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**Space and population  
 – competitiveness  
 determinants of countries  
 in the age  
 of globalization**

**1. Introduction**

From the historical perspective, two development elements have always been associated with factors that signify the wealth of the country. These were population and space. The spatial argument understood in the aspect of Martin's first degree of regional revolution, that is region as the place of export activity, is less topical in the age of globalization. Raw material affluence of the region, no matter how appreciated, is not automatically associated with the level of wealth of its inhabitants. Although understanding of spatial advantages in the infrastructural aspect and location relative to trade partners is still an adequate argument in the debate on the influence of globalization factors on the competitiveness of the region. The population aspect evolved too. Currently, countries with population under 10 million residents are leading the rankings of affluence, calculated as GDP per capita. These countries reach the status of highly competitive regions, using globalization factors to their benefit in pursuing the strategy of acquiring foreign investors and internal economic growth.

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The purpose of this study is to find common strategic elements responsible for the economic success of these countries and to assess how these elements contribute to the success of the most developed regions of the EU, which are also characterized by low population and often small spatial volume.

We shall commence our deliberations from explaining the basic terms necessary to take up the issue identified in the title. Competitiveness is a term which assumes an increasingly broad significance in the contemporary world. Although the definition evolved, assuming various forms defining its ultimate purpose, the concept itself has always oscillated around the search for the source of wealth in the elements of commercial exchange. Therefore, competitiveness became a mean necessary to retain and support appropriate attractiveness of the parties to the exchange. Yet it is not attractiveness that should be deemed a direct synonym of competitiveness. The theory of international trade, on the basis of which development models were built, based on the element of convergence, assumes that commercial exchange between parties drives internal development, granting benefits to both the participants of the exchange. Yet, it is significant that these benefits are not uniform for all the parties to the exchange. This disproportion can be attributed to a number of factors, which ultimately come down to different levels of economic competitiveness of the parties to the exchange. The primary difference between the aspects of competitiveness and attractiveness results from locating both these terms in the environment they are defined in. Attractiveness of the given country is an element of its competitive policy, oriented at acquisition of investors. Whereas competitiveness includes elements of rivalry. They manifest themselves via competition of state-owned entities in creation of the best possible conditions for development, which enable drawing of benefits from international distribution of work (Pawlak 2004, pp. 107-108). These considerations bring to interpretation of competitiveness in economic dimension. Early reflections on the subject were associated with classical economic theory. Those assumptions created strong relation between competitiveness and pricing policy. This relation is still visible in modern global economy. Mentioned relationship is associated with main stimulus of grow for many emerging economies in the world. In extreme cases, its influence is responsible for leading those economies into a trap of average grow. Main reason for that could be detected in international division of labour forces. Where one country is concentrated on supply of low cost employees, while the other benefits from its work. This example of benefits disproportion has been mentioned above. Its proves that international exchange is not always homogenous for all parties. Therefore, the concept of economic competitiveness defined by the classical

relation between competitiveness and price policy is no longer entirely adequate in the 21<sup>st</sup> century global economy. The other factors are responsible for stable and sustained economic growth that is taking place in all economic and social areas of the economy. Modern considerations on economic competitiveness are no longer concentrated on the aspects of price policy. Quality of the product, service, and work itself, seems to take over this role. This switch between cost factors in favour of quality being done due to increasingly visible structural and strategic changes in world's economies.

In a globalized world, where transformations of social, economic, scientific and technical structures are dynamic, elements of economic competitiveness are also subject to rapid and multidimensional evolution. Considering the example of two African countries, Botswana and Zimbabwe, one may notice that within mere 25 years the social and economic situation, and therefore competitiveness, undergoes extreme transformations (Cebulski 2014). The example of Botswana proves how an appropriate package of reforms, which adequately respond to dynamic changes on both regional and global level, is able to boost the development of a single country, turning it into the leader of the region. Whereas the example of Zimbabwe shows how backward views, combined with ignorance of international trends and belief in international segregation, can degrade a region, rendering it backward and incapable of permanent economic and social development.

Of course, one can find more examples of an adequate use of international trend in order to effectively increase the level of international competitiveness at the turn of the 20<sup>th</sup> and 21<sup>st</sup> century alone. Good examples include: New Zealand, Luxemburg or Israel. It is interesting that in the process of reformation or extensive evolution of these countries' competitive policy no elements traditionally associated with key factors of increasing the national wealth were used. These degraded factors are the aspects of population size and spatial size of the given country.

