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An Internationally Competitive Economy: a Comparison of Poland and the Visegrad Group Countries in the Post-Accession Period¹

Abstract

This article presents the results of an analysis comparing the competitive position of Poland and other countries of the Visegrad Group (V4) in the post-accession period (2004–2015). The assumption is that among the V4 countries, Poland has joined those countries where the diverse effects of EU membership are clearly visible. In the study, analysis was applied to secondary data pertaining to pillars of economic competitiveness, as determined by the ‘Global Competitiveness Reports’ prepared by the World Economic Forum. The article ends with a list of vital conclusions based on the presented analysis.

Keywords: *international economic competitiveness, effects of EU membership, Poland, Visegrad Group, V4*

JEL: *E2, E6, F4, F5*

1. Introduction

Poland, like the other ‘new’ EU member states, has experienced a number of successes and failures in the post-accession period. The prospect of accession to the EU provided the impulse for transformational changes initiated at the beginning of the 1990s and the first years of EU membership allowed Poland to build rela-

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tively stable and sustainable foundations for further development. They became the main factors for reinforcing its international economic competitiveness.

The article's objective is to present the results of an analysis comparing changes in the competitive position of the Polish economy with those of other member states of the Visegrad Group (V4) between 2004 and 2015. In the analysis, I have also made an attempt to determine the impact of the major factors (pillars) on the competitiveness positions of Poland and other V4 countries in this period. The hypothesis was adopted that Poland, a V4 member, is among those countries whose international competitive position has clearly improved in the post-accession period.

Due to space limitations, the analysis refers to indicators presented in 'Global Competitiveness' reports prepared by the World Economic Forum. These reports are the most comprehensive international competitiveness rankings of economies, as well as the most frequently-quoted in the literature.

2. Competitiveness and International Position: a Review of the Positions Taken in the Main Literature²

The term 'international competitiveness' has given rise to much debate. Although the concept of competitiveness with respect to a company is commonly accepted, its application in the context of an entire economy has been challenged.

The most serious 'attack' on this concept is presented by P. Krugman in his article 'Competitiveness: A Dangerous Obsession.' He deems the analogy between the competitiveness of companies and that of countries is 'deeply misleading' and 'flatly wrong' with respect to international trade theory (Krugman 1994, p. 28).

In his criticism, Krugman relies on three arguments:

- 1) companies that are uncompetitive over time succumb to financial difficulties and, in effect, cease to exist. On the macro scale, it is impossible to designate a 'bottom threshold of competitiveness': countries do not disappear from the market, so there is no basis for examining their competitiveness;
- 2) competitiveness pertaining to companies is a zero-sum game. A company offering more competitive products and services and accomplishing above-average profits 'wins financially' at the cost of another less competitive company. Transferring this analogy to the macro level means that the success of one country should come at the cost of another one, which, in effect, would lead to the existence of winners and losers in international trade. Since every country has some comparative advantage, there is no basis for this assumption;

² In this part of the article, I make use of a compilation by M. Żmuda, E. Molendowski 2016.

3) competitiveness of export determines the success of small, open economies, yet in the case of more sustainable, large economies, economic growth does not depend on success in international trade, but on the effective use and redistribution of generated resources. Therefore, the phenomenon of competitiveness is not universal.

However, proponents of the theory of the economic competitiveness of countries believe it is a 'modern' approach to the fundamental problems of economic development embedded in a globalisation reality (Reinert 1995, pp. 23–24; Radło 2008, p. 77). According to these proponents, the central point of discussion on the international competitiveness of an economy is the attempt to answer the questions why countries have different results in socio-economic development; what underlies these differences; and in what manner the development of a country and an increase in its citizens' welfare can be shaped, based on the maximisation of profits from international trade in the long-term (Wysokińska 2001, p. 37; Martin 2003, p. 7).

In response to Krugman's statements about countries lacking the 'bottom threshold of competitiveness' of companies, it is worth looking at it as a long-term phenomenon with structural features (Jagiełło 2008, p. 13). A. Wziątek-Kubiak emphasises that such a view distinguishes economic competitiveness from that of a company or even a sector, which are performance categories (Wziątek-Kubiak 2001, p. 487). In the long term, an improvement in an economy's competitiveness may come through the evolution of trade specialisation as a result of structural adjustments and changes in quality, mainly based on a country's technological capacity (Miozzo, Walsh 2006; Majewska-Bator 2010; Alvarez, Marin 2010). The argument then is that an economy's competitiveness is 'inextricably linked to economic development' and is to be viewed as a dynamic category (Jagiełło 2008, p. 14; Radło 2008, p. 4; Weresa 2008, p. 102).

