

INTELLECTUAL CAPITAL AS A FACTOR OF CO-OPERATION BETWEEN THE COUNTRIES OF THE EASTERN PARTNERSHIP AND THE EUROPEAN UNION

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Abstract: This paper concerns the use and analysis of key intellectual capital indicators in the Eastern Partnership countries and Poland. Its purpose is to identify areas of necessary development and opportunities for cooperation between the Eastern Partnership countries, Poland, and in the near future, with the entire European Union. This work uses the analysis and review of recent academic literature, comparing the main intellectual capital indicators in the countries mentioned above. Effective implementation of joint programs with the European Union in the fields of science and education, environmental protection, as well as in the field of tourism and hospitality can be based on the joint use of intellectual capital in Poland and all other Eastern Partnership countries. Relying on intellectual capital allows for the creation of a "good economic neighborhood" zone in the Eastern part of the European Union, in order to strengthen stability and harness the mutual benefits of cooperation and social and economic progress.

Key words: intellectual capital, cooperation, social and economic development, indicators

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Introduction

The importance and use of intellectual capital in our modern economy and social life is not subject to debate. The growing role of this capital is important on the macro and micro levels of cooperation between individual countries and international organizations. Many studies have been devoted to intellectual capital, documented in numerous publications, especially on the economy.

This paper concerns the use and analysis of key intellectual capital indicators in the Eastern Partnership countries and Poland. Its purpose is to identify areas of necessary development and opportunities for cooperation between the Eastern Partnership countries, Poland, and in the near future, with the entire European Union. This work uses the analysis and review of the academic literature and compares the main intellectual capital indicators in the countries mentioned above. The methodology of comparative analysis of the state and dynamics of intellectual capital of separate countries makes it possible to create statistical columns containing aggregated indicators, applying methods of analysis and synthesis,

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deduction and induction, extrapolation and analogy, comparison and modeling. This allows one to draw relevant conclusions.

The Importance of Intellectual Capital

Interest in intellectual capital began to grow in the middle of the last century, when many theoreticians and practitioners paid particular attention to the use of this capital by organizations to achieve their goals. Research and analysis have focused mainly on the content and characteristics of the functioning of intellectual capital at the micro level. The need to use intellectual capital to assess the intangible resources that are important for the quality of learning processes is justified by M. Bornemann and R. Wiedenhofer (2014), D. Altuner et al. (2015) and E. Shakina and A. Barajas (2014). M. Pedrini (2007) showed the tangent points between intellectual capital and corporate responsibility, reflected in relevant corporate reports. Particular attention is given to human capital, which is presented as one of the three dimensions of intellectual capital. It proves in a justified way that proper management of corporate responsibility practices provides additional opportunities for the development of intellectual capital as a source of value creation. F. Calza et al. (2014) emphasize the role of intellectual capital in the development of incubators, and the presented analytical model helps to better understand and properly assess the importance of intellectual capital at the level of the national economy. In their research, K. Asiaei and R. Jusoh (2015) acknowledged the essence of the role of organizational culture in the development of intellectual capital. In their opinion, trust is the main factor determining such components of intellectual capital as human capital, structural and relational capital. At the same time, organizational culture and trust in the enterprise are the growth carriers for intellectual capital.

Research shows that organizational culture plays a leading role in the development of human intellectual capital. The enterprise benefits from the use of this capital depending on its ability to translate employees' knowledge into sustainable activities. This requires a proper organizational culture, within which the involvement of company employees is determined, motivating them to train and share knowledge, and support their participation in decision-making. Organizational culture is decisive in the development of structural capital, because if perceived as a business philosophy, it allows employees to develop their ideas, follow trends and stimulate innovation that increases structural capital at the micro level.

The development of intellectual capital requires the creation of flexible and adequate knowledge and corporate memory. This is possible primarily due to the creation of a strong organizational culture that stimulates highly developed intellectual capital through innovation, knowledge sharing and encouraging learning through various communication channels.

