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Competitiveness of the Polish Economy in Comparison with the Economies of the Visegrád Group in years 2015-2019[2]

Abstract

The aim of the study is to present an assessment of the international competitive position and development of competitiveness of Polish economy compared to the Visegrád Group countries in years 2015-2019, and to identify the key indicators that formed those aforementioned. The data used for the analysis come from the reports published by International Institute for Management Development and World Economic Forum. On the basis of the assessment, it can be concluded that in the time considered Polish economy was the second most competitive among the Visegrád Group economies, behind the Czech economy, which was determined primarily by criteria assessing business dynamism, institutions, as well as public finance, and health and environment.

Keywords**:** economic competitiveness, competitive position, economy of Poland, Visegrád Group.

JEL classification: F62, F63**,** O11, O57.

Paper type: Theoretical research article

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Introduction

Competitiveness is nowadays regarded as one of the main subjects of consideration of economic, political and management sciences. (Mróz, 2016). It implies production, employment, GDP and, in effect, country's level of development. Until recently, this term was only considered on a micro scale, mainly at the level of a company, and later at national and international level. In spite of the fact that 'international competitiveness of economy' is one of the most commonly used terms from the field of international economy, the multitude and diversity of its definitions[3] present in literature indicate the lack of agreement between theorists regarding an unambiguous declaration of what competitiveness of the economy as a whole actually is, or even on using it in relation to a country at all.

The main goal of the study is to present the most important results of the analysis of application of the term and assessing the development of the international competitiveness of the Polish economy in comparison to the Visegrád Group countries. The following literature and reports of international organizations were used: World Economic Forum (WEF) - *The Global Competitiveness Report* and the International Institute for Management Development (IMD) - *World Competitiveness Yearbook*. There are multiple studies on this subject available in literature, however, there is no study covering the range of recent years. This article therefore attempts to close this gap. The following research hypotheses were taken into account in the presented analysis:

- international competitiveness of economy is determined by an array of different factors of economic, political and social nature;
- the economy of Poland is one of the most competitive among the economies of the Visegrád Group countries.

The quintessential conclusions of the analysis are compiled in the "Conclusion" section.

1. The concept of economic competitiveness

Initially, the concept of competitiveness was only applied to enterprises and, under such a concept, W. Mantura defined it as" the ability of the entity to compete" (Mantura, 2000, p. 87). M. Gorynia provided a very similar definition, according to which it is "the ability to compete and thus to operate and survive in a competitive environment" (Gorynia, 2002, p. 48). He also stressed that this is a relative feature, i.e. it should be measured with regard

[3] J. Misala quotes 27 definitions of national competitiveness derived from foreign literature and 10 from Polish literature, Misala, J. (2011). Międzynarodowa konkurencyjność gospodarki narodowej,. Warsaw: Polskie Wydawnictwo Ekonomiczne.

to other entities. Over time, the term ‘competitiveness’ has also started to be used for countries.

A review of the crucial definitions of economic competitiveness is presented in Table 1.

Table 1. Definitions of economic competitiveness

Definition	Year	Author	Source
1	2	3	4
„Competitiveness for a nation is defined as degree to which it can, under free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously maintaining and expanding the real income of its citizens”	1985	President’s Commision on Industrial Competitiveness	(US Government Printing Office, 1985, p. 5)
„World competitiveness is the ability of a country or a company to, proportionally, generate more wealth than its competitors in the world markets"	1994	International Institute for Management Development (IMD)	(Aiginger, Bärenthaler-Sieber, Vogel, 1994, p. 69)
„The ability of a country to create added value and thus increase national wealth by managing assets and processes, attractiveness and aggressiveness, globality and proximity, and by integrating these relationships into an economic and social model”	1996	International Institute for Management Development (IMD)	(Garelli, 1996, pp. 6-7)
"The ability of companies industries, regions, nations or supra-national regions to generate, while being and remaining opened to international competition, relatively high factor income and factor employment levels”	1996	Organisation for Economic Co-operation and Development (OECD)	(Hatzichronoglou, 1996, p. 20)
„Competitiveness is the ability of a country to achieve sustained high rates of growth in GDP per capita”	1996	World Economic Forum (WEF)	(World Economic Forum, 1996)

