#### **PRACE NAUKOWE**

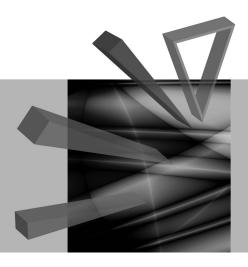
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Introduction	9
Part 1. Theoretical aspects of regional economy	
Ryszard Brol: Innovation vs. regional development  Ewa Glińska, Anna Kononiuk: The concept of regional strategy of smart	13
specialization	27
Hanna Kruk: Resilience, competitiveness and sustainable development of the region – similarities and differences	35
Andrzej Sztando: Regional innovation strategy implementation – system model covering the results of the analysis of the Polish experiences  Andrzej Raszkowski: Creativity in the context of regional development –	43
selected issues	52
Yuliya Melnyk: Regional peculiarities of the global art market	62
Elżbieta Załoga, Dariusz Milewski: The impact of transport on regional development	71
Alina Kulczyk-Dynowska: Diversified spatial neighbourhood – a metropolis and a national park	79
Part 2. The results of European regional space research and analyses	
Małgorzata Markowska, Danuta Strahl: Polish regions against the	
background of European regional space with regard to smart growth -	
aggregate perspective	89
Beata Bal-Domańska: Does smart growth enhance economic cohesion?	100
An analysis for the EU regions of new and old accession countries  Elżbieta Sobczak: Typology of European regions vs. effects of workforce	100
changes by the level of research and development activities intensity	111
Malgorzata Karczewska: Gross domestic expenditures on research and	111
development in GDP of European Union countries – changes in trends	121
Marzena Grzesiak, Anita Richert-Kaźmierska: Educational engagement of	
the elderly – the experiences of selected Baltic Sea Region countries	133
Ewa Coll: The classification of EU and Eastern Partnership countries	
regarding economic development level – a dynamic approach	144
Anetta Waśniewska: The potential of the population in the Baltic Sea	
Region in the years 2001–2011	157
<b>Alla Melnyk:</b> Modernization of regional structural policy mechanisms in Ukraine in the process of its EU integration	169

Part 3. Selected problems of polish regions functioning and development	
<b>Dariusz Głuszczuk:</b> Barriers to innovation activities in industrial enterprises by Polish regions in 2004–2006 and 2008–2010	181
Piotr Hajduga: Special economic zones as stimuli to regional development	
during a crisis	191
Adam Przybyłowski: Sustainable transport development prerequisites in selected Polish regions	199
<b>Mariusz E. Sokołowicz:</b> The impact of transnational corporations' activity on regional human capital. Case study of the Łódź metropolitan area	210
<b>Anna Jasińska-Biliczak:</b> Interregional cooperation as the stimulation of proinnovation actions – the casual analysis	222
Franciszek Adamczuk: Cross-border cooperation of Lower Silesia and	222
Saxony – current results and prospects	230
Agnieszka Barczak: Managing the production process of a group of agricultural farms of the Pomorze and Mazury Region and their	230
economic development	240
Tomasz Dorożyński, Wojciech Urbaniak: Experiences of county employment agencies in the use of EU structural funds to promote	2.0
employment. The case of the Łódź voivodeship	249
Malgorzata Golińska-Pieszyńska: Contemporary innovative practices in a regional context of the Łódź region	260
Streszczenia	
Część 1. Teoretyczne aspekty gospodarki regionalnej	
Ryszard Brol: Innowacyjność a rozwój regionalny Ewa Glińska, Anna Kononiuk: Koncepcja regionalnej strategii inteligent-	26
nej specjalizacji	34
Hanna Kruk: Rezyliencja, konkurencyjność i rozwój zrównoważony regio-	5.
nów – podobieństwa i różnice	42
Andrzej Sztando: Wdrażanie regionalnej strategii innowacji – model sys-	
temu stanowiący rezultat analizy polskich doświadczeń	51
Andrzej Raszkowski: Kreatywność w kontekście rozwoju regionalnego –	
wybrane zagadnienia	61
Yuliya Melnyk: Regionalna specyfika globalnego rynku sztuki	70
Elżbieta Zaloga, Dariusz Milewski: Wpływ transport na rozwój regionalny	78
Alina Kulczyk-Dynowska: Zróżnicowane sąsiedztwo w przestrzeni – me-	
tropolie i park narodowy	86

