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Three-Seas Initiative countries and their competitiveness in Europe

Introduction

The Three-Seas Initiative was launched in 2015 at the initiative of the presidents of Poland and Croatia in order to establish cooperation in the fields of energy, transport, digital communications and economy. The boundaries of the region are designated primarily by the coastlines of the three seas: the Adriatic (in the south-west), the Baltic (in the north) and the Black Sea (in the south-east). The range of the region is determined not only by geographical boundaries, but also by shared historical experience and similar economic and geopolitical conditions of the countries in this area.

The region includes 12 Central European countries (112 million people). The declaration of these countries of 23 August 2016, signed in Dubrovnik, facilitates cooperation in the field of supra-regional projects, as well as cross-border cooperation between countries. Twelve countries constitute a large endogenous potential, used to a limited extent in shaping the socio-economic development of the region. The analysis of the literature on the subject indicates the links between the increase in

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the level of intellectual capital and the economic growth of individual countries. Economic growth is usually measured by changes in gross domestic product, while intellectual capital is determined by many factors, the selection of which (in the research aspect) depends on the type and direction of the analysis.

The main aim of the paper is to assess the regional specifics of the Three-Seas area in terms of defining competitive advantage of the whole region and its countries through development of relationships and changing their approach to a competitive paradigm for this area. The scientific discussion undertaken in this paper is related to such internal resources as ICT and human resources development (and its involvement in science and technology – measured by Human resources for science and technology) as well as innovativeness.

The paper is based on secondary research using literature studies. After literature analysis, the major indicators of development were chosen, considered beneficial in terms of decreasing historical economic developmental inequalities. Then, taking the abovementioned factors into consideration, the discrepancies between the Three-Seas countries in the period of 2006–2018 were analysed with the use of secondary data from Eurostat and other available sources. Apart from this, some other measures as well as recommendations for the countries in the region were included.

The evolution of economic processes – from the industrial economy to the new economy and the knowledge-based economy in terms of defining regional competitive advantage

Economy is primarily a material, technological, political, legal-organizational and socio-civilization category. It consists of both the real sphere and the sphere of regulation, covering a variety of phenomena and processes related to economic activity.

The growth of economy is referred to the real sphere of economy, which includes the material base of production along with natural resources, population and changes in its structure as well as manufactured production and consumption of goods. However, the term "economic growth" includes only an increase in the volume of production and consumption of goods and services, i.e. certain production factors and means of meeting needs. The development of capitalism has shifted research over "the nature and causes of the wealth of nations" from a family household to a capitalist company appearing in the form of various types of enterprises, thereby shifting emphasis on the driving forces of multiplying entrepreneur profits and domestic production – the wealth of nations, i.e. a long-term economic growth, as one should capture it in the modern economic language.

The research on the growth of economy breaks down the emphasis on the micro and macroeconomic determinants of growth, which can also refer to various scales of economic processes, such as a country or its individual regions,

the state and society. When using the term economic growth, we usually refer it to the national economy. Economic growth may also refer to a group of countries distinguished by various criteria, such as the European Union or even the entire global economy (Woźniak, 2004, pp. 9–10).

The development and foundation of the knowledge-based economy is directly related to the growing importance and dissemination of new information and communication technologies (which could be used to manage mass society using software and computers (Bell, 1973, p. 344), services and the building of an information society, as well as the approach to acquiring knowledge of the necessary competing processes (Lozano-Platonoff et al., 2004, p. 87). Information technologies are very close to creativity (Mitchell et al., 2003, pp. 27–28).

However, economic changes such as innovations related to the absorption of technological solutions (diffusion of innovations) would not be possible, or their spread would be unsatisfactory, if it was not for the quality of human capital. The microeconomic approach to the knowledge-based economy considers knowledge as a factor of competitive advantage (Kołodko, 2002, p. 155). The discussion of the character of competitiveness should be carried out by defining the phenomenon leading to the creation of the enterprise and its development capabilities, as a competing entity in a volatile environment (Koźmiński, Latusek-Jurczak, 2011, p. 29). Global changes in the flow of information and the approach to running a business have influenced the competitiveness of knowledge-based economies, in which increasingly frequently virtual solutions, mainly related to information (and its management), are created instead of conventional ones. Generally, it can be concluded that computers and electronic communication have enabled the emergence of virtual organizations and virtual chains (Franke, 2002, p. 94).