With respect to Krugman's second argument – that international trade is not a zero-sum game – counter viewpoints argue that national economies are entities of international competition. It is worth recalling that one of the central assumptions of the theory of comparative advantage, on which Krugman relies, is the lack of mobility of productive factors (Kojima, Ozawa 1985, p. 136). According to the German concept of locational competition, in conditions of a free flow of production factors, the competitive battle is manifested in rivalry for factors such as capital, technical knowledge and experts (Lorz 1997; Siebert 2006). More effective use of production factors and particularly non-tangible assets (innovation, cultural standards organisational and management skills) become the basis for structural adjustment and lead to changes in the competitiveness of sectors of the economy (Porter 1990; Cho, Moon 1998; Radło 2008, p. 75). It may be assumed then that countries at a similar level of development fight for advantageous conditions for specialised workers and for the location of economic activity in innovative sectors.

It also seems important to attempt to refute the accusation that the concept of economic competitiveness does not apply to large countries. Through the progress of glo-

balisation and the similarity of consumer preferences on a global scale (Mrak 2000), manufacturers from large countries, still theoretically relying on domestic sales, are exposed to competition in the form of innovative foreign products (Karodia et al. 2014). Although economic growth in a large country is not directly dependent on export competitiveness, in the era of the global economy the international fight over competitiveness at the level of companies is transferred to the domestic market. In effect, even a large industrialised economy cannot ignore competitive pressure from innovation leaders or even from more cost-competitive foreign companies. In an open economy, the capacity to make use of opportunities related to the progress of globalisation, while also facing the challenges of international competition, translate into employment in the given country and, in effect, economic growth (Howes 2000, p. 180).

These arguments allow one to assess whether analysis of the competitiveness of national economies in an era of progressing globalisation is justified. Any final determination about the core of this phenomenon remains an open issue. The sharp increase in discussions about economic competitiveness has led to terminological chaos (Gomułka, Czajkowski 2008, p. 16). Despite the inconsistencies in nomenclature, it is commonly accepted that a key part of any review of the concept of international economic competitiveness is to separate factors from results (Radło 2008, pp. 76–78).

A competitive position is, in a static approach, a country's place in the global economy (Weresa 2008, p. 102). This is reflected in its share in the 'international turnover,' as the term is broadly understood, indicating its position in trade in goods, services and the transfer of international production factors (Misala 2011, p. 80). 'Competitive position' is related to the balance of the volume and structure of such turnover. The increased significance of the export of technologically advanced goods (based on knowledge and innovation) is reflected in a country achieving a relatively better competitive position (Wysokińska 2001). This situation translates into the better position and promotion of a country in the modern international division of labour and, in effect, leads to an increase in wages and to the increased welfare of its inhabitants.

An evaluation of 'competitive position' as a starting point in the process of an analysis of competitiveness makes it possible to estimate the degree of a country's integration in the international division of labour at any given moment (static approach). On the other hand, an analysis of the evolution of this position over time allows for determining the 'competitive capacity' (dynamic approach). It is necessary to look deeper into what caused a country to achieve a specific position and the determinants of its ongoing changes via, i.e., an analysis of factor competitiveness (Weresa 2008, p. 102; Gomułka, Czajkowski 2008, p. 29).

Simultaneously, it must be noted that each of the categories described above is relative in nature, i.e., they must be evaluated not only in comparison to other countries, but also in the context of the stage of development in which a given economy is at a given moment (Weresa 2008, p. 102; WEF 2014, pp. 9–11).

3. Measures and Methods of Evaluating International Competitiveness




Determining an economy's international competitiveness consists of ranking its competitive position (Bossak 2000) and/or its competitive capacity (Misala 2008). In recent years, numerous indicators of international competitiveness of national economies and, simultaneously, measurement methods have emerged. This refers both to measuring the international competitive capacity of the national economy of a given country, as well as its international competitive position in a given period. Determinants describing the competitiveness of individual countries have become the object of analysis of numerous researchers and international centres.

One such centre is the International Management Institute (IMD). It publishes the results of its studies in annual reports, compiled as the *World Competitiveness Yearbook*, which includes several dozen countries. Since 2004, the World Bank has also been preparing its annual *Doing Business* reports, devoted to analysis of the conditions of conducting business in the examined countries. The *Foreign Direct Investment Confidence Index*, prepared annually by the consulting company A.T. Kearney, is also used relatively often to examine the international competitive capacity of an economy. The Human Development Index (HDI, a synthetic measure of the quality of life in a given country), is published yearly by the UNDP and also is used to measure the international competitiveness of a country.

In recent years, one of the most comprehensive and most frequently-quoted rankings has been the competitiveness ranking of international economies ('The Global Competitiveness Report'). This ranking is the result of an annual comparative study of the conditions of economic development of countries and is conducted by the World Economic Forum.³ The examined countries are ranked according to their competitiveness based on indicators prepared especially for this purpose. The latest report in 2016 calculated 114 indicators, arranged in 12 'pillars' and divided into three categories (by individual countries): basic requirements, efficiency enhancers and innovation and sophistication factors. For each indicator, individual countries were assigned a rating of 1 to 7, with 1 being the lowest and 7 the highest. A list of these indicators is contained in Table 1.

