innovative development of Ukraine in the context of the global world tendencies Development of the innovative environmental and economic system in Ukraine: collective monograph / ed. V. Khudolei, T. Ponomarenko. Prague 8-21
- [6] Lorvi I F, Kovtun A A 2017 Skladovi konkurentospromozhnosti personalu pidpryiemstva [Components of competitiveness of enterprise personnel] *Ekonomichnyj forum* **2** 197-201 (*in Ukrainian*)
- [7] Neykova R M, Prokopenko O V, Shcherbachenko V O 2015 Competitive dimensions of human resources *Economic Processes Management: International Scientific E-Journal* **1 E-source:** http://epm.fem.sumdu.edu.ua/download/2015_1/2015_1_1.pdf
- [8] Pliashko O S 2014 Mizhnarodni pidkhody do otsiniuvannia konkurentospromozhnosti liuds'kykh resursiv: perevahy ta nedoliky [International approaches to assessing the competitiveness of human resources: advantages and disadvantages] Sotsial'no-trudovi vidnosyny: teoriia ta praktyka **2** 462-9 (in Ukrainian)
- [9] Šikýř M 2013 Best Practices in Human Resource Management: The Source of Excellent Performance and Sustained Competitiveness Central European Business Review, University of Economics, Prague 2013(1) 43-8
- [10] Sokolov A V 2015 Metodolohichni aspekty doslidzhennia konkurentospromozhnosti trudovykh resursiv rehioniv [Methodological aspects of the study of the competitiveness of labor resources of the regions] *Investytsii: praktyka ta dosvid* **23** 64-8 (*in Ukrainian*)
- [11] Statistical Yearbook of Ukraine 2018 **E-source:** http://www.ukrstat.gov.ua/
- [12] The Global Competitiveness Report 2019 **E-source:** https://www.weforum.org/reports/global-competitiveness-report-2019