C.G. Camfield et al. (2018) emphasize that intellectual capital manifests in three ways: as human capital, structural capital and client capital. The value of human

capital is composed of the skills and competences of employees, which are necessary to solve problems and make decisions. The value of structural capital creates the implementation of innovation in the development of products and services, aiming at better interaction with contractors and obtaining a larger market share. The value of client capital is to provide high quality relationships with customers and suppliers. The authors note that intellectual capital correlates significantly with the efficiency of the company's operations and is an important factor in maintaining the competitive advantage necessary for functioning in the contemporary market.

It is obvious that intellectual capital is a key factor in economic growth and development not only at the micro level but also at the macro level of the national economy and at the regional level. The good example of such interdependence was presented in a comparative analysis of human capital in post-Soviet countries and China carried out by D. Didenko et al. (2013).

The role of knowledge, which is reflected in intellectual capital and inspires economic growth, was particularly emphasized in the research of the 2018 Nobel Prize winner, P.M. Romer (2015). He emphasized that knowledge transforms itself into ideas that are embodied in productive innovation, which include the latest technologies, know-how, utility models, etc. This means that technological capacity is raised thanks to the emergence of new ideas. In P.M. Romer's model, the rate of innovation is directly dependent on the size of the human population. Society creates the potential of human intellectual capital that ensures growth and economic growth at the macro level. Therefore, D. Acemoglu (2018) rightly notes that the model of knowledge accumulation (learning in the process of operation) allows the endogeneity of technological progress.

The intellectual capital of the country is the hidden values of citizens, enterprises, institutions, communities and regions constituting current and potential sources of generating social well-being (Bontis, 2004) and is not a uniform category. Various measures can be used to measure it (Malhotra, 2000; Stahle and Stahle, 2006; Stone, 2001; Bontis, 2004; Bounfour, 2005; Andriessen and Stam, 2008; Shakina and Barajas, 2013, Panzabekova et al., 2019).

N. Bontis (2004) has developed an extensive set of measures for individual categories of intellectual capital of the country. The NIC (National Intellectual Capital) model proposes 4 groups of capital ratios (human, market, process and renewal) with a number of components in each group. In the group of human capital indicators there are: knowledge, education and skills used by the population to achieve national goals, teamwork and communication skills, knowledge of applicable law and the history of the country. Market capital is the relationship between the citizens of a given country, the country's connections with global markets, attractiveness from the point of view of foreign markets, international relations, the ability to share knowledge with the rest of the world and the ability to create competitive initiatives that meet the needs of an international client. Technological, information and communication systems have been distinguished

in the process capital. Renewal capital is an innovation that allows the creation of the future intellectual wealth and innovative capacity of a nation, contributing to the acquisition and preservation of its competitive advantage (Bontis, 2004).

Another model for measuring the intellectual capital of EU countries is ICM (Intellectual Capital Monitor). There are three components of intellectual capital: human, structural and relational capital. Human and structural capital is similar to that of Bontis. Relational capital, like cognitive capital, are macroeconomic intangible resources, i.e. knowledge accumulated and stored using technology and communication systems, software, databases, research laboratories and organizational structures (Andriessen and Stam, 2008). Each of the components in the ICM model is additionally considered in three categories: current assets, future investments and results obtained through the use of intangible assets.

In a different interesting intellectual capital evaluation model by Bounfour, the IC-dVAL approach, the author divides intellectual capital into human capital and structural capital, and uses measures related to resources, processes and results (Bounfour, 2005).

The above statements allow us to hypothesize about the important role of intellectual capital in the development of national economies. The comparative analysis of the parameters of intellectual capital at the state level and the dynamics at the macro level reflects the perspectives of economic growth in various countries, their global stability, competitiveness and ability to mutually cooperate profitably on the world stage. However, it should be noted that a country's intellectual capital can impact development, increase competitiveness and cooperation only when it is subject to effective management processes.

Intellectual Capital in Poland and the Eastern Partnership Countries

The development of intellectual capital in all countries is continuous, although the dynamics of this development are different. The social and economic development of countries, including those from the Eastern Partnership, should be based on the potential of their intellectual capital. The decisive condition for the dynamics of development at the macroeconomic level is intensive growth of production.

