THE INFLUENCE OF GLOBAL INTELLECTUALIZATION ON HUMAN DEVELOPMENT

In the context of the global intellectualization, human capital is the determining factor in the innovation development and the international competitiveness of countries. In the XXI century, the leading component of human capital are qualitatively new information, communication and network technologies. Particular importance are education and training, professionalism, high level of human resources management, building up, reproduction and human capital development. These factors are the prerequisite for the growth of the competitive advantages of the country in the conditions of globalization.

Keywords: human development; human capital; global intellectualization; human development index; global human capital index; Global Innovation Index; Global Competitiveness Index; grouping countries.

Introduction. In the beginning of the XXI century, the processes of globalization are intensifying. They cover all spheres of public life. Knowledge and information the main bearer of which is a person plays the primary role in innovation process. High increase in information technologies development contributes to the greater demands regarding human resources and determines their main significance. Therefore, the main indicator of the developed society and the main factor of sustainable development is the increase of competitiveness on the basis of efficient use of human capital. Recently, much attention has been payed to the issue of human development, as it is one of the key factors in the process of the sustainable development of any country. Accordingly, the growth of human capital becomes not only a system-forming factor of economic entities competitiveness, but also a strategic resource of the country’s economic development.

Literature review. The works of well-known foreign and domestic researchers are devoted to the questions of global intellectualization: L. Antonyuk, J. Becker, E. Broking, V. Heyets, L. Edvinson, V. Inozemtsev, E. Libanova, D. Lukyanenko, T. Sakaya, T. Stewart, A. Toffler, A. Filippenko, T. Schultz and others. The theoretical and practical aspects of human capital and its development were considered by the following domestic researches: O. Bilorus, O. Grishnova, T. Romashchenko, A. Samoilenko, S. Sardak, S. Sidenko, R. Stakanov and others. However, despite the significant achievements of predecessors, the definition of the factors influencing human development, requires further research.

The purpose of the study is to determine the impact of global intellectualization on human development. To achieve this goal the following tasks were set and solved: research of the indicators of intellectualization and human development; characteristic of human capital; grouping countries; definition of interconnections between intellectualization and human development.
**Results and discussion.** Accelerated development of scientific and technological progress as well as the rapid aging of professional knowledge and skills largely determine the role of the intellectualization process. Such conditions have led to an increase in the share of mental work in all spheres of human activity. An important trend in the development of the global economy at the present stage of globalization is the process of global intellectualization and the formation on this basis of a knowledge-based society in which the economic well-being of that society is determined by high technologies, innovative capabilities and the level of society intellectual development.

In conditions of the information economy dynamic development, human capital takes the first place among the indicators of human development. In the XXI century, the processes of substitution of physical and natural capital by human capital are gradually taking place in the national wealth. That is why the concept of human capital takes one of the first places in the theory of economic development.

The concept of "human capital" was first mentioned in the 1960's. The evolution of the views of different trend followers and school representatives on "human capital" category indicates the diversity of scientific approaches to human development issues and its recognition as a catalyst of both the country and the world economy development.

Most human capital researchers pay attention to the economic result of investment in human development. According to T. Schultz [20], one of the founders of the "human capital" modern theory, investment in human capital, the growth of the human labor value become a significant factors in the restructuring of the economy. In his studies, he argued that human capital, as well as other types of capital, requires investments that would contribute to the growth of labor productivity.

Human Capital under conditions of global intellectualization is one of the key factors of the country economic growth. The main criterion for measuring human capital is investing in a person, all kinds of investments, which contribute to the growth of labor productivity and its intellectual level, the improvement of the human capital quality [21, p. 15].

As it is defined by the majority of Western economists, human capital consists of the acquired knowledge, skills, motivations and energy that human beings possess and which can be used over a period of time for the production of goods and services [22, p. 25].

Human capital – is an amount of natural abilities, talent, level of education, qualifications, professional experience, health status embodied in an individual and their ability to generate income [23, p. 187].

It should be noted that there is no consensus among scholars in their definition of the "human capital" term. Analyzing the scientific approaches of foreign and domestic researches, we can define human capital as the capital of knowledge, skills, professional skills and experience which are gained as a result of investment in education, self-education, capital investment in healthcare and science.