## **2. The influence of spatial and population factors on competitiveness**

For ages, the actual international position of a country was determined by its geographical size. The ancient tendency to rule sea basins or the major inspiration of the age of feudalism or colonialism derived from the desire to increase the territory of one's region. The reasons behind these expansions may be sought in actual and intuitive premises. The country's size is also determined by its internal resources. Of course, the higher civilization advancement of the resources,

the more advanced the evolution of the potential concept. Referring to the regional classification in the context of R.L. Martin's civilization or technological advancement, one can observe an interesting development sequence of the internal regional potentials from the region defined in the context of export specialization, to a place of growing income, to the centre of creating knowledge. One may analogically approach the evolution of internal regional potentials – natural resources. New territories provide new deposits of natural and human resources. From the most technologically basic, such as access to fresh and sea waters, forests or deposits of coal or iron ore, to the most advanced, such as oil, gas, uranium deposits, trade routes or technological development centres. In his book *Civilization*, a historian N. Ferguson presents a hypothesis explaining how the Western civilization dominated the global culture throughout the ages. He assumes that this was done by applying six factors (applications) which, working together, could make the Western (West European) civilization the dominating global culture (Ferguson 2013, pp. 131-181). According to the historian, one of these factors was property. Here, property is defined as an internal force which, via the will to own, by pacts, colonization, endowment or aggressive invasion strived to enlarge its territory and influence.

Therefore, new geographic discoveries and technological progress systematically invalidated the possibly trivial, yet still intuitive assumption of correlation between the population and surface factor. The assumption that a country with the largest population must be therefore the largest in terms of space no longer holds true. Historically, the times of broadly-defined imperialism had the greatest impact on invalidating this relation. Countries such as Russia are the best examples of this. The current Russian Federation, which historically expanded its borders by military action, has increased its internal territory to a size disproportionate to its population. A country with the surface area of 17 million square kilometres has less than 150 million residents. For comparison, Bangladesh, with a population of over 160 million residents, has a surface of 147 thousand square kilometres, meaning it is over one hundred times smaller.

The aforesaid correlation naturally draws attention to another factor of inner potential, which is the population aspect. Here, a historical analysis of the population potential does not change as greatly as the spatial aspect. The development of population affluence has always been associated with the development of the national potential. Samuel Huntington is the author of a cycle devoted to issues which influence the level of civilization antagonism. In his work, he finds factors that impact civilization domination in cultural

elements, not ideological of economic ones. Whereas the cultural stimuli evolve only in human environments, and culture is an inherent element of humanity (Huntington 1993, p. 24). Therefore, the dominating cultures are usually those which owe their dominating nature to an extensive dissemination of their trends.

The classic economy theory also confirms there are benefits from having a large population. Thanks to the economics of scale, the administrative and social costs arising from the welfare nature of the state should be much lower in countries with a higher population. Countries with greater population are naturally able to achieve a greater cultural or economic domination in the region. Nevertheless, in the age of globalization characterized by instant exchange of information, this aspect is not so much losing significance as it is being effectively undermined. The most dominating countries are no longer those with the largest population, but those with the highest civilization development ratio of their residents. This relation is the most visible precisely from the perspective of national competitiveness. Referring to the rankings of GDP per capita, that is a figure related directly to the population index in terms of purchasing power - strongly related to the competitiveness rate - one can observe an interesting relation between countries described as small and large (in terms of surface area, but mostly population). Rankings of organizations such as the International Monetary Fund (IMF), Central Intelligence Agency (CIA) or World Bank (WB) on the list of countries with the highest GDP per capita ratio show a dominating number of countries with population under 10 million people. Moreover, most of these countries described as small powers (or small states) have no rich deposits of natural resources or well-developed infrastructure for supporting entrepreneurship embedded in their historical genome. Countries such as New Zealand, Israel or Iceland have achieved a high level of competitiveness in the age of growing globalization trends thanks to an appropriate development strategy and correctly implemented reforms, which identified these trends accurately.