Table 2. cd

"Competitiveness is the ability to achieve success in markets leading to better standards of living for all. It stems from a number of factors, notably firm level competitiveness and a supportive business environment that encourages innovation and investment, which combined lead to strong productivity growth, real income gains and sustainable development"	2004	Ireland's National Competitiveness Council	(National Competitiveness Council, *2004, p. 3*)
„Competitiveness is the set of institutions, policies, and factors that determine the level of productivity of a country"	2006	World Economic Forum (WEF)	(World Economic Forum, 2006, p. xiii)
„Competitiveness refers to the overall economic performance of a nation measured in terms of its ability to provide its citizens with growing living standards on a sustainable basis and broad access to jobs for those willing to work. In short, competitiveness refers to the institutional and policy arrangements that create the conditions under which productivity can grow sustainably."	2010	European Commission	(European Commission, 2010*, p*. 23)
"Competitiveness is a comprehensive and holistic concept. It evaluates the extent to which a country fosters an environment where enterprises can achieve sustainable growth, generate jobs and, ultimately, increase welfare for its citizens"	2019	International Institute for Management Development (IMD)	(International Institute for Management Development, 2019, p. 3)

Sourse: Own elaboration based on sources given in column 4.

M. E. Porter links competitiveness as regards national economies with the concept of productivity. In his opinion, this is the only right reference of competitiveness to the countries. He claims that a high, growing standard of living for a given nation depends on the efficiency of work and the capital held by its members. The factors which are responsible for shaping the competitive advantage of the economy at the microeconomic level are presented by him in a form of a model referred to as *the Porter Diamond*

Theory of National Advantage. The first set of factors presented in the model - the strategy, structure and rivalry of companies - determines how companies are created, organized and managed, and how they compete with each other. Factors of production such as natural, human and capital resources, as well as infrastructure have been included in the factor conditions, while the characteristics of the domestic demand for products and services produced by the given industry have been included in the model as demand conditions. The last set of factors describes the presence – or absence – of domestic suppliers and related industries that are internationally competitive. Other factors also have a role to play here, such as the government, which indirectly, by creating conditions in which companies can gain competitive advantage, contributes to its creation, as well as opportunities, random events such as the emergence of new technologies, sudden changes in financial markets or exchange rates, coups and wars. These events, used appropriately, can contribute to gain of competitive advantage. All model items interact with each other (Porter, 1990).

According to J.H. Dunning, Porter underestimated the role of globalization in creating a competitive advantage for states. He considers that the components of Porter's Diamond should be updated to take account of the phenomenon of transnationalization. This is mainly due to the growing importance of transnational corporations, which contribute to the development of economic links (Dunning, 1993).

The European Commission defines competitiveness as ‘ability to provide citizens with growing living standards on a sustainable basis and broad access to jobs for those willing to work’. It also stresses the role of institutional and policy arrangements, which are responsible for creating favorable conditions for sustainable productivity growth, which is considered the only source of sustainable income growth and thus of an increase in the standard of living of society (European Commission, 2010). The World Economic Forum[4], in turn, identifies the competitiveness of the economy through its characteristics, which contribute to a more efficient use of production factors. Among these are i.a.: institutional conditions, as well as policies adopted and applied. According to the *Global Competitiveness Report*, the productivity of an economy determines the level of prosperity it can achieve (WEF, 2019). The authors of the European Commission's definition as well as the World Economic Forum, likewise Porter, link the competitiveness of the economy to its productivity.

[4] World Economic Forum - an international non-governmental and lobbying organization located in Cologny, Switzerland; it publishes *Global Competitiveness Report* yearly.

International Institute for Management Development[5] during the process of creating *World Competitiveness Yearbook* uses a definition that states that the economic competitiveness assesses the degree to which it provides an environment that enables enterprises to achieve sustainable growth, create jobs and, consequently, improve the prosperity of its citizens (Cabolis, 2019).

The definitions of international competitiveness of economy can also be found in Polish literature. According to M. Żmuda and E. Molendowski (2016) it can be defined as the ability to achieve development goals, among which increasing the welfare of the citizens is regarded as the most crucial one. Cz. Pilarska notes that it is "closely correlated with the ability of a country to effectively use its production factors in order to achieve prosperity", at the same time she emphasizes that competitiveness is not so much an economic phenomenon, but a socio-economic one (Pilarska, 2017, s. 50). M. Weresa notices that competitiveness should be considered in two approaches – static (in literature - international competitive position), and dynamic (international competitive ability). And so, according to the first approach, it is described as a position of a country on international markets related to foreign trade, and particularly with its structure which translates to the welfare of the society. In the other approach, however, it is the ability to achieve benefits from production factors faster than other countries which leads to relatively faster rate of growth of the level and quality of life of the citizens (Weresa, 2008). Common feature of majority of definitions is therefore a statement that competitiveness of economy contributes to a stable economic growth and to improvement of a quality of life of the country's society.

