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COMPETITIVE POSITION OF CENTRAL EUROPEAN ECONOMIES AS REFLECTED IN INTERNATIONAL RANKINGS

Abstract

The aim of this paper is to analyze the development of the competitive position of Central European countries – Czech Republic, Poland, Slovakia and Hungary – in the light of international competitiveness rankings between 2004 and 2014. The hypothesis put forward here is that these countries' membership in the European Union contributed to improving their competitive position.

The paper consists of three parts. The first one presents selected definitions of international competitiveness, coined both by economists and international organizations. Next, selected international competitiveness rankings are discussed, as well as the methods of constructing them. Based on these rankings, in the final part, competitive position of the selected countries is analyzed for the period from 2004 to 2014. The paper ends with summary and conclusions.

JEL Classification Code: **F00**.

Keywords: international competitiveness, Central Europe, European Union, Visegrád Group.

Introduction

International competitiveness of national economy is an increasingly important issue for every country's international policy and thus its development and the related benefits have been the subject of much discussion among economists. Moreover, many of them contributed valuable reflections and conclusions to the development of economics. In the continuous process of worldwide integration and progressing globalization, a high level of international competitiveness of a given national economy is highly desirable due to the resulting benefits.

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Competitiveness of national economy

Up until the early 1970s, research on international competitiveness of national economies was not a priority. It was only in the late 1970s and early 1980s, due to the surfacing of various effects of crises in the world economy and the transferring of comparative and competitive advantages within this economy (in particular the erosion of the United States economy's advantages in favour of Japan), that the issues of competing on an international scale began to be examined in more detail. This research established the foundations for the development of an academic sub discipline called the theory and policy of international competitiveness.

The research on international competitiveness of national economies was also set off by the occurrence of many other factors. The processes of internationalization, or even globalization of economic life were advancing ceaselessly. At the same time, it was the start ofthe disintegration of socialist countries with their centrally planned economy and command-and-quota system, and thus the progressing processes of regional economic integration could be observed (especially in continental Europe), with strong indication that they were irreversible. This growing interest in the topic of international competitiveness resulted in numerous attempts at defining this notion (Misala, 2009, p. 31-33).

Among the many definitions of international competitiveness, there is one developed by Polish economists J.W. Bossak and W. Bieńkowski in 2004, and modified several times since then, thatis undoubtedly noteworthy. It says that „the competitiveness of a country or an enterprise is assessed by comparing the benefits ofits business activity with those obtained by competitors. Just as the present value of a company oscillates around a certain value, so the country's competitiveness is related to the development level and economic structure, and fluctuates within the limits designated by their relative costs, quality and innovativeness as well as the state of economic equilibrium." Another definition was provided by H. Siebert in his 2006 paper, where he presented international competitiveness as „the capability to improve the prosperity level by retaining mobile factors of production in one's own country and making it attractive for foreign factors of production"(Bossak, Bieńkowski, 2004, p. 34).

Attempts to define this notion have been made by various international organizations, both those concerned strictly with analysis of such competitiveness, e.g. by collecting statistical data, and those aiming at analysing all the processes going on in the world's economy. The International Institute for Management Development (IMD) defined international competitiveness as the „country's ability to create added value and thus increase national wealth by appropriate resource and process management, attractiveness and aggressiveness, taking both global and local dimension into account and integrating all this into a uniform, coherent economic and social model"(Bukowski, Siek, 2013, p. 11). The World Economic Forum experts, on the other hand, present international competitiveness ina much broader way, namely as

„a set of factors, policies and institutions that determine the level of productiveness in the country and make the national economy able to develop fairly quickly in the mid- and long-term perspective"(Misala, 2007a, p. 66).

The world's competitiveness rankings

Nowadays, there is a great number of different measures and methods for measuring international competitiveness of a given national economy. Especially noteworthy are the world's competitiveness rankings developed by international institutions.

„Heritage Foundation and *The Wall Street Journal* publish an annual report presenting the Index of Economic Freedom (IEF). It shows the extent of all the economic liberties and rights that concern the production, distribution and consumption of goods and services, and refers to the research by the Nobel prizewinning economist Milton Friedman who in his studies was concerned with economic freedom. According to the report, total economic freedom means such things as an unlimited right to own property, fully realized freedom of migration of production factors (labour, capital and products) and a complete lack of state interventionism (or such interventionism existing only to an extent necessary to protect citizens and respect the economic liberties). The IEF is calculated as an average of all ten liberties (with each one having the same weight):

a) business freedom (the ability to start, run and close a business);
b) trade freedom – how liberal the economic exchange is (tariff, non-tariff and para-tariff barriers in foreign trade);
c) fiscal burden (taxes imposed by the government on income, including tax rates on individual income and corporate income as well as the share of tax income in the GDP);
d) government intervention, measured as the relation of all government expenditures (including consumption and transfers) to the GDP;
e) monetary policy as a measure of stability (weighted average of inflation rates from three previous years) and price control;
f) foreign investments (a measure of the freedom of international migration of capital);
g) banking and finance (a measure of the openness of the banking and financial system, i.e. government regulations on financial services, state interventionism and difficulties with starting, operating or closing a business offering financial services);
h) property rights (how well the law protects private property and to what extent the state apparatus enforces these legal regulations);
i) freedom from corruption (a measure based on the Corruption Perception Index, taking into account possibilities of corruption in business, the judiciary and administration);

j) labour rights (a measure showing to what extent can employees communicate with employers without government's intervention).