### **3. Small states and stable development**

The phenomenon of small states was investigated, for instance, in the analytical report of the Swiss Credit Suisse Institute in 2015 and 2014 (Natella, O'Sullivan 2015). The results of this study prove that small countries are more involved in providing social support for their citizens. This manifests itself in increased expenditures on health care and education policies (Natella, Keating

2014). Education is of crucial importance here. The approach to the aspect of intellectual education in countries with a small population is not calculated using the now-anachronistic method of economies of scale. Alternatively, it seems that small states approach the issue treating small population as an advantage, rather than threat for the nation's funds. Thanks to a smaller number of residents, the learning process can be more customized and therefore focused on individual needs of the citizens. Additionally, the curriculums can be faster and more flexibly adopted to the changing trends of the global labour market. This is used particularly in the age of globalization. As the authors of the Credit Suisse report note, at the age of outsourcing small states do not have to focus on obtaining the entire operating base of foreign corporations. Instead, they concentrate on these elements of companies' operations which give foreign corporations market advantage and specialize in the same (Natella S., Keating G. 2014, pp. 12-13). Specialization is one of the elements on which small states base their competitiveness strategy. Another element is their involvement in international trade.

In the aspect of international exchange, small states once again turn a potential hazard, related to small risk, into an advantage. Due to their size, these countries are unable to satisfy all the needs of their residents. Their goods and services production capacities are even more limited than in countries categorized as medium- and large-sized. Yet, this disadvantage motivates small countries to increase their involvement in the international exchange, which in itself is a catalyst of globalization. Due to their limited production capacity, small states are more involved in the global, international trade and in exchange for imported goods and services they export goods and services they specialize in. This strategy encourages the small states' foreign exchange to liberalize their trade regulations and abolish barriers for international exchange, thus involving said states in pro-globalization activities, which decide their well-being and survival. The discussion of how free market influences the developmental aspects is both long and passionate. Admittedly, globalization of the economy has a positive impact on the factors which facilitate international exchange, but making it fully open, while doing away with any elements of domestic protectionism, is not always fundamental for the development of the most powerful countries. One may name Great Britain, USA or China as examples of countries which initiated their road to global developmental domination not by market openness, but precisely thanks to economic protectionism. Yet, according to Ha-Joon Chang, even the countries currently referred to as small states started their impressive development in accordance with the classic principles of economic protectionism,

which not always goes hand in hand with the currently reasoned trends of economic liberalization open to the international market (Ha-Joon 2011, pp. 96-72). For instance, between 1930 and 1980 Finland classified all the companies with more than 20 per cent foreign share as „hazardous activities”. France, Austria and Finland conducted large-scale activities of state-owned property in order to promote sectors crucial for the economy. Until the beginning of the 20<sup>th</sup> century, Switzerland or Holland did not acknowledge patent rights, deeming them contrary to the rules of free trade. It seems that although currently many of these countries successfully perform trade exchange based on liberal market openness, they owe their origins to protective activities intended to protect their products until their production capacity and quality grows enough to be able to effectively compete in the international (open) market.

Legal regulations also play an important role in the context being discussed. Law in itself is to ensure safety and protection to citizens and institutions. But although rule of law is still associated with a direct, positive impact on the democratic system, in the case of small states simplicity and clarity of law show a more obvious impact on the economic shape of the country (Natella S., Keating G. 2014, p. 14). This has a direct influence on administrative bodies which redistribute economic resources. Strong international connections of these countries also enforce - due to their policy of competitiveness - activities intended to enhance the clarity of the legal regulations for international institutions. Therefore, international agreements are clearer and encounter no hazards related to ambiguities arising from the nuances of complicated commercial law of the given country. This is another element which influences high competitiveness of small states.

#### **4. EU regions growth factors**

To begin with, it should be noted that the authors' intention is not to create an economic development model based on the experiences of small states and an attempt to transfer them within the regional policy of the EU. Neither is it their intention to create a development model itself. According to the principle of open-endedness of the growth theory (Aghion P., Durlauf S. 2005), the intention is to identify those variables of the political and economic space which are the most frequent in the case investigated, and a preliminary check of how they translate in the case of golden regions of the EU - that is regions with the GDP per capita ration in the 6<sup>th</sup> and 5<sup>th</sup> development class. The problem is all the more significant as discussions of the aspect of the regional policy in Europe

have always been accompanied by the argument of autonomic increase of the regions, up to the point of their achieving independence (Fries 1998, pp. 308-313). Currently, this discussion is still intense, as proved, for instance, by the cases of Scotland or Catalonia. In these regions, the independence arguments are largely based on development assumptions derived from the example of small states.

