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## INTELLECTUAL POTENTIAL AS THE FACTOR OF COMPETITIVENESS OF THE STATE IN CONDITIONS OF GLOBALIZATION

### ІНТЕЛЕКТУАЛЬНИЙ ПОТЕНЦІАЛ ЯК ФАКТОР КОНКУРЕНТОСПРОМОЖНОСТІ КРАЇНИ В УМОВАХ ГЛОБАЛІЗАЦІЇ

#### ANNOTATION

The article dedicated to the formation and development of intellectual potential of the country as one of the important factors of development. It is shown that the priorities of the national economic management in a globalizing economy objectively shift toward greater attention to the processes of intellectualization of employment. The article deals with the relationship with the level of competitiveness of the country's intellectual potential on the example of the EU. The problems of intellectual potential formation in modern conditions in Ukraine are analyzed. The necessity of intellectual potential motivating of the population is substantiated as important component of intellectual potential of the national economy.

**Keywords:** intellectual potential, globalization, motivation, competitiveness, economic growth, economics of knowledge, information society.

#### АНОТАЦІЯ

Статтю присвячено питанням формування та розвитку інтелектуального потенціалу як одного з важливих факторів розвитку країни. Показано, що пріоритети управління національною економікою в умовах глобалізації об'єктивно зміщуються в бік підвищеної уваги до процесів інтелектуалізації зайнятості населення. Розглянуто взаємозв'язок конкурентоспроможності з рівнем інтелектуального потенціалу країни на прикладі країн ЄС. Проаналізовано проблеми формування інтелектуального потенціалу України в сучасних умовах. Обґрунтовано необхідність мотивації інтелектуального потенціалу населення як важливого складника інтелектуального потенціалу національної економіки.

**Ключові слова:** інтелектуальний потенціал, глобалізація, мотивація, конкурентоспроможність, економіка знань, інформатизація суспільства.

#### АННОТАЦИЯ

Статья посвящена вопросам формирования и развития интеллектуального потенциала страны как одного из важных факторов развития страны. Показано, что приоритеты управления национальной экономикой в условиях глобализации экономики объективно смещаются в сторону повышенного внимания к процессам интеллектуализации занятости населения. Рассмотрена взаимосвязь конкурентоспособности с уровнем интеллектуального потенциала страны на примере стран ЕС. Проанализированы проблемы формирования интеллектуального потенциала Украины в современных условиях. Обоснована необходимость мотивации интеллектуального потенциала населения как важной составляющей интеллектуального потенциала национальной экономики.

**Ключевые слова:** интеллектуальный потенциал, глобализация, мотивация, конкурентоспособность, экономика знаний, информатизация общества.

**Problem statement.** Globalization is called the main trend of the world economy at the turn of XX-XXI centuries. Its processes are manifested, on the one hand, in the deepening of relationship between states in the global economic stage, on the other hand, in the strengthening contradictions between the developed industrialized countries and

developing countries, in tightening of competition on the world markets. As we know, the world markets are controlled by Transnational and Multinational corporations succeeding in innovation sectors of the economy. Whereas previously competition was reduced to a great extent to the fight for the possession of the unique natural resources, today more and more competition – it is a struggle for the possession of stable core competencies that provide a monopoly position in the market. Thus, the problem of creation and development of intellectual resources is becoming increasingly relevant in the context of globalization.

In today's global economy the role of the economic value of information resources was increased. Currently, these resources are the source of reproduction and accumulation of intellectual capital of any nation aspiring to be among the leaders of competition in various sectors of the economy. The desire to possess the modern constantly updated information resources is the inexorable law of competitive nation existence. These resources are important factors in creation of the competitive human capital – innovative person. The analysis of modern concepts of economic development shows the unity of opinion that the quality of the intellectual resources and the extent of their involvement in social production have a direct impact on economic growth and the level of national wealth in selected countries.