To analyze the development of intellectual capital in the Eastern Partnership countries, the comparative method is applied not only to the Eastern Partnership countries, but also to at least one EU country. Poland can successfully perform in this role. It is located not only geographically closest to these countries, but also has key similarities to some of them, and in the past was part of the Eastern socialist bloc and effectively overcame the remnants of the previous system, introducing successful market reforms and became a leader in economic development among eastern European Union countries.

It is obvious that the success of Poland's economic development is largely related to accumulated and effectively used intellectual capital, which allows not only for the most productive use of new, advanced technologies imported in the process of obtaining foreign direct investment, but also for creating its own innovative

products. The collection and use of human and artificial intelligence, operating in the economic sphere in their transformed form as national human capital and structural intellectual capital at the national level, has two functions. On the one hand, it influences the general level of socio-economic development of the country. On the other hand, this level has a decisive influence on finding its reflection in an innovative intellectual product, becoming both a new means of production and a consumer good.

The most important indicator of intellectual capital is the Human Development Index (HDI). On the basis of its dynamics and level, one can assess the success of a given country in the field of accumulation of intellectual human capital.

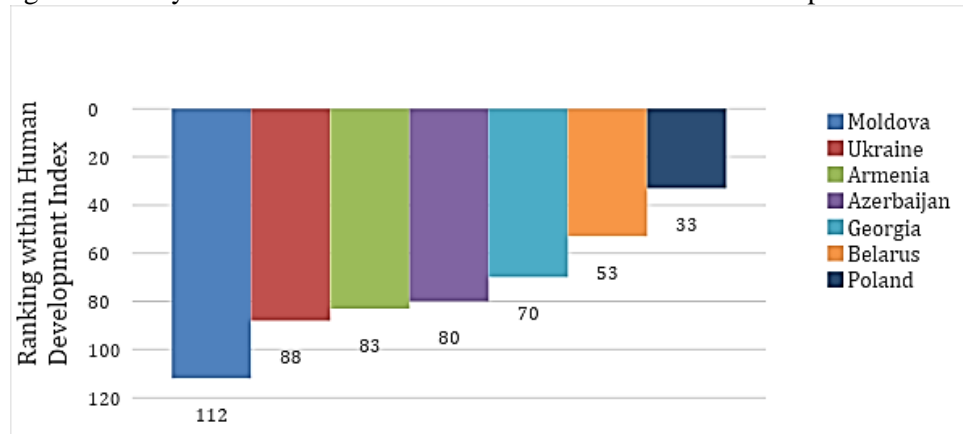


Figure 1: Ranking of the Eastern Partnership countries and Poland in the field of HDI in 2017

(Elaboration based on [Human development (1990-2018) [Electronic resource] / United Nations Development Program - UNDP, 2018, pp. 22-23; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

Figure 1 illustrates the fact that all Eastern Partnership countries have HDI significantly lower than Poland. Only Belarus, like Poland, is included in the group of countries with a very high level of social development. At the same time, Moldova is ranked the lowest among countries with a high level of social development. When comparing its position in 2012 to 2017, Moldova dropped down three places in this ranking. The country faces a real threat of transitioning to a group of countries with medium levels of social development. Georgia, which is at the forefront of countries with a high level of social development, improved its position by 7 places in the ranking over the same time period. In the near future, Georgia may join the group of countries with a very high level of social development. The worst performer in the HDI ranking is Ukraine, which, being closer to the group of countries with an average level of social development, fell 8 places and is in danger of transitioning to the group of countries with medium levels of social development. The decline of Ukraine's position in this ranking is the most significant here compared to other Eastern Partnership countries.

The development of civilization, socially and economically, and in particular the accumulation of intellectual capital, depends to a decisive extent on the length and quality of education of its people.