When trying to summarize the factors which have the greatest impact on the development of small states in the world, one should start from the economic aspect. Countries with the highest GDP per capita ratios, with population under 10 million residents, make significant investments in health care and education. They also consider trade openness crucial for their development. Factors which favour international trade, apart from the aforesaid legal clarity and simplicity, also include appropriate personnel, educated in accordance with the global market trends. Yet, there are also other factors which can strongly impact commercial development, and are directly related to the aspect of infrastructure, which makes them highly dependent on the spatial aspect. For it has a substantial influence on regional development. This aspect is all the more important because, as proven by studies of M.G. Rivas using the example of Mexico, even regions with lower level of educational advancement, but with well-developed infrastructure, can reap great benefits of border and infrastructural openness, with a simultaneous, ambiguous impact on material stratification of the local society (Rivas 2007, pp. 545-561). Spatial availability of a region is a significant element, influencing the commercial condition of the country, which also has to be taken into account in the strategy of developing competitiveness. This thread will be elaborated on further in this study.

Bearing the aforesaid factors in mind, it is worth seeing how they translate into individual regions of the EU. Considering that in terms of population many EU regions are comparable to small states, one can attempt to answer the question of whether the strategies implemented by small states can also be responsible for the success of the most developed European regions.

Of course, just like in the case of describing the development factors of small states, an answer to this question must be to a large extent general. Admittedly, there are elements common for the most developed EU regions – and they are the focus this study – but there are also several region-unique elements, which have a great impact on their development. Many of these elements arise, for instance, from the spatial characteristics of the given region's location. For example, one of the main reasons of the economic diversification between the north and south of Italy is that the north has more convenient geographical location, compared

to the south. The north has direct access to the countries of the continent, which is a strong catalyst for trade coefficients. This also translates into the extent of urbanization in the north, and therefore the economic advancement of this region (The Economist 2015). At the same time, geographical assimilation of the peninsula in the south hinders international exchange for the residents of southern Italy. Also, taking into account that the south, thanks to good farming conditions, specializes mostly in agriculture – an important, yet insufficiently competitive branch of economy – the stratification between the north and the south keeps growing (Eckaus 1961, pp. 292-300).

Table 1 shows all the EU regions as per NUTS 2 classification, which declare 6th and 5th advancement level of GDP per capita. Level 6 means that the purchasing power of a region's resident, calculated as a percentage contribution to the GDP exceeds 150 per cent of the EU average (the EU average is 100). Threshold 5 oscillates around 125-150 per cent. Therefore, these are the regions with the highest ratio of economic advancement. Further on, this study deliberately excludes the regions which include the capital cities of the member states from the analysis. This is because capital metropolises are region-unique growth catalysts at the national level and therefore impossible to be copied in another region. The goal of this study is to find the commonest possible growth factors a suitable manipulation of which can contribute to increasing the development index. Therefore, taking into account capital regions would defeat the purpose of this study. Nonetheless, regional closeness of capital cities also involves the influence of convergence forces, which may explain the development and spread of European development centres.

**Table 1. GDP per capita and population of EU regions in class 5 and 6 of the GDP per capita ratio**

Country	Name of the region	GDP per capita	Population	Class
Belgium	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	205,11	1 136 778	6
Belgium	Prov. Antwerpen	139,98	1 773 267	5
Belgium	Prov Vlaams-Brabant	128,90	1 088 692	5
Belgium	Prov.Brabant Wallon	129,49	383 648	5
Prague	Praha	177,98	1 268 796	6