The literature on the subject defines four main stages in the development of the international competitiveness of national economies (Borowiecki, Siuta-Tokarska, 2015):

- Stage I – competitiveness based on the production factors – most frequently occurs in least developed countries
- Stage II – competitiveness based on investment – specific to developing countries
- Stage III – competitiveness based on innovation – occurs in developed countries
- Stage IV – competitiveness based on wealth – characteristic of developed countries, whose basis of competitive advantage is already achieved competitive position that countries, at this stage, do not want to improve but maintain.

[5] International Institute for Management Development – business education school based in Lausanne, Switzerland known for its competitiveness report - *World Competitiveness Yearbook*

The economist who negates the legitimacy of the use of analogy between competitiveness of companies and whole economies is P. Krugman. He argues that, unlike companies, countries do not enrich themselves at the expense of others. Producing goods that compete, they might provide each other with markets. Moreover, a good condition of one economy may contribute to improvement of the other one, because the first country gives the other the access to a bigger market. Krugman also emphasizes that international trade is a non-zero sum game. This is not the case for companies that benefit at the expense of their opponents in the market. Another difference is that the competitiveness of companies depends on the results they achieve. When their market position does not bring the expected results, they ultimately cease to operate. National economies, on the other hand, regardless of their condition, continue to exist (Krugman, 1994). Krugman's statement has been widely criticized by other researchers. For more information see Żmuda, Molendowski (2016).

2. Determinants of economic competitiveness

The diversity of the quoted definitions shows that the development of international competitiveness of economy (and therefore, competitive position) is affected by a multitude of factors. An overview of those factors can be done on the basis of reports published by various institutions. The most popular are the ones prepared by International Institute for Management Development and World Economic Forum.

The authors of *The World Competitiveness Yearbook* create a ranking of competitiveness of 63 countries. For this purpose they analyze over 300 criteria divided into four groups (IMD, 2019):

- economic performance – includes factors regarding domestic economy, international trade, international investment, employment, prices;
- government efficiency – public finance, tax policy, institutional framework, business legislation, societal framework
- business efficiency – productivity & efficiency, labor market, finance, management practices, attitudes and values;
- infrastructure – basic infrastructure, technological infrastructure, scientific infrastructure, health and environment, education.

In turn, *Global Competitiveness Index* developed by World Economic Forum that is designed to assess the productivity and track its changes for nearly 140 countries, is based on 12 competitiveness pillars compiled in four categories (WEF, 2019):

Table 3. 12 competitiveness pillars by World Economic Forum

Category	Pillars in the category
Enabling environment	I. Institutions II. Infrastructure III. ICT adoption IV. Macroeconomic stability
Human capital	V. Health VI. Skills
Markets	VII. Product market VIII. Labour market IX. Financial system X. Market size
Innovation ecosystem	XI. Business dynamism XII. Innovation capability

Source: (WEF, 2019).

M. Weresa divides the determinants of economic competitiveness into three groups, formed with specific factors (Weresa, 2008):

I. Material resources and their quality, including natural and climate resources, technical infrastructure, social infrastructure, workforce, capital resources, resources and level of technology;
II. Non-material resources and their quality: creativity and innovation, proclivity to entrepreneurship and taking risk, level of institutional development and efficiency of their functioning, economic policy and its efficiency, social and cultural capital;
III. Resource efficiency: labour and capital productivity.

3. Competitive position of Poland in comparison to Visegrád Group countries

Visegrád Group (V4) is an informal grouping of four Central European countries: Czech Republic, Poland, Slovakia and Hungary. The Group was established on February 15, 1991 in a Hungarian town Visegrád, where then president of Czechoslovakia Václav Havel, president of Poland Lech Wałęsa and prime minister of Hungary József Antall met. Its initial aim was to deepen the cooperation regarding building the democratic state structures and free market economy, as well as undertaking joint efforts to join the European Union. Currently the cooperation focuses mostly on development of transport infrastructure and enhancement of the energy security in the region.[6]

In terms of the goals of the analysis presented in the study, examination of the development of competitiveness on the basis of *The Global Competitiveness Report* published by World Economic Forum appears to be important. The positions taken by the countries of the Visegrád Group in a competitiveness ranking by WEF in years 2015-2019 were presented in Table 3.