The Index of Economic Freedom ranges from 0 to 100%, with high-scoring countries seen as entirely free economies, while the lowest-ranked ones, i.e. with a score below 50%, are considered repressed economies (Misztal, Siek, 2007, p. 21-24).

Another significant ranking of international competitiveness is the World Competitiveness Yearbook published annually by the Swiss International Institute for Management Development (IMD). The ranking aims at assessing the ability of individual countries to create and support a favourable environment for competitiveness of enterprises (Piotrowski, 2009, p. 249). Each country analysed in the report can score a total of 0 to 100 points (the higher the score, the more competitive the country's economy) and the research done by the IMD encompasses four categories of factors, namely:

a) macroeconomic results (e.g. economic development, international trade, foreign investment, employment rate, prices level);
b) government efficiency (factors concerning public finance, fiscal policy, institutions, business legislation and education);
c) business efficiency (e.g. productivity, labour market, finance, management practices, the impact of globalization);
d) infrastructure quality (basic, technological, scientific, healthcare, value system) (International Institute for Management Development, www.imd.org/wcc/wcc-factors-criteria/).

Also, the World Economic Forum issues annually its Global Competitiveness Report aiming at assessing the ability of national economies to provide a high standard of living for their citizens and determining the country's competitive position with the use of the Global Competitiveness Index (GCI) (Piotrowski, 2009, p. 261). The analyses of the World Economic Forum turned out to be a breakthrough as they were the first to factor in the differences in the levels of economic development of the countries studied, which undoubtedly translates into the diversification of their international competitive ability. Asa result, three groups of countries have been distinguished:

a) countries that base their economic growth and development on using the basic factors of production (*factor-driven economies*);
b) countries basing their economic growth and development on increasing the efficiency of production factors (*efficiency-driven economies*):
c) countries basing their economic growth and development on invention and innovation (*innovation-driven economies*)(Misala, 2011, p. 186-187).

The Global Competitiveness Index (GCI) assesses the development potential of a given country for the next five years. Initially (until 2005), the GCI was constructed based on three macroeconomic variables that formed a certain basis for economic growth, namely:

a) the quality of public institutions;

b) macroeconomic environment;
c) technological progress.

In 2006, the number of variables for creating the GCI was expanded by further six, that is:

a) the quality of infrastructure;
b) health and primary education;
c) secondary and higher education;
d) goods market efficiency;
e) business sophistication;
f) innovation (World Economic Forum, 2006, p. 3).

A year later, in 2007, further three factors were added to the list:

a) labour market efficiency;
b) financial market development level;
c) market size (World Economic Forum, 2008, p. 20).

All of the above factors ('pillars of competitiveness') are assigned to one of three groups. The first one is called 'basic requirements' and concerns factor-driven economies whose development is determined by the use of the basic factors of production, such as unqualified labour force or natural resources. The second group are 'efficiency enhancers' – these are key for efficiency-driven economies, which are countries that strive for increasing productivity and improving product quality. The last group of components are 'innovation and sophistication factors'(World Economic Forum, 2008, p. 20) which refer to innovation-driven economies, i.e. the countries with the highest level of economic development, using state-of-the-art production technologies and thus engaging in quality-based competition.

An indicator of the competitiveness level is also the ease of starting, running and closing a business. The Ease of Doing Business Index is created by the World Bank organization and published in its annual reports. Their aim is to rank the countries, starting with those with laws and regulations most favourable for conducting business activity, broadly speaking, and ending with those the least business friendly (Misala, 2007b, p. 29-30).

The World Bank analyzes selected countries in terms of the following ten categories (components of the index):

a) conditions for starting a business (number of the procedures required, minimum capital necessary to open a business);
b) obtaining construction permits (procedures, time and cost of inspections and of getting a permit);
c) access to electricity (time and cost of obtaining an electricity connection fora newly built enterprise);
d) registering property (procedures, time and cost needed to enter a commercial property into the mortgage register);
e) access to credits for financing business activity;

f) protecting investors;
g) tax issues (tax rates and regulations, time necessary to fulfill tax-related formalities);
h) international trading (issues related to foreign trading of a company, i.e. the number of necessary permits for imports/exports and the time and cost of obtaining them);
i) enforcing contracts (time and cost of the procedures for resolving commercial disputes in court);
j) resolving insolvency – procedures for closing a business (time and cost of the procedures and the size of capital recovered) (World Bank Group, www.doingbusiness.org/methodology).

The ranking has been prepared with the assumption that the higher a given country is ranked, the less complicated it is to take up business activity on its territory.

Although no one questions the validity of creating such rankings, it does not mean they are not criticized. The most important among the many critical arguments seem to be those pointing out that such indices often refer only to some aspects of economy, making ita partial analysis, or those challenging the credibility of the assessments as relying too little on hard statistical data and too much on subjective opinions. The fact is that these rankings are not perfect, yet they form an indisputable source of useful information, thus allowing to compare the selected economies – at least partially – and in consequence to see the size of the competitive gap between them (Piotrowski, 2009, p. 272).