Denmark	Hovedstaden	163,19	1 699 387	6
Germans	Stuttgart	161,72	3 88 620	6
Germans	Karlsruhe	139,20	2 643 810	5
Germans	Tübingen	134,14	1 747 500	5
Germans	Oberbayern	177,92	4 295 510	6
Germans	Oberpfalz	129,13	1 064 110	5
Germans	Mittelfranken	135,46	1 669 830	5
Germans	Bremen	158,76	646 980	6
Germans	Hamburg	206,24	1 693 130	6
Germans	Darmstadt	163,30	3 726 870	6
Germans	Braunschweig	130,68	1 565 770	5
Germans	Düsseldorf	132,93	5 048 380	5
Germans	Köln	131,49	4 262 290	5
France	Île de France	176,38	11 851 840	6
Italy	Lombardia	126,93	9 704 151	5
Italy	Provincia Autonoma di Bolzano/ Brozen	147,01	504 643	5
Luxembourg	Luxembourg	263,76	512 353	6
Netherlands	Groningen	143,78	579 036	5
Netherlands	Utrecht	149,99	1 228 794	5
Netherlands	Noord-Holland	164,04	2 691 477	6
Netherlands	Zuid- Holland	128,32	3 528 324	5
Netherlands	Noord-Brabant	131,46	2 454 215	5
Austria	Wien	154,81	1 714 227	6
Austria	Oberösterreich	130,66	1 413 762	5
Austria	Salzburg	149,52	529 066	5
Austria	Tirol	136,27	709 319	5

Austria	Vorarlberg	137,28	370 440	5
Romania	Bucuresti- Ilfov	136,39	2 272 163	5
Slovakia	Bratislavský hrad	188,44	602 436	6
Finland	Helsinki-Uusimaa	143,57	1 532 309	5
Finland	Åland	132,89	28 007	5
Sweden	Stockholm	174,18	2 091 473	6
Great Britain	Cheshire	127,01	901 965	5
Great Britain	Inner London – East and West	755,38	4 942 040	6
Great Britain	Outer London	126,13	2 269 770	5
Great Britain	Berkshire, Buckinghamshire and Oxfordshire	149,99	2 269 770	5
Great Britain	North Eastern Scotland	155,08	475 765	6
Norway	Oslo og Akershus	187,62	1 167 194	6
Norway	Agder og Rogaland	145,61	727 819	5
Norway	Vestlandet	143,68	854 291	5

**Source:** own study based on Eurostat data for the years 2014, 2015, 2016

The data presented in table 1 show a significant advantage of German regions, and those culturally related to them. Also, there is a strongly noticeable presence of Nordic and Anglo-Saxon regions. Regions of central and northern Europe are dominating. One can conclude that in a united Europe, characterized by openness of borders and free flow of goods and services, the effect of convergence is somewhat inherent in the development strategy. Of course, class 4 regions are characterized by an equally high GDP per capita ratio – coming to 100-125% of the European average – and can also be classified as dynamically developing ones. Development centres are spatial elements the identification of which is one of the goals of this study. Therefore, the element of the spatial aspect and its impact on the development of competitiveness can be expanded from strictly geography-related elements to commercial elements and those arising from the convergence effect.

An interesting fact results from the location of the largest development centre. It is an area encompassing, e.g., regions of the southern Germany, western Austria or northern Italy. Undoubtedly, their adjacency to the Swiss borders also has a great impact on the potential of their developmental power. The aforesaid centre is all the more interesting as it is the only one situated inland and in itself has no access to sea, which has always been a factor with a positive impact in international commerce. The fact that a landlocked centre is so strongly dominated by class 5 and 6 regions, without the presence of any capital regions, proves that in the age of free trade the aspect of international exchange is a continuously growing driver for regional economies. This also shows a dominating force of another spatial element, strongly connected with the infrastructural aspect. The district of this mid-European development centre is one of the most accessible and transport-open regions. Both: the size and geographic location of this centre as well as the fact that it is spread among a group of different countries can most likely be considered and a significant proof of the spill-over effect. Numerous studies proved the existence of a relation between transport infrastructure and economic growth in the age of globalization. Referring to the aforementioned publication of M.G. Rivas, one can find a confirmation of the same motifs from the North American scene also in the space of the discussed development centre of Europe. Yet, it should be emphasized that this reference to the works of the researcher does not suggest that the education level in the countries of golden EU regions is low. To the opposite, statistical data indicate that education is at a high level, although lower than in the regions included in other EU development centres.

As mentioned above, three factors of small states' continuous increase in their international competitiveness were selected: expenditure on education, health care and participation in international market via use of globalization factors. It is worth seeing how the countries which contain the richest regions of the EU handle management of the aforesaid factors. This is also when an important disclaimer must be made. The main difference which can impact the results of this comparison derives from the autonomic level. Countries referred to as small states can be comparable in terms of population with some EU regions, but as independent, united political entities they have much greater decision-making autonomy (EU regions are merely components of their countries). Thus, it is difficult to compare the share of GDP as contribution to education or health care of the regions themselves. This index is shown in the national, not regional scale, as for most EU regions there is no reason to evaluate it on the micro (regional) scale, not macro (national).