³ The report was published for the first time in 1979 and has been systematically extended to new countries (in 2015 it included over 140 countries). Initially, it contained the *Competitiveness Index* prepared under the supervision of Prof. J. Sachs, in which bases for mid- and long-term rapid economic development were shown. In 2000, its name was changed to the *Growth Competitiveness Index* to differentiate it from the current microeconomic competitiveness indices issued under various names in various reports. Since 2004, it was replaced by the *Global Competitiveness Index*. It was prepared by the World Economic Forum in cooperation with Prof. X. Sala-i-Martin with the use of studies by Prof. M. Porter.

Table 1. Indicators determining a country's competitive position according to the Global Competitiveness Report

GLOBAL COMPETITIVENESS INDEX		
Basic requirements sub-index	Efficiency enhancers sub-index	Innovation and sophistication factors sub-index
Pillar 1: Institutions Pillar 2: Infrastructure Pillar 3: Macroeconomic environment Pillar 4: Health and primary education	Pillar 5: Higher education and training Pillar 6: Goods market efficiency Pillar 7: Labour market efficiency Pillar 8: Financial market development Pillar 9: Technological readiness Pillar 10: Market size	Pillar 11: Business sophistication Pillar 12: Innovation
		
Development determined by traditional factors	Development determined by investment	Development determined by innovation

Source: own study based on: The Global Competitiveness Report 2016–2017, Klaus Schwab (ed.), World Economic Forum, Geneva 2016.

When calculating this synthetic index of competitiveness, it is important to place a given country in the relevant group determining its level of development. Weights assigned to individual groups of pillars depend on the GDP per capita values of the examined countries. These weights are presented in Table 2.

Table 2. Weights of indicators determining a country's competitive position based on development level (GDP per capita)

Specification	Level 1 based on basic requirements	Transfer from level 1 to level 2	Level 2 based on efficiency enhancement	Transfer from level 2 to level 3	Level 3 based on innovation
GDP per capita (in USD)	<2000	2000–2999	3000–8999	9000–17000	>17000
Weight for basic requirements (in %)	60	40–60	40	30–40	20
Weight for efficiency enhancers (in %)	35	35–50	50	50	50
Weight for innovation and sophistication factors (in %)	5	5–10	10	10–30	30

Source: The Global Competitiveness Report 2014–2015, World Economic Forum, Geneva 2015, p. 10.

According to data presented in Table 2, in the WEF ranking the basic requirements are essential to economies whose development is primarily based on traditional production factors (their GDP per capita does not exceed USD 2,000). Efficiency enhancers are important for economies whose development primarily relies on investment (GDP per capita from USD 3,000 to USD 17,000). Innovation and sophistication factors are particularly important for countries where development is innovation-driven. These are countries on the highest (third) level of economic development (their GDP per capita exceeds USD 17,000). It is worth emphasising that among the factors determining a country's competitive position, the greatest weight was assigned to efficiency enhancers. On the other hand, basic requirements play a relatively vital role in determining the competitive position of countries with the lowest level of economic development.

4. Changes in Poland's Competitive Position Compared to the Other V4 Countries

The results of studies on economic competitiveness conducted by the World Economic Forum show that the position and competitiveness of Poland in the international arena was relatively low when it first acceded to the European Union (in comparison to the examined countries) (cf. Table 3).

However, throughout the entire post-accession period (2004–2015), Poland's score significantly changed. In 2004, the Polish economy was 60th in terms of competitiveness (3.98 points). In the subsequent two years, its competitiveness was evaluated much higher, at 51st and 45th (4.00 and 4.39 points), respectively. Poland scored relatively poorly in 2008, at 53rd in the ranking (4.28 points). The next two years were marked by a clear improvement in its position to 46th and then to 39th (4.33 and 4.51 points, respectively), its highest ranking in the entire post-accession period. Between 2011 and 2015, the competitiveness of the Polish economy remained relatively stable, slipping slightly to 41st position (4.46 points) in 2011 and 2012 and then by one position in the next two years, but to regain the 41st position in 2015 (4.49 points).

It is worth emphasising that in the first years after accession, or until 2010, Poland's position in the ranking significantly improved. A particularly favourable trend occurred between 2004 and 2006, when Poland advanced from 60th among the examined countries to 45th. Between 2007 and 2008, its position slightly deteriorated, but between 2009 and 2010, there was significant improvement once again. As a result, in 2010 Poland had achieved the 39th position in the ranking, before falling back slightly for the next few years, as demonstrated above. However, it is worth noting that in the entire post-accession period, Poland improved

its rank by as 19 positions, with its greatest success recorded in the period to 2010 (as illustrated in Diagram 1).

