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## THE ECONOMIC POSITION OF THE EUROPEAN UNION IN THE CONTEMPORARY WORLD. THE RISK-BASED PERSEPECTIVE

### INTRODUCTION

The discussion of the position of the European Union in the contemporary world is dominated by the considerations concerning the Union's current economic role and its future position. A number of prognostic studies indicate multiple threats and trends driving structural transformations of the global economy and conclude that the EU will lose its position. The risk of marginalising the UE position in the global economy stems from adverse, both internal and external, development conditions, including: demographic situation, labour resources, growing immigration trends, relations with Russia and the US, China's increasing importance for the global economy, low innovativeness of the UE's economy, political, social and cultural factors. For these reasons, the proposition put up herein is: *Despite numerous internal and external threats, the European Union remains one of the world's main economic regions.* The proposition is supported by standard economic indicators and qualitative features of the European economy, laying the foundations for growth. One should bear in mind, though, that if the risk of marginalising the European Union's position in the modern

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global economy is not mitigated and the EU's internal problems are dealt with ineffectively, then we can soon see that both European economy and its role in international relations have weakened.

The objective of this paper is to identify and analyse the risks shaping the European Union's current position in the global environment. The discussed key subject is the identification of the EU's economic standing in terms of classical economic indicators. The paper endeavours to prove the following: *Despite numerous internal and external threats, the European Union remains one of the world's main economic regions.* The statement will be supported by an analysis of both standard economic indicators and qualitative aspects of the EU economy laying the foundations for growth. The empirical part hereof comprises a comparative analysis of the EU's key macroeconomic data against the global economy and a partial implementation of the PSM model and Scoreboard for the purposes of determining the EU position in the world.

## RISK RELATING TO THE CURRENT AND FUTURE POSITION OF THE EUROPEAN UNION IN THE GLOBAL ECONOMY

### SELECTED ECONOMIC INDICATORS FOR THE EU – RISK CRITERION

As already mentioned, in discussions on the place of the European Union in the contemporary global economy, considerations of the EU's current future economic role play a prominent role. It appears that a threat of marginalisation of the EU in the global economy, under adverse internal and external growth conditions, does not have to emerge soon, which results from the Union's current position, growth potential, as well as technological, social, cultural and political factors.

For the purposes of the analysis of classical economic indicators, UE-28's position is compared with that of BRIC<sup>1</sup>, which, together with Next 11<sup>2</sup>, is considered a group of countries characterised by rapid economic growth with a large growth potential for the next few decades.

In 2016, the EU's economy generated 23.4% of the global product in terms of exchange rates and was, after the US (with a 25.1% share), the second largest region in terms of a share in the global GDP. China's share was 15.1%, Russia's 14.2, India's 4.1% and Brazil's 2.7%. Calculated in terms of PPP, the shares in the global GDP were as follows: China – 17.3%, the EU – 17.4%, the US – 16.0%, Russia – 12.3%, India – 7.2% and Brazil – 3.3%. (see Table 1 and Figure 1).

<sup>1</sup> Brazil, Russia, India and China.

<sup>2</sup> South Korea, Nigeria, Bangladesh, Egypt, the Philippines, Indonesia, Iran, Mexico, Pakistan, Turkey and Vietnam.

Table 1. The EU-28's economic position. Selected indicators against the US and BRIC in 2016

Item	World	EU-28	US	China	Russia	Brazil	India
GDP in terms of exchange rates (USDbn)	74.8	17.5	18.8	11.3	10.6	2.0	3.1
% share	100.0	23.4	25.1	15.1	14.2	2.7	4.1
GDP in terms of PPP (USDbn)	115.8	20.1	18.5	20.0	14.3	3.8	8.3
% share	100.0	17.4	16.0	17.3	12.3	3.3	7.2
Per capita GDP (USD '000)	16.1	38.4	56.2	14.8	12.0	15.9	6.8
Region's GDP/global GDP (%)	100.0	238.5	349.1	91.9	74.53	98.8	42.2
Region's GDP/EU's GDP (%)	41.9	100.0	146.4	38.5	31.3	41.4	17.7
GDP-measured productivity per employee (USD)	X	84,741.2	85,000.5	25,123.8	22,456.8	31,218.1	14,999.0
GDP-measured productivity per hour(USD)	X	52	68.3	22	32	12	5

Source: The author's own study based on The World Factbook 2017, World Development Indicators 2016, World Economic Outlook 2016.

The analysis of the structure of Europe's GDP reveals a clear concentration, because as much as 71% of GDP is generated in seven European states (i.e. 25.6% of the number of member states): Germany, France, the United Kingdom, Italy, Spain, Poland and the Netherlands. Other seven countries jointly generate 14% of GDP: Belgium, Switzerland, Sweden, Austria, Romania, Ukraine and Norway.