Table 1: Duration of Education in the Countries of the Eastern Partnership and Poland

No.	Country	Average Duration of Education (in years)	Projected Duration of Education (in years)
1	Poland	12.3	16.4
2	Belarus	12.3	15.5
3	Georgia	12.8	15.0
4	Azerbaijan	10.7	12.7
5	Armenia	11.7	11.7
6	Ukraine	11.3	15.0
7	Moldova	11.6	11.6

(Own study based on [Human development (1990-2018) [Electronic resource]/United Nations Development Program – UNDP, 2018, pp. 24-25; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14.10.2018)

The data in Table 1 indicates a significant difference between Belarus and Georgia in relation to other Eastern Partnership countries in terms of the average length of education, which is directly correlated with their HDI assessment. In order to assess the growth perspectives of other HDI values and raise their position in the ranking, the indicator of the projected duration of education is of particular importance. There are even more striking differences between this indicator in Belarus and Georgia compared to Azerbaijan, Armenia and Moldova (around 2.5 - 3.5 years).

Table 2: Unemployment in the Eastern Partnership Countries and in Poland

No.	Country	Total, %	Youth, % of People, Ages 15-24
1	Poland	5.0	14.7
2	Belarus	0.5	1.1
3	Georgia	11.6	29.3
4	Azerbaijan	5.0	13.7
5	Armenia	18.2	39.0
6	Ukraine	9.5	23.3
7	Moldova	4.5	12.8

(Own study based on [Human development (1990-2018) [Electronic resource] / United Nations Development Program - UNDP, 2018, pp. 60-61; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

As can be seen in Table 2, in countries such as Georgia, Armenia and Ukraine, the youth unemployment rate exceeds the overall unemployment rate 2-3 times, which can be considered as an indicator of inefficient use of intellectual capital. However, the most negative indicator is that youth unemployment rate ranges from almost

25% of people aged 15-24 in Ukraine to almost 40% in Armenia. This is a manifestation of the insufficient use of intellectual capital of their people, and shows the impracticability to fully utilize the intellectual capital of young people in social and economic development. It is worth noting that the level of 0.5% of total unemployment in Belarus probably results from the imperfection of statistical calculations in the country, as well as disruptions in the operation of the labor market mechanism, market self-regulation and market regulation, because in modern market economies the overall level of frictional and structural unemployment, characterizing its natural level, varies between 5-6%. There is unemployment at this level in Poland, Azerbaijan and Moldova, although there are also problems in the segment of unemployed youth.

Problems in the mobility of the population internationally are directly related to problems in the labor market.

Table 3: Mobility between Countries in the Eastern Partnership Countries and Poland

No.	Country	National Net Migration Rate (2010-2015)	International Student Mobility (% of the total number of students)
1	Poland	- 0.4	1.9
2	Belarus	1.6	- 2.1
3	Georgia	- 14.9	- 1.7
4	Azerbaijan	0.0	-18.3
5	Armenia	- 2.1	- 3.1
6	Ukraine	- 0.9	- 1.3
7	Moldova	- 0.5	- 16.1

(Own study based on [Human development (1990-2018) [Electronic resource] / United Nations Development Program - UNDP, 2018, pp. 68-69; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

Table 3 shows that almost all Eastern Partnership countries have a negative net migration rate, but the most dangerous level is in Georgia, reaching almost 15%. This ratio remains positive only in Belarus. The synthesized indicator of human intellectual capital accumulated in the country and the possibilities of its increase is international student mobility, because its positive indicators testify to the intellectual capital of local university staff and the productive use of this capital in its homeland, and its intense accumulation, which does not only apply to students, but also to academic and didactic staff. In this respect, all Eastern Partnership countries have negative indicators. The situation is particularly difficult in Azerbaijan and Moldova (18.3% and 16.1% respectively).

In Poland, international student mobility has positive values. Intellectual capital is inextricably linked to people, which is why their biological condition, state of health, and life expectancy directly determine the possibility of collecting, maintaining and using this capital. The life cycle of the individual, as a carrier

of intellectual capital, can be extended and become more productive in the event of health improvement and longer life expectancy. At the macro level, the size of intellectual capital depends on the health and life expectancy of its hosts and on the size of the population. In connection with the above mentioned statement, it is important to compare the average annual growth rate of the population.