Table 3. Poland's competitiveness compared to the other V4 countries in studies conducted by the World Economic Forum between 2004 and 2015

Ranking	Ranking Score				Indicator Value			
	CZ	HU	PL	SK	CZ	HU	PL	SK
2004–2005	40	39	60	43	4.55	4.56	3.98	4.43
2005–2006	38	39	51	41	4.42	4.38	4.00	4.31
2006–2007	31	38	45	36	4.67	4.49	4.39	4.54
2007–2008	33	47	51	41	4.58	4.35	4.28	4.45
2008–2009	33	62	53	46	4.62	4.22	4.28	4.40
2009–2010	31	58	46	47	4.67	4.22	4.33	4.31
2010–2011	36	52	39	60	4.57	4.33	4.51	4.25
2011–2012	38	48	41	69	4.52	4.36	4.46	4.19
2012–2013	39	60	41	71	4.51	4.30	4.46	4.14
2013–2014	46	63	42	78	4.43	4.25	4.46	4.10
2014–2015	37	60	43	75	4.53	4.28	4.48	4.15
2015–2016	31	63	41	67	4.69	4.25	4.49	4.22
Transition								
2015/2004	9	–24	19	–24	0.14	–0.31	0.51	–0.21
2015/2009	0	–5	5	–20	0.02	0.03	0.16	–0.09

Source: The Global Competitiveness Index Historical Dataset © 2005–2015; Global Competitiveness Index (GCI), 2004–2005, Scores; Global Competitiveness Index (GCI), 2005–2006, Scores, World Economic Forum.

An important element in the presented analysis is the comparison of Poland's results with those of other countries from the Visegrad Group. These countries' economies and social situations in the post-accession period were similar. However, their results in the competitiveness rankings are quite diverse (cf. Table 3 and Diagram 1). At the beginning of this period, Poland's competitiveness (60th) was evaluated much lower than that of the Czech Republic, Hungary and Slovakia (40th, 39th and 43rd, respectively). In subsequent years, that is, until 2007, Poland was still in a relatively worse position than the other V4 countries. However, Poland achieved better scores than Hungary in 2008 and Slovakia in 2009 and this situation persisted until the end of the analysed period (2015). In the entire analysed period, only the Czech Republic had a higher score than Poland in the ranking. In 2015, Poland ranking at 41st was lower than the Czech Republic's (which was 31st), but considerably higher than Hungary's or Slovakia's (63rd and 67th, respectively).

It is worth emphasising that when analysing data presented in Table 3 and in Diagram 1, it can be stated clearly that Poland recorded its best scores among the

examined countries with respect to improvement of the international competitive position of its economy in the post-accession period. As noted above, Poland improved its position in the WEF ranking by 19 places (0.51 points) compared to the Czech Republic, whose improvement amounted to only nine places (0.14 points). In the meantime, Hungary's and Slovakia's position dropped by as many as 24 places (0.31 and 0.21 points respectively). This shows that Poland has transformed from a country that in 2004 held the worst position among the group to a country with a much more favourable position compared to two of the three other V4 countries (Hungary and Slovakia).

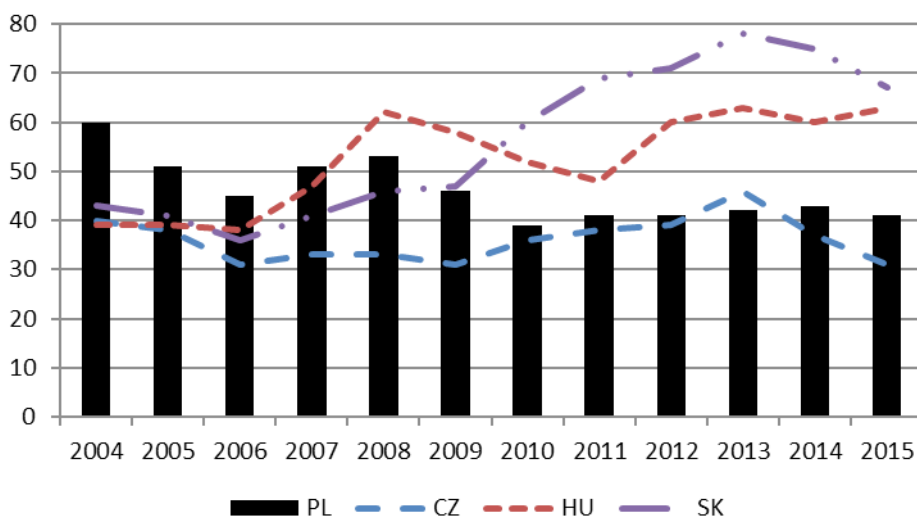


Diagram 1. Changes in Poland's competitive position compared to the other V4 countries in studies conducted by the World Economic Forum between 2004 and 2015

Source: Author, based on data from Table 3.

This increase in the rankings contained in the WEF reports resulted in particular from Poland's dynamic GDP growth, especially during the global economic crisis. In the entire post-accession period (2004–2015), Poland stood out among the new EU member states as having had the highest GDP growth index (Molendowski 2015, 2016). Thanks to this, and despite the recorded aggravation of its public finances, Poland was considered one of the most stable (macroeconomically) economies on the continent. This favourable change in Poland's position is also attributed to its relatively good education system and large internal market. Benefits from improvements in state administration were also noted (WEF 2015, p. 25).