This means that the other 23 states generate 15% of the continent's GDP. The EU member states together with Switzerland and Norway represent in aggregate 96% of GDP, which stems from both differentiated economic potential and differentiated growth rates among the European states.

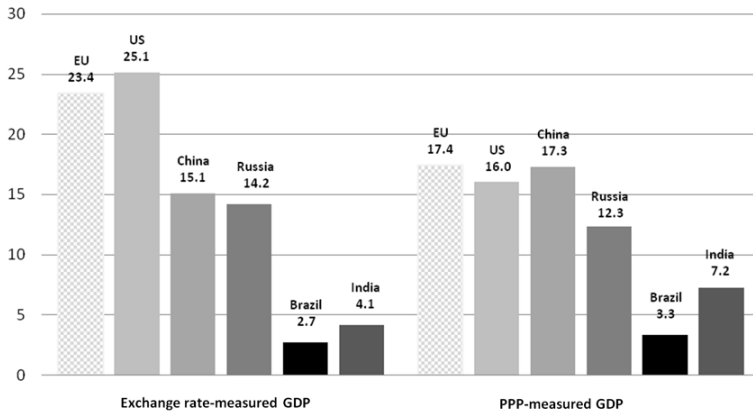
This also refers to the EU member states. Thus one may speak about various seeds of growth (measured with the GDP growth rate) and various growth factors (intensive and extensive ones), and, consequently, about a material risk of differentiated per capita GDP<sup>3</sup>.

Among material indicators selected for the purposes of this analysis there is work productivity. It is one of the key measures of the country's competitiveness and also a decisive driver of economic growth, hence of the quality of life. Productivity (see Figure 2) measured per employee is in Brazil by 27% lower than in the EU. In China the respective figure is 48.5%, in India 55% and in Russia 38%. In terms of work productivity, the US outpaces the European economies. In the EU states, work productivity growth rate was slightly above 1% and in numerous highly developed economies it remained below that threshold. This was the

<sup>3</sup> S. M.Szukalski, *Pozycja ekonomiczna Europy i jej potencjał w świecie*, [in]: J. Kleer, K. Prandecki, *Ekonomiczna pozycja Europy w świecie*, PAN, Warszawa 2016, p.78.

case in, for instance, the Netherlands, Finland, Belgium and Italy. According to the OECD, since the mid-1990s, the decreasing productivity growth rates were observed in almost all EU countries covered by the analysis, including Poland. However, measured against other countries, the change was insignificant. For instance, in 1995 Germany could boast 5% productivity growth rate, while in 2016 it was only around 1%.

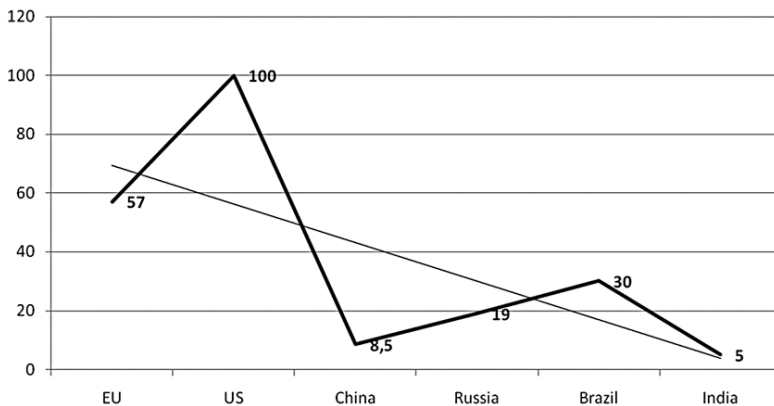
Figure 1. Exchange rate- and PPP-measured GDP in the EU-28, the US and BRIC countries in 2016 (%)



Source: The author’s own study based on Table 1.

In the OECD ranking (OECD Report, 2016), Poland ranked second in terms of work productivity growth in 2009–2016.

Figure 2. Work productivity growth rate in EU-28, US and BRIC countries in 2016 (%)



Source: The author’s own study based on Table 2.

The rate stood over 3%, which rendered Poland second only to Lithuania, which recorded the growth rate of almost 4%. Poland was closely followed by Latvia with the growth rate similar to Poland's. Despite this impressive (against other EU countries) growth, in the general productivity ranking<sup>4</sup>, Poland and other CEE countries come very poorly. In 2016, Luxembourg ranked first. There, the average value of production per hour exceeded USD 90. Luxembourg was closely followed by Norway (more than USD 80) and Belgium (almost USD 70). Poland is sixth from the bottom with USD 30 per hour. Such differentiation and stratification among the EU member states results from the fact that in the CEE countries productivity is, as a rule, spurred by longer working hours and a lower ratio of part-time jobs. Over a year, a German works by several hundred hours less than a Pole; nevertheless, the former produces goods of considerably higher value. Unfortunately, this is a question of not only better work organisation or better motivation, but also of investments in new technologies, which the CEE countries started with a delay.