Development of information technologies and intellectual capital in the improvement of competitiveness

The development of information and communication technologies (ICT) has an impact on the growth of Gross Domestic Product (GDP). Studies on this issue, initiated in the second half of the 1990s, emphasized the increase in labour productivity (as well as highlighted the importance of ICT in industry and on the macro- and micro-scale. The subject of research was also the contribution of ICT to the convergence of developing and highly developed countries. With the development of technology, labour performance (productivity) increases, which in turn increases the efficiency of management processes, measured by productivity. Many studies characterize the positive impact of ICT on strong profit growth and the economic development of highly developed countries (Piatkowski, 2006, pp. 39–40; Oliner, Sichel, 2002). On the other hand, transition economies are characterized by a significantly lower return on invested capital in ICT solutions (Dewan, Kraemer,

2000, p. 552; Pohjola, 2001). Adequate knowledge resources accumulated through improving the efficiency of information processes play a special role in the process of adapting to changes in a competitive environment. They increase the company's possibilities in terms of adaptability and innovativeness of companies as conditions for survival in the market and achieving a competitive advantage.

However, it should be emphasized that ICT is not something that started 30 years ago. The development of ICT was initiated in the 19th century, beginning with the reproduction and collection of documentation, aided by the development of the typewriter, for example. The appearance of calculators and data processing methods (1883 – Charles Babbage's work on the differential machine "calculator of the time", 1887 – an American, Herman Hollerith, patented a calculating machine using punched cards as a data storage medium). Also, the revolutionary invention of the telegraph, which enabled sending information over long distances, caused a reduction in "distance" and a rapid increase, for the time, in the flow of information. The introduction of these innovative technical solutions had a significant impact on the way businesses operated. The 20th century was characterized by a very turbulent development of technology, in which we can distinguish four very different periods:

- 1880–1941 – development of modern administration: (introduction of typewriters).
- 1914–1957 – mechanization of offices, associated with the introduction of mechanization to offices, special attention being paid to work distribution and improvement of work efficiency. The scientific approach to management was emphasized.
- 1957–1980 – increasing importance of computers: in the period after the end of World War II, departments of central administration were transformed into computer centres.
- 1980–2000 – computer revolution: characterized by the development of personal computers and a broad access to the Internet. At that time, the importance of people and organizations and the integration of many different systems could be observed. ICT blurs the boundaries between organizations, groups or individuals (Bouwman et al., 2005, p. 29).

Importance of innovation processes

According to Rogers (1983, p. 363), innovations in business organizations arise in the process of initiation and implementation. Initiation is information collection, conceptualization and planning of innovation adoption, and consists in designing the stages of agenda setting, which are an attempt to define organizational problems justifying the need to implement innovation, as well as to identify relevant innovations available in the environment at this stage. Matching is a link between the problem created with innovation and that between the plan and the project. The

second stage is implementation (these are all activities related to the implementation of innovation), re-definition/restructuring, when innovation is adapted to a specific problem situation and, in connection with the implementation, the organizational structure of the company is adapted.

However, it should be remembered that a change in the structure, strategy and technology must be related to solutions in the area of human resource management (Czubasiewicz, 2007, p. 135). Clarification is the right relationship between an innovation and an organization, where innovation should be introduced in a full and correct way. The last element is routinization, where innovation ultimately loses its separateness and becomes an element in the current operations of the organization.

In analysing this phenomenon from the perspective of the essence and importance of ICT in an economic organization, as an innovative approach to the management process, it can be seen that the process of diffusion of innovation associated with the introduction of ICT is becoming increasingly important in this context. The organization is developing the last three phases (adaptation, introduction and implementation), which are an extension of the approach (Cozijnsen, Vrakking, 2003) characterized by research, development, diffusion, adaptation, introduction and implementation of new solutions.