In our opinion, the key areas of human capital development in the context of global intellectualization include:

1) Formation of innovative activity human capital. The role of innovative work is increasing due to influence of the knowledge economy development built on the use of innovations. As a result, the demand for competitive human capital capable of creative thinking and the generation of new knowledge and ideas is increasing.

2) The growth of the education role and science as the main factor of development, which in turn leads to the strengthening of the states competitive positions. In today's conditions, the global infrastructure of science and lifelong education of a person is being formed.

3) Increasing of the information technology influence on the human capital formation and development. Modern globalization processes put forward new requirements:

   - formation of new information competence and information culture, based on knowledge and information;
   - preparing society for life in a new information and communication environment.

4) The tendency of education towards common standards, parameters, requirements and norms. Thus, in a globalized world, uniform approaches to the quality of education are formed.
5) In the context of global challenges and threats, the model of a new employment model in the labor market is formed. It is characterized by the transformation and the creation of a virtual labor market (creation of new and job and working places require intellectual labor, increase in informal employment, flexible forms of part-time employment). In the global labor market, a new segment has been formed, namely the international labor market, characterized by a large-scale shift of human capital from country to country [24, p. 141].

6) Global transformations intensify migration processes, which in turn result in an increase in the outflow of intellectual capital and, therefore the international movement of human resources.

In the modern world there is a large number of indicators that characterize the differences in the impact of global intellectualization on human capital. For example, indirectly determine the impact of intellectualization on the human capital development of countries is possible using such indicators as the index of human potential and the index of human development, the index of globalization, the global innovation index, the global competitiveness index, the knowledge economy index, the knowledge index, the world economic prosperity index, the reliability index of foreign direct investment (FDI), the global services index, the international security index, the press freedom index, the international index of Internet development, as well as ratings countries according to the level of e-government development, the knowledge based economies, export of high-tech products, the population literacy state, the spending on education, the number of Internet users, the patent applications, the research and development expenditure, the number of researchers in the country, etc [25].

But using the above data when comparing the impact of global intellectualization on the human capital development, there are problems associated with different countries, duplication of indicators, disproportionality in the number of indicators, different years of publication, and so on. Therefore, for the sake of comparability of data, we select four general indicators – the Human Development Index [26], the Global Human Capital Index [27], the Global Innovation Index [28], the Global Competitiveness Index [27] We use these indices to research and determine the impact of global intellectualization on the human capital development in the world's economies.

The Human Development Index (HDI) is an integral indicator calculated annually since 1990 for interstate comparison and measurement of living standards, literacy, education and longevity as the main characteristics of the human potential in the researched areas. It is a standard tool for a general comparison of living standard in different countries and regions. When calculating the HDI, three indicators are considered: life expectancy - evaluates longevity; the population literacy level of the country (the average number of years spent on training) and the expected duration of training; the standard of living estimated through per capita Gross National Income (GNI) per purchasing power parity (PPP) in US dollars.

The Global Human Capital Index (GHCI) – estimates 130 countries as to how they are developed their human capital. It is calculated according to the methodology of the World Economic Forum (CEF). It consists of four main indicators: educational potential (education level of young people and older generation as a result of past investments), implementation (deployment) (implementation of skills and accumulation by the adult population), development (formal education of the next generation of workforce, advanced training and retraining of modern workers) and know-how (level of use of specialized skills at work). The indicator itself contains 21 indicators, eight of which are divided into different age groups, which in total gives 44 indicators.

The Global Innovation Index (GII) is compiled by the World Intellectual Property Organization, Cornell University and the international business school "Insead". In 2017 it covered 127 countries around the world and used 81 indicators for a number of topics. GII provides a large data set to analyze global trends in innovation.