The risk of decreased or differentiated productivity and productivity growth rate in the EU states is also related to adverse demographic developments: society aging and occupational mismatch. It is emphasised that in the EU countries a significant number of employees are either under- or over-qualified in relation to their respective job requirements. This translates into lower productivity. Employees' potential is to a large degree wasted, because, in recent years, enterprises would invest in solutions supporting production or logistics management rather than human resources management. Today, most of them lack tools to quickly and precisely measure competence gaps or surpluses, assess an employee's productivity and plan their professional development<sup>5</sup>.

For the economic growth rate in the EU states to be satisfactory, productivity must grow by 80% quicker than it is now. In the past, growth was driven by the growing employment rate and higher productivity. However, for over two decades now, global employment growth has been decelerating. The employment rate has decreased in all EU countries and also in Russia. The same process is expected to start in China in several years. As one of the pillars of the economic growth weakens, the EU economy will be unable to maintain the current growth ratio.

Another indicator used to analyse the EU's global economic position described in terms of GDP-measured effects is the sectoral structure of the EU economy, with services being the dominating sector (representing 74.1% of GDP). The share of services in total employment is 72.8%, with the ratio varying materially from country to EU country. The share of services in the added production exceeds 72% in eleven EU countries; its share in employment is that high in nine countries<sup>6</sup>.

<sup>4</sup> Work productivity increases if the real GDP grows more quickly than the number of employees (man-hours). As a rule, the higher the capital expenditure on human capital, innovations and new technologies, the higher the productivity.

<sup>5</sup> S. Vanhoonaeker, N. Reslow, *The European External Action Service: Living Forwards by Understanding Backwards*, "European Foreign Affairs Review", 2010, Vol. 15, No. 1, p.18.

<sup>6</sup> UNDP, *Human Development Report 2016. Work for Human Development*, New York 2017, p.208; World Bank, *Policy Research Report, Globalization, Growth, and Poverty*, New York 2016.

S. Szukalski<sup>7</sup>, observes that some secular trends are present in the European economy, manifested in economy servicisation (between 1995 and 2015, the share of services in employment increased from 65.1% to 72.8% and in GDP to 69.9%); deagrarisation (over the same time, the share of agriculture in GDP generation dropped from 2.4% to 1.6%; and deindustrialisation (the share of manufacturing industries in the added value decreased from 28.5% in 1995 to 21.6%). In this area, the risk faced by the EU is the gradually vanishing share of agriculture in the EU's GDP. Deep marginalisation of agriculture may leave the European Union dependent on food imports.

The comparison of structures of the EU's and US's economies with the structures of economies of the BRIC countries reveals their material differentiation, to the disadvantage of BRIC (see Table 2), where agriculture dominates the structure. In Brazil, China and India, the share of services is low.

The next important indicator in our analysis is international trade. In 2016, the EU's main export and import markets were the US, China and Russia (see Table 3). The EU's share in global exports (measured in USD) was 38.9% in 2016. The risk for the EU's position is here a steady decrease in this share over the last decade, to the advantage of East Asia countries, primarily China<sup>8</sup>.

Table 2. Sectoral structure of EU-28, US and BRIC economies in 2016 (%)

Item	EU-28	US	China	Russia	Brazil	India
GDP						
Sector 1	1.6	1.3	6.0	12.0	6.2	20.0
Sector 2	28.5	17.2	42.0	38.0	22.0	34.0
Sector 3	69.9	81.5	52.0	50.0	71.8	46.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Employment						
Sector 1	5.6	1.0	30.5	22.9	23.5	50.0
Sector 2	21.6	21.5	32.0	20.1	14.5	17.4
Sector 3	72.8	77.5	37.5	57.0	72.0	32.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sector 1: agriculture, forestry, fishing and mining industries; Sector 2: processing and construction industries; Sector 3: services.

Source: The author's own study based on: The World Factbook 2017, World Development Indicators 2016, World Economic Outlook 2016.

<sup>7</sup> S.M. Szukalski, *Pozycja ekonomiczna Europy i jej potencjał w świecie*, [in]: J. Kleer, K. Prandecki, *Ekonomiczna pozycja Europy w świecie*, PAN, Warszawa 2016, p.78.

<sup>8</sup> WTO, *International Trade Statistic* 2016.

Table 3. International trade of EU-28, the US and BRIC in 2016(%)

Trade partner	Share in EU-28's exports	Share in EU-28's imports
US	22.0	15.5
China	10.4	23.1
Russia	5.0	8.2
Brazil	2.1	1.9
India	2.2	2.3

Source: The author's own study based on: Eurostat 2017; UNCTAD 2017, WTO, *International Trade Statistic*, 2016.

The risk implied by forecasts (see Table 4) is the next material factor in the analysis of the EU's global economic position:

**1. Demographic situation characterised by Europe's decreasing population, reduced labour resources and change in the age structure.** Forecasts provide for the EU's population dropping to 707m in 2050 from the current 738m, while the global population will rise by 2.4bn. This translates into continued shrinking of the EU's share in global population from 10.2% in 2016 to 7.3% in 2050<sup>9</sup>.