It should be noted that there are many factors that affect the above-mentioned processes regarding the implementation of ICT solutions in the organization and its proper use by the employees. These are mainly (Bouwman et al., 2005, p. 15):

- organizational factors – all factors related to the nature of organization and business environment in which the company operates,
- technological – all elements of activity related to information and communication technology (software, devices, networks or standards),
- economic – cost factors as well as profit factors relevant to the decision-making process in the field of ICT and having direct impact on them,
- end user perspective – variables characterizing employees in an organization using technology, their position, tasks as well as the psychological determinants associated with making decisions in the field of ICT in the context of using these solutions in the company.

The techno-economic paradigm has changed the current understanding of economics by introducing new rules and vocabulary, an example being the "new economy", with its many interpretations. However, the general understanding of this concept refers to a change in the understanding of economics in the context of changes in information technology. These changes are particularly significant from the perspective of the hitherto prevailing understanding of the economy of mass production in the 1980s (Kudyba, Diwan, 2002, p. 6). The concept of economic evolution, described earlier by Thorstein Veblen, is based on constantly changing institutions (technological institutions and ceremonial institutions) and it describes a dichotomous set of institutions that confronts the unchanging human nature (Ekelund, Hébert, 1997, p. 415).

This process is inseparable from education; you can look at it as an investment in people who are "carriers" of human capital, capable of adapting knowledge from the outside world (Nelson, Phelps, 1966, p. 75). Accumulation of the appropriate quality of human capital is a guarantee of development and a proper use of technological achievements that create the opportunity to improve the quality of life. Some channels related to technological diffusion are directly related to international trade and foreign direct investments (FDI) (Keller, 2004, pp. 752–753). Diffusion of knowledge is of global importance, as well as locally in relation to regions and cities, and may also lead to the formation of geographically limited economic clusters in a particular area.

In the wider, global scope, the spread of technology and knowledge through foreign trade, the development of telecommunications and the Internet all provide access to the same scope of knowledge (Keller, 2002, pp. 120–121).

Research methods

In this study, three categories were used as measures of intellectual capital potential creating the ability to build competitive advantage and the competitiveness of countries (Szajt, 2013, pp. 144–145).

One is the number of employees working in Knowledge-Intensive Services (KIS), which is directly related to the creation of business innovations based on technological changes in the areas of new service concepts, new client interfaces and new service delivery systems (Hertog, 2000, p. 495), as well as the importance of knowledge intensity in the development of the knowledge based economy.

Human resources for science and technology (HRST) is of great importance in raising the competitiveness of countries, and it is synonymous with the survival and development of economies, and therefore it is important from the perspective of the country's characteristics and its ability to build competitiveness (Chou et al., 2008).

On the other hand, the innovative activity of a society inhabiting a given area (country) is usually measured by the number of patents submitted by residents registered by the European Patent Office – the third category of interest to the author.

Intellectual capital as a factor of capability for achieving competitive advantage in the Three-Seas area

The area of the Three-Seas located in the central part of Europe is crucial not only for the countries between the three seas. It is justifiable to emphasize the fact that this area becomes a link between the east and the west, which is conditioned

by the developed competitive potential of individual countries implementing the Three-Seas Initiative. The area simultaneously brings northern Europe closer with the south, through jointly implemented infrastructure investments that integrate this project and which also forms an element increasing the competitiveness of the entire area as well as of individual countries, something that is becoming ever more important.

It should be noted that knowledge, which is inextricably linked to human capital, is only a part of a wider phenomenon known as intellectual capital, defined as the wealth of the organization. Intellectual capital is perceived as the main element active in the process of globalization of economies. It has changed the essence of understanding the concept of an organization's wealth – both in terms of its use and creation (Jarugowa, Fijałkowska, 2002, p. 7). The intellectual capital of an organization can be divided into the unconscious part, which includes organizational and social capital, and the conscious part, i.e. human capital (Żemigała, 2009, p. 169). Table 1 presents the percentage of employees in high-tech industries among the countries of the Three-Seas region.