Statistics of education expenditure show a certain correlation between economic advancement calculated as GDP per capita and expenditures converted in GDP percentage value in EU countries. Countries such as: Netherlands, Great Britain, Austria spent over 5% GDP on education, that is more than the EU average for 2014 (Eurostat), which was 5.1% GDP. Whereas countries such as Norway, Finland, Belgium significantly exceeded the threshold of 6.5%. Yet what is interesting is the exception of Germany, which in the period analysed spent 4.6 per cent of GDP, and Italy with 4.1%, that is less than the EU average. Statistical data for health care show more consistent results. Expenditures of all the countries are substantially over the EU average (8.4% of GDP in 2015). Great Britain can be considered an exception. Although the British expenditure on the National Health Service (NHS) was above the EU average in 2015, it is predicted that this ratio can decrease in the years to come. Great Britain's problems in this aspect are well-known in the region. Stig Abell believes that poor management of the system is caused by the centralized NHS management system and its strong politicization (Abell, 2018, p. 108). These two elements are important factors which merit a separate discussion.

The European health care models can be classified as combinations of private insurance systems and state support methods. In France and Germany, the social security system is paid for by the employees and the employers. The costs of insurance for the unemployed are covered by the state. Although the disproportion between the percentage contribution in these two countries is significant. In France, 85% of the citizens also purchase private insurance, in Germany only 16% citizens decide to do so. The Dutch system puts an emphasis on cooperation between the citizens and the state. Basic insurance is paid for by the state, but the citizens can expand the coverage by purchasing private insurance. In Switzerland, the employers do not pay the health insurance fees. This is covered by the state, the citizens can expand the coverage by buying out additional insurance.

The above proves a greater investment activity of the state in the scope of health care and promotion of healthy lifestyle of its citizens. This is visible, for instance, in the relation of statistics of doctors per one thousand residents. In Austria, this ratio is 5.1, in Belgium 3.1; in Germany 4.2 in Norway 4.7, in Netherlands 3.3, France 3.4, in Finland 3.2; Great Britain 2.8 (OECD).

But the most important index is the one that shows the relation between the country's international exchange and its GDP. Its weight results mostly from the fact that it is the only one from those listed above with a direct involvement in generation of profit. Expenditures on education and health can be considered

and investment, the profitability and income-generation of which will be demonstrated in the future. Yet it is the trade exchange that has a direct impact on the current relation of the state balance. Another analysis of the countries which formed the most developed EU regions in table 2 shows the percentage ratio of GDP, referring to trade exchange in selected countries. This time, the data are extended, showing the full size of all the regions in countries with the most regions of class 5 and 6. The ratio between international exchange and percentage GDP relation of the countries is accompanied by a population index, in this case referring to the entire country, with all its regions regardless of the regional classification. The point is to demonstrate that countries with the highest international trade index also have one of the lower population indexes. This relation is quite typical of highly competitive countries with a small population. Therefore, countries such as Luxemburg, Norway, Finland or Denmark, listed in table 2, are also classified as small states, described, for instance, in the Credit Suisse report.

**Table 2. International trade index, presented as percentage contribution to GDP in 2015 for selected countries, compared to their population and a numerical list of their regions converted in relation of a percentage GDP per capita index for all the classes**

Region	/Internatio- nal exchange as % GDP	Population	Class % GDP per capita						Total
			1	2	3	4	5	6	
Luxembourg	410	512 353	0	0	0	0	0	1*	1
Slovakia	184	5 397 036	3	0	0	0	0	1*	4
Belgium	160	11 000 638	0	4	1	2	3	1*	11
Netherlands	156	16 655 799	0	0	4	3	4	1*	12
Czech Republic	156	10 436 560	4	3	0	0	0	1*	8
Denmark	104	5 560 628	0	1	0	3	0	1*	5
Austria	102	8 401 940	0	1	0	3	4	1*	9
Sweden	86	9 482 855	0	0	1	6	0	1*	8
Germans	86	79 652 330	0	6	2	18*	7	5	38
Romania	83	28 267 229	7	0	0	0	1*	0	8

