

7 International competitive position of the Polish economy against the backdrop of the Visegrad Group countries – changes in the post-accession period*

Introduction

Since the EU accession, Poland and the new EU Member States have experienced a number of both successes and failures. Joining the EU triggered more changes in addition to those initiated in the early 1990s, whereas the first years of membership allowed to build relatively firm and stable foundations for further development. Recent years (especially after the outbreak of the global crisis) have shown that undoubted successes were also accompanied by failures. The economic performance noted in the period of more than a decade after EU accession allows a reasonably full assessment of the consequences of that decision.

The article seeks to present the results of an analysis aimed at comparing changes in the competitive position of the Polish economy with those of the other Visegrad Group (V4) countries. The analysis demonstrated that Poland belonged to the V4 countries whose international competitive positions had improved the most in the post-accession period. It was driven by factors such as a relatively high GDP growth rate, increasing innovation of the economy and better quality of the functioning of institutions.

Due to the imposed limitations on the article size, the analysis referred to the indicators presented in the *Global Competitiveness Reports* prepared by the World Economic Forum. The reports contain some of the most comprehensive and most frequently quoted rankings of international economic competitiveness.

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1. Measures and methods of the measurement of international economic competitiveness

The international competitiveness of an economy is assessed by determining the competitive position (Bossak, 2000) or competitiveness (Misala, Misztal, Młynarzewska, Siek, 2008) of the economy in question. In recent years, there have been various measures of the international competitiveness of national economies, thus a number of measurement methods. It concerns both measuring the competitiveness of the national economy of a country and its international competitive position in the period under analysis. The determinants of the competitiveness of individual countries have been investigated by many researchers and international centres.

One of them is the International Institute for Management Development (IMD). It publishes its research results in annual reports entitled the *World Competitiveness Yearbook* covering several dozen countries. In addition, since 2004, the World Bank has prepared annual *Doing Business* reports investigating the conditions of pursuing economic activities in the countries under examination. Assessments of international economic competitiveness relatively often rely on the Foreign Direct Investment Confidence Index prepared on an annual basis by the consulting firm A.T. Kearney. The international competitiveness of a country is also measured by the Human Development Index (HDI), a composite measure of the quality of life in the country concerned, published annually by the United Nations Development Programme. Another method for evaluating the competitiveness of economies is the KAM (Knowledge Assessment Methodology). It was developed by the World Bank Institute in 1999, within the 'Knowledge for Development Program' for the purpose of analysing possible transition of individual countries to the knowledge economy (Misala et al., 2008).

In recent years, one of the most comprehensive and most frequently quoted rankings has been that of the international competitiveness of economies (*The Global Competitiveness Report*). It is the product of a comparative study of economic development conditions in individual

countries prepared on an annual basis by the World Economic Forum.¹ The countries covered are ranked in terms of competitiveness measured by an index developed for this purpose. In 2016 it was calculated on the basis of 114 factors grouped into 12 pillars divided into 3 categories with regard to specific countries: basic requirements, efficiency enhancers as well as innovation and sophistication factors. With regard to each determinant, individual countries receive scores of 1 to 7 where 1 and 7 denote the lowest and the highest possible scores respectively. The list of factors used to establish the competitive position of the countries covered is presented in Table 1.

Table 1
Determinants of the competitive position of a country
according to the Global Competitiveness Report

Global Competitiveness Index		
Basic requirements	Efficiency enhancers	Innovation and sophistication factors
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
↓	↓	↓
Factor-driven development	Efficiency-driven development	Innovation-driven development

Source: own study based on Schwab (2016).

¹ The report was first published in 1979 and has gradually covered an increasing number of countries (in 2015 – more than 140). Initially, it contained a ranking based on the Competitiveness Index designed under the supervision of Professor J. Sachs, indicating the foundations of fast economic development in the medium and long term. In 2000, the name was changed to the Growth Competitiveness Index, to distinguish it from the current microeconomic competitiveness index used under various names in a number of reports. Since 2004, it has been known as the Global Competitiveness Index. It is developed by the World Economic Forum in cooperation with Professor X. Sala-i-Martin drawing on research by Professor M. Porter.

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In order to compute the composite indicator of the competitive position, it is essential to place the country concerned in the relevant group defining its stage of development. The weights assigned to specific pillar groups depend on the value of GDP *per capita* of the country in question. Those are presented in Table 2.