By 2050, the EU's productive age population will be by 36m less than today, with the growing 65+ population<sup>10</sup>.

**2. Unemployment in the EU is and will be determined by the dynamic development of the research potential and increasing expenditure on research (as a result of civilisation transformations and IT revolution).** Technical and technological progress will significantly limit the demand on the labour market. The unemployment rate is estimated to grow over the period under the analysis, to 31.0% (by 12m unemployed). Foreign labour resources (immigrants) will not offset the decrease in the European labour resources. The studies carried out indicate that odds for immigrants being absorbed by the European labour market are poor, due, for instance, to their lack of qualifications.

**3. Immigration and a 2015 and 2016 shock of massive inflow of immigrants continuing into subsequent years.** If continued, the increase in the number of immigrants will change the ethnic, cultural, religious, educational and economic structure of the European population, and transformations in the prevailing culture, customs or religion will follow. Problems will emerge relating to the cultural assimilation (already present in France, the United Kingdom and Germany). The social processes will overlap with economic problems connected, for instance, with immigrants requiring access to an extended social benefits system. The annual migration balance is forecast to stay positive in Europe, while it will be negative in Asia and Africa.

<sup>9</sup> Polish Central Statistics Office GUS, Warsaw 2016.

<sup>10</sup> UNDP, *Human Development Report 2016. Work for Human Development*, New York 2017; World Population Prospects 2016.

Table 4. Selected parameters for UE-27, the US and BRIC – forecasts until 2050

Item/Year		World	EU-28/27	US	China	Russia	Brazil	India
Population (bn)	2016	7.5	0.74	0.324	1.4	0.142	0.210	1.3
	2050	9.9	0.70	0.892	2.9	0.199	0.920	2.2
Unemployment rate (%)/ number (m)	2016	x	8.1/20.5	4.50/0.257	4.0/0.976	3.79/5.1	12.8/13.33	4.90/48.26
	2050	x	11.0/25.7	3.90/0.237	6.4/1.123	4.78/6.6	14.21/16.41	5.12/49.54
Immigration (m)	2016	x	1.122	X	x	x	x	x
	2050	x	10.490	X	x	x	x	x
Energy: oil, gas (%)	2016	x	x	12.6	x	59.0	x	x
	2050	x	x	56.7	x	42.0	x	x

Assumption: EU-28 for 2016 and EU-27 for 2050.

Source: The author's own study based on Trading Economics 2017; World Bank, *World Economic Situation and Prospects* 2016, World Development Indicators 2016, World Economic Outlook 2016.

**4. Energy carriers: the EU-Russia.** Alarming trends in the EU's imports of energy carriers should be highlighted. Russia's share in the imports of solid and liquid fuels to EU-28 increased from 13.31% in 2003 to 59% in 2016. Russia is the main supplier of crude oil to the EU countries. The comparison of import directions for energy carriers leads to a conclusion that the EU's dependence on energy carrier imports from Russia has been growing.

## AN ASSESSMENT OF MACROECONOMIC BALANCE OF EU-28 IN 2008-2016 – A SYNTHESIS OF RESEARCH RESULTS

The European Union took interest in macroeconomic balance in the wake of the crisis faced by the Union countries. The issue was addressed in Regulation (EU) No. 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

The research conducted in 2008-2016<sup>11</sup> – (see Tables 5A and 5B) covered: Financial Openness Index (FOI)<sup>12</sup>; International Investment Position (IIP)<sup>13</sup>; Current Account Balance Ratio (CABR)<sup>14</sup> and Current Account Deficit Coverage with FDI (CADC)<sup>15</sup>.

<sup>11</sup> For the purposes of this analysis, the presentation of results is limited to the extreme years of the extended analysis, i.e. 2008 and 2016.

<sup>12</sup> Permitted value < 100%.

<sup>13</sup> Permitted value < -35% of GDP.

<sup>14</sup> Permitted value in the range from -4% to + 6%.

<sup>15</sup> Permitted value > 100%.