Finland	73	5 375 276	0	1	2	0	2*	0	5
Norway	70	4 978 236	0	0	0	4	2	1*	7
France	62	64 103 703	4	15	6	1	0	1*	27
Italy	57	53 930 858	7	2	1	8*	2	0	20
Great Britain	56	65 648 245	3	16**	10**	5	3**	2*	39

\* One unit of a given class is assigned to a region containing the capital of the country

\*\* The capital of Great Britain - London is divided into several regions

**Source:** own study based on data from Eurostat and World Bank

In the table above, the range of classes was expanded to three: class 6 – under 150%, class 5 – from 125 to <150% and class 4 – from 100 to <125%. The addition of class 4 is justified by the fact that regions of this class also achieve above-average economic growth, which contributes to the general status of the country's economic development. Table 2 shows that Norway is the most developed country in Europe, with all its regions in the area of above-average development in the European arena<sup>1</sup>. In EU countries such as Denmark, Austria and Sweden also can boast high results. Much over 80% of these countries' regions are classified as class 4, 5, 6 of the GDP per capita index. Again, it is worth to emphasize that the population of all these countries does not exceed 10 million inhabitants. But once again, Germany is the most interesting example. This country, considered one of the largest in the EU, has as much as 38 regions. Admittedly not all, but as much as 79% of them are in the zone of above-average classification. Moreover, the capital region – Berlin – unlike in other countries with class-6 regions, does not rank class 6, or even 5. Therefore, in terms of population Germany surpass other countries in the ranking.

Finally, it is worth adding that the international exchange index for both countries included in table 2 is above the average value for this rate in the EU, which in 2015 exceeded 83%. It is then worth considering why the other

<sup>1</sup> It the more so as one can find numerous similarities between the NHS and the National Health Service (NSZ) in Poland. Conclusions of this discussion would certainly be interesting in a debate about improving the NSZ in Poland. Yet, this comment is to be deemed a suggestion of a research subject for future analysis, as the topicality of this issue diverges from the purpose of this study.

countries in the table do not exceed the average. The reasons why countries such as Great Britain, Italy or France are below the European average are to be found in the population statistics. All these economies belong to countries which are considered large, thus they do not allocate their entire domestic product to international trade. As mentioned above, countries with small population, which have few inhabitants, but have also developed a specialization, are able to manufacture less goods, instead focusing on more specific goods, of higher quality. And the global demand for such high-quality products is very high. So this may be one of the reasons behind such a high international trade index. Romania may be an exception, having a population lower than the other countries listed above, yet still far from the threshold of ten million residents. Exceeding this threshold could rank this country among small economies. Yet Romania still balances on the ceiling of the average European index of trade exchange. Which proportionally also becomes part of its population index. Yet it is worth noticing that Romania, similarly to Slovakia or the Czech Republic has only one region ranked as class 4-6. Moreover, in all three countries it is the capital region, that is one which by its very administrative and population nature is often the most advanced. The other regions are below the overproduction area. This manifests a reduced convergence force. The thesis of reduced convergence force in these countries could be also supported by geographical location analysis. All the countries shown therein, maybe except for the Czech Republic are distant from the main EU development centres. It also indicated weaker impact of spill-over effect. However this should not diminish their chances of successfully implementing endogenous grow models in the future. Especially these elements of these models that are focused on the accumulation of knowledge capital, in particular human capital, in order to achieve long term effect of higher grow dynamics. This point could be attributed to any countries which are distant from the development centres due to geographical location or political situation.

This conclusion once again confirms the weight of the spatial element in the development of economic competitiveness. Despite economic globalization, the convergence effect in economy is still largely based on the elements of the so-called geographic closeness. Of course, in the age of instant messaging and domination of the service sector over the industrial sector, this element is less crucial than in the past, yet, in combination with advantages of developed technical infrastructure, it plays an important part in the strategic development of regional policy.

## 5. Conclusion

Despite significant economic revolution, space and population are still important elements of economic development. Admittedly, the role of such elements of special policy as natural resources or vast border affluence of the countries is much lower than in the past, yet understanding of space in the aspect of closeness to one's foreign trade partners is still an important element of development strategy. Gravity of commercial exchange increases along with the growing significance of globalization factors in the global economy. The main driving force of the EU regional policy – economic convergence – is still also understood within the borders of the spatial argument (Slugocki 2014, pp. 17-39). The geographic location of the most developmental EU regions is a clear evidence of this. Mutual border closeness, particularly of those regions which do not include state capitals, proves how important the physical closeness is for the forces of economic convergence.