The Global Competitiveness Index (GCI) is a global survey and its global ranking in terms of economic competitiveness. It is calculated according to the methodology of the World Economic Forum (CEF), and it consists of 113 variables, which characterize the competitiveness of the world countries at different levels of economic development in detail. The result of global survey among company executives and public sources make up 2/3 and 1/3 of the totality of variables respectively: the first survey was conducted to cover a wide range of factors affecting the business climate in the countries.
under study, and second one is statistical data and research results carried out on a regular basis by international organizations). All variables are grouped into 12 benchmarks that determine national competitiveness: quality of institutions, infrastructure, macroeconomic stability, health and primary education, higher education and professional training, the efficiency of the market for goods and services, labor market efficiency, financial market development, the level of technological development, the size of the domestic market, the competitiveness of companies, the innovative potential.

The interconnection of intellectualization and human development was accomplished by the dividing of countries into four groups, while taking into account that the first three groups included 30 countries according to their location in the ranking of each of the above indicators, and to the fourth group - all other remaining countries and were not included in the rating to the previous three groups due to the lack of all indicators for an adequate international comparison (Table 1).

According to the tabl. 1 authors stated that the first group for HDI included 21 countries in Europe, 5 – in Asia, 2 – in North America, Australia and New Zealand, most economies in which are developed. These countries have a high level of longevity, which is in most countries over 80 years. The average length of years spent on study is 10-13 years. The standard of living, which is estimated through the GNI per capita, is on average more than 35 thousand dollars USA.

The top-30 of the second group consists of 14 countries in Europe, 10 – in Asia, 5– in South America and 1 in the Middle East. This group differs that GNI per capita is at 25 thousand dollars USA, which provides an opportunity to provide an average length of study 9-11 years. The level of longevity of this group representatives is 75-80 years old.

The third group included 7 European countries, 8 – South America, 6 – Asia, 5 – North America, 3 – Africa and 1 Oceania. Their GNI per capita is less than 2.5 times than that of the second group and amounts to 9.6 thousand dollars USA. Average duration of representatives study of this group is approaching to the second one and is 9-10 years. The level of longevity is 73-75 years.

The last group includes the underdeveloped countries of Asia, Africa and America. This is the largest group of countries (over 40) and the range of differences between indicators is significantly different. The longevity level in these countries is 65-70 years. The average duration of study is up to 8 years, and in some countries it is even 2-3 years. GNI per capita 900-5000 dollars USA.

According to the Global Human Capital Index (GHCI), only 25 countries of the world use more than 70% of their human capital. 50 countries received estimates from 60% to 70%, 41 countries scored 50-60%. On average, the world has developed only 62% of human capital, or vice versa, the country is under-utilizing 38% of its potential.

As a result, from our assessment, we observe that in the first group of countries, the coincidence was 23 out of 30, which is almost 76%. This group includes: Australia, New Zealand, Sweden, Estonia, Norway, United States of America, Singapore, Luxembourg, Canada, Austria, Belgium, Israel, Germany, United Kingdom, Denmark, Korea, Republic of, Netherlands, Ireland, Finland, Iceland, Japan, France, Switzerland. These countries are the first to introduce and experience the results of the Fourth Industrial Revolution, the main characteristics of which are mobile Internet, miniature industrial devices, artificial intelligence and educational devices. They have a developed market economy; a dominant position in the international economy, which makes it possible to intensively involve in its economic circulation own and imported resources; the shift of the economic gravity center activity in the sphere of services and domination of predominantly service economy; the greatest exhaustion of sources and factors of industrial development; advanced post-industrial development. The economic policy of the first group of countries has a decisive influence on the state and dynamics of the world economy, defining the main directions of its scientific and technological development and structural adjustment.

For countries of the second and third groups, we can watch that their comparison was made by six and four countries, respectively. Many representatives of these two groups are partly in different groups, which confirms the same development of indicators.