The competitive position of the Central European countries

The present paper will analyse the competitive position of the Central European countries in the light of the rankings showing international competitiveness. However, as evidenced in the literature on the subject, the area of Central Europe is not unequivocally defined (see e.g. the World Bank, the Organization for Economic Cooperation and Development). The area of Central Europe analyzed in this paper is here considered synonymous with the Visegrád Group whose members are: the Czech Republic, Poland, Slovakia and Hungary (Ministerstwo Spraw Zagranicznych Rzeczypospolitej Polskiej (Ministry of Foreign Affairs of the Republic of Poland), www.msz.gov.pl/pl/polityka_zagraniczna/europa/grupa_wyszehradzka). All of these countries joined the European Union on 1 May 2004 (Slovakia has also been the member of the Eurozone since 2009).

These four countries are not only connected with ties of culture, religion and close neighbourhood. They are also – or perhaps, from an economic perspective, above all – former members of the Eastern Bloc whose economies have undergone a systemic transformation towards market economy. This process is still underway, because, while it was possible to change the political system within several months and create foundations for a multiparty system, the development of a reliable sector of financial services, creating infrastructure or even the structural reforms of the biggest industry branches could not be done overnight (Mościbrodzki, 2008, p. 6). Today, however, more than two decades after this change of system, the effects of these transformations can surely be assessed, which has been the subject of discussion by many authors.

The Index of Economic Freedom – the Heritage Foundation

In the annual rankings prepared by the experts of the Heritage Foundation, Central European economies had a medium degree of economic freedom during the last ten years.

Table 1. The Index of Economic Freedom values (%) and the position in the Heritage Foundation ranking for the Czech Republic, Poland, Slovakia and Hungary, 2004 – 2014

	Czech Republic		**Poland**		**Slovakia**		**Hungary**	
	Score	Ranked	Score	Ranked	Score	Ranked	Score	Ranked
2004	67.0	21	58.7	52	64.6	30	62.7	43
2005	64.6	20	59.6	49	66.8	33	63.5	41
2006	66.4	21	59.3	41	69.8	34	65.0	40
2007	67.4	31	58.1	87	69.6	40	64.8	44
2008	68.1	37	60.3	83	70.0	35	67.6	43
2009	69.4	37	60.3	82	69.4	36	66.8	44
2010	69.8	57	63.2	45	69.7	35	66.1	65
2011	70.4	28	64.1	68	69.5	37	66.6	51
2012	69.9	30	64.2	64	67.0	51	67.1	49
2013	70.9	29	66.0	57	68.7	42	67.3	48
2014	72.2	26	67.0	50	66.4	57	67.0	51

Source: own study based on *2004 – 2014 Index of Economic Freedom*, Heritage Foundation.

Virtually in the entire analysed period, the country with the lowest degree of economic freedom is Poland (between 2004 and 2007 it was described as 'mostly unfree,' between 2008 and 2014 – as 'moderately free'). It should be pointed out, however, that at the same time Poland is the only country of the studied four that consistently improved its score in the ranking in the researched period. Economic freedom proved to be a bit greater in Hungary and Slovakia. Throughout the studied period, the Czech Republic was the freest of the four and as the only one of them has scored more than 70% since 2013, thus being classified as 'mostly free.'

More detailed information on the reasons behind these results can be inferred from the different measures comprising the Index of Economic Freedom.

Table 2. The components of the Index of Economic Freedom for the Central European countries, 2004 – 2008 (%)

	Czech Republic			Poland			Slovakia			Hungary		
	2004	2006	2008	2004	2006	2008	2004	2006	2008	2004	2006	2008
business freedom	70	57.8	64.2	70	57	54	70	69	70	70	71	74
trade freedom	73.4	82.4	86	70.4	82.4	86.0	72.8	82.4	86.0	76.0	82.4	86.0
fiscal burden	67	68.8	71.3	64.9	68.7	68.6	68.5	89.5	89.4	65.6	68.2	70.0
government intervention	40.9	36.8	45.6	35	40	44	42	53	54	20	27	27
monetary policy	84.6	85.9	80.3	78	80	82	81	78	77	74	74	77
foreign investment	70	70	70	50	50	60	70	70	70	70	70	80
banking and finance	90	90	80	70	70	60	90	90	80	70	70	70
property rights	70	70	70	50	50	50	50	50	50	70	70	70
freedom from corruption	37	42	48	40	35	37	37	40	47	49	48	52
labour rights	–	60.3	66.1	–	61.2	61.3	–	76.7	77.1	-	69.5	70.3

Source: own study based on *2004 – 2014 Index of Economic Freedom*, Heritage Foundation.

The lowest graded components in all the four countries throughout the analyzed period are government intervention and freedom from corruption. This information shows that the countries of the Visegrád Group are stillbattling with certain constriction of economic freedom by the government, which can mean the presence of state-owned companies in the economy (e.g. the Czech energy company CEZ, Polish State Railways, Forests of the Slovak Republic, or Hungarian public television Magyar Televizió (Dančíková, Riapošová, 2013,p. 9-12)), as well as the share of state ownership in budget income. This is due to the fact that the presented economies have been operating in the free market system for a relatively short time, and thus the process of privatizing and restructuring state-owned enterprises is still underway. The problem is also the fight against corruption, pointing to the occurrence of such unwanted phenomena as smuggling or piracy of intellectual property. This seems to be confirmed by the fact that all the four countries are classified relatively high in the ranking concerning corruption (especially in public life) prepared by Transparency International (www.transparency.org).