Whereas the population aspect is more important if it grows along with a suitable social policy, especially one oriented at education and health care. Nowadays, it is becoming increasingly obvious that the competitiveness of an economy is not decided by the volume of the labour market, but its quality. In a globalized world, quality is the main driver for the competitiveness development strategies. Thus, there is a clearly visible development of countries with small populations which in many aspects are able to compete with much larger countries with greater influence on the international arena.

The omission of capital regions in the study was based on the principle that metropolitan character of the region is difficult not impossible to copy. This uniqueness is therefore difficult to adapt by other regions. Of course, the capital regions are also characterized by the number of other elements that are affectively able to support the convergence forces. The mentioned capital regions of Slovakia, the Czech Republic and Romania are the best example of this. However the Berlin region proves that relation between metropolitan state and increased competitiveness not always accrued.

This suggests that other elements not mentioned in the study must directly affect the level of competitiveness of regions.

It should be also added that characterized grow factors responsible for substantial grow as: increased involvement in international trade, investments in health and education could be a part of grow strategy, but should not constitute it. Regions should be able to adapt their unique potentials and build their own development strategies around them with strong focus on elements of trade, and social policy.

## Summary

### **Space and population – competitiveness determinants in the age of globalization**

In the 21st century in a globalized world the level of competitiveness depends on numerous factors. This article concentrates deliberations on several of them, including space, population and international exchange. For ages, the international position of a country depended on its geographical size or access to sea. The country's size was also determined by its internal demographic potential. As civilization progressed, there was a reorientation of factors which influence the development of individual countries and their regions. The contemporary world has seen an emergence of countries with small surface area and minor human potential, which yet are global development leaders. In the literature, they are often referred to as small states. Analysis of research shows that small countries are more involved, for instance, in providing support for the society. International exchange is also important for the development of individual countries. In this aspect, small countries turn the apparent threat related to a small market into an advantage. In the conclusion of the deliberation, the authors of the study point out that despite significant economic, social and cultural evolution, space and population are still important elements of development, although, they note, the role of such elements of spatial policy as natural resources is smaller than in the past.

**Keywords:** *competitiveness, space, population, regional policy, international exchange.*

## Streszczenie

### **Przestrzeń i populacja – czynniki determinujące konkurencyjność w dobie globalizacji**

W XXI wieku w zglobalizowanym świecie poziom konkurencyjności zależy od szeregu czynników. W artykule skoncentrowano rozważania na kilku z nich między innymi przestrzeni, populacji oraz wymiany międzynarodowej. Przez wieki pozycja międzynarodowa państwa zależna była od jego wielkości geograficznej, czy też dostępu do mórz. O wielkości państwa decydował również jego wewnętrzny potencjał demograficzny. Wraz z postępem cywilizacyjnym następowała

reorientacja czynników wpływających na rozwój poszczególnych państw i ich regionów. We współczesnym świecie pojawiły się państwa zarówno o niewielkiej powierzchni jak i niedużym potencjale ludzkim, które należą do globalnych liderów rozwoju. Określa się je często w literaturze mianem małych potęg. Z analizy badań można wywnioskować, iż małe kraje angażują się w większym stopniu między innymi w socjalne wspieranie społeczeństwa. Nie bez znaczenia dla rozwoju poszczególnych państw jest również wymiana międzynarodowa. W tym aspekcie małe kraje przemieniają pozorne zagrożenie związane z niewielkim rynkiem w atut. W konkluzji rozważań autorzy opracowania zaznaczają, iż mimo znaczącej ewolucji gospodarczej, społecznej i kulturowej przestrzeń i populacja wciąż stanowią ważne elementy rozwoju, chociaż zauważają, że takie elementy polityki przestrzennej jak chociażby zasobność surowcowa odgrywają mniejszą rolę niż w przeszłości.

#### Słowa

**kluczowe:** konkurencyjność, przestrzeń, populacja, polityka regionalna, wymiana międzynarodowa:

#### JEL

**Classification:** D72, D73, D74, D78, H70, H79, H83, O18, P1

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