#### Analysis of recent research and publications.

In the formation of scientific ideas about the intellectual potential of significant contribution made by following scientists: J. Grayson, P. Drucker, M. Porter, J. Schumpeter, B. Twiss, X. Hekhauzen, T. Schultz, Mr. Becker, L. Edvinson, M. Malone, W. Hansen, V. Inozemtsev. A lot of aspects of the formation and development of intellectual component in economy are studied by national researchers: A. Amosha, S. Bandur, N. Gavkalova, V. Grinyova, A. Komarova, Y. Leli, L. Lisogor, V. Novikov, O. Shevtchuk, M. Setchikina.

#### Unresolved aspects of the general problem.

The competitive position of the country and its progressive development is largely dependent on the intellectual abilities of every person, to ensure uptake of new knowledge and its practical implementation in the creation of cutting-edge services,

products and technologies. In these conditions the national economic management priorities objectively displaced aside greater attention to the processes of intellectualization of employment, which open new opportunities for effective use of the intellectual potential of the employed population. Ukraine today is characterized by sharp contradictions between the needs of the modernization of the domestic production and the real state of the economy in the use of the intellectual potential of the employed population. Observed incomplete, ineffective, inefficient use of intellectual abilities and acquired knowledge workers, incentives for educational and professional development of deformation, deterioration in the quality of education, which has a negative impact on the capacity of innovative developments. This calls for the intensify the inclusion of domestic sources of economic growth, primarily due to the motivation of the intellectual potential of the working population as an important component of the intellectual potential of the national economy.

**Paper objective** is to determine the characteristics of economic content of intellectual capital in the modern economy the context of globalization, the features of its formation in Ukraine.

**Discussion.** The term "intellectual capital" as an economic category is based on the knowledge economy. But above all, historically, logically and theoretically the development of intellectual capital concept is based on the concept of human capital. In a narrow sense, intellectual capital refers to the company's assets, which are the body of knowledge of its staff, and the result of realization of this knowledge in other intangible assets: in-house structures, client capital and others. The intellectual potential of society – is a set of positive knowledge, experience, spiritual and physical development of the society, its ability to produce a marketable product, taking different forms of intellectual property. The latter include

the qualifications and education, "know-how", "intangible" values (health, royalty, prestige, priority, etc.), as well as innovations, realized in engineering, technology, different approaches to the organization of production and labor. The category of "intellectual capital" in the broad sense is a form of manifestation of human productive and creative forces in the information and network economy, which corresponds to the informational stage of development of human society. Its elements are characterized by monetary and non-monetary evaluation, have the ability to accumulate, to enter into the market and the social revolution, to generate income, to ensure economic growth in society [1].

The leading countries of the world development of intelligence personality and intellectual capacity of society as a whole, the quality of education and science are priority directions of economic policy. UNESCO reports that 20 countries where 95% of scientists per capita income increases annually at 200 \$; in others, where scientist only 5% it increase occurs only at 10 \$ per year [2]. In today's Ukraine, scientists and politicians continually note the need of active formation of the country's intellectual capacity [3]. The integration of the Ukrainian economy into international structures requires cardinal changes in the motivation of intellectual and labor potential of the enterprise personnel. After all intellectual work opens prospects for the introduction of new technologies, increasing the volume of gross national product, improving the well-being and spiritual comfort of citizens.

The nature of research and development is such that there are clusters of activity and specific geographical areas where R&D activity appears to be concentrated. These regions are often developed around academic institutions or specific high-technology industrial activities and knowledge-based services, which foster a favora-