Table 1. Human resources in science and technology (HRST) – Three-Seas countries 2007–2018

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union – 28 countries	39	39.5	40.1	40.8	42.3	43.1	43.8	44.4	45.2	46	46.6	47.5
Euro area (19 countries)	40	40.5	40.9	41.4	42.3	43.1	43.7	44.3	45	45.6	46.3	47.1
Bulgaria	30.8	31.4	31.8	32.1	32.7	32.8	34	35.4	36.3	36.8	36.5	36.8
Czechia	36	37.1	37.9	37.8	35.9	36.6	37.2	38.1	38.1	38.7	39.6	39.9
Estonia	44.4	44.4	45.9	45.2	47.3	49.2	48.9	48.9	49.3	49.1	50.3	52
Croatia	28.3	29	30.3	31.6	29.8	31.5	34.5	35.1	36.2	37.4	38.2	40
Latvia	36.9	39.4	38.7	38	38.2	40.1	41.2	40.7	42.4	43.3	44.4	44.4
Lithuania	39.9	42.3	41.7	42.7	43.6	43.9	45.6	46.5	48.2	49.1	49.4	50.5
Hungary	31.8	33.3	33.3	33	34.6	35.6	36	36.3	36.7	36.3	36.5	37.3
Austria	37.5	37.7	38.9	39.1	40.4	41.7	43	48.3	48.6	49.1	50.1	50.4
Poland	32.5	33.4	34.9	35.9	36.6	37.7	39	40.4	41.6	42.8	44	45.2
Romania	23	23.8	24.1	24	25.4	25.5	25.1	25.6	27	27.6	27.7	27.9
Slovenia	38.9	40.1	40.6	40.8	42.4	42.8	43.5	43.7	45.1	46.5	47.8	47.4
Slovakia	31.8	32	32	33.5	33.9	32.5	32.5	32.9	33.5	34.2	35.2	36.9

Source: Eurostat (Percentage of active population, people with tertiary education (ISCED) and/or employed in science and technology – aged 25 to 64 years) https://ec.europa.eu/eurostat/databrowser/view/TSC00025/default/table (2019.05.23).

In analysing Table 1, it should be emphasized that in 2018 six countries belonging to the Three-Seas region reached a state where employment in the field of science and technology was similar to that occurring in the European Union, but with Lithuania, Estonia and Austria hiring more workers in this area, which shows that they are becoming leaders in this field of the knowledge-based economy.

Figure 1 shows the employment growth rate in the technology sectors in 2007–2018, where it can be seen that the increase in employment from the science and technology sector is similar to the dynamics observed in the entire European Union.

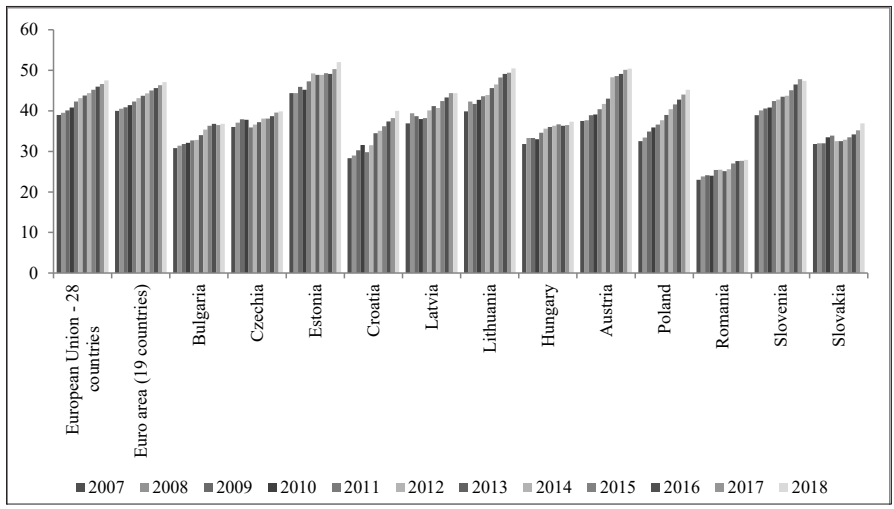

Figure 1. Growth dynamics in Human Resources in Science and Technology (HRST) – Three-Seas countries 2007–2018