Table 5A. Macroeconomic balance indicators for EU-27 and number of imbalances in 2008

State/ Indicator	FOI	IIP	CABR	CADC	Number of imbalances
AT	190	-11.0	-4.4	93	3
BE	187	-19.8	-5.8	97	3
BG	98	-72.1	-0.8	11	3
CY	200	-19.7	-6.0	99	3
CZE	109	-59.1	-1.9	11	4
DK	153	-19.5	-6.9	18	3
EE	90	-30.0	-0.9	35	3
IE	142	-4.5	-4.9	69	3
EL	142	-119.1	-4.8	6	4
ES	153	-8.1	-1.9	12	3
FI	109	-1.2	-1.9	13	3
FR	186	-29.0	-2.8	54	3
GE	196	-5.1	-7.9	96	3
HU	100	-39.1	-1.8	29	3
HR					
IT	157	-27.4	-1.7	99	3
LV	67	-62.0	-1.8	19	3
LT	69	-49.2	-1.5	17	3
LU	108	-11.0	-5.4	16	3
MT	99	-19.1	-1.5	18	3
NL	159	-16.0	-7.8	84	3
PL	99	-38.0	-3.9	17	3
PT	128	-21.1	-4.8	55	3
RO	99	-42.0	-3.9	98	3
SL	98	-36.1	-3.9	12	3
SK	113	-32.8	-0.9	13	3
SE	135	-6.0	-5.0	93	3
UK	207	-9.9	-3.9	100	3
Total	18	10	27	27	82

Table 5B. Macroeconomic balance indicators for EU-28 and number of imbalances in 2016

State/ Indicator	FOI	IIP	CABR	CADC	Number of imbalances
AT	114	0.9	2.0	123	1
BE	154	49.8	-1.8	167	1
BG	98	-72.1	0.8	111	1
CY	99	-89.7	-6.0	143	2
CZE	121	-49.6	-1.9	101	2
DK	132	39.7	6.9	118	2
EE	88	-40.5	-0.9	105	1
IE	122	-94.5	4.9	109	2
EL	102	-109.1	-4.8	86	4

ES	133	-88.1	-1.9	102	2
FI	100	11.2	-1.9	113	1
FR	146	-22.0	-2.8	154	1
GE	156	50.1	7.9	166	2
HU	120	-99.1	1.8	129	2
HR	113	-81.1	0.7	114	2
IT	127	-21.4	-1.7	99	2
LV	87	-61.0	-1.8	99	2
LT	89	-40.2	-1.5	97	2
LU	98	161.1	5.4	106	0
MT	99	29.6	1.5	108	0
NL	109	56.1	7.8	144	2
PL	112	-78.3	-3.9	117	2
PT	118	-111.1	-4.8	100	3
RO	99	-82.1	-3.9	98	2
SL	90	-36.1	3.9	112	1
SK	123	-72.1	0.9	103	2
SE	125	-5.0	5.0	133	1
UK	167	-2.9	-3.9	172	1
Total	19	16	6	5	46

Key:

1/ AT – Austria, BE – Belgium, BG – Bulgaria, CY – Cyprus, CZE – the Czech Republic, DK – Denmark, EE – Estonia, IE – Ireland, EL – Greece, ES – Spain, FI – Finland, FR – France, GE – Germany, HU – Hungary, HR – Croatia, IT – Italy, LV – Latvia, LT – Lithuania, LU – Luxembourg, MT – Malta, NL – the Netherlands, PL – Poland, PT – Portugal, RO – Romania, SL – Slovenia, SK – Slovakia, SE – Sweden, UK – the United Kingdom.

– Value beyond the permitted range

– No EU member

Source: The author's own study based on Trading Economics 2017; OECD Report 2016.

Aggregating the data in Tables 5A and 5B reveals that a total of 128 instances of going beyond the permitted range of reference indicators occurred in the EU economies in 2008 and 2016, with most of the instances occurring in 2008. In 2008, when the crisis started, as much as 82 macroeconomic imbalances occurred. In 2008, the largest numbers of imbalances were recorded for CABR (27) and CADC (27). In 2016, the lowest number was recorded for CADC (5).

With respect to the Financial Openness Index, imbalances were recorded in 19 EU states in 2016, with the highest deviations in the United Kingdom (167), Germany (156) and Belgium (154). The least values were recorded in Latvia (87), Estonia (88) and Lithuania (89).

With respect to the International Investment Position index, deviations from the reference value were recorded in 16 EU states in 2016. The highest absolute values were in Portugal (-111.1) and Greece (-109.1). The least absolute values were recorded in Austria (0.9) and Finland (11.2).

In 2016, in six EU member states CABR-measured deficit was recorded and in three of them CABR fell below the lower bound of the permitted range, i.e. -4%. They were: Cyprus (-6.0%), Greece (-4.8%) and Portugal (-4.8%).

Twenty two EU member states enjoyed a CABR-measured surplus, with the largest, and far above the upper threshold 6% recorded in Germany (7.9%) and the Netherlands (7.8%).

In the event of the CADR ratio, deviations were recorded in five EU member states. The least values were in Italy (99) and Lithuania (99), the largest ones in the United Kingdom (172), Belgium (167) and Germany (166).

In line with the assumed research methodology, direct relations exist between the instances of imbalances against the permitted thresholds of the indicators used and crisis phenomena. A question thus arises about the correlations between the imbalances and those phenomena, including in particular between the coverage ratio for individual macro economic imbalances and the intensity of crisis phenomena.