Table 4: Average Annual Population Growth Rates in the Eastern Partnership Countries and Poland (in %)

No.	Country	2005/2010	2015/2020 (Projected)
1	Poland	0.0	-0.2
2	Belarus	- 0.3	- 0.1
3	Georgia	- 1.2	- 0.3
4	Azerbaijan	1.1	1.0
5	Armenia	- 0.7	0.1
6	Ukraine	- 0.5	- 0.5
7	Moldova	- 0.4	- 0.2

(Own study based on [Human development (1990-2018) [Electronic resource] / United Nations Development Program - UNDP, 2018, pp. 68-69; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

Table 4 shows that a negative growth rate is observed in most Eastern Partnership countries, with the exception of the positive population growth rate in Azerbaijan, although it should be noted that its rate has decreased. Apparently, positive population growth is due to actions taken by national governments. Expenditure of funds and programs implemented in this direction should be increased to ensure good prospects for the development of intellectual capital dynamics at the national level.

The increase in life expectancy plays a significant role in the prevention of the decline in the birth rate and the extension of the vital life-cycle of intellectual capital. It is reasonable to consider the average life expectancy in the top five analyzed countries according to the Human Development Index assessment. Life expectancy in these five countries is between 71.6 - 73.5 years (Human development (1990-2018), p.48). It should be remembered that the average life expectancy to a certain extent depends on the level of financing health care in the state. In the analyzed countries, the current spending on healthcare in 2015 was within the limits of 7.8-12.1% of GDP (Human development (1990-2018), p.48).

Data in Table 5 show that the average life expectancy in the Eastern Partnership countries ranges from 63 to 66 years, which indicates the similarity of health problems affecting them. There is no strong correlation between the difference in life expectancy in separate countries and the percentage of their spending on health care.

For example, expenditures in Georgia and Azerbaijan differ by 1.2 percentage points, and the average life expectancy in both countries is the same.

Table 5: Results Achieved in the Area of Health Protection in the Eastern Partnership Countries and in Poland

No.	Country	Average Life Expectancy 2016	Current Spending on Healthcare in % of GDP in 2015
1	Poland	68.5	6.3
2	Belarus	65.5	6.1
3	Georgia	64.9	7.9
4	Azerbaijan	64.9	6.7
5	Armenia	66.3	10.1
6	Ukraine	64.0	6.1
7	Moldova	63.5	10.2

(Own study based on [Human development (1990-2018) [Electronic resource] / United Nations Development Program - UNDP, 2018, pp. 48-49; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

At the same time, in Poland, where the share of expenditure on health care in GDP is lower than in the above-mentioned countries, the average life expectancy is almost 4 years longer. It is obvious that the problem of extending this indicator (life expectancy), and hence the life cycle of human intellectual capital, lies not only on the level of GDP allocated for health care, but is also determined by the quality and standard of living of the population, access to preventive care, as well as the general state of the country's economy. For example, the unemployment rate in Georgia is 11.6%, while in Poland only 5%. Being unemployed entail both stress and loss of social status, as well as deviant behavior, and thus bring many factors that cause deterioration of health.

It is important to note the differences in absolute GDP figures in different countries. Table 6 shows that the GDP per capita in Poland, according to the purchasing power parity, is \$26,150 USD, and in Georgia only \$9,186 USD, approximately three times less. The average amount of money spent on healthcare per capita in Poland is \$1,647 USD per year, and in Georgia \$725 USD.

Table 6: GDP and Expenditure on Healthcare Per Capita in the Countries of the Eastern Partnership and in Poland

No.	Country	GDP per capita in 2016 USD according to Purchasing Power Parity from 2011	The Amount of Money Spent on Health per capita (in USD, 2015)
1	Poland	\$26,150	\$1,647
2	Belarus	\$16,323	\$996
3	Georgia	\$9,186	\$726
4	Azerbaijan	\$15,160	\$1,016
5	Armenia	\$9,144	\$923
6	Ukraine	\$8,130	\$496
7	Moldova	\$5,554	\$566

(Own study based on [Human development (1990-2018) [Electronic resource] / United Nations Development program - UNDP, 2018, pp. 2, 23, 48, 49; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

The amount of health care expenditure correlates with the longest average life expectancy in Poland, and the lowest level of financing health care in Moldova results in the shortest average life expectancy in this country.