Część 2. Rezultaty badań i analiz nad europejską przestrzenią regionalną	
Małgorzata Markowska, Danuta Strahl: Polskie regiony na tle europejskiej przestrzeni regionalnej w kontekście inteligentnego rozwoju – ujęcie agregatowe	99
<b>Beata Bal-Domańska:</b> Czy inteligentny rozwój sprzyja spójności ekonomicznej? Analiza dla regionów państw Unii Europejskiej nowego i starego rozszerzenia	110
<b>Elżbieta Sobczak:</b> Typologia regionów europejskich a efekty zmian liczby pracujących według poziomu intensywności prac badawczo-rozwojowych <b>Małgorzata Karczewska:</b> Udział nakładów na badania i rozwój w PKB	120
krajów Unii Europejskiej – tendencje zmian	132 143
<b>Ewa Coll:</b> Klasyfikacja państw UE i krajów Partnerstwa Wschodniego ze względu na poziom rozwoju gospodarczego – ujęcie dynamiczne <b>Anetta Waśniewska:</b> Potencjał ludności regionu Morza Bałtyckiego w la-	156 168
tach 2001-2011  Alla Melnyk: Modernizacja mechanizmów regionalnej polityki strukturalnej Ukrainy w procesie integracji z Unią Europejską	177
Część 3. Wybrane problem funkcjonowania i rozwoju polskich regionów	
Dariusz Głuszczuk: Przeszkody działalności innowacyjnej przedsiębiorstw przemysłowych według regionów Polski w latach 2004–2006 i 2008–2010 .  Piotr Hajduga: Specjalne Strefy Ekonomiczne jako stymulator rozwoju regionalnego w dobie kryzysu	189 198 209
Mariusz E. Sokołowicz: Wpływ korporacji transnarodowych na rozwój kapitału ludzkiego w regionie. Przykład łódzkiego obszaru metropolitalnego Anna Jasińska-Biliczak: Współpraca międzyregionalna stymulantem działań proinnowacyjnych – przykład województwa opolskiego	221 229
Franciszek Adamczuk: Współpraca transgraniczna Dolnego Śląska i Saksonii – aktualne wyniki i perspektywy	239
Ja 20060am 62020	2.0

Tomasz Dorożyński, Wojciech Urbaniak: Doświadczenia powiatowych	
urzędów pracy w zakresie wykorzystywania funduszy strukturalnych	
UE w celu promocji zatrudnienia. Przykład województwa łódzkiego	259
Małgorzata Golińska-Pieszyńska: Współczesne praktyki innowacyjne w	
kontekście regionalnym w oparciu o region łódzki	267

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## THE CLASSIFICATION OF EU AND EASTERN PARTNERSHIP COUNTRIES REGARDING ECONOMIC DEVELOPMENT LEVEL – A DYNAMIC APPROACH

**Summary:** The study presents the classification of the European Union member states and the Eastern Partnership countries with regard to economic potential illustrated by GDP *per capita* value in a dynamic perspective (covering the period of 1995–2009).

**Keywords:** the Eastern Partnership, economic integration, classification, GDP per capita.

#### 1. Introduction

The development of the European Union as well as its competitiveness may depend on both the establishment of long-term, permanent principles of dynamic economic and social development in particular member countries, as well as strengthening international relations not only with partners who set global development tendencies, but also with neighbouring countries, creating opportunities for the accomplishment of external advantages. Therefore the evaluation of the prospects for the European Union's competitive advantage requires an in-depth analysis of the relations occurring in the sphere of the economy between EU member states and its neighbours, i.e. countries featuring significant political potential and represented, beyond any doubt, by the Eastern Partnership.

The main purpose of this paper is to classify the EU and the Eastern Partnership with regard to their economic potential, illustrated by the value of GDP *per capita*, taking a dynamic approach perspective in the period of 1995–2009.

#### 2. Determinants of the European Union external relations

The directions of systemic reform introduced by the Lisbon Treaty are of fundamental importance for the future of the European Union, its cohesion and its

position perceived in the international arena. It is of crucial importance that the EU was established as a legal entity in accordance with the Lisbon Treaty provisions [Barcz 2008; 2010; 2012; Barcz (ed.) 2008; Wróbel (ed.) 2012] and therefore it has became a coherent international organization acting upon a unified legal structure and its sources. As the legal system underlying an international organization, EU legislation currently covers the following [Barcz, Kawecka-Wyrzykowska, Michałowska-Gorywoda 2012; Bujalski, Błędzki 2008]:

- primary law, i.e. treaties constituting EU fundamentals (TUE Treaty on European Union and TFUE – Treaty on the Functioning of the Union), revision treaties, accession treaties and general principles of law developed by the judicature of the European Court of Justice (ECJ);
- derivative law an internal EU legislation accepted by the Union institutions in order to regulate their functioning, i.e. institutional rules, inter-institutional agreements or binding legal agreements, addressed to the member states and units representing these states (natural persons and legal entities). These decision take the form of legislative and non-legislative acts divided into categories.