Source: Eurostat *(Percentage of active population, people with tertiary education (ISCED) and/or employed in science and technology – aged 25 to 64 years).* https://ec.europa.eu/eurostat/databrowser/view/TSC00025/default/table (2019.05.23).

However, it should be noted that Romania and Slovakia cannot maintain the pace of employment, which in the long run may cause problems in growth and competitiveness for these countries. Another very important indicator (Table 2) is the percentage of employees in the medium-high technology manufacturing sectors and knowledge-intensive service sectors (KIS), which characterizes the structure of employees in the service sector based on high technology and knowledge.

According to Table 2, in 2018 countries such as Slovakia, Slovenia, Czechia and Hungary are leaders in this area. These countries are leading in the field of services based on high technologies and knowledge, which is the basis for building their competitive position. Characterizing the employment structure in the high technology and knowledge sectors in the Three-Seas area, the visible effect of this employment structure is the number of patents submitted to the EPO in individual countries (Table 3).

Table 2. Employment in high- and medium-high technology manufacturing sectors and knowledge-intensive service sectors – Three-Seas Countries 2007– 2018

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union – 28 countries	5.9	5.6	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8
Euro area (19 countries)	6.2	6.1	5.9	6	6	6	6	6.1	6.1	6.1	6.1
Bulgaria	4.2	3.6	3.3	3.4	3.6	3.9	3.7	3.9	4	3.8	4
Czechia	10.2	9.5	9.5	9.9	10.6	10.5	11.2	11.2	11.5	11.4	11.3
Estonia	4	4.1	3.5	4.4	4.2	4.1	3.5	3.6	4	3.8	4.1
Croatia	3.8	3.3	3.1	3.8	3.8	3.6	3.3	3.2	3.4	3.7	3.5
Latvia	1.9	1.4	1.3	1.3	1.5	1.8	1.6	1.6	1.8	1.7	1.6
Lithuania	2.1	2.1	1.8	1.7	1.8	1.8	1.9	2.1	2.1	2.2	2.2
Hungary	8.6	7.8	8.2	8.7	8.4	8.5	8.9	9.1	9.5	9.8	9.9
Austria	5	5	5.1	5.5	5.8	5.8	5.9	6.2	6	5.9	6.3
Poland	5.4	4.8	4.6	4.8	4.9	5	5.2	5.3	5.7	5.9	5.9
Romania	5	4.6	4.4	4.7	4.5	4.8	5.3	5.6	5.8	5.9	6.4
Slovenia	9.1	8.5	8.6	8.2	7.8	8.3	8.6	9.4	9.6	9.8	10.2
Slovakia	10.2	8.6	8.6	9.7	10.2	9.8	9.4	10.6	10.8	11.2	11.3

Source: Eurostat *(The definition of high- and medium-high technology manufacturing sectors and of knowledge-intensive services is based on a selection of relevant items of NACE Rev. 2 on 2-digit level and is oriented on the ratio of highly qualified working in these areas)* https://ec.europa.eu/eurostat/databrowser/view/TSC00011/default/table (2019.05.23).