As the basic research method, the analysis of Spearman's rank correlation coefficient ( $\rho - \text{rho}$ )<sup>16</sup> was selected. This coefficient is a good measure of the feature correlation strength. It works well for smaller samples ( $n < 30$ ), which is the case in this analysis, covering 28 EU economies.

The intensity of the crisis phenomena was measured with the following indicator:

$$\Delta X_i = (\text{ARIX}_{i,2008} - \text{WRX}_{i,2016}) * 100 \quad (1)$$

where:

$\Delta X_i$  stands for the indicator of the intensity of the crisis phenomena in the state  $i$ ;

$\text{ARIX}_{i,2008}$  stands for the three-year average for the reference indicator  $X$  in the state  $i$  in 2008;

$\text{RIX}_{i,2016}$  stands for the reference indicator  $X$  in the state  $i$  in 2016.

The study was based on the computation of:

1. The number of exceeded permitted thresholds (number of imbalances) in 2008 and 2016 (Tables 5A and 5B);
2. The indicator of the intensity of the crisis phenomena ( $\Delta X_i$ ) in 2008 and 2016 (Table 6 and Figure 3).
3. The correlation of imbalances and crisis phenomena (Table 7A and 7B).

<sup>16</sup> The research was inspired by a model developed by D. Graj. For the purposes of this study, the logic of the model has been modified and adapted to the needs; Graj D., *Zakłócenia równowagi makroekonomicznej w UE a intensywność zjawisk kryzysowych*, yadda.icm.edu.pl/pdf, (reading date: 06.17).

Table 6. Intensity of crisis phenomena measured with  $\Delta X_i$  in 2008 and 2016

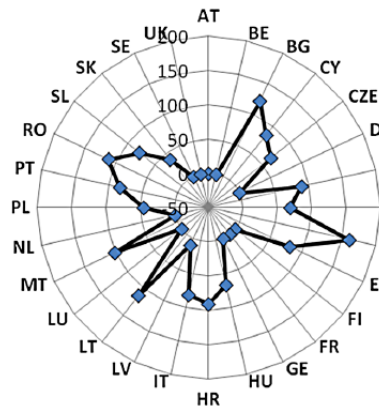
	$\Delta X_i$ in 2008	$\Delta X_i$ in 2016
AT	-0.99	-0.43
BE	-0.99	-0.51
BG	102.1	122.0
CY	99.0	85.0
CZE	99.0	65.8
DK	-0.99	-0.66
EE	99.0	89.0
IE	99.0	69.0
EL	167.0	160.0
ES	99.0	81.0
FI	-0.99	-0.20
FR	-0.99	-0.12
GE	-0.99	-0.23
HU	99.0	65.1
HR		90.0
IT	99.0	80.0
LV	120.3	10.3
LT	193.1	113.1
LU	-0.99	-0.65
MT	111.0	101.0
NL	-0.99	-0.43
PL	0.99	44.0
PT	99.0	82.0
RO	122.0	112.0
SL	99.0	78.3
SK	99.0	39.4
SE	-0.99	-0.29
UK	-0.99	-0.19

Source: The author's own study.

Based on the analysis of the crisis phenomenon intensity viewed from the perspective of imbalances in 2016, the EU-28 economies can be classified into the following three categories:

- states with a relative resistance to the crisis phenomena (negative indicator): Germany, the United Kingdom, Sweden, the Netherlands, Luxembourg, Belgium, Austria, Denmark, Finland and France;
- states with a medium resistance to the crisis phenomena (positive indicator in the range 0-100): the Czech Republic, Estonia, Hungary, Croatia, Poland, Slovenia, Slovakia, Italy, Portugal, Spain, Cyprus and Ireland;
- states with a low resistance to the crisis phenomena (positive indicator of over 100): Bulgaria, Lithuania, Latvia, Romania, Greece and Malta.

Figure 3. Intensity of crisis phenomena measured with  $\Delta X_i$  in 2016



Source: The author’s own study.

Table 7A. Spearman’s rho coefficient for imbalances and crisis phenomena (measured with  $\Delta X_i$ ) in 2008

	FOI	IIP	CABR	CADC	$\Delta X_i$
FOI	1.00				
IIP	0.94	1.00			
CABR	0.91	0.92	1.00		
CADC	0.99	0.99	0.91	1.00	
$\Delta X_i$	0.96	0.93	0.91	0.94	1.00

Source: The author’s own study.

Table 7B. Spearman’s rho coefficient for imbalances and crisis phenomena (measured with  $\Delta X_i$ ) in 2016

	FOI	IIP	CABR	CADC	$\Delta X_i$
FOI	1.00				
IIP	0.74	1.00			
CABR	0.61	0.92	1.00		
CADC	0.79	0.99	0.91	1.00	
$\Delta X_i$	0.56	0.53	0.51	0.54	1.00

Source: The author’s own study.

The correlation coefficients set forth in Tables 7A and 7B enable the strength of the correlation to be determined precisely.