EU international agreements with third countries or international organizations constitute a crucial component of primary law. In accordance with the Lisbon Treaty, the scope of EU competencies for entering into international agreements was prepared, following Art. 216, paragraph 1 of TFUE: "The Union may conclude an agreement with one or more third countries or international organisations where the Treaties so provide or where the conclusion of an agreement is necessary in order to achieve, within the framework of the Union's policies, one of the objectives referred to in the Treaties, or is provided for in a legally binding Union act or is likely to affect common rules or alter their scope".

The EU functioning in international relations occurs through many institutions, based on diverse TUE and TFUE legal regulations and within the framework of activities performed by the High Representative of the Union for Foreign Affairs and Security Policy appointed by the Lisbon Treaty¹ [Cała-Wacinkiewicz 2012; Chruściak 2010]. The element which binds these activities is the concept of EU external relations, since: "In its relations with the wider world, the Union shall uphold and promote its values and interests and contribute to the protection of its citizens. It shall contribute to peace, security, the sustainable development of the Earth, solidarity and mutual respect among peoples, free and fair trade, eradication of poverty and the protection of human rights, in particular the rights of the child, as well as to the strict observance and the development of international law, including respect for the principles of the United Nations Charter" (Art. 3, paragraph 5 of TUE).

<sup>&</sup>lt;sup>1</sup> Referred to as High Representative.

Within the framework of external relations, the following are distinguished Kawecka-Wyrzykowska, Michałowska-Gorywoda 2012]: Foreign and Security Policy (CFSP) which "is subject to specific rules and procedures" (Art. 24 of TUE) and the European Neighbourhood Policy (ENP). The significance of ENP was emphasized by separate regulations (in Art. 8) of the Treaty on European Union. External relations also cover – listed in Part five of TFUE – "external activities of the Union". These areas are covered by a common catalogue of values and focused on the implementation of common goals. The most important components of these activities are as follows [Łazowski, Łabedzka 2011; Osica 2010]: Common Commercial Policy, association, cooperation for development, economic, financial and technical cooperation with third countries, humanitarian aid, mitigation measures, concluding international agreements by the Union, EU relations with international organizations and third countries, as well as the Union delegations and solidarity clause.

### 3. Partnerships as the result of the European Neighbourhood Policy

The European Neighbourhood Policy (ENP) was initiated following the subsequent stages of EU enlargement taking place in 2004 and 2007. The main purpose of the ENP is to avoid new divisions which might occur between the EU and its new neighbours [Communication... 2008a; Communication... 2008b].

The ENP, in carrying out the set goals, takes advantage of the existing legal measures and especially association agreements presented in the form of special action plans. The significance and rank of the ENP was defined in Art. 8 of the TUE, which states that in order to develop the ENP, "special agreements" are planned to be concluded:

- "1. The Union shall develop a special relationship with neighbouring countries, aiming to establish an area of prosperity and good neighbourliness, founded on the values of the Union and characterised by close and peaceful relations based on cooperation.
- 2. For the purposes of paragraph 1, the Union may conclude specific agreements with the countries concerned. These agreements may contain reciprocal rights and obligations as well as the possibility of undertaking activities jointly. Their implementation shall be the subject of periodic consultation".

Therefore, the main task of the ENP is to counteract potential break ups by facilitating and developing relations with new neighbours of the enlarged Union, as well as supporting political reforms in these countries. The European Neighbourhood Policy covered 16 countries altogether within the framework of:

- The Eastern Partnership: Byelorussia, Ukraine, Moldova, Armenia, Azerbaijan and Georgia [Communication... 2008a],

The Union for the Mediterranean: Algeria, Egypt, Israel, Jordan, Lebanon,
 Libya, Morocco and also Palestinian Autonomy, Syria and Tunisia
 [Communication... 2008b].