Table 3. The components of the Index of Economic Freedom for the Central European countries, 2010 – 2014

	Czech Republic			Poland			Slovakia			Hungary		
	2010	2012	2014	2010	2012	2014	2010	2012	2014	2010	2012	2014
business freedom	65.5	67.7	70.1	62	61	70	73	71	67	77	80	79
trade freedom	87.5	87.1	87.8	87.5	87.1	87.8	87.5	87.1	87.8	87.5	87.1	87.8
fiscalburden	80.1	82	81.7	74.9	74.4	76.1	84.0	84.2	80.2	68.6	78.6	81.1
governmentinter-vention	45.6	36.8	43.8	47	40	43	65	48	56	26	24	27
monetary policy	75.6	81.5	79.4	78	79	78	78	84	78	74	76	76
foreign investment	70	70	80	60	65	70	70	75	80	75	70	75
bankingandfinance	80	80	80	60	60	70	70	70	70	70	70	70
propertyrights	65	70	70	55	60	60	55	50	50	65	70	60
freedom from corruption	52	46	45.3	46	53	54.8	50	43	42	51	47	49
labourrights	76.4	77.9	84	61.5	61.3	60.4	65.1	58.1	53.6	67.6	67.6	65.7

Source: own study based on *2004 – 2014 Index Of Economic Freedom*, Heritage Foundation.

In the period from 2004 to 2008, the highest scores were obtained in such categories as 'banking and finance,' 'monetary policy' and 'trade freedom.' The high level of freedom in these areas is probably the result of the four countries joining the European Union, especially in case of trade freedom, as evidenced by the fact that trade volumes doubled, on average (for each of the countries analyzed), within three years since the EU accession (World Trade Organization, stat.wto.org).

World Competitiveness Yearbook – International Institute for Management Development

The next ranking presented here is the World Competitiveness Yearbook, published annually since 1989 and considered to be one of the most detailed and insightful report on international competitiveness.

The competitiveness of the Czech economy from 2005 to 2014 was consistently ranked around 30th place, which is the best result among the studied countries. As for Slovakia and Hungary, their positions ranged from 30th to 50th, with Slovakia ranking slightly higher. As in the previous ranking analysed here, Poland seems to be faring worst: in 2006, for instance, it was ranked 58th, almost twenty places lower than Hungary and Slovakia. It should be noted, however, that Poland is the only country in this group that has climbed more than 20 places in the ranking (in 2014, as compared to the base year). At the same time, Slovakia and Hungary, initially ranked much higher (in the period from 2004 to 2009), have fallen several places down, making Polish economy come second after the Czech Republic in terms of competitiveness, according to the World Competitiveness Ranking.

Table 4. The position of the Central European countries and their score in the IMD World Competitiveness Yearbook, 2004 – 2014

	Czech Republic		Poland		Slovakia		Hungary	
	Ranked	Score	Ranked	Score	Ranked	Score	Ranked	Score
2004	43	56.4	57	42	40	57.5	42	57.2
2005	36	60.1	57	39	40	58.6	37	59.9
2006	31	63	58	40	39	57.4	41	57.3
2007	32	59.6	52	42.7	34	57.7	35	57.6
2008	28	62.2	44	48	30	59.4	38	52.9
2009	29	66.8	44	53.9	33	63.9	45	53.8
2010	29	65.4	32	64.5	49	51	42	54.1
2011	30	70.1	34	66.9	48	58.6	47	58.9
2012	33	66.2	34	64.2	45	57.3	47	55.7
2013	35	64.6	33	65.4	47	54.5	50	53.5
2014	33	62.2	36	61.8	45	53.3	48	52.5

Source: own study based on: *IMD World Competitiveness Yearbook* (2014) and earlier editions.

The International Institute for Management Development compiles its report based on four categories, with each one containing, on average, from 70 to 100 diverse criteria (Gorynia, Łaźniewska (eds.), 2009, p. 250-251). The values for the four categories scored by each of the Central European countries within the last four years are shown in table 5.

Considering the fact that each of the categories is assessed on the scale of 0 to 100 points, it can be said that in general the countries of Central Europe score quite average in the ranking, if not lower. The country that stand out is clearly Hungary, achieving the best grade among the four in the 'government efficiency' and 'business efficiency' categories. The first of these categories assesses economic policy in terms of its favourable impact on competitiveness and contains such factors as public finance, fiscal policy and business legislation. The second category concerns the ways of motivating enterprises by the environment, i.e. examines such factors as productivity, efficiency, labour market or business practices(International Institute for Management Development, www.imd.org/wcc/wcc-factors-criteria/). In the categories of 'macroeconomic results' and 'infrastructure quality,' Slovakia was an undisputable leader throughout the period analysed, with 57 points in 2011. This confirms that Slovakia is one of the fastest developing economies in Europe.