5. Factors Determining Poland's Competitive Position Compared to the Other V4 Countries

As a reminder, the WEF's Global Competitiveness Report is calculated from 114 indicators grouped into 12 pillars divided into three categories: basic requirements, efficiency enhancers and innovation and sophistication factors.

It is worth noting that among the factors determining a country's competitive position, efficiency enhancers have relatively the greatest weight. On the other hand, the basic requirements are relatively significant in determining the competitive position of countries with the lowest level of economic development.⁴ Data pertaining to the impact of individual indicators on the competitive position of Poland and the other V4 countries are presented in Table 4.

Table 4. Impact of individual indicators on the competitive position of the V4 countries in 2006 and 2015⁵

Indicators	Score							
	2006				2015			
	CZ	HU	PL	SK	CZ	HU	PL	SK
GCI – total	31	38	45	36	31	63	41	67
1. Institutions	55	45	69	50	57	97	58	104
2. Infrastructure	33	50	65	53	41	48	56	57
3. Macroeconomic environment	36	88	51	37	21	52	46	41
4. Health and primary education	57	40	21	65	27	72	40	50
5. Higher education and training	27	30	33	39	29	57	31	53
6. Goods market efficiency	31	45	56	38	37	72	46	54
7. Labour market efficiency	31	36	41	24	47	77	81	100
8. Financial market development	50	43	64	27	24	65	43	35
9. Technological readiness	27	36	46	33	29	48	41	44
10. Market size	40	41	22	53	47	51	21	62
11. Business sophistication	27	36	56	47	30	90	55	57
12. Innovation	27	30	43	42	35	51	64	66

Source: Author, based on data from Table 1.

According to data presented in Table 3, in 2006, apart from market size, the categories 'health and primary education' and 'higher education and training' had the greatest impact on Poland's competitive position; to a much lesser degree it was also influenced by 'labour market efficiency' and 'innovation'. The majority are factors (pillars) included under the efficiency enhancers sub-index. In princi-

⁴ Cf., more: WEF 2017.

⁵ Data presented in this table is from the period starting in 2006, since rankings for previous years applied a different classification of indicators determining the competitive position of the examined countries.

ple, the same indicators determined Poland's competitive position in 2015. Unfortunately, in the group 'innovation and sophistication factors' sub-index, Poland's relatively weak score in 2006 did not improve greatly.

In the case of the Czech Republic (which occupies the highest position among the examined countries), 'higher education and training' and 'technological readiness' (efficiency enhancers), as well as 'business sophistication' and 'innovation' (innovation and sophistication factors) exerted the greatest impact in 2006. However, in 2015 (even though the Czech Republic's score in the rankings did not change), innovation and sophistication factors did not play such a significant role in shaping the country's position. The Czech Republic mainly owed its score to the factors 'macroeconomic environment', 'higher education and training', 'financial market development' and 'technological readiness' (included in the group of efficiency enhancers).

Innovation and sophistication factors also played an important role in the competitive position of Hungary in 2006 ('business sophistication' and 'innovation'). Efficiency enhancers ('higher education and training', as well as 'labour market efficiency' and 'technological readiness') were also vital here. However, in the period until 2015, the competitiveness ranking of Hungary greatly deteriorated (by as many as 63 positions). This was the result of the significant decline in its score with respect to innovation and sophistication factors. On the other hand, basic requirements (infrastructure, macroeconomic environment) played an important role that year, i.e., requirements characteristic of countries with a relatively low level of GDP per capita.

On the other hand, in Slovakia's case, which in 2006 had a score similar to the Czech Republic's in the rankings, efficiency enhancers played a major role ('labour market efficiency', 'financial market development' and 'technological readiness'). In the period to 2015, Slovakia's score (similarly to Hungary's) clearly deteriorated (a drop of 31 positions to a distant 67th). Slovakia owed its position in 2015 mainly to basic requirements ('infrastructure', 'macro-economic environment', 'health and primary education').

It is obvious that in analyses of this type, the examination of long-term trends plays a special role. In the presented analysis, an attempt was made to identify the most important trends that characterised changes in the competitive position of the analysed countries in 2015 in comparison to 2006. These changes are clearly visible when Diagrams 2 and 3 are compared.