The possibility of economic, financial and technical cooperation with third countries, carried out within the framework of Partnerships, was introduced as a separate legal basis by the Treaty of Nice and adopted by the TFUE in accordance with the Lisbon Treaty. It is emphasized that its introduction was necessary for the development of EU relations with the former Soviet Union states. It was not possible to conclude any association agreement and besides, these states were not covered by aid programmes aimed at the developing countries. Provisions of these articles offer the possibility of undertaking unilateral measures by the Union in order to develop cooperation with these countries and concluding international agreements as well as providing them with financial support.

The Eastern Partnership (EP) represents the programme inaugurated in Prague in 2009 which defines the eastern dimension of the policy realized within the framework of the European Neighbourhood Policy – the form of regional cooperation directed towards the EU's eastern neighbours. The initiative and the project of the Partnership initiated activities undertaken by Polish diplomacy and supported by Swedish partners.<sup>2</sup> The programme objectives focus on closer cooperation with Byelorussia, Ukraine, Moldova, Georgia, Azerbaijan and Armenia, while the manifestations of its implementation are, among others [Łapczyński 2009]: trade preferences including the proposal of a free trade zone, fewer restrictions along the visa application process, intensification of human relations, as well as aid programmes. The idea of the Partnership is also to prepare its member countries for possible accession. The financial support for the programme amounts to 600 million EUR, including 250 million coming from the European Neighbourhood Partnership Instrument ENPI and the, so called, additional means make 350 million [Communication... 2008a; Communication... 2008b].

### 4. Economic integration of the European Union with Eastern European countries

The fundamental purpose of the European Neighbourhood Policy is to attract Eastern neighbours closer to the EU, to develop relations between the Union and Eastern European countries as well as the Southern Caucasian states, which may facilitate the gradual participation of these countries in EU policies and programmes and will also allow for integration with the common market.

<sup>&</sup>lt;sup>2</sup> The project was accepted by the European Commission on 3<sup>rd</sup> December 2008, approved by the EU leaders on 20 March 2009 and officially initiated on 7 May in Prague at the summit of EU Heads of Member States and Governments – the first session of EuroNest as the assembly of the European parliament representatives and national parliaments of Eastern Partnership.

Additionally, cooperation is supposed to result in passing on good EU practice in such areas as: trade, economy and policy, while the pace of cooperation development depends on changes occurring in these countries and the expectations of their partners.

Many EU member states influenced the content of the signed agreement, since the need for the intensification of relations with eastern neighbours was emphasized, among others, by the Visegrad countries (V4): Czech Republic, Poland, Slovak Republic and Hungary, which presented substantive proposals in this mater, also joined by Lithuania, Latvia and Estonia. In 2006, during its EU Presidency, Austria suggested the establishment of a common power engineering policy with its integral part taking the form of a dialogue with energy transit countries, i.e. Ukraine and Byelorussia. During the German EU Presidency (2007) Germany suggested the "ENP Plus" concept which postulated offering EU neighbours an attractive and broad proposal of extending relations to facilitate concluding sector oriented agreements by EU and ENP countries. The manifestation of changes in the approaching neighbourhood policy was adopting the Polish-Lithuanian proposal of southern and eastern ENP dimension development by the European Council (in December 2007), not only within the framework of bilateral, but also multilateral relations [Wojna, Gniazdowski (eds.) 2009].

The Eastern Partnership, following its bilateral dimension, aims at preparing a new legal basis in relations between the EU and its eastern neighbours, including association agreements as well as the establishment of broad and complex free trade zones. It also focuses on activities for the total liberalization of visa obtaining regime in relations with particular partnership countries and also the development of cooperation in the area of power engineering safety. A further deepening of relations with the Union depended, among others, on the partners' progress in the realization of such values as democracy, rule of law and respect for human rights and also in the implementation of the market economy, sustainable development and the rules of good management practice. The EU, on the other hand, follows the commitment of supporting reform oriented activities in the neighbouring countries, including the support for their administrative capacity improvement. Even though the Eastern Partnership does not stand for enlargement strategy, however, it is not ruled out that its member countries may, in the future, become EU member states. It is emphasized that the model, defined within the framework of the Eastern Partnership, for relations development with the Union is flexible enough to become attractive for both those countries which are only interested in close cooperation with the Union and those aspiring to be covered by the process of European integration [Wojna, Gniazdowski (eds.) 2009].