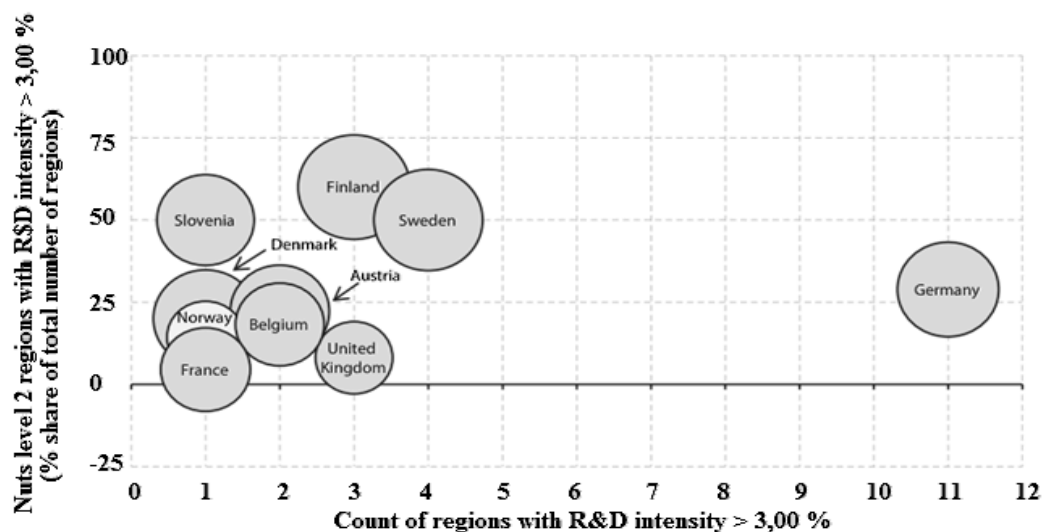


Fig. 1. Regions R&D intensity greater than or equal to 3,00 %, by NUTS level 2 region [2]

ble environment, thereby attracting new start-up and highly qualified personnel such that the competitive advantage of these regions is further intensified [4].

The Fig. 1 presents the regional distribution of R&D expenditure relative to GDP for NUTS level 2 regions.

It shows the most concentrated areas of research activity were often clustered together: there was a band of research intensive regions running from Finland through southern Sweden into Denmark; another band ran from the United Kingdom, through Belgium into southern Germany; while a final band ran from Slovenia,

Table 1

## Rating of European countries by the share of household expenditure on food

№	Country	Share of expenses for food,%	Share of expenses for leisure and culture,%
1	Luxembourg	8,8	7,2
2	United Kingdom	9,1	12,1
3	Switzerland	9,6	9,1
4	Denmark	10,7	12,5
5	Norway	11,8	12,5
6	Germany	12,1	10,8
7	Austria	12,1	12,8
8	Cyprus	12,3	5,4
9	Finland	12,6	11,2
10	Belgium	13,2	8,5
11	Portugal	13,3	5,3
12	Sweden	13,4	-
13	Slovenia	14,3	8,7
14	Spain	14,7	5,9
15	Iceland	14,7	11,2
16	Netherlands	15,8	11,2
17	France	15,9	9,9
18	Ireland	16,2	-
19	Italy	18,7	4,1
20	Slovakia	19,3	6,0
21	Turkey	19,6	3,2
22	Greece	20,1	4,7
23	Czech Republic	20,2	9,2
24	Malta	22,4	8,5
25	Hungary	22,8	7,5
26	Poland	25,1	8,1
27	Estonia	27,0	9,0
28	Latvia	28,0	6,7
29	Russia	30,3	6,7
30	Croatia	31,7	5,3
31	Montenegro	32,3	3,4
32	Bulgaria	33,4	4,1
33	Lithuania	33,7	4,9
34	Macedonia	38,3	2,3
35	Belorussia	40,8	5,7
36	Romania	41,9	3,5
37	Kazakhstan	42,5	н/д
38	Serbia	42,9	3,8
39	Moldavia	43,2	0,9
40	Ukraine	50,2	2,0

through Austria and Switzerland into southern France and northern Spain. Those EU Member States with the highest levels of R&D intensity were often characterised by pockets of concentrated research activity. Fig.1 summarises this information on the concentration of R&D activities, with national R&D intensities (shown by the size of the bubbles) highest among the Nordic Member States; Finland and Sweden also reported a relatively high share of their total number of regions had R&D intensities of 3% or more (three out of five regions in Finland and four out of eight regions in Sweden). Today, domestic companies are just starting to realize that along with traditional financial resources, there is an economic instrument such as intellectual property rights. With this tool, you can solve a number of tasks, including: increase the profit of the company, to be competitive, to personalize your company's products in order to increase its attractiveness on the market, and others.