Table 2
Weights of the determinants of the competitive position of a country according to the stage of development (GDP *per capita*)

Specification	Stage 1: factor-driven	Transition from stage 1 to stage 2	Stage 2: efficiency-driven	Transition from stage 2 to stage 3	Stage 3: innovation-driven
GDP <i>per capita</i> (USD)	<2,000	2,000–2,999	3,000–8,999	9,000–17,000	>17,000
Weight for basic requirements (%)	60	40–60	40	30–40	20
Weight for efficiency enhancers (%)	35	35–50	50	50	50
Weight for innovation and sophistication factors (%)	5	5–10	10	10–30	30

Source: *The Global Competitiveness Report 2014–2015* (2015), p. 10.

As follows from the data presented in Table 2, in the WEF ranking basic requirements are of key importance to economies whose development is mostly based on traditional factors of production (their GDP *per capita* does not exceed USD 2,000). Efficiency enhancers are crucial for economies mainly driven by investment (GDP *per capita* of USD 3,000 to USD 17,000). Innovation and sophistication factors are particularly vital to countries whose development is innovation-driven. Those are countries at the top (third) stage of economic development (their GDP *per capita* exceeds USD 17,000). It is worth emphasising that efficiency enhancers were assigned relatively the highest weight among the determinants of a country's competitive position. At the same time, basic requirements play a relatively significant role in defining the competitive position of the lowest-income countries.

2. Development of the competitive position of Poland against the backdrop of the Visegrad Group (V4) countries

According to the results of the economic competitiveness studies carried out by the World Economic Forum (WEF), in the early 2000s Poland ranked relatively low in terms of international position and competitiveness (against the backdrop of the EU Member States) (cf. Table 3).

Table 3

Position of Poland against the backdrop of the V4 countries in the competitiveness studies conducted by the World Economic Forum in 2004–2015

Ranking	Rank				Score			
	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
Change								
2015/2004	9	–24	19	–24	0.14	–0.31	0.51	–0.21
2009/2004	9	–19	14	–4	0.12	–0.34	0.35	–0.12
2015/2009	0	–5	5	–20	0.02	0.03	0.16	–0.09

Source: *The Global Competitiveness Index Historical Dataset* (2015).

In the post-accession period (2004–2015), however, Poland's position showed significant changes. In 2004, in terms of competitiveness the Polish economy ranked as low as 60th (with a score of 3.98). The following two years witnessed much more favourable assessments of its competitiveness – 51st and 45th place (with scores of 4.00 and 4.39

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respectively). Poland's performance was the most disadvantageous in 2008 (a score of 4.28) when it was ranked 53rd. Another two years saw significant improvements in rank – 46th and 39th place respectively (with scores of 4.33 and 4.51), the 39th position obtained in 2010 being the best result in whole post-accession period. Between 2011 and 2015, the competitiveness of the Polish economy was assessed at a relatively similar level. In 2011–2012, Poland ranked 41st (4.46). In the following years, it dropped one spot annually, whereas in 2015 it moved up again to 41st place (with a score of 4.49).

Changes in the competitive position of Poland against the backdrop of the V4 countries in the competitiveness studies conducted by the World Economic Forum in 2004–2015 are illustrated in Figure 1.

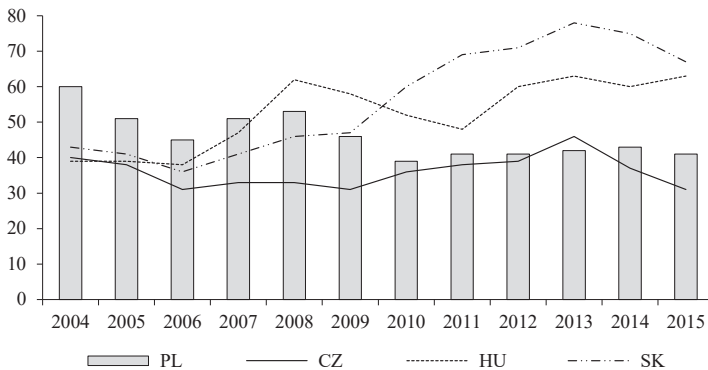


Figure 1. Changes in the competitive position of Poland against the backdrop of the V4 countries in the competitiveness studies conducted by the World Economic Forum in 2004–2015

Source: own study based on data as in Table 3.

As shown in Figure 1, in the first years after accession – until 2010 – Poland's rank was characterised by an upward trend. However, the following years saw a reversal. The most favourable rank obtained in 2010 could not be regained. But it is worth stressing that in the whole post-accession period Poland improved its rank by as many as 19 spots. The most successful period was that before 2010.