The ranking in the fourth group of countries was 18 states. This group includes countries with low outsiders, namely Bangladesh, El Salvador, Burundi, Yemen, Tanzania, Malawi, Pakistan, Cambodia, Egypt, Mali, Ethiopia, Benin, Madagascar, Mozambique, Honduras, Senegal, Guinea, Nigeria.
<table>
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<tr>
<th>№</th>
<th>Human Development Index</th>
<th>Global Human Capital Index</th>
<th>Global Innovation Index</th>
<th>Global Competitiveness Index</th>
<th>Coincides</th>
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<tr>
<td>1</td>
<td>Norway, Switzerland, Australia, Ireland, Germany, Iceland, Hong Kong (China), Sweden, Singapore, Netherlands, Denmark, Canada, United States of America, United Kingdom, Finland, New Zealand, Belgium, Liechtenstein, Japan, Austria, Luxembourg, Israel, Korea, Rep., France, Slovenia, Spain, Czech Republic, Italy, Malta, Estonia</td>
<td>Norway, Finland, Switzerland, United States of America, Denmark, Germany, New Zealand, Sweden, Slovenia, Austria, Belarus, Russian Federation, Japan, Israel, Ireland, Australia, Iceland, Czech Republic, United Kingdom, Ukraine, Lithuania, France, Korea, Rep., Latvia, Kazakhstan, Luxembourg</td>
<td>Switzerland, Sweden, Netherlands, United States of America, Denmark, Germany, New Zealand, Sweden, Slovenia, Austria, Belarus, Russian Federation, Japan, Israel, Ireland, Austria, Canada, Switzerland, France, Hong Kong (China), China, Israel, Kazakhstan, Turkey</td>
<td>Switzerland, United States of America, Singapore, Netherlands, Germany, Hong Kong (China), Sweden, United Kingdom, Japan, Finland, Norway, Denmark, New Zealand, Canada, Taiwan, China, Israel, United Arab Emirates, Austria, Luxembourg, Belgium, China, Australia, Czech Republic, Estonia, Malta, Belgium, Spain, Italy, Cyprus</td>
<td>Australia, New Zealand, Sweden, Estonia, Norway, United States of America, Singapore, Luxembourg, Canada, Austria, Belgium, Germany, United Kingdom, Denmark, Korea, Rep., Netherlands, Ireland, Finland, Iceland, Japan, France, Switzerland</td>
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<td>2</td>
<td>Greece, Cyprus, Poland, United Arab Emirates, Andorra, Lithuania, Qatar, Slovakia, Brunei Darussalam, Saudi Arabia, Latvia, Portugal, Bahrain, Chile, Hungary, Croatia, Argentina, Oman, Russian Federation, Montenegro, Bulgaria, Romania, Belarus, Bahamas, Uruguay, Kuwait, Malaysia, Barbados, Kazakhstan, Iran (Islamic Rep.)</td>
<td>Poland, Bulgaria, Malaysia, China, Italy, Slovakia, Croatia, Cyprus, Hungary, Thailand, Malawi, Romania, Portugal, Spain, United Arab Emirates, Kyrgyzstan, Armenia, Greece, Armenia, Philippines, Mongolia, Armenia, Chile, Bolivia, Qatar, Panama, Tajikistan, Brunei Darussalam, Trinidad and Tobago, Serbia</td>
<td>Portugal, Slovenia, Latvia, Slovakia, United Arab Emirates, Bulgaria, Malaysia, Poland, China, Hungary, Lithuania, Ukraine, Singapore, Greece, Russian Federation, Chile, Vietnam, Montenegro, Qatar, Ukraine, Thailand, Mongolia, Costa Rica, Moldova, Saudi Arabia, Kuwait, South Africa, Mexico, Armenia, India</td>
<td>Czech Republic, Thailand, Chile, Spain, Azerbaijan, Indonesia, Malta, Russian Federation, Poland, India, Lithuania, Portugal, Italy, Bahrain, Mauritius, Brunei Darussalam, Costa Rica, Slovenia, Bulgaria, Panama, Mexico, Kuwait, Turkey, Latvia, Vietnam, Philippines, Kazakhstan, Rwanda, Slovakia, Hungary</td>
<td>Bulgaria, Portugal, Poland, Chile, Hungary, Slovakia</td>
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<td>3</td>
<td>Palau, Seychelles, Costa Rica, Turkey, Mauritius, Panama, Serbia, Albania, Trinidad and Tobago, Antigua and Barbuda, Georgia, Saint Kitts and Nevis, Cuba, Mexico, Grenada, Sri Lanka, Bosnia and Herzegovina, Venezuela, Brazil, Azerbaijan, Lebanon, Macedonia, Armenia, Thailand, Algeria, China, Ecuador, Uruguay, Peru, Colombia</td>