Table 3. Patent applications to the European Patent Office (EPO) by priority year – Three-Seas Countries 2006–2017

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
European Union – 28 countries	58 408	58 578	57 050	56 815	56 770	57 446	56 772	56 757	56 753	57 237	55 984	54 649
Euro area (19 countries)	48 433	48 319	47 068	46 994	46 672	47 004	46 163	45 886	45 624	46 036	44 870	43 571
Bulgaria	27.1	12.2	18.7	15.8	17.0	26.4	33.8	39.8	47.4	31.9	31.1	29.3
Czechia	152.9	189.3	209.6	176.1	192.6	222.8	232.0	250.6	269.9	295.4	318.7	357.4
Estonia	21.2	28.2	35.3	45.0	38.9	27.9	23.7	27.9	24.2	38.3	33.0	36.3
Croatia	35.5	31.2	28.9	22.0	30.3	17.0	19.4	18.5	14.6	17.9	21.1	19.9
Latvia	16.4	15.7	22.8	18.7	15.8	17.9	27.1	67.2	:	26.2	21.6	22.3
Lithuania	9.7	9.8	16.9	8.3	15.9	18.9	32.6	40.6	48.9	24.5	19.2	21.6
Hungary	165.0	191.1	181.2	184.4	195.5	221.6	207.8	215.6	222.3	205.2	201.3	196.8
Austria	1750.3	1722.0	1626.2	1711.3	1770.5	1800.3	1863.0	1913.5	1961.2	2001.6	2025.2	2029.6
Poland	140.3	201.8	233.7	291.6	361.4	384.8	483.3	547.2	609.2	578.4	627.3	686.6
Romania	20.2	32.6	33.5	31.1	34.6	60.4	71.6	85.1	101.9	93.5	98.9	99.6
Slovenia	100.4	120.1	138.9	123.3	106.3	112.1	126.7	127.9	135.1	119.1	112.4	114.3
Slovakia	40.4	38.9	36.9	28.9	46.5	54.8	44.5	49.8	:	41.9	54.2	55.1

Source*:* Eurostat *(The data shows the total number of applications per country. If one application has more than one inventor, the application is divided equally among all of them and subsequently among their countries of residence, thus avoiding double counting).* https://ec.europa.eu/eurostat/databrowser/view/TSC00009/default/table (2019.05.23).

The best in this context is Austria which takes full advantage of the accumulated competitive potential in the high technology sectors. This translates into a record number of innovative patents submitted to the EPO. Poland occupies the second position in the ranking, nevertheless it is not a satisfactory position because the country has a significant base in high technology and science.

In some areas, the Three-Seas countries already show superior performance. When comparing research and development expenses (in EUR per person) in 2006 and 2016, it can be seen that the average R&D expenditure by the Three-Seas area increased by 72.9%. At the same time, the amount for the entire EU increased by 36.2%. The largest increases were noted in Bulgaria (230.2%), Slovakia (193.1%) and Poland (173.5%) (Konkel, 2018, p. 26).

The analysis shows that the Three-Seas countries have a significant competitive potential, which in the near future can be fostered by intensifying and integrating the actions of governments of the countries forming the entire structure. An important trend in the activities of companies from these countries is the dynamics of increase in the number of employees in the field of science and technology, which indicate the direction of development for individual countries. It should also be emphasized that this region is characterized by a significant high level of entrepreneurship and innovation (which is reflected in the number of patents filed in patent offices). This is a good predictor of growth and development for the entire region. In this context, an important element in building the competitive position of the countries belonging to the Three-Seas is a significant increase in employment in the technology manufacturing sectors and knowledge-intensive service sectors, especially among small and medium enterprises, which in this case will generate innovative solutions in the field of IT services and others related to them.

Thanks to the concept of cooperation in the Three-Seas area and initial infrastructure investments, the countries of Central and Eastern Europe can achieve prosperity and economic resilience. The effect of cooperation in the first phase of activities, focused on infrastructure activities, i.e. the construction of roads and railways, can be translated into further activities focused on digital innovation. After catching up with Western Europe, in terms of infrastructure, the countries of the region can, thanks to agreements, create conditions for developing specializations in the field of high-technology innovations. Accelerated programs and the construction of regional technology centres can contribute to increasing the importance of the knowledge-based sector. This should allow a break with low growth industry based on cheap labour. It is possible with the assumption of a strong cooperation and achieving synergistic effects as a result. Investments on the basis of PPP projects and appropriate harmonization of projects should be on the list of priorities if this initiative is to be more than just a political manifesto without measurable actions. Another potential impulse could be the Belt and Road initiative, which, thanks to the involvement of China, can accelerate infrastructure projects and help in an earlier implementation of innovation assumptions in the

field of modern technologies. Ultimately, the Three-Seas countries should be able to gain a competitive advantage in many areas.