Table 5. The position of the Central European countries in each of the components of the competitiveness index published in the IMD Global Competitiveness Yearbook, 2010 – 2014

		macroeconomic results	government efficiency	business efficiency	infrastructure quality
Czech Republic	2010	29	33	40	26
	2011	34	28	35	29
	2012	29	30	41	30
	2013	38	36	40	29
	2014	30	38	40	28
Poland	2010	24	36	38	36
	2011	31	35	41	34
	2012	30	36	39	36
	2013	36	27	35	36
	2014	36	30	36	36
Slovakia	2010	54	41	43	40
	2011	57	42	42	41
	2012	55	43	43	39
	2013	52	48	45	41
	2014	55	45	44	40
Hungary	2010	40	51	47	35
	2011	44	52	50	35
	2012	35	51	49	35
	2013	44	52	55	38
		32	53	56	37

Source: own study based on: I*MD World Competitiveness Yearbook* (2014) and earlier editions.

Global Competitiveness Index – World Economic Forum

In its publications, the World Economic Forum has distinguished three groups of countries, divided in terms of their level of economic development. According to the 2014 report, the Czech Republic was the only Central European country rated as belonging to the most advanced group, the innovation-driven economies. Poland, Slovakia and Hungary were classified as countries at the stage of 'transition' from efficiency-driven economies to the aforementioned innovation-driven economies. It should also be noted that Slovakia was classified as one of innovation-driven economies in 2010 and 2013(World Economic Forum, 2010 – 2013).

Table 6. Positions of the Central European countries in the Global Competitiveness Ranking 2004 -2014

	Czech Republic		Poland		Slovakia		Hungary	
	Ranked	Score	Ranked	Score	Ranked	Score	Ranked	Score
2004	40	4.55	60	3.98	43	4.43	39	4.56
2005	29	4.66	43	4.21	36	4.51	35	4.58
2006	29	4.74	48	4.3	37	4.55	41	4.52
2007	31	4.6	45	4	37	4.51	38	4.47
2008	33	4.58	51	4.28	41	4.45	47	4.35
2009	33	4.62	53	4.28	46	4.4	62	4.22
2010	31	4.67	46	4.33	47	4.31	58	4.22
2011	36	4.62	39	4.4	60	4.22	52	4.33
2012	38	4.52	41	4.46	69	4.19	48	4.36
2013	39	4.51	41	4.46	71	4.14	60	4.3
2014	46	4.43	42	4.46	78	4.1	63	4.25

Source: own study based on: *Global Competitiveness Report 2013-14 and earlier editions*, World Economic Forum.

Poland was the only country that strengthened its position in the studied period, climbing up 18 places (in 2014, as compared to the base year). This conclusion reached by the experts of the World Economic Forum differs profoundly from the conclusions of the experts who prepared the previous rankings presented here. One reason for such inconsistencies is that each ranking 'assesses' a given economy on a basis of a different number of criteria. Another is that some rankings are based mostly on hard data, and some on managers' opinions (Piotrowski, 2009, p. 251).

All the other countries studied here have fallen in the ranking. The biggest loss was recorded by Slovakia: it moved down 35 places since the base year. Next comes Hungary with almost as dramatic a drop by 24 places, and then the Czech Republic with a smaller fall by 6 positions.

Until 2006, the Global Competitiveness Index of the World Economic Forum had been created basing on three components, with values for the countries studied here shown in table 7 below (see also table 7a further on).

As for the quality of public institutions, which also means how the government affects different legal aspects such as property rights or integrity and corruption, between 2004 and 2006 Hungary was the frontrunner, first ranked 37th, and then 36th. In case of the other two categories, concerning macroeconomic data and technology with the related diverse processes, the Czech Republic scored the highest. International competitiveness of Slovakia was rated as moderately good, contrary to Poland's – this country lagged behind the rest in each category but the disparity was the greatest in case of technological progress.

Table 7. The components for the Global Competitiveness Index by the World Economic Forum for the Central European countries, 2004 – 2006

		Quality of public institutions	Macroeconomic environment	Technological progress
2004 – 2005	Czech Republic	4.56 (51)	4.22 (41)	4.88 (19)
	Poland	3.7 (80)	4.05 (51)	4.19 (45)
	Slovakia	4.64 (49)	3.98 (54)	4.67 (28)
	Hungary	5.07 (37)	3.95 (55)	4.66 (29)
2005 – 2006	Czech Republic	4.63 (50)	4.31 (40)	4.31 (22)
	Poland	4.14 (79)	4.09 (51)	3.77 (52)
	Slovakia	4.73 (49)	4.23 (52)	3.99 (32)
	Hungary	5.15 (36)	3.91 (57)	4.08 (36)

Source: own study based on: *Global Competitiveness Report 2004-05* and *Global Competitiveness Report 2005-06*, World Economic Forum.

In 2007, the number of criteria used to rate international competitiveness of a given economy was significantly expanded: 12 criteria were established, assigned to the three pillars (or three subindices). It should be emphasized, however, that they were not assigned randomly. Each of the pillars (subindices) has different weight, depending on the stage of economic development the given country is at. The assignment of these pillars is parallel to the level of economic development (e.g. for a factor-driven economy, the biggest weight is assigned to the factors of the first subindex, called 'basic requirements').