The significance of the Eastern Partnership for countries referred to as "supporters of the Black Sea Cooperation", i.e. Germany (the authors of the Black Sea Synergy concept), Romania and Bulgaria, as well as the Mediterranean Greece,

is crucial owing to the geographical location of these three countries and their cultural, political, economic and social ties. Interest in the eastern neighbours is also growing among other European countries oriented towards the southern neighbourhood, which mainly refers to economic, power engineering, internal safety and cooperation in border management. The desire for the ENP extension constitutes, beyond any doubt, the common ground for countries interested in relations with southern and eastern neighbours and, in spite of discrepancies regarding the type of EU political and financial involvement in the east and south, it is of mutual interest to promote political, legal, institutional and good management standards, as well as democratic norms in the EU neighbourhood areas [Wojna, Gniazdowski (eds.) 2009].

## 5. The results of EU and Eastern Partnership countries' classification regarding GDP per capita in the period of 1995–2009

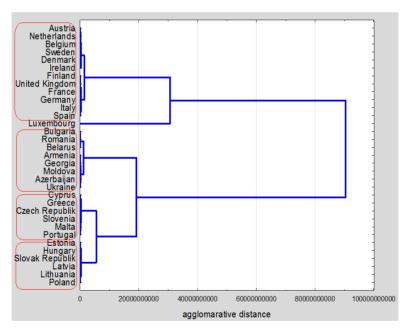
The performed analysis covered EU27 countries and the Eastern Partnership nations, i.e. Armenia, Azerbaijan, Byelorussia, Georgia, Moldova and Ukraine in the period of 1995–2009. The International Monetary Fund³ database resources served as the source of statistical information. GDP *per capita* based on purchasing power parity (PPP) represents the measure selected for the primary evaluation of the listed countries economic development level. PPP GDP is the gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the US dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy, plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for the depreciation of manufactured assets or for the depletion and degradation of natural resources. The data presented are in current international dollars.

The group of countries featuring the lowest GDP *per capita* level, both in 1995 and in each subsequent year, included: Armenia, Moldova and Georgia (in 1995 it was respectively 1,232, 1,298 and 1,438, while in 2009 in Moldova – 2,862, in Georgia – 4,766.5 and in Armenia – 4,987.7). At the same time, GDP *per capita* value increased in Luxembourg from 44,500 up to 77,400, while in Poland from 7,300 up to 18,000. GDP growth in 2009, assessed in relation to 1995 levels, allows to conclude that almost a sixfold increase is characteristic for Azerbaijan (from 1,600 up to 9,500), fivefold for Lithuania (from 3,400 up to 16,600), fourfold for Armenia and the smallest one was recorded in Italy (up to 140% of the 1995 level, i.e. from 20,700 up to 29,100). The above brief characteristics confirm the extensive diversification of both the level and pace of GDP changes in the countries under analysis.

<sup>&</sup>lt;sup>3</sup> http://data.worldbank.org/indicator.

The next stage of analysis consisted in investigating groups of countries featuring similar GDP values in the period of 1995–2009. The study used time series grouping by means of applying the Ward method with the square Euclidean distance. The analysis of the groups obtained was conducted based on, among others, mean values, standard deviations and variation coefficients.

The European Union and Eastern Partnership countries grouping was made regarding GDP *per capita* value based on purchasing power parity throughout an overall period which means that there are as many "qualities" as time units. The standardization of qualities was not performed due to data uniformity. This procedure allowed for obtaining groups distinguished both with regard to the level of analyzed quality and its changes in time. The classification results obtained using the Ward method are presented in Figure 1. It is only by means of visual assessment that the analyzed countries may be divided into four groups, of which one constitutes a single-element group comprising Luxembourg, and therefore it was decided that a split into 5 groups of countries will be applied in the course of further analysis.



**Figure 1.** Dendrogram prepared following the Ward method presenting division into classes Source: own elaboration based on IMF data applying the Statistica programme.

Among the five groups obtained, group B is the most numerous featuring the second GDP *per capita* value level in both the first and the last year of analysis and covering twelve "old" EU countries – see Table 1.