Motivation effective employment of the intellectual potential of the enterprises, is a complex, multi-level and multi-pronged process of interaction between objective-subjective factors, related to the both characteristics of the population consciousness (or individual) and the levers of external action, regulatory processes of employment of highly skilled workers, labor behavior and intellectual performance [5, p. 6]. The weakest link in the motivation of the employed population in the development and use of intellectual potential in Ukraine are contradictions in the area of wages [6]. They include cross-sectoral, inter-regional disparities in pay, low minimum wages, income differentiation, no tangible connection of income resulting from the complexity of work, level of education, qualifications. For the majority of workers earned income is only enough for the primary needs of the reproduction of labor potential, even limited to high-quality food capabilities. The share of food expenditure Ukrainian households is about 50,2%, the highest figure among European countries (Table 1).

It is stated in the study of RIA rating. In the combined analysis rating Ukraine was on the last 40th position. Above arranged Moldova and Serbia (43,2% and 42,9% respectively). The share of expenditure on recreation and culture for Ukrainian is only 2% [7].

Thus, the needs of a higher order relating to the intellectual development and creative self-realization, in these circumstances are often not available. This significantly reduces the conscious interest in the development of creative abilities, intellectual enrichment of the population. Poverty of workers children inherit through the family, receiving limited opportunities for creative abilities development and knowledge. The worst for the intellectual potential is the destruction of motivation to effective work, self-development, the expression of creativity, destroys the belief that honest labor and capacity knowledge can

ensure their own well-being. The last forces to think about seeking a better life abroad.

According to official data from 1996 to 2011 from the Ukraine for permanent residence abroad 1622 left scientists. Most of all Ukrainian scientists traveled to the United States, Germany and Russia. The number of scientists and researchers in the Ukraine from 1991 to 2013 decreased three-fold. In total, the state scientific organizations, business and education sectors of science work 135 000 people (0,7% of the employed population), is allocated to science, only about 0,29% of GDP.

Taking into account only candidates and doctors, according to official data of the State Statistics Committee of Ukraine, 778 people with a scientific degree emigrated from Ukraine in 1991–2015. Only in the last six years from the Ukraine have left 47 doctors and 252 PhDs [8].

Thus, the highest level of the minimum wage (EUR) was recorded in countries of the European Union in 2015: Luxembourg – 1923, Netherlands – 1502, Belgium – 1502, Germany – 1473, France – 1458, Ireland – 1462, UK – 1379, Slovenia – 791, Spain – 757, Malta – 720, Greece – 684, Portugal – 589 (Fig. 2).

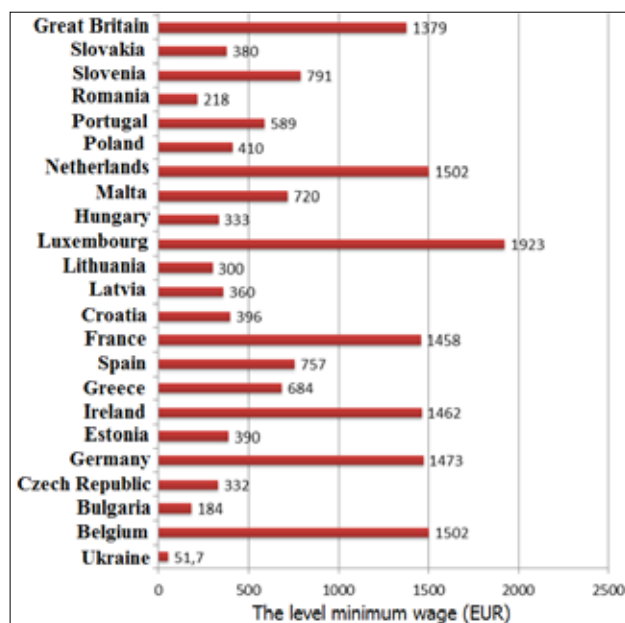


Fig. 2 The level of the minimum wage in Ukraine and Europe in 2015 (EUR) [2]

Comparing the ability to provide labor income in Ukraine and in countries with more advanced economies, it is easy to conclude that for the same work, the relevant knowledge and skills, somebody gets a bigger salary and therefore has the best conditions for self-education and professional development.