The Czech Republic, as the most advanced of the four economies, dominated the majority of the categories presented. Throughout the studied period, it was rated the highest in such categories as 'infrastructure' (the Czech Republic has the densest railway network in Europe and an excellent road network), 'technological progress' and 'macroeconomic environment,' which shows the good condition of the Czech economy. Importantly, the country was the leader among the studied four in such areas as 'business sophistication' and 'innovation' which, according to the methodology adopted by the World Economic Forum, are categories of key significance to the Czech Republic as an innovation-driven economy. The country was also the frontrunner in the 'secondary and higher education' area for almost the entire studied period, but in 2011 it was outrun by Poland. The same goes for 'business sophistication' – since 2010, Poland has ranked slightly higher than the Czech Republic.

In case of Slovakia, the highest rated category was the 'financial market development level' but, as in the previous case, the country was outstripped by Poland in 2010. Hungarian economy showed promise on 'the quality of public institutions,' yet it too was outdistanced by Poland in 2010.

Table 8. The components for the Global Competitiveness Index by the World Economic Forum for the Central European countries, 2007 – 2010

		2007 – 2008				2009 – 2010			
		Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary
Basic requirements	quality of public institutions	3.84	3.65	3.99	4.14	3.93	3.90	3.74	3.77
	quality of infrastructure	4.22	3.03	3.78	3.93	4.27	2.88	3.89	4.04
	macroeconomic environment	5.26	5.01	4.92	4.22	4.99	4.56	5.14	4.50
	health and primary education	6.06	5.96	5.88	5.86	5.94	5.88	5.68	5.59
Efficiency enhancers	quality of public institutions	4.85	4.62	4.42	4.64	5.05	4.82	4.37	4.63
	quality of infrastructure	4.65	4.12	4.66	4.26	4.82	4.34	4.67	4.22
	macroeconomic environment	4.64	4.44	4.76	4.36	4.88	4.54	4.78	4.43
	health and primary education	4.60	4.32	5.02	4.64	4.64	4.61	4.82	4.20
	secondary and higher education	4.12	3.44	4.08	3.91	4.75	3.97	4.61	4.44
	labour market efficiency	4.38	4.88	3.81	4.26	4.51	5.07	4.05	4.35
Innovation and sophistication factors	business sophistication	4.71	4.04	4.26	4.35	4.80	4.35	4.29	3.89
	Innovation	3.95	3.28	3.42	3.61	4.01	3.33	3.12	3.45

Source: own study based on: *Global Competitiveness Report 2007-08* and *Global Competitiveness Report 2009-10*, World Economic Forum

Table 9. The components for the Global Competitiveness Index by the World Economic Forum for the Central European countries, 2011 – 2014

		2007 – 2008				2009 – 2010			
		Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary
Basic requirements	quality of public institutions	3.65	4.17	3.46	3.79	3.64	4.01	3.32	3.67
	quality of infrastructure	4.87	3.87	4.23	4.52	4.71	3.96	4.12	4.37
	macroeconomic environment	5.17	4.71	4.92	4.77	5.01	4.88	4.91	4.51
	health and primary education	5.91	6.06	6.04	5.81	5.84	6.03	6.07	5.88
Efficiency enhancers	quality of public institutions	4.95	4.95	4.50	4.66	4.51	4.6	4.27	4.28
	quality of infrastructure	4.58	4.36	4.36	4.32	4.85	4.88	4.4	4.72
	macroeconomic environment	4.62	4.48	4.47	4.38	4.41	4.34	4.24	4.23
	health and primary education	4.31	4.60	4.44	4.15	4.2	4.2	4.24	4.18
	secondary and higher education	4.82	4.18	4.54	4.55	4.2	4.54	4.49	3.93
	labour market efficiency	4.48	5.08	3.99	4.24	4.88	4.47	4.16	4.35
Innovation and sophistication factors	business sophistication	4.00	4.45	3.74	4.47	4.5	5.14	4.03	4.26
	Innovation	2.91	3.81	3.61	3.92	4.07	3.65	3.49	3.6

Source: own study based on: *Global Competitiveness Report 2011-12* and Global Competitiveness Report 2013-14, World Economic Forum.

It is clear, therefore, that the reason for such spectacular rise of Poland's competitive position in the Global Competitiveness Ranking are significant changes in several categories (that are key for the country in terms of its level of economic development). The crucial year turned out to be 2010, when the general condition of Polish economy proved to be important (its immunity to the global recession of 2008 and 2009 was a factor), as did the ready domestic market and achievements in the area of education, providing companies with highly qualified staff. What should also be emphasized is the significant progress in building information society, which was made from 2007 to 2010, especially the fast development of e-administration(Żuber, 2011, p. 49).

TheEase Of Doing Business Index– World Bank

Between 2006 and 2014 the countries of the Visegrád Group ranked relatively high here, as shown in table 9, given that the ranking included almost 190 economies.

Table. 10. The positions of the Central European countries in the Ease of Doing Business ranking by the World Bank, 2006 – 2014

	Czech Republic	Poland	Slovakia	Hungary
2006	50	74	34	60
2007	52	75	36	66
2008	56	74	32	45
2009	66	72	35	41
2010	74	72	42	47
2011	70	59	43	46
2012	64	62	48	51
2013	68	55	49	53
2014	75	45	49	54

Source: own study based on *Ease Of Doing Business Report 2014* and the earlier editions, World Bank.