The comparison of diagrams 2 and 3 (and data from Table 3) shows a clear improvement in Poland's competitive position, not only in reference to the overall indicator but also to the majority of indicators (8 out of 12) which determine it. However, the greatest improvement took place in the group of basic requirements, which play a relatively significant role in determining the competitive position of countries with the relatively lowest level of economic development (institutions: by 11 positions; infrastructure: by 9 positions; macro-

economic environment: by 5 positions). In the group of efficiency enhancers, a clear improvement was visible only in the case of ‘financial market development’ (by 21 positions) and ‘goods market efficiency’ (by 10 positions). Unfortunately, in the group of ‘innovation and sophistication’ factors, a clear deterioration was seen (a decline of 21 positions). It is also worth adding that a significant deterioration of Poland’s competitive position also took place in ‘labour market efficiency’ (by as many as 40 positions) and in ‘health and primary education’ (by 19 positions).⁶

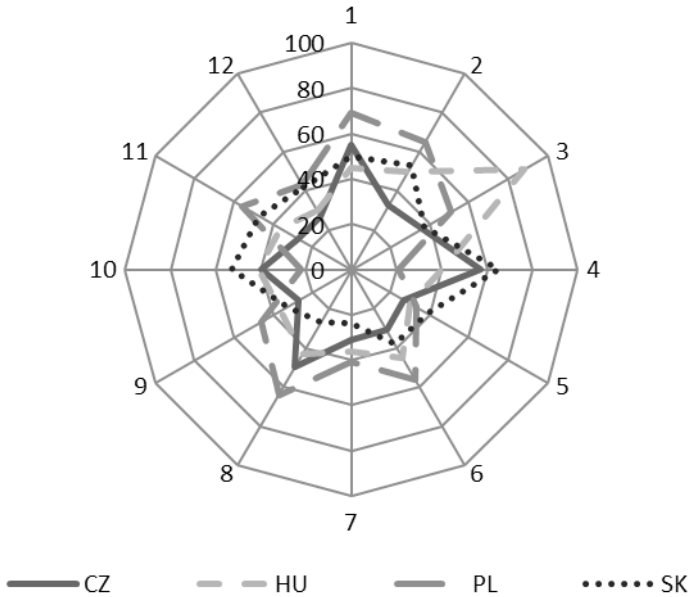


Diagram 2. Indicators determining Poland’s competitive position and those of the other V4 countries in 2006

1. Institutions; 2. Infrastructure; 3. Macroeconomic environment; 4. Health and primary education; 5. Higher education and training; 6. Goods market efficiency; 7. Labour market efficiency; 8. Financial market development; 9. Technological openness; 10. Market size; 11. Business sophistication; 12. Innovation.

Source: Author, based on Table 3.

An important part of the presented analysis is the attempt to identify the factors that greatly affected the deterioration of the competitive position of Hungary and Slovakia in 2015 compared to 2006. In Hungary’s case, deterioration took place with reference to 10 out of the 12 indicators. Among them, the highest drop was in ‘business sophistication’ (by as many as 54 positions), ‘institutions’ (52), ‘labour market efficiency’ (41) and ‘health and primary education’ (32). Hungary

⁶ For more, see: Boguszewski 2016, pp. 20–28.

improved its score only in ‘macroeconomic environment’ (by 36 positions) and ‘infrastructure’ (but only by 2 positions).

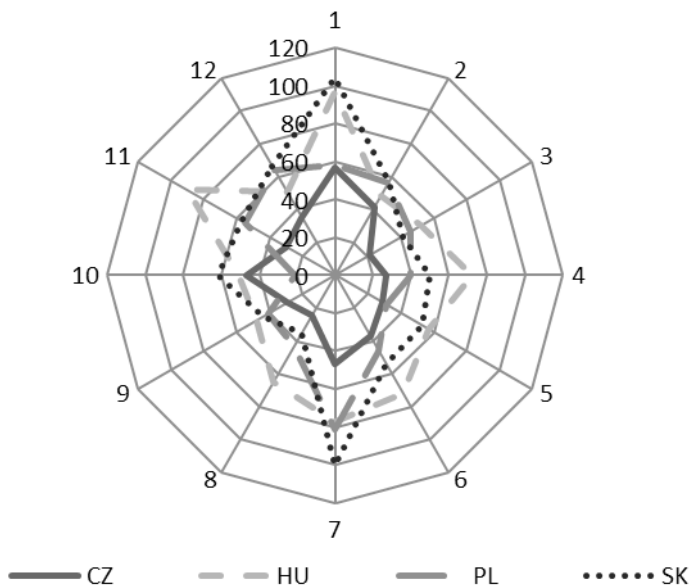


Diagram 3. Indicators determining Poland’s competitive position and that of the other V4 countries in 2015

1. Institutions; 2. Infrastructure; 3. Macroeconomic environment; 4. Health and primary education; 5. Higher education and training; 6. Goods market efficiency; 7. Labour market efficiency; 8. Financial market development; 9. Technological openness; 10. Market size; 11. Business sophistication; 12. Innovation.

Source: Author, based on Table 3.

On the other hand, Slovakia’s competitive position deteriorated in 11 indicators. The greatest impact was in ‘labour market efficiency’ (down by 76 positions), ‘institutions’ (down by 54 positions) and ‘innovation’ (down by 24 positions). Improvement was recorded only in ‘health and primary education’ (up 15 positions).

6. Conclusions

In Poland and the other V4 countries, accession to the European Union resulted in rapid economic growth, coupled with simultaneous restructuring and modernisation. This exerted a significant influence on improvement of the international competitive position of their economies.