A characteristic feature of intellectual capital, acting as one of the factors of production, is the fact that using it in the production process does not cause its consumption, like other components such as energy, materials, equipment, machinery, etc. By creating added value, it not only remains unchanged, but usually increases its utility value, due to the mastering of the latest advanced technologies, exchange of information, etc. This capital develops particularly intensively during scientific and research activities, when new knowledge is disseminated in the form of new information. Therefore, one of the indicators of accumulation of intellectual capital of a human being, as well as its productive use, is costs incurred for R & D activity as a % of GDP.

Data presented in Table 7 indicates low levels of financial expenditures on research and development in all countries of the Eastern Partnership. A comparison with expenditure on national defense shows a significant advantage of the latter. In Azerbaijan and Armenia, for example, defense spending is 3.6 percentage points higher than for R&D. The smallest difference between these indicators is in Belarus and Moldova. At the same time, in developed countries such as Germany and Japan, the share of R&D expenditure is higher than defense spending by 1.7 percentage points and 2.4 percentage points, respectively.

Table 7: R & D and National Defense Spending as a % of GDP in the Eastern Partnership countries and in Poland

No.	Country	Spending on Research and Development (R&D) in years 2005-2015	Spending on Defense in years 2010-2017
1	Poland	1.0	1.9
2	Belarus	0.5	1.2
3	Georgia	0.3	2.2
4	Azerbaijan	0.2	3.8
5	Armenia	0.3	3.9
6	Ukraine	0.6	3.2
7	Moldova	0.4	0.4

(Own study based on [Human development (1990-2018) [Electronic resource] / United Nations Development Program - UNDP, 2018, pp. 101-102; Mode of access: <http://hdr.undp.org/en/2018-update> Date of access: 14/10/2018)

The low level of R&D as a percentage of GDP is a very important factor hindering the development of intellectual capital in all countries of the Eastern Partnership. A 1% expenditure on research and development in Poland cannot be considered sufficient for science to fulfill its creative function. Science in its full scope can fulfill its innovative function in the economy if expenditures in the R&D sphere are at the level of 1.5-2% of GDP.

Conclusion

Taking into account the considerations detailed above, it can be concluded that the development of intellectual capital in the Eastern Partnership countries is very uneven. Belarus occupies a leading position in this field, as evidenced by its position on the HDI in 53rd place, the highest projected duration of education, low unemployment among youth, positive net migration rates, strong health care expenditures, as well as the share of R&D as a percentage of its GDP.

Even though the Belarusian economy faces a number of problems related to poor financing of science, excessive labor market regulation, relatively low life expectancy, further depopulation and negative cross-border mobility of students, it can rightly be considered as a kind of replicator of the EU's economic policy in relation to Eastern Partnership countries. In this context, effective implementation of joint programs with the European Union in the fields of science and education, environmental protection, as well as in the field of tourism and hospitality can be based on joint use of intellectual capital not only from Poland and Belarus as neighboring countries, but also with all other Eastern Partnership countries.

Additional possibilities of implementing joint programs are opening in the context of cross-border cooperation. In creating intellectual capital resources in partner countries, it is essential to introduce the practice of the "double diplomas" program implemented by universities. Economic Partnership programs under the Eastern Partnership can contribute to the growth of innovation-oriented scientific and technological progress, provided that it is based on intellectual capital, its gradual enrichment and utilization. To extend the life cycle of human capital, additional investments and expenditures on health care are needed, especially in preventative care. In order to activate profits from the use of accumulated human capital, it is necessary to intensify, integrate and increase mutual benefits from the educational and scientific-research programs that have been implemented. It is advisable to adopt programs regulating intellectual migration, taking into account the interests of all interested parties in order to prevent the loss of intellectual capital in the Eastern Partnership countries.

It seems that it is necessary to diversify the models and forms of cooperation with the European Union and the Eastern Partnership countries due to the potential and structural features of their intellectual capital. For example, Belarus has a successful High-Tech Park, which in 2018 exported services for \$1.5 billion in the field of IT, with an added value of 90%. It is advisable to implement joint programs in the field of biotechnology, as well as organ and tissue transplantation. In Georgia, intellectual capital in the field of balneology is valuable, and in Ukraine - in the field of heavy machinery engineering.