Table 4. Position of Visegrád Group countries in WEF's competitiveness ranking in years 2015-2019

	Position in ranking					**Change 2015-2019**
Year	**2015-16**	**2016-17**	**2017-18**	**2018**	**2019**	
Czech Republic	31	31	31	29	32	-1
Poland	41	36	39	37	37	+4
Slovakia	67	65	59	41	42	+25
Hungary	63	69	60	48	47	+16

Source: Own elaboration based on (WEF, 2019).

The Visegrád Group countries were changing their competitive position in the competitiveness ranking during the period considered. Poland was the second most competitive economy of the Visegrád Group in all those years, after the Czech economy. In 2018, it improved its position by two, from 39 to 37, and maintained it at the same level in 2019, while the Czech Republic and Slovakia fell slightly in the ranking, and Hungary's economy rose by one rank. In 2019 Poland improved its competitive position compared to 2015 (by 4 positions), but not as much as Slovakia (by 25 positions) and Hungary (by 16 positions), while the Czech Republic slightly deteriorated its position in the ranking.

Due to the fact that the authors made changes in the methodology used in developing the report between year 2017 and 2018, and have not come up with a key of comparability between them, in Table 4. were presented the positions for WEF's competitiveness pillars for V4 countries in years 2018-2019.

6 Visegrád Group. (n.d). Retrieved November 29, 2021, https://www.gov.pl/web/dyplomacja/grupa-wyszehradzka.

Table 5. Position of V4 countries in WEF's competitiveness ranking for each pillar in years 2015-2019

Competitiveness pillars	2018				2019			
	Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary
Institutions	43	**53**	55	66	44	**60**	61	63
Infrastructure	18	**27**	33	28	20	**25**	30	27
ICT adoption	42	**68**	35	51	42	**51**	39	54
Macroeconomic stability	1	**1**	32	43	1	**1**	1	43
Health	41	**49**	57	69	48	**54**	57	70
Skills	25	**32**	48	49	29	**34**	45	49
Product market	47	**38**	78	82	55	**50**	89	91
Labour market	47	**62**	58	83	48	**70**	64	80
Financial system	40	**55**	54	66	47	**57**	56	66
Market size	42	**22**	60	48	42	**22**	59	48
Business dynamism	25	**55**	45	75	32	**59**	55	83
Innovation capability	29	**38**	43	39	29	**39**	44	41

Source: Own elaboration based on (WEF, 2018, WEF 2019).

The data presented in Table 4. indicates that the development of Polish competitive position in the period considered was influenced essentially by highly-graded macroeconomic stability and market size which is considerably bigger than in other Visegrád Group countries. Also polish product market was rated highest among all analyzed in both years, leaving quite a large gap to the others. Unfortunately, this rate deteriorated by 12 positions in 2019, however, a similar pattern was noticed for the other economies, which led to Poland maintaining its leading position. Polish economy took second place in the Group in years 2018-2019 in terms of institutions, infrastructure, skills and innovation capability. What is worth noticing is the improvement of position of Poland in the ranking of ICT adoption by as much as 17 positions compared to the previous year, whereas Czech Republic maintained and the other countries aggravated their position so that Poland overtook Hungary in the ranking for this pillar.

Unfortunately, it has to be noted that in 2019 Poland's position deteriorated in eight (out of twelve) fields compared to 2018, but in case of Czech Republic it was eight fields as well, in case of Slovakia it was as much as nine, however Hungary deteriorated its position in barely five, improved in three, and maintained the same position as the year before in four fields. In order to improve the competitive position, an improvement of business dynamism, financial system, and most of all, of a poorly rated in comparison to other V4 countries, especially in 2019, labour market should take place in Polish economy.

In the following stage of the analysis of Visegrád Group economies' competitiveness, *World Competitiveness Yearbook* published by International Institute for Management Development was used. The positions of V4 countries in competitiveness ranking by IMD in years 2015-2019 were presented in Table 5.