An important element of the analysis presented was to compare the scores obtained by Poland with those of the other Visegrad Group countries. It is common knowledge that in the post-accession period the socio-economic situation in the countries concerned was similar to that observed in Poland. However, they varied rather widely in terms of competitiveness scores (cf. Table 3 and Figure 1). At the beginning of the period covered, the competitiveness of Poland (60th place) was assessed much less favourably than in the case of the Czech Republic, Hungary and Slovakia (ranked 40th, 39th and 43rd respectively). In the following years, until 2007, Poland continued to be ranked lower than the other V4 countries. In 2008 Hungary and in 2009 Slovakia were ranked below Poland and such a situation (lower ranks of Hungary and Slovakia) was observed until the end of the period under analysis (2015). Therefore, throughout the period covered, only the Czech Republic outperformed Poland. In 2015, Poland was ranked below the Czech Republic (31st place) but significantly higher than Hungary and Slovakia (ranked 63rd and 67th respectively).

It is worth emphasising that the analysis of the data presented in Table 3 and illustrated in Figure 1 unequivocally shows that, against the backdrop of the countries covered, Poland was the most successful in improving its international economic competitiveness. Whereas Poland jumped by as many as 19 spots (by 0.51) in the WEF ranking, the Czech Republic moved up by 9 positions (by 0.14). Simultaneously, Hungary and Slovakia dropped by as many as 24 places (with their respective scores down by 0.31 and 0.21 respectively). Due to the above-mentioned developments, from the country with the worst position in 2004, Poland became one enjoying a much more favourable position in comparison with the two partners (Hungary and Slovakia) (Boguszewski, 2016).

Such a significant advancement described in the WEF reports is attributable in particular to robust GDP growth, especially during the global economic crisis. Throughout the post-accession period covered (2004–2015), Poland was characterised by the highest GDP growth rate among the new EU Member States (Molendowski, 2015; Źmuda, Molendowski, 2016). Thanks to that, despite deteriorated public finance, it was

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ranked among the most stable economies in Europe in macroeconomic terms. The advantageous change in Poland's position is also associated with a relatively good education system and a large internal market. Other benefits included improved functioning of public administration (World Economic Forum, 2015, p. 25).

Conclusions

Thanks to accession to the European Union, Poland and the other V4 countries experienced rapid economic growth accompanied by restructuring and modernisation. It considerably improved the international competitive positions of their economies.

The analysis presented in the article assumes (on the basis of a review of major publications in the literature) that the competitiveness of an economy should be described dynamically, from the angle of the development of available (domestic and foreign) production factors, the ability to take opportunities related to ongoing globalisation and the adaptability of businesses, sectors and the economy as a whole to changing conditions in the external environment, thus – the achievement of development objectives. Such an approach to economic competitiveness was adopted by the authors of the *Global Competitiveness Reports* prepared by researchers associated with the World Economic Forum.

The analysis of the Reports for 2004–2015 unambiguously demonstrates that, against the backdrop of the V4 countries, Poland was the most successful in improving the international competitive position of its economy. At the beginning of the period covered, Poland's competitiveness (60th place) was as assessed much worse than in the case of the Czech Republic, Hungary and Slovakia. However, by 2015 Poland became a country ranked distinctly higher than the last two partners (Hungary and Slovakia). It was only slightly behind the Czech Republic. It is worth adding that Hungary and Slovakia significantly deteriorated their positions in the ranking (by as many as 24 spots).

It must be emphasised that such a substantial improvement in Poland's competitive position was due to dynamic GDP growth, particularly

in the period of the global economic crisis. The authors of the analysed Reports also noted positive effects of the education system, the size of the internal market and ever better functioning public administration.

The considerations presented in the article will be the starting point to further research, involving a detailed analysis of the determinants of changes in Poland's competitive position against the backdrop of the Visegrad Group countries.

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International competitive position of the Polish economy against the backdrop of the Visegrad Group countries – changes in the post-accession period

Summary. The article presents the results of an analysis attempting to compare changes in the competitive positions of Poland and of the other Visegrad Group (V4) countries in the post-accession period (2004–2015). The hypothesis adopted was that Poland belonged to the V4 countries enjoying the most positive effects of EU membership. The study was based on an analysis of secondary data concerning the pillars of economic competitiveness described in the *Global Competitiveness Reports* prepared by the World Economic Forum. The article ends with a summary of the most important conclusions from the analysis presented.

Keywords: international economic competitiveness, effects of EU membership, Poland against the backdrop of the Visegrad Group countries

JEL classification: E2, E6, F4, F5

Międzynarodowa pozycja konkurencyjna polskiej gospodarki na tle krajów Grupy Wyszehradzkiej – zmiany w okresie poakcesyjnym

Streszczenie. 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 (w latach 2004–2015). Przyjęto hipotezę, że Polska należy wśród państw GW-4 do tych, w których najwyraźniej wystąpiły pozytywne efekty członkostwa. W badaniu zastosowano analizę danych wtórnych, dotyczących filarów konkurencyjności

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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

Klasyfikacja JEL: E2, E6, F4, F5