<td>Costa Rica, Moldova, Uruguay, Vietnam, Indonesia, Peru, Macedonia, Colombia, Mexico, Sri Lanka, Rwanda, Ghana, Cameroon, Mauritius, Turkey, Ecuador, Brazil, Kenya, Barbados, Zambia, Uganda, Saudi Arabia, Saudi Arabia, Laos PDR, Albania, Jordan, South Africa, Guyana, Myanmar, Paraguay</td>
<td>Macedonia, Serbia, Panama, Mauritius, Cambodia, Bahrain, Uruguay, Georgia, Brazil, Peru, Brunei Darussalam, Morocco, Philippines, Tunisia, Iran (Islamic Rep.), Argentina, Oman, Kazakhstan, Dominican Republic, Kenya, Lebanon, Azerbaijan, Jordan, Jamaica, Paraguay, Bosnia and Herzegovina, Indonesia, Belarus, Botswana, Sri Lanka</td>
<td>South Africa, Oman, Botswana, Cyprus, Jordan, Colombia, Georgia, Romania, Iran (Islamic Rep.), Jamaica, Morocco, Peru, Armenia, Croatia, Albania, Uruguay, Montenegro, Serbia, Tajikistan, Brazil, Ukraine, Bhutan, Trinidad and Tobago, Guatemala, Sri Lanka, Algeria, Greece, Nepal, Moldova, Namibia</td>
<td>Brazil, Colombia, Peru, Sri Lanka</td>
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<td>4</td>
<td>Mongolia, Dominican Republic, Jordan, Tunisia, Jamaica, Botswana, Gabon, Paraguay, Moldova, Philippines, South Africa, Egypt, Indonesia, Vietnam, Bolivia, Palestine, Iraq, El Salvador, Kyrgyzstan, Morocco, Nicaragua, Guyana, Guatemala, Tajikistan, Namibia, India, Honduras, Bhutan, Bangladesh, Congo, Lao PDR, Ghana, Kenya, Zambia, Cambodia, Angola, Myanmar, Nepal, Pakistan, Cameroon, Tanzania, Syrian Arab Republic, Zimbabwe, Nigeria, Rwanda, Lesotho, Mauritania, Madagascar, Uganda, Benin, Senegal, Togo, Afghanistan, Haiti, Cote d'Ivoire, Malawi, Ethiopia, Gambia, Guinea, Congo (Democratic Republic), Yemen, Mozambique, Liberia, Mali, Burkina Faso, Sierra Leone, Burundi, Chad, Niger</td>
<td>Botswana, Cambodia, Dominican Republic, Venezuela, El Salvador, Kuwait, Egypt, Nepal, Namibia, Guatemala, Honduras, Burundi, India, Iran (Islamic Rep.), Benin, Tanzania, Gabon, Nicaragua, Malawi, Madagascar, Bangladesh, Algeria, Cote d'Ivoire, Nigeria, Tunisia, Mozambique, Sierra Leone, Morocco, Gambia, Liberia, Guinea, Chad, Swaziland, Lesotho, Pakistan, Mali, Ethiopia, Senegal, Mauritania, Yemen</td>
<td>Trinidad and Tobago, Ecuador, Brazil, Belize, Mozambique, Algeria, Nepal, Ethiopia, Madagascar, Cote d'Ivoire, Pakistan, Bangladesh, Malawi, Benin, Cameroon, Mali, Nigeria, Burkina Faso, Zimbabwe, Burundi, Niger, Zambia, Pakistan, Malawi, Ethiopia, Senegal, Mauritania, Yemen, Korea, Rep., Singapore, Belgium, France, Luxembourg, Switzerland, United Kingdom, Japan, France, Hong Kong (China), China, Israel, United Arab Emirates, Austria, Luxembourg, Belgium, China, Australia, Czech Republic, Estonia, Malta, Belgium, Spain, Italy, Cyprus,</td>
<td>Kenya, Argentina, Nicaragua, Cambodia, Tunisia, Honduras, Ecuador, Lao PDR, Bangladesh, Egypt, Mongolia, Kyrgyzstan, Bosnia and Herzegovina, Dominican Republic, Lebanon, Senegal, Seychelles, Ethiopia, El Salvador, Cape Verde, Ghana, Paraguay, Tanzania, Uganda, Pakistan, Cameroon, Gambia, Zambia, Guinea, Benin, Madagascar, Swaziland, Mali, Zimbabwe, Nigeria, Congo (Democratic Republic), Venezuela, Haiti, Burundi, Sierra Leone, Lesotho, Malawi, Mauritania, Liberia, Chad, Mozambique, Yemen</td>
<td>Bangladesh, El Salvador, Burundi, Yemen, Tanzania, Malawi, Pakistan, Cambodia, Egypt, Mali, Ethiopia, Benin, Madagascar, Mozambique, Honduras, Senegal, Guinea, Nigeria</td>
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Thus, the main driver of human development is the global intellectualization, through which there is an increase in the importance of professional and general knowledge, the level of intelligence, intellectual activity. In their turn, they are provided with the continuous development of scientific and technological progress, which leads to the emergence of new technologies, the use of which has a social and economic effect and accelerates social and economic development of the country.