The strength of the correlation was determined using the Stanisiz scale:

If  $r_{xy} = 0$ , we say that the variables are not correlated.

If  $0 < r_{xy} \leq 0.1$ , we say that the variables are hardly correlated; the coefficient is almost insignificant.

If  $0.1 < r_{xy} \leq 0.3$ , we say that the variables are weakly correlated; the coefficient is clearly visible, but low.

If  $0.3 \leq r_{xy} \leq 0.5$ , we say that the variables are averagely correlated; the coefficient is meaningful (real).

If  $0.5 \leq r_{xy} \leq 0.7$ , we say that the variables are highly correlated; the coefficient is material.

If  $0.7 \leq r_{xy} \leq 0.9$ , we say that the variables are very highly correlated; the coefficient is substantial.

If  $0.9 \leq r_{xy} \leq 1$ , we say that the correlation is almost certain; the coefficient is certain.

The performed analysis reveals that in the period under the analysis the correlation occurred between the number of imbalances in the parameters selected (FOI, IIP, CABR and CADC) and the intensity of the crisis phenomena (and, quite understandably, was especially strong in 2008) if imbalances were recorded for all indicators analysed. Imbalances of those four indicators may create an adverse macroeconomic environment resulting in the occurrence of the intensive crisis phenomena, which means that those indicators should be closely monitored. What may be stated without a shadow of doubt is that these imbalances pose a material risk to the EU, both for its internal integration and multilateral relations.

## CONCLUSION

From the analysis conducted there follows that the EU still enjoys a strong position in the global economy. The assumed proposition has been confirmed that despite numerous internal and external threats, the European Union remains one of the world's main economic regions. The proposition is supported by the analysis of standard economic indicators and of qualitative aspects of the EU economy laying the foundations for growth.

In conclusion, a question has to be asked: What is the European Union nowadays?<sup>17</sup>: Is it becoming not so a moral project, as rather a kind of benefit, treaty, from which a given state can withdraw at will if it believes such a withdrawal to serve its interests? A.D. 2017 it has finally turned out that Europe is just a continent and not an idea, and the nations are not eager to abandon their nation states.

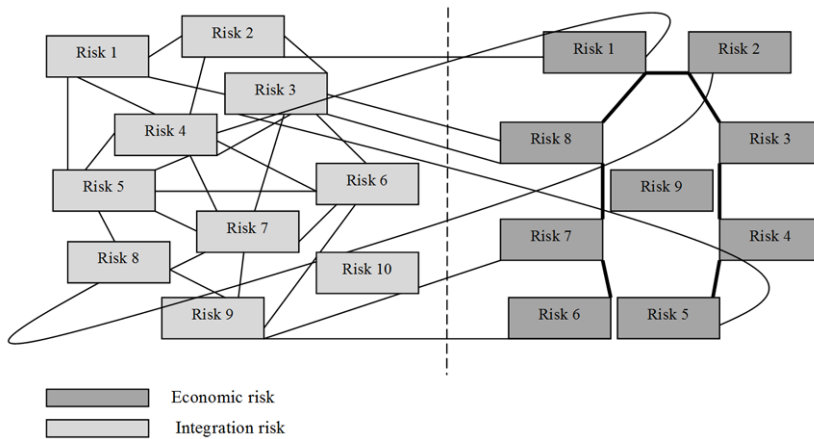
The analysis conducted identified the integration-related and economic risks as those requiring a special attention among materials threats and risks to the EU's economic position (Figure 5).

Risks relating to the EU's current economic situation include: 1) structural features of the European economy: primarily, innovativeness weaker than in the US, support for research in mid-technology areas, a lower share of modern manufacturing structures, large shares of mid- and low-technologies in the production and exports structure; 2) material differentiation of per capita GDP within the Union; 3) gradual decrease and growing differentiation of work productivity and

<sup>17</sup> G. Baziur, *Geopolityczny i gospodarczy blok państw Międzymorza jako alternatywa wobec groźby rozpadu Unii Europejskiej*, <http://geopolityka.net> (reading date: 09.2017).

efficiency, preventing the EU economy from maintaining its historic growth rate; 4) excessive de-agrarisation of the EU economy, which might render it dependent on food imports; 5) political instability, low economic growth and high sovereign debt in Italy; 6) demographic situation reflected in the decreasing population of the Union, shrinking labour resources and growing unemployment; 7) intensification of immigration trends; 8) energy cooperation; and 9) threat of occurrence of critical phenomena with respect to the following parameters: financial openness, international investment position, current account balance and current account deficit coverage with FDI.

Figure 5. Diffusion of integration and economic risks in the EU in 2016



Source: The author's own study.

In conclusion, it should be observed that we are now not in a position to say which school of thinking about Europe will prevail. The status quo option appears to be least popular. However, whatever solutions are applied, the Community has to promptly take decisions concerning:

- development of Europe's social dimension,
- tightening the economic and currency unions,
- exploiting globalisation opportunities,
- future of defence of Europe,
- future of the EU's finance,
- integrated growth in the multi-speed environment,
- migration crisis,
- strategies of relations with the world's economic mega-regions (China, India, the US) and Russia.