Conclusions

In order to facilitate innovation, foster research and development, create more patents as well as develop knowledge-based companies, cooperation across the entire region is needed. Thanks to the proper financing in the mentioned fields, university cooperation with research and technological development centres, and the construction of innovation centres, there are opportunities to compensate for differences in development. IT education and access to teaching are of crucial importance, along with incentives for students and teachers in terms of education in the use of ICT, which is fundamental in creating business strategies that will increase the competitive advantage of the whole region. There is a need for equal financing of investments in the Three-Seas area, as well as substantive increases in initiatives in the field of public-private partnerships. According to the McKinsey report (Novak et al., 2018), it is recommended that intensified digitization could benefit from regional cooperation over a wide range of regional infrastructural projects, such as 5G networks.

The indicators shown earlier specify the strength and potential of Central and Eastern European countries. Strengthening this potential through properly targeted education and investments could lead to rapid economic development. The Three-Seas Initiative can strengthen the idea of European Union cohesion and reduce the development inequalities.

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Summary

The paper shows the regional characteristics of the Three-Seas area in terms of defining the competitive advantage of the whole region and its countries through the development of relationships and changes in their approaches to the competitive paradigm in this area. The scientific discussion undertaken in this paper is related to internal resources in terms of ICT and human resources development (and its involvement in science and technology – measured by Human Resources for science and technology) as well as innovativeness. The authors have chosen indicators of development that could be beneficial in terms of decreasing historical economic developmental inequalities, with some differences between the Three-Seas countries being analysed for the period of 2006–2018. The secondary data was taken from Eurostat and other available sources. The regional strategy should focus on the knowledge-based economy, and the possibilities for rapid development in this area. This gives opportunities to make rapid progress in a region centrally located in Europe to generate great potential to strengthen accumulated resources and, in the nearest future, to create the possibility of becoming a hub connecting eastern and western Europe.

Keywords: regional development, regional competitiveness, evolution of economics processes.

Kraje inicjatywy Trójmorza i ich konkurencyjność w Europie

Streszczenie

W pracy przedstawiono regionalną charakterystykę obszaru Trójmorza pod względem określania przewagi konkurencyjnej całego regionu i jego krajów poprzez rozwój relacji i zmianę podejścia do konkurencyjnego paradygmatu tego obszaru. Dyskusja naukowa podjęta w tym artykule odnosi się do zasobów wewnętrznych związanych z rozwojem ICT i potencjału ludzkiego (i jego wpływu na naukę i technologię – mierzoną przez HRSC, czyli *Human resources for science and technology*), a także z innowacyjnością. Autorzy wybrali wskaźniki rozwoju, które mogą być korzystne pod względem zmniejszania historycznych nierówności rozwojowych pod względem gospodarczym, a różnice między krajami Trójmorza zostały przeanalizowane dla lat 2006–2018. Dane wtórne pochodzą z Eurostatu i innych dostępnych źródeł. Strategia regionalna powinna koncentrować się na gospodarce opartej na wiedzy, dającej możliwości rozwoju tego obszaru. Daje to możliwość szybkiego rozwoju regionu o centralnej lokalizacji w Europie, co stwarza doskonałą okazję do wzmocnienia zakumulowanych zasobów, a w najbliższej przyszłości daje szansę na stanie się łącznikiem między wschodem a zachodem w Europie.

Słowa kluczowe: rozwój regionalny, konkurencyjność regionów, ewolucja procesów ekonomicznych.

JEL: F23, O11, O19.