Table 5. Position of Visegrád Group countries in IMD's competitiveness ranking in years 2015-2019

	Position in ranking					**Change 2015-2019**
Year	**2015**	**2016**	**2017**	**2018**	**2019**	
Czech Republic	29	27	28	29	33	-4
Poland	33	33	38	34	38	-5
Slovakia	46	40	51	55	53	-7
Hungary	38	46	52	47	47	-9

Source: Own elaboration based on (IMD, 2019).

As in the case of the previous report, Poland took second place in the Visegrád Group countries in terms of economic competitiveness according to the analysis presented in *World Competitiveness Yearbook.* In this case Poland was also behind the Czech Republic, whereas Slovakia and Hungary took the last and the second to last position interchangeably in the period considered. Particular tendencies, upward or downward, in the development of competitive position of the countries in the overall ranking were not noticed, however, what may be pointed out is that in 2019 every V4 economy deteriorated its position in comparison to the beginning of the period considered, that is 2015.

Table 6. Position of Visegrád Group countries in IMD's competitiveness ranking for each criterion in years 2015-2019

Competitiveness criteria	2015				2016				2017				2018				2019			
	Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary	Czech Republic	Poland	Slovakia	Hungary
Domestic economy	42	**21**	47	40	35	**23**	38	44	41	**39**	51	57	35	**29**	57	37	29	**26**	39	23
International trade	13	**15**	31	6	13	**15**	34	11	13	**22**	27	9	20	**11**	25	10	17	**10**	19	12
International investment	35	**50**	55	20	27	**44**	56	34	36	**30**	55	62	32	**34**	59	63	38	**40**	56	63
Employment	36	**42**	56	39	35	**42**	50	41	25	**40**	49	21	16	**37**	35	34	12	**32**	47	34
Prices	18	**32**	25	16	6	**17**	12	9	15	**19**	18	16	17	**8**	13	16	25	**9**	23	14
Public finance	32	**29**	37	49	24	**41**	31	50	18	**46**	41	51	14	**38**	47	44	25	**38**	47	45
Tax policy	38	**44**	48	56	40	**44**	45	57	45	**47**	53	58	41	**48**	56	49	47	**49**	50	46
Institutional framework	32	**29**	45	43	29	**32**	34	43	26	**34**	49	43	27	**38**	53	39	31	**41**	54	39
Business legislation	34	**20**	49	37	38	**31**	45	42	35	**41**	60	42	34	**38**	58	42	42	**39**	59	37
Societal framework	21	**27**	34	53	24	**34**	35	41	29	**35**	41	45	25	**36**	44	42	25	**38**	46	41
Productivity & efficiency	26	**23**	20	48	18	**28**	27	45	30	**25**	44	57	20	**21**	33	45	28	**27**	34	46
Labor market	34	**39**	48	52	39	**35**	45	57	44	**36**	54	59	36	**42**	62	60	49	**38**	62	59
Finance	39	**32**	49	57	32	**34**	45	52	32	**39**	51	54	30	**27**	59	52	36	**37**	57	49
Management practices	27	**31**	38	59	33	**22**	32	55	34	**42**	55	61	35	**34**	59	58	43	**36**	61	49
Attitudes and values	32	**45**	51	60	34	**49**	47	59	39	**45**	57	62	45	**52**	62	61	39	**48**	59	57
Basic infrastructure	19	**24**	38	39	17	**31**	32	37	18	**28**	37	38	25	**29**	45	33	24	**31**	46	32
Technological infrastructure	27	**35**	47	46	28	**37**	38	40	26	**35**	47	45	26	**35**	43	45	30	**39**	42	41
Scientific infrastructure	28	**34**	50	35	28	**37**	49	35	28	**34**	47	35	26	**33**	54	34	26	**31**	50	35
Health and environment	28	**41**	32	42	29	**42**	30	43	31	**40**	34	39	30	**41**	39	40	31	**43**	38	39
Education	28	**16**	40	36	22	**16**	39	36	31	**20**	41	42	39	**31**	47	42	40	**31**	47	44

Source: Own elaboration based on (IMD, 2015-2019).

The breakdown of the positions according to the competitiveness criteria of IMD for V4 countries in 2015-2019 was presented in Table 6, and based on the data presented in it, conclusions on the development of the competitive position of the Polish economy against other countries were drawn.