Conclusions. In the context of global intellectualization, human capital is the determining factor in the innovation development and the international competitiveness of countries. In the XXI century the leading component of human capital are qualitatively new information, communication and network technologies. The particular importance are education and training, professionalism, high level of human resources management, building up, reproduction and development of human capital. These factors are the prerequisite for the growth of the competitive advantages of the country in the conditions of globalization.

International organizations can use these results when developing international economic development programs; state authorities of countries in the formation of foreign and domestic policies; companies for the formation of innovation and investment policy.

References
ВПЛИВ ГЛОБАЛЬНОЇ ІНТЕЛЕКТУАЛІЗАЦІЇ НА ЛЮДСЬКИЙ РОЗВИТОК

Проблема. У контексті глобальної інтелектуалізації людський капітал є стратегічним фактором розвитку країни. Це стимулює зростання продуктивності праці, підвищує якість продукції та формує конкурентні переваги на ринку. Відповідно, світовими лідери є країни, які навчилися краще за інших використовувати знання, навички, компетентність людей, їх здатність до подальшої освіти – все, що охоплює категорію людського капіталу.

Метою дослідження є вивчення впливу глобальної інтелектуалізації на людський розвиток.

Результати. У сучасному світі існує велика кількість показників, що характеризують вплив інтелектуалізації на людський капітал. Порівнюючи вплив інтелектуалізації на людський капітал у глобальному масштабі, виникають проблеми з різною кількістю країн, дублюванням показників, непропорційним числом компонентів показників, різними роками публікації тощо. Тому для забезпечення порівнянності вибрано чотири загальні показники – індекс людського розвитку, індекс глобального людського капіталу, індекс глобальних інновацій та індекс глобальної конкурентоспроможності. Використовуючи ці показники, ми проводимо дослідження та взаємозв’язок між інтелектуалізацією та людським розвитком.

Наукова новизна. Згідно з даними за 2017 рік ми поділили країни світової економіки на чотири групи, беручи до уваги, що до перших трьох груп віднесено 33 країни за місцем їх розташування в рейтингу за комплексом показників, а до четвертої – всі інші країни, що залишилися і яких не внесли до рейтингу в межах попередніх трьох груп через відсутність показників для адекватного міжнародного порівняння. В результаті було встановлено, що в першій групі виявилося 23 країни, у другій і третій – відповідно шість і чотири, в четверті – 18.

Висновки. У контексті глобальної інтелектуалізації людський капітал є визначальним фактором інноваційного розвитку та міжнародної конкурентоспроможності країн. У XXI ст. провідним компонентом людського капіталу є якісно нові інформаційні, комунікаційні та мережеві технології. Особливо значення мають освіта та навчання, професіоналізм, високий рівень управління людськими ресурсами, розбудова, відтворення та розвиток людського капіталу. Ці фактори є передумовою для зростання конкурентних переваг країни в умовах глобалізації.

Ключові слова: людський розвиток; людський капітал; глобальна інтелектуалізація; індекс людського розвитку; індекс глобального людського капіталу; глобальний інноваційний індекс; індекс глобальної конкурентоспроможності; групи країн.