In the period from 2006 to 2014, the most favourable conditions for doing business were created by Slovakia, despite the fact that with respect to the base year, its position became much weaker in 2014 (down by 15 places). Poland's economy in the first few years (i.e. 2006 – 2010) was ranked the lowest among the group, but ultimately in 2014 it took the highest, 45th, place in the ranking. Hungary also rose by 6 places, while the Czech Republic fell by 25 places.

These developments were affected by a series of reforms implemented in all of the four countries in the studied period. In Poland, the most effective reforms concerned, among other things, the conditions for starting a business: in 2010, starting a company was made easier by reducing the minimum capital requirements, and in 2014 it was facilitated by removing the requirement to register the new enterprise at the Chief Labour Inspectorate and the Chief Sanitary Inspectorate. Equally significant were the new solutions concerning property registration: e.g. online land registration was implemented in 2011. More facilitations are scheduled to be introduced in 2015, with computerizing property transfers (which will allow for avoiding notarial costs, for instance)(World Bank Group, www.doingbusiness.org/reforms).

Table. 11. The components of the Ease of Doing Business index by the World Bank for the Central European countries, 2010 – 2014

	2010	2012	2014	2010	2012	2014	2010	2012	2014	2010	2012	2014
	Czech Republic			Poland			Slovakia			Hungary		
Conditions for starting a business	74	64	146	117	62	45	66	76	108	47	39	59
Obtaining construction permits	76	68	86	164	160	88	56	50	53	88	55	47
Access to electricity	-	148	146	-	64	137	-	102	65	-	103	112
Registering property	62	34	37	88	89	54	11	10	11	61	43	45
Access to credits for financing business	43	48	55	15	8	3	15	24	42	30	48	55
Protecting investors	93	97	98	41	46	52	109	111	115	119	122	128
Tax issues	121	119	122	151	128	113	120	130	102	122	117	124
International trading	53	70	68	42	46	49	113	95	108	70	74	70
Enforcing contracts	82	78	75	75	68	55	61	71	65	14	19	15
Resolving insolvency – procedures for closing a business	116	33	29	85	87	37	39	35	38	58	66	70

Source: own study based on *Ease of Doing Business Report 2014* and the earlier editions, World Bank.

From 2010 to 2014, in the Czech Republic many solutions were implemented, too, such as simplifying and accelerating procedures for enforcing contracts (resolving commercial disputes in court), introducing an option for paying taxes via the Internet, and decreasing insurance rates paid by the employer for the employee. However, there were also some unfavourable changes, such as the ones concerning property registration – in 2014 the relevant tax rate was increased, which inevitably raised the cost of these proceedings – and this must have contributed to weakening the Czech economy's position in the ranking(World Bank Group, www.doingbusiness.org/reforms).

Hungary, despite many unfavourable reforms, slightly improved their position as far as conditions favouring business activity are concerned. The most harmful changes had to do with the conditions for starting a business: in 2013 the related costs were significantly increased (e.g. by raising the registration fee for limited liability companies, and by creating a new tax taking effect when enterprises form a group). At the same time, there were also many favourable changes, such as the ones concerning the financing of business activity or the tax issues(World Bank Group, www.doingbusiness.org/reforms).

The most harmful changes responsible for lowering Slovakia's position in the Ease of Doing Business ranking are the ones concerning starting a business as well as the tax issues. In 2014, starting a limited liability company in Slovakia became more difficult because of a newly created procedure concerning it, and taxes became more costly due to an increase of the income tax rate, among other factors. However, in 2015 the country is planning to facilitate business activity by improving the credit information system and simplifying the procedures for registering a business (and thus waiving some of the fees)(World Bank Group, www.doingbusiness.org/reforms).

Summary and conclusion

Nowadays, the process of industrialization of economic life is becoming more and more intensive worldwide. The dominant reason seems to be the aspiration to achieve higher prosperity and to take all the opportunities to make profit – these are the features of competing on an international scale.

This paper has analysed the competitive position of the Central European countries (considered to be synonymous with the Visegrád Group) on the basis of international rankings compiled and published by some of the most prestigious economic organizations in the world: the Heritage Foundation, the International Institute for Management Development, the World Economic Forum and the World Bank. The analyses performed allow us to formulate certain conclusions about how the competitive position of the Central European countries evolved in the period from 2004 to 2014.

The country that got the best ratings in most of the rankings is the Czech Republic. This does not seem unusual since the Czech Republic has been and still is the leader among this entire group, despite having been hit with the global economic crisis and the fact it is still recovering from the losses suffered.

Slovakia and Hungary proved to be the countries in the middle of the ranking. Slovakia turned out to be a country that consistently reforms its economy and is more strongly tied to the center of Europe due to the implementation of euro as its currency in 2009. The high standing of Slovakia can be confirmed by the fact that is has been qualified three times by the World Economic Forum as one of innovation-driven economies, i.e. those at the highest level of development. Hungary did not fare as good as this, which does not mean it was far behind Slovakia. Hungary proved to be the leader in such categories as 'government efficiency' and 'business efficiency' in the rankings published by the Institute for Management Development. It also slightly improved its position – contrary to Slovakia – in the 'Ease of Doing Business' ranking examining the conditions for starting and operating a business in a given country. It should also be remembered that the economic situation of Hungary improved greatly in 2014 (Eurostat's forecasts point to a GDP increase of as much as 3% (Eurostat Database, ec.europa.eu/Eurostat)) which is probably a result of a stringent budget and economical fiscal policy (Piotrowski, 2014).