A failure to implement sufficient and firm solutions in these areas will intensify the risk of internal divisions in and disintegration of the EU, accompanied by a partial loss of its international importance, primarily to the Asian mega-region.

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**Summary:** The objective of this paper is to identify and analyse the risk shaping the European Union's (the "EU's", or "Union's") current position in the global environment. To do this, key subjects are discussed: the identification of the EU's economic standing in terms of classical economic indicators. The paper endeavours to prove the following: Despite numerous internal and external threats, the European Union remains one of the world's main economic regions. The statement will be supported by an analysis of both standard economic indicators and qualitative aspects of the EU economy laying the foundations for growth. The empirical part hereof comprises a comparative analysis of the EU's key macroeconomic data against the global economy and a partial implementation of the PSM model and Scoreboard for the purposes of determining the EU position in the world.

The analysis carried out revealed that among material threats and risks to the EU's current economic position, the economic risks need a special emphasis. Material threats and risks relating to the EU's current economic situation include: 1) structural features of the European economy: primarily, innovativeness weaker than in the US, support for research in mid-technology areas, a lower share of modern manufacturing structures, large shares of mid- and low-technologies in the production and exports structure; 2) material differentiation of per capita GDP within the Union; 3) gradual decrease and growing differentiation of work productivity and efficiency; 4) excessive de-agrarianisa-



tion of the EU economy, which might render it dependent on food imports; 5) political instability, low economic growth and high sovereign debt in Italy; 6) demographic situation reflected in decreasing population of the Union, shrinking labour resources and growing unemployment; 7) intensification of immigration trends; 8) energy cooperation; and 9) threat of occurrence of critical phenomena with respect to the following parameters: financial openness, international investment position, current account balance and current account deficit coverage with FDI.

**Key words:** risk, mitigation, Two-Speed Europe, external economic position, disintegration.

## POZYCJA EKONOMICZNA UNII EUROPEJSKIEJ WE WSPÓŁCZESNYM ŚWIECIE. ASPEKT RYZYKA

**Streszczenie:** Celem artykułu jest identyfikacja i analiza ryzyka determinującego bieżącą pozycję Unii Europejskiej (UE) we współczesnym świecie. Realizację celu oparto na omówieniu pozycji ekonomicznej UE w ujęciu klasycznych wskaźników ekonomicznych. Teza artykułu jest następująca: *Unia Europejska pomimo wielu zagrożeń wewnętrznych i zewnętrznych – pozostaje nadal jednym z głównych obszarów gospodarczych świata.* Uzasadnieniem dla tej tezy są standardowe wskaźniki ekonomiczne oraz jakościowe aspekty gospodarki europejskiej, kreujące przesłanki rozwoju. Część empiryczna składa się z: analizy porównawczej podstawowych danych makroekonomicznych UE w zestawieniu z gospodarką światową oraz implementacji części modelu PSM i tabeli Scoreboard dla określenia zewnętrznej pozycji UE. Przeprowadzona analiza wykazała, że wśród istotnych zagrożeń i ryzyka we współczesnej pozycji ekonomicznej UE, szczególnie należy zwrócić uwagę na: ryzyka ekonomiczne. Wśród istotnych zagrożeń i ryzyka we współczesnej pozycji ekonomicznej UE, szczególnie należy zwrócić uwagę na: 1) cechy strukturalne gospodarki europejskiej: głównie słabszą innowacyjność w porównaniu do USA, wspieranie badań w obszarach średniej techniki, mniej nowoczesnej struktury produkcji, duży udział w produkcji przemysłowej i w eksporcie wyrobów średniej i niskiej techniki; 2) istotne różnicowanie poziomu PKB per capita; 3) postępujący spadek i różnicowanie w produktywności i wydajności pracy; 4) nadmierną deagrarizację gospodarki unijnej, co w efekcie doprowadzić może do uzależnienia UE od importu żywności; 5) polityczna niepewność, niski wzrost gospodarczy i wysokie zadłużenie Włoch; 6) sytuacja demograficzna, wyrażająca się spadkiem liczebności populacji europejskiej, zmniejszeniem zasobów pracy i wzrostem bezrobocia; 7) nasilenie tendencji imigracyjnych; 8) współpraca energetyczna; 9) niebezpieczeństwo wystąpienia zjawisk kryzysowych w zakresie parametrów: otwartości finansowej, międzynarodowej pozycji inwestycyjnej, salda rachunku obrotów bieżących oraz poziomu pokrycia deficytu bilansu obrotów bieżących przez BIZ.

**Słowa kluczowe:** ryzyko, mitygacja, Europa dwóch prędkości, zewnętrzna pozycja ekonomiczna, dezintegracja.