A review of the most important relevant literature presented in the article shows that the evaluation of the competitiveness of an economy should be carried out using a dynamic approach, from the perspective of available (domestic and foreign) production factors, the capacity to make use of opportunities related to the progress of globalisation and the adjustment potential of companies, sectors and even the entire economy to the changing conditions of the external environment, thus in effect meeting development targets. Such an approach to economic competitiveness was adopted by the authors of the WEF's Global Competitiveness Reports.

The analysis of the reports for years 2004–2015 clearly shows that in the post-accession period (2004–2015), Poland was the most successful among the V4 countries with respect to advancing its economy's international competitiveness. At the beginning of this period, Poland was ranked 60th, far behind the Czech Republic, Hungary and Slovakia. However, from then until 2015, Poland became a country with a considerably more favourable position than two of its V4 partners (Hungary and Slovakia) and was only slightly behind the Czech Republic. It is worth adding that Hungary's and Slovakia's positions significantly deteriorated in the rankings (by as many as 24 places).

It is also worth emphasising that Poland owes much of its significant improvement in its competitive position to the dynamic growth of its GDP, in particular during the global economic crisis. According to an analysis of those indicators which, according to the GCR authors, determine a country's competitive position, Poland improved its score in reference to 8 out of 12 of them. The greatest improvement took place in basic requirements, which play a relatively significant role in determining the competitive position of countries with the lowest level of economic development. In the group of pro-efficiency indicators, no significant improvement was recorded. On the other hand, in the group of pro-innovation indicators (determining the score of countries with the highest GDP level), Poland recorded a significant deterioration of its competitive position.

References

Aigigner K. (2006), *Competitiveness: From a Dangerous Obsession to a Welfare Creating Ability with Positive Externalities*, 'Journal of Industry, Competition and Trade', No. 2.

Alvarez I., Marin R. (2010), *FDI and Technology as Levering Factors of Competitiveness in Developing Countries*, [in:] *Globelics 2010, 8th International Conference: Making Innovation Work for Society: Linking, Leveraging and Learning*, 'Conference Proceedings', University of Malaysia, Kuala Lumpur, Malaysia.

Bieńkowski W., Weresa M.A. (2008), *Czynniki i miary międzynarodowej konkurencyjności gospodarek w kontekście globalizacji – wstępne wyniki badań*, SGH Warsaw School of Economics, Warsaw.

- Boguszewski P. (2016), *Globalny raport konkurencyjności 2016–17 Światowego Forum Gospodarczego*, National Bank of Poland, Warsaw.
- Bossak J. (2000), *Międzynarodowa konkurencyjność gospodarki kraju i przedsiębiorstwa. Zagadnienia teoretyczne i metodologiczne* [in:] Bieńkowski W. (ed.), *Konkurencyjność gospodarki Polski w dobie integracji z Unią Europejską*, SGH Warsaw School of Economics, Warsaw.
- Bossak J. (2013), *Konkurencja i współpraca międzynarodowa*, Difin, Warsaw.
- Cho D., Moon H. (1998), *A Nation's International Competitiveness in Different Stages of Economic Development*, 'Advances in Competitiveness Research', Vol. 6, No. 1.
- Dunn M.H. (1994), *Do Nations Compete Economically? A Critical Comment on Prof. Krugman's Essay*, 'Competitiveness: A Dangerous Obsession', 'Intereconomics', November/ December.
- Gomułka M., Czajkowski Z. (2008), *Konkurencyjność międzynarodowa – pojęcie i metodologia pomiaru; Materiały do dyskusji*, [in:] Bieńkowski W, Weresa M.A. (ed.), *Czynniki i miary międzynarodowej konkurencyjności gospodarek w kontekście globalizacji – wstępne wyniki badań*, SGH Warsaw School of Economics, Warsaw.
- Gorynia M., Łażniewska E. (ed.) (2009), *Kompendium wiedzy o konkurencyjności*, PWN, Warsaw.
- Howes C. (2000), *U.S Competitiveness and Economic Growth* [in:] Howes C., Singh A., (ed.) *Competitiveness Matters: Industry and Economic Performance in the U.S*, The University of Michigan Press, Michigan.
- Jagiello, E.M. (2000), *Strategiczne budowanie konkurencyjności gospodarki*, Poltext, Warsaw.
- Karodia A. et al. (2004), *International Competitiveness, Globalisation and Technology for Developing Countries*, 'Singaporean Journal of Business Economics and Management Studies', Vol. 12, No. 9.
- Kojima K., Ozawa T. (1985), *Toward a Theory of Industrial Restructuring and Dynamic Comparative Advantage*, 'Hitotsubashi Journal of Economics', Vol. 26.
- Krugman P. (1994), *Competiveness: A Dangerous Obsession*, 'Foreign Affairs', Vol. 73, No 2.
- Krugman P. (1996), *Making Sense of the Competitiveness Debate*, 'Oxford Review of Economic Policy', Vol. 12, No. 3.
- Lorz J. O. (1997), *Standortwettbewerb bei internationaler Kapitalmobilität: eine modelltheoretische Untersuchung*, 'Kieler Studien', Vol. 284, Kiel.
- Majewska-Bator M. (2010), *Rozwój endogenicznej przewagi w handlu międzynarodowym a proces zmniejszania luki technologicznej*, Wydawnictwo Naukowe UAM, Poznań.
- Martin R. (2003), *A Study on the Factors of Regional Competitiveness. Final Report for The European Commission Directorate-General Regional Policy*, University of Cambridge, Cambridge.
- Miozzo M. Walsh V. (2006), *International Competitiveness and Technological Change*, Oxford University Press, New York.
- Misala J. (2011), *Międzynarodowa konkurencyjność gospodarki narodowej*, PWE, Warsaw.
- Misala J; Misztal P., Młynarzewska I., Siek E. (2008), *Międzynarodowa konkurencyjność gospodarki Polski w okresie 1990–2007*, University of Technology in Radom, Radom.