	Number		Mean GDP values		Mean GDP values Mean	Mean GDP valu	Mean GDP
Group	of countries	Countries	in 1995	in 2009	dynamics		
	(from EU, from EP)		111 1 9 9 3	III 2009	in 1995-2009		
A	1 (1 EU)	Luxembourg	40,537.8	77,363.5	104.7		
	12 (12 EU)	Austria, Netherlands, Belgium, Sweden,					
В		Italy, Spain Denmark, Ireland, Finland,					
		United Kingdom, France, Germany,	20,769.8	34,922.5	103.8		
С	6 (6 EU)	Cyprus, Czech Republic, Greece, Slovenia,					
		Portugal, Malta,	14,494.2	26,019.8	104.3		
D	6 (6 EU)	Estonia, Hungary, Slovak Republic, Latvia,					
		Poland, Lithuania,	6,714.6	17,694.0	107.5		
E	8 (2 EU, 6 EP)	Bulgaria, Romania, Armenia, Azerbaijan,					
Е		Belarus, Georgia, Moldova, Ukraine	2,970.9	8,230.3	108.1		

Table 1. Selected characteristics of groups

Source: own elaboration based on IMF data.

Poland, including five other countries of the 2004 accession (Estonia, Hungary, Slovak Republic, Latvia, Lithuania), represent the group featuring the second mean value of GDP *per capita* level (but in the ranking from the smallest), while mean dynamics is almost the highest in this group.

The Eastern Partnership countries, as well as Romania and Bulgaria (i.e. countries of the 2007 accession), represent "the weakest" group regarding GDP *per capita* value, however, at the same time this group shows the highest mean dynamics of this particular characteristics.

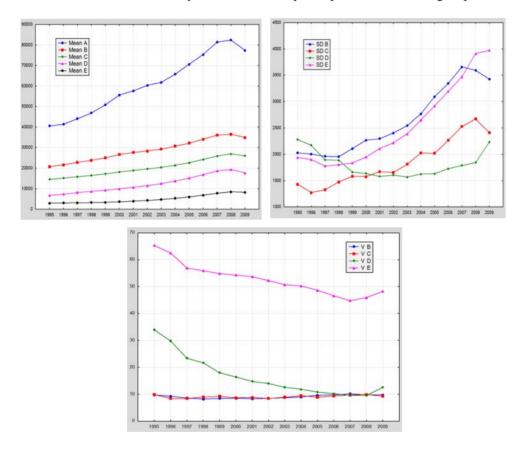
For each group mean values, standard deviations and variation coefficients were also determined, as illustrated in Figure 2.

It can be easily noticed that the obtained division resulted mainly from the mean value of GDP *per capita* level, however, it is worth paying attention to the fact that in the case of weaker groups the downturn was slower in recent years since the drop was from a lower level.

The graph illustrating standard deviation indicates that the diversification between countries in the same group measured by standard deviation was increasing at a similar pace among both the "rich" EU countries (group B) and the "eastern" ones (group E). Group D, to which Poland belongs, presented a smaller diversification at first, however, in recent years it increased again. The analysis of variation coefficients indicates that the "old" EU countries maintained their diversification at a similar level (up to 10%) while the group including Poland converged and due processes were initiated even before EU accession. The Eastern countries are, on the other hand, characterized by an extensive diversification regarding GDP value and their convergence was slowed down.

GDP value *per capita* in the obtained clusters and mean values in these groups are presented in Figure 3 which illustrates that group B features an initial quick

increase of GDP *per capita* in the case of Ireland and a spectacular drop in 2008. The lowest values in this group, throughout the entire analyzed period, were recorded in Spain. For the first few years and in 2009, the highest GDP values *per capita* were observed in group C, both Czech Republic and Slovak Republic were ranked last regarding GDP *per capita* level in the pre-accession period (Slovak Republic) and in the accession year (Czech Republic) recorded higher values of this characteristic than, among others, Portugal and Malta representing, since 2005, the countries characterized by the lowest GDP *per capita* levels in this group.



**Figure 2.** Mean, standard deviation and variation coefficient values in the obtained groups Source: own elaboration based on IMF data.in group B in the Netherlands.

Group D, which includes Poland, forms the cluster characterized by a relatively stable GDP *per capita* growth. It is worth emphasizing that Poland is the only country included in this group which also preserved its growing tendency in 2009. It should also be remembered at this point that group D covers countries acting as strong advocates of the idea of the Eastern Partnership.