The lowest rated economy – considering the entire period analysed – turned out to be Poland. All the three rankings showed a relatively large gap between the competitiveness of the Polish economy and that of the rest of the studied group. However, in the last few years, i.e. since 2010, Poland's position has begun to rise quite rapidly, and as a result the country outdistanced Slovakia and Hungary (according to WEF, in such areas as 'the quality of public institutions' and 'market size') and even the Czech Republic (in the 'business sophistication' category). One reason for this 'growth' is the fact that the Polish economy did relatively well in enduring the global economic crisis and its effects (it should be noted that Poland was the only country to record a GDP increase of +1.7% in 2010, when the rest of the group took a fall of as much as −6 or −4%(Eurostat Database, ec.europa.eu/eurostat)). Poland also proved to be an economy creating the best conditions for business activity among the Visegrád Group countries.

The analysis shows that the countries of Central Europe have yet much to achieve in the area of international competitiveness in order to match such countries as Germany or the United Kingdom, which are the leading economies of the European Union. However, one should not overlook the enormous progress that Central European countries have made since adopting the free market economic system.

References

Bossak J., Bieńkowski W. (2004), *Międzynarodowa zdolność konkurencyjna krajui przedsiębiorstw – wyzwania dla Polski na progu XXI wieku*, Wydawnictwo SGH, Warszawa.

Bukowski S., Siek E. (2013), *International Technology and Innovation Competitiveness of Poland as compared to other Central and Eastern European Countries (EU-10)*, Central European Review Of Economics & Finance, Vol. 3, No. 1

Dančíková Z., Riapošová L. (2013), *Analiza realizacji ustawy o dostępie do informacji publicznych w przedsiębiorstwach będących własnością państwa i samorządu w Czechach, Estonii, Polsce, Słowacji i na Węgrzech*, Transparency International Slovakia.

Doing Business Data, www.doingbusiness.org (access date 10.03.2015)

Eurostat Database, ec.europa.eu/Eurostat (access date 10.03.2015)

Heritage Foundation, *Economic Freedom Indexes*, www.heritage.org (access date 08.03.2015)

IMD (2004-2014), *IMD World Competitiveness Yearbook*, International Institute for Management and Development, Geneva.

Instytut Ekonomiczny i Biuro Gospodarki Światowej (2012), Analiza sytuacji gospodarczej w krajach Europy Środkowej i Wschodniej, Narodowy Bank Polski.

International Institute for Management Development, www.imd.org(access date 11.03.2015)

Ministerstwo Spraw Zagranicznych Rzeczypospolitej Polskiej, www.msz.gov.pl(access date 15.03.2015)

Misala J. (2007a), *Konkurencyjność i pozycja konkurencyjna Polski w handlu z krajami Unii Europejskiej*, in: Misala J. (ed.), *Międzynarodowa konkurencyjność gospodarki Polski. Teoria i praktyka*, Politechnika Radomska, Radom.

Misala J. (2007b), *Międzynarodowa zdolność konkurencyjna i międzynarodowa konkurencyjność gospodarki narodowej*, Politechnika Radomska, Radom.

Misala J. (2009), *Historia rozwoju teorii i polityki konkurencyjności międzynarodowej*, Wydawnictwo SGH, Warszawa.

Misala J. (2011), *Międzynarodowa konkurencyjność gospodarki narodowej*, Wydawnictwo PWE, Warszawa.

Misala J., Misztal P., Siek E. (2007), *Kształtowanie się międzynarodowej zdolności konkurencyjnej gospodarki narodowej Polski w okresie transformacji*, in: Misala J. (ed.), Międzynarodowa konkurencyjność gospodarki Polski. Teoria i praktyka, Politechnika Radomska, Radom.

Mościbrodzki W. (2008), *Etapy transformacji systemowej w Europie Wschodniej*, Państwowy Uniwersytet Wirtualny.

Piotrowski M. (2014), *Gospodarczy cud na papierze. Czy Węgry się rozwijają?*, www.wyborcza.biz(access date 15.03.2015)

Piotrowski S. (2009), *Konkurencyjność a uwarunkowania prawne polityki konkurencji w Unii Europejskiej*, in: Gorynia M., Łaźniewska E. (eds.), *Kompendium wiedzy o konkurencyjności*, Wydawnictwo Naukowe PWN, Warszawa

Transparency International, www.transparency.org(access date 10.03.2015)

World Bank Group (2006 - 2014), *Easy Of Doing Business*, www.doingbusiness.org, Washington.(access date 10.03.2015)

World Economic Forum (2004-05 - 2013-14), *Global Competitiveness Report*, www.weforum.org, Genewa.(access date 09.03.2015)

World Economic Forum, www.weforum.org(access date 10.03.2015)

World Trade Organization, www.stat.wto.org(access date 09.03.2015)

Żuber P. (ed.) (2011), *Raport Polska 2011. Gospodarka – Społeczeństwo – Regiony*, Ministerstwo Rozwoju Regionalnego, Warszawa