In 2015, Poland was in the second least competitive position in terms of international trade within the group, but the final increase of 5 positions in the period 2015-2019, and the decline of the Czech Republic (by 4 positions) and Hungary (by 6 positions) secured that in 2019 Poland was the most competitive in this respect. From year to year, Poland's position in terms of employment improved, and so from 42nd in 2015, in 2019 it was in 32nd, but it was not as much improvement as in the case of the Czech Republic, which starting from the 36th place finally reached 12th. Poland in three out of five years surveyed was the most competitive among the Visegrád Group countries in terms of labor market, and in 2019 improved by one position compared to 2015, while the other countries deteriorated (Czech Republic – 15 positions, Slovakia – 14 positions, Hungary – 7). However, the biggest improvement in the Polish economy was recorded in terms of prices. Starting at the last place in the group in 2015, it managed to take the first one in 2019. It was a jump of whole 23 positions in the global ranking.

Both the business legislation and the societal framework in Poland deteriorated during the period considered. However, the downward trend also taking place in the Czech Republic and Slovakia allowed Poland to maintain its initial position in V4 in societal terms, while in legal terms Poland eventually fallen from its first position to the second position in favor of Hungary. Poland recorded the biggest drop in 2015-2019, among all criteria, for business legislation. It was a difference of 19 positions. The second biggest decline in Poland occurred in the case of education (15 positions), but the similar pattern also occurred in other countries, so that Poland managed to maintain its first position in this respect for all the years under examination. Poland's position in the ranking evaluating institutional framework in 2015-2019 deteriorated from year to year and, therefore, from its first position at the beginning of the period considered, ended in third in 2019. The ranking for tax policy also deteriorated (5 positions in 2019 compared to 2015). At the beginning of the period under consideration Poland had a great advantage over the other Visegrád Group countries in terms of the domestic economy, which, however, has decreased over the years, leading to the fact that in 2019 it lost its position as a leader in this respect in favor of Hungary.

In 2019 Poland was the most competitive in the Visegrád Group in terms of international trade, prices, productivity and efficiency, labor market, management practices and education. The third position was achieved in tax policy and institutional framework, and, in terms of health and environment, was the least competitive among all countries.

4. Conclusion

Nowadays economic competitiveness gains more and more importance. It is a significant indicator that helps assess the economic situation of a country, and also helps determine the economic policy orientations. Thanks to reports on international competitiveness of economies, it is possible to compare countries and the processes that take place in them. The most crucial tendencies were described in this study. On the basis of literature review it can be stated that economic competitiveness development is influenced by a variety of factors assessing i.a. the economic situation of a country, legal, political and social sphere, which confirms the abovementioned hypothesis.

The analysis shows that the most competitive economy of the Visegrád Group in years 2015-2019 was the Czech Republic. However, Poland was in the second position in this regard, supporting the second of the hypotheses. On the basis of *The Global Competitiveness Report* it can be concluded that in the period considered the strength of the Polish economy was formed primarily by macroeconomic situation and the market size. However, business dynamism and ICT adoption were poorly rated in comparison to other V4 countries, although the latter one was significantly improved in global terms in the last year considered. Over the years under examination Poland improved its competitive position, however not as much as Slovakia and Hungary. The strong competitive position of the Czech Republic was determined primarily by macroeconomic stability, rated at the same level as of Poland. The biggest advantage that the Czech Republic held over Poland was in terms of business dynamism and institutional framework, therefore those are the factors that Poland should take into particular consideration in order to become the most competitive economy of the Visegrád Group.

The analysis of *World Competitiveness Yearbook* shows, however, that over the years considered Poland improved its economic situation, thereby narrowing the gap to the Czech Republic in this category. Most of all, the improvement of Poland in prices and international trade deserves a positive assessment. In spite of a poor rating in a global terms, polish labor market distinguished itself from the other V4 countries. Poland should pay particular attention to health and environment because of its worst position in the Group in this matter. At the end of the years considered the Czech Republic had a significant advantage over Poland in terms of employment, public finance, as well as in societal framework, and attitudes and values, therefore those are the fields that require Poland's improvement for it to improve its competitive position among the Visegrád Group economies.