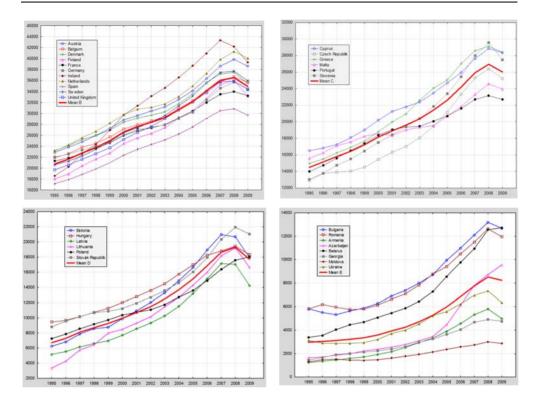


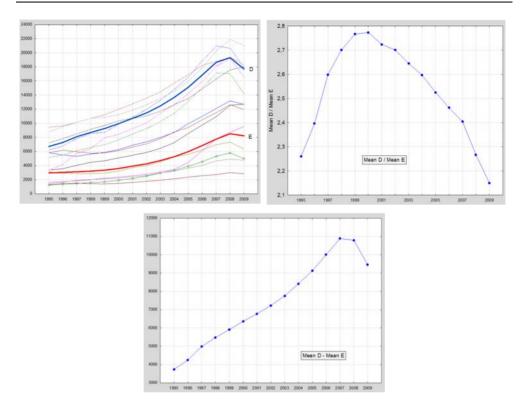
Figure 3. GDP per capita values in countries forming B, C, D and E clusters

Source: own elaboration based on IMF data.

Group E includes all countries of the Eastern Partnership, as well as Bulgaria and Romania. Azerbaijan represents the country which features the most dynamic GDP *per capita* growth, while Moldova is the country characterized by the slowest pace of transformations in this group.

The next part of the study discusses information regarding the two poorest groups in terms of GDP *per capita* (see Figure 4). These groups are made up of countries whose initial GDP *per capita* values start from 1,200 up to 9,400, and the final ones take the range of 2,800 up to 21,000 per inhabitant.

The relations presented in the middle picture of mean GDP values *per capita* in groups D and E indicate that, following the initial period of growth (till 2000), a gradual decrease of relationship was assessed in relative terms. Nevertheless, the difference of these values in both groups illustrated in the right-hand picture shows a worrying, ongoing increase of the distance (till 2007) between group D and E (evaluated as the absolute distance).



**Figure 4.** GDP *per capita* in groups D and E and the presentation of mean values in these groups Source: own elaboration based on IMF data.

The drop in GDP *per capita* values is clearly visible in almost all the analysed countries apart from Poland, Byelorussia and Azerbaijan, where in 2009 GDP growth was still observed.

Meeting the underlying provisions of the agreement concluded between the European Union and the Eastern Partnership countries constitutes the next step in carrying out the policy of opening towards the east. These countries represent the natural direction of economic cooperation for the Union. The discussed research indicates that the Eastern Partnership countries feature a very low GDP *per capita* level, as well as a significant spread of its values. This means a great challenge for the economies of such countries as Azerbaijan, Moldova, Georgia, Armenia, Byelorussia and Ukraine in undertaking activities aimed at both GDP *per capita* value growth and minimizing developmental disproportions.

#### 6. Final remarks

The preformed analysis allows for making an observation that in the studied period of time there occurred characteristic economic development tendencies illustrated by GDP per capita value. Groups of countries featuring relatively high GDP per capita values presented, in the period under consideration, a weaker development dynamics, while the diversification between countries covered by these groups was relatively stable. On the other hand, countries with lower GDP per capita values, in the studied years, registered high dynamics of economic development while the differences between countries were undergoing changes from a dynamic increase in spread to mitigating development disparities. The Eastern Partnership countries are characterized by a significant spread regarding GDP per capita level and the low level of this measure values. The Eastern Partnership countries have a difficult path ahead of them focused on a gradual increase of GDP per capita values and the simultaneous mitigation of development disproportions.

The conducted analysis illustrates how complicated the provisions for carrying out integration processes are, which should result in economic and civilization advantages for all their participants.

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#### KLASYFIKACJA PAŃSTW UE I KRAJÓW PARTNERSTWA WSCHODNIEGO ZE WZGLĘDU NA POZIOM ROZWOJU GOSPODARCZEGO – UJĘCIE DYNAMICZNE

**Streszczenie:** W pracy przeprowadzono klasyfikację państw Unii Europejskiej i krajów Partnerstwa Wschodniego ze względu na potencjał gospodarczy ilustrowany wartością PKB *per capita* w ujęciu dynamicznym (w latach 1995–2009).

**Slowa kluczowe:** Partnerstwo Wschodnie, integracja gospodarcza, klasyfikacja, PKB *per capita*.