- Molendowski E. (2015), *10 Years of Membership in the European Union – Poland in Comparison with the Visegrad Group countries*, 'Central European Review of Economics & Finance', Vol. 10, No. 4.
- Molendowski E. (2016), *Dekada członkostwa w Unii Europejskiej – Polska na tle nowych państw członkowskich*, 'Studia i Materiały Miscellanea Oeconomicae', Vol. 1, No. 3.
- Mrak M. (2000), *Globalisation: Trends, Challenges and Opportunities in Countries in Transition*. IDO, Vienna.
- Olczyk M. (2008), *Konkurencyjność. Teoria i praktyka*, CeDeWu, Warsaw.
- Porter M.E. (1990), *The Competitive Advantage of Nations*, The Free Press, New York.
- Radło M.J. (2008), *Międzynarodowa konkurencyjność gospodarki. Uwagi na temat definicji, czynników i miar* [in]: Bieńkowski W., Weresa M.A. (ed.), *Czynniki i miary międzynarodowej konkurencyjności gospodarek w kontekście globalizacji – wstępne wyniki badań*, SGH, Warsaw.
- Reinert E. (1995), *Competitiveness and its predecessors – a 500 Year Across National Perspective*, 'Structural Change and Economic Dynamics', Vol. 6.
- Siebert H. (2006), *Locational Competition: A Neglected Paradigm in the International Division of Labour*, 'The World Economy', Vol. 29, No. 2.
- Thurow L.C. (2006), *Microchips, Not Potato Chips*, 'Foreign Affairs', Vol. 73.
- Weresa M. A. (2008), *Definicje, determinanty oraz sposoby pomiaru konkurencyjności krajów*, 'Prace i Materiały', No. 284, SGH Warsaw School of Economics, Warsaw.
- World Economic Forum (2014), *Global Competitiveness Report 2014–2015*, WEF, Geneva.
- World Economic Forum (2015), *Global Competitiveness Report 2014–2015*, WEF, Geneva.
- World Economic Forum (2017), *The Global Competitiveness Report 2016–2017*, Klaus Schwab (ed.), WEF, Geneva.
- Wysokińska Z. (2001), *Konkurencyjność w międzynarodowym i globalnym handlu technologiami*, PWN, Warsaw.
- Wziątek-Kubiak A. (2001), *Międzynarodowa specjalizacja a konkurencyjność*, 'Ekonomista', No. 4.
- Wziątek-Kubiak A. (2004), *Kontrowersje wokół konkurencyjności w teorii ekonomii*, 'Ekonomista', No. 6.
- Żmuda M., Molendowski E. (2016), *W poszukiwaniu istoty konkurencyjności gospodarki narodowej: studium interdyscyplinarne*, 'Finanse, Rynki Finansowe, Ubezpieczenia', No. 3 (81).

Streszczenie

MIĘDZYNARODOWA POZYCJA KONKURENCYJNA GOSPODARKI – POLSKA NA TLE PAŃSTW GRUPY WYSZEHRADZKIEJ W OKRESIE POAKCESYJNYM

Artykuł jest prezentacją wyników analizy, w ramach której podjęto próbę porównania zmian pozycji konkurencyjnej Polski oraz pozostałych państw Grupy Wyszehradzkiej (GW-4) w okresie poakcesyjnym (lata 2004–2015). Przyjęto założenie, że Polska należy wśród państw GW-4 do tych, w których najbardziej wyraźnie wystąpiły zróżnicowane efekty członkostwa. W badaniu zastosowano analizę danych wtórnych, dotyczących filarów konkurencyjności gospodarki wyodrębnionych w Raportach „Global Competitiveness Report”, opracowywanych przez Światowe Forum Ekonomiczne. Artykuł kończy zestawienie najważniejszych wniosków wynikających z prezentowanej analizy.

Słowa kluczowe: międzynarodowa konkurencyjność gospodarki, efekty członkostwa w UE, Polska na tle państw Grupy Wyszehradzkiej