References

1. Aiginger K., Bärenthaler-Sieber S., & Vogel, J., Competitiveness under New Perspectives, Working Paper no 44, 2013.
2. Borowiecki, R., & Siuta-Tokarska, B., (2015). Konkurencyjność przedsiębiorstw i konkurencyjność gospodarki Polski – zarys problemu. Nierówności Społeczne a Wzrost Gospodarczy, 41, 52-66.
3. Dunning, J.H., (1993). Internationalizing Porter's Diamond. MIR: Management International Review, 33, 7-15.
4. European Commission. (2010). European Competitiveness Report 2010. Brussels.
5. Garelli, S. (1996). What is World Competitiveness. In International Institute for Management Development. World Competitiveness Yearbook 1996, Lausanne, (pp. 6-7).
6. Gorynia, M. (2002). Pojęcie konkurencyjności – istota i poziomy. In M. Gorynia. (Ed.), Luka konkurencyjna na poziomie przedsiębiorstwa a przystąpienie Polski do Unii Europejskiej (pp. 48-60). Poznań: Akademia Ekonomiczna.
7. Hatzichronoglou, T. (1996). Globalisation and Competitiveness: Relevant Indicators, STI Working Papers, 5, OECD, Paris.
8. International Institute for Management Development. (2015). World Competitiveness Yearbook 2015. Lausanne.
9. International Institute for Management Development. (2016). World Competitiveness Yearbook 2016. Lausanne.
10. International Institute for Management Development. (2017). World Competitiveness Yearbook 2017. Lausanne.
11. International Institute for Management Development. (2018). World Competitiveness Yearbook 2018. Lausanne.
12. International Institute for Management Development. (2019). World Competitiveness Yearbook 2019. Lausanne.
13. Krugmam P. (1994). Competiveness: A Dangerous Obsession. Foreign Affairs, 73 (2), 28-44.
14. Mantura, W. (2000). Identyfikacja czynników sukcesu i konkurencyjności przedsiębiorstwa. In E. Skawińska (Ed.), Problemy wdrażania strategii rozwoju województwa wielkopolskiego, Poznań: PTE.

15. Misala, J. (2011). Międzynarodowa konkurencyjność gospodarki narodowej. Warsaw: Polskie Wydawnictwo Ekonomiczne.
16. Mróz, J. (2016). Determinanty i miary międzynarodowej konkurencyjności gospodarki. In P. Urbanek, E. Walińska (Ed.), Ekonomia i nauki o zarządzaniu w warunkach integracji europejskiej (pp.15-29). Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
17. Pilarska, Cz. (2017). Międzynarodowa konkurencyjność gospodarki polskiej na tle nowych krajów członkowskich Unii Europejskiej. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
18. Radło, M. J. (2008). Międzynarodowa konkurencyjność gospodarki. Uwagi na temat definicji, czynników i miar, Szkoła Główna Handlowa, Warsaw.
19. National Competitiveness Council. (2004), Annual Competitiveness Report 2004. Dublin.
20. Rubaj, P. (2019). Teoretyczny i praktyczny wymiar międzynarodowej konkurencyjności gospodarki. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, 6 (984), 7-24.
21. US Government Printing Office. (1985), Review of Findings of the President's Commission on Industrial Competitiveness. Washington.
22. Weresa, M. (2008). Definicja, determinanty oraz sposoby pomiaru konkurencyjności krajów. In Czynniki i miary międzynarodowej konkurencyjności gospodarek w kontekście globalizacji – wstępne wyniki badań (pp. 98-105). Warsaw: SGH.
23. Żmuda, M., & Molendowski E. (2016). W poszukiwaniu istoty konkurencyjności gospodarki narodowej: studium interdyscyplinarne. Finanse, Rynki Finansowe, Ubezpieczenia, 81 (3), 323-333.
24. World Economic Forum. (1996). The Global Competitiveness Report 1996. Geneva.
25. World Economic Forum. (2006). The Global Competitiveness Report 2006-2007. Geneva.
26. World Economic Forum. (2015). The Global Competitiveness Report 2015-2016. Geneva.
27. World Economic Forum. (2016). The Global Competitiveness Report 2016-2017. Geneva
28. World Economic Forum. (2017). The Global Competitiveness Report 2017-2018. Geneva.
29. World Economic Forum. (2018). The Global Competitiveness Report 2018. Geneva.
30. World Economic Forum. (2019). The Global Competitiveness Report 2019. Geneva.

31. Visegrád Group. (n.d). Retrieved November 29, 2021, from https://www.gov.pl/web/dyplomacja/grupa-wyszehradzka
32. Cabolis, C. (2019, May). In Anticipation of the 2019 IMD World Competitiveness Yearbook. Retrieved August 16, 2021, from https://www.imd.org/contentassets/0b8ed32e71b249ea9b79c19ad785541c/com_may_2019.pdf