A comprehensive approach to the use and increase of intellectual capital in the Eastern Partnership countries will allow them to achieve a synergistic effect in their development processes. This will bring positive effects not only in countries with a relatively high level of intellectual capital development, but also in those with a lower level of development. As a result, the growing general level of intellectual

capital development will increase the possibilities of advanced technology sectors in the Eastern Partnership countries, and will contribute to their gradual integration into the European space of innovation.

There are sufficiently favorable conditions for the transfer of advanced technology industries based on highly developed intellectual capital to the Eastern Partnership countries. Expansion of mutually beneficial cooperation with the European Union can be implemented based on the concept of integration. When planning the flow of investment from the European Union, Eastern Partnership countries should not only take into account the general level of intellectual capital development attained by each of the member countries and its structural features, but also the possibility of increasing this capital, with the necessary optimization of its structure, as well as the prospects of mutually "enriching" intellectual capital in the course of implementing economic programs financed by the European Union. Relying on intellectual capital allows the creation of a "good economic neighborhood" zone east of the European Union, in order to strengthen stability and harness the mutual benefits of cooperation for social and economic progress.

Of course, the realistic possibilities of cooperation and the restrictions on developing cooperation should be taken into account. These depend on, among others, the role of political factors and institutional deficiencies, such as the will and ability of managing institutions to support such cooperation. There is the possibility that restrictions to cooperation can partially be resolved through further research. Even though these topics are quite complex, they can support real activities. Research areas are mainly: flows of intellectual capital and its factors and their impact on development, as well as measurement of intellectual capital of countries and regions. The benefits of investing in intellectual capital are still valid. Research in these areas can influence the implementation of real actions focusing on cooperation and mutual benefits.

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KAPITAŁ INTELEKTUALNY JAKO CZYNNIK WSPÓŁPRACY MIĘDZY KRAJAMI PARTNERSTWA WSCHODNIEGO I UNII EUROPEJSKIEJ

Streszczenie: Niniejszy artykuł dotyczy wykorzystania i analizy kluczowych wskaźników kapitału intelektualnego w krajach Partnerstwa Wschodniego i w Polsce. Jego celem jest identyfikacja obszarów niezbędnego rozwoju i możliwości współpracy między krajami Partnerstwa Wschodniego, Polską, a w niedalekiej przyszłości, z całą Unią Europejską. W pracy wykorzystano analizę i przegląd najnowszej literatury akademickiej, porównując główne wskaźniki kapitału intelektualnego w wyżej wymienionych krajach. Skuteczne wdrażanie wspólnych programów z Unią Europejską w dziedzinie nauki i edukacji, ochrony środowiska, a także turystyki i hotelarstwa może opierać się na wspólnym wykorzystaniu kapitału intelektualnego w Polsce i we wszystkich innych krajach Partnerstwa Wschodniego. Poleganie na kapitale intelektualnym pozwala na stworzenie

strefy „dobrego sąsiedztwa gospodarczego” we wschodniej części Unii Europejskiej, w celu wzmocnienia stabilności i wykorzystania wzajemnych korzyści współpracy i postępu społecznego i gospodarczego.

Słowa kluczowe: kapitał intelektualny, współpraca, rozwój społeczny i gospodarczy, wskaźniki

智力资本是东盟国家与欧洲联盟国家之间合作的一个因素

摘要: 本文涉及东部伙伴国家和波兰关键智力资本指标的使用和分析。其目的是确定东部伙伴关系国家，波兰以及不久的将来与整个欧洲联盟之间必要的发展领域和合作机会。这项工作使用了最新学术文献的分析和回顾，比较了上述国家的主要智力资本指标。可以在波兰和所有其他东部伙伴国家共同使用知识资本的基础上，有效地执行与欧洲联盟在科学和教育，环境保护以及旅游和款待领域的联合计划。依靠智力资本可以在欧盟东部建立一个“良好的经济邻里”区，以加强稳定并利用合作与社会及经济进步的互利。

关键词: 智力资本, 合作, 社会经济发展, 指标