Between the level of quality of life and innovation activity definitely there is a correlation. It is presented in the form factor model based aggregates that characterize the development of these areas in a particular country – the index of quality of life and the global innovation index (Fig. 3).

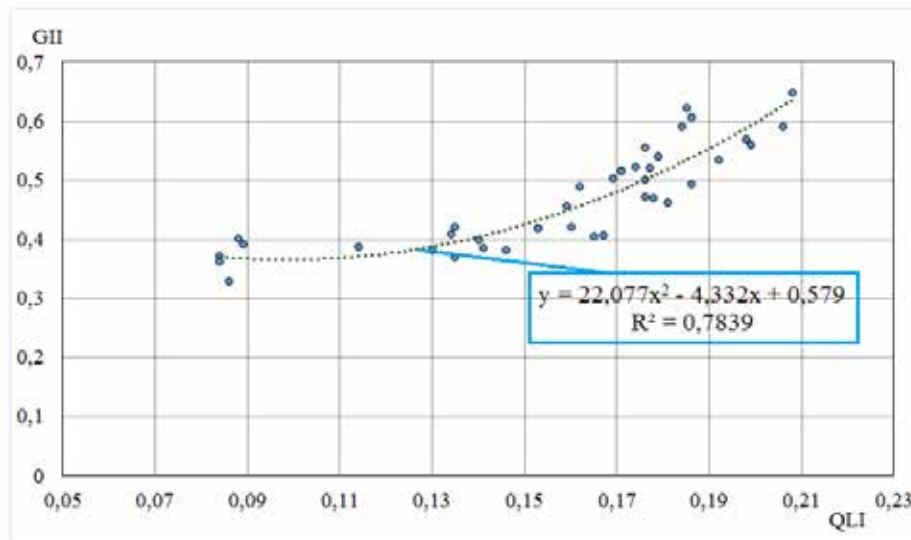


Fig. 3. The dependence of the innovation activities and the quality of life in EU countries in 2016 [9-11]

Thus, the innovative activity of the state, as an important component of its competitiveness must take into account the interests of all participants [12]. All participants in the innovation process should be interested in a combination of interest and efforts in creating and applying new business knowledge and technologies to enter the domestic and foreign markets of high-tech products. In the implementation of this interaction and thus creating economy based on knowledge, the role of government is a priority.

#### Conclusions.

1. Intellectual capital, scientific knowledge, innovativeness, creative abilities, qualifications and specialized skills unique employees are a major factor of innovation for economic growth.

2. The main creative element of the national innovation system is the intellectual capital (new knowledge, advanced scientific and technical and commercial information), whose support is highly skilled, and the main governing and managing partner of the subject and at the same time professional and labor groups is the state.

3. Features of formation of intellectual capital in Ukraine consist in ineffective motivational mechanism of the state. This reduces the impact of intellectual property and employees is a factor reducing the competitiveness of domestic workers, innovation and economic development of the country as a whole.

Qualitative and quantitative levels of the country's innovation potential linked to economic factors, such as material labor motivation. Therefore, providing innovative performance competitiveness of the economy of any country requires a comprehensive approach and taking into account a number of economic factors, the base at the same time are economic, directly and indirectly affect the other parameters of society.

Ukraine is obliged to invest financial and material resources in the development of scientific intelligence, creating incentives for the implementation of creative ideas, otherwise the economy will not rise.

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