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Poland's long-term competitive position from the perspective of WEF global competitiveness reports

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STANISŁAW FLEJTERSKI*, MAGDALENA MAJCHRZAK**

Poland's Long-Term Competitive Position from the Perspective of WEF Global Competitiveness Reports

Abstract

Competitiveness is not clearly defined and there are different methods of measuring it. Analysis of the level of competitiveness on a macro scale is of interest to many entities. Competitiveness rankings are published in the Global Competitiveness Report prepared by the World Economic Forum (WEF), among others. 137 countries have been included in the WEF's 2017–2018 Report. A country's position in this ranking depends on many factors, classified in 12 pillars. In the group of 10 countries with the highest ranking, there are changes in order compared to the previous year; but the composition of this group did not significantly change. In this ranking, Poland was 39th. This is relatively high compared to 2008, in which it ranked 53rd out of 134 countries. In the future, further growth of the competitiveness of the Polish economy may depend on, among other things, the professionalism of managerial staff and on the shift to product competitiveness. It is also necessary to share knowledge between the university and the business sectors and between companies themselves.

Keywords: *global competitiveness, competitiveness report, World Economic Forum, ranking*

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1. Introduction

Competitiveness is not clearly defined in its multidimensional category. The source literature introduces more than 400 definitions of competitiveness (Kuciński 2000, p. 11). Some of them have a universal meaning or they refer directly to country competitiveness. Among the most commonly referred to definitions of competitiveness, we highlight the interpretations of authors such as Balassa, Bieńkowski, Bossak, Casson, Gorynia, Grzywacz, Kłosiński, Lubiński, Misala, Molendowski, Porter, Reilijan, and Żmuda. Attempts at interpretation have also been made by research teams working within organizations like the EEC, The Presidential Commission of the Competitiveness of US industry, the World Economic Forum, the IMD, the OECD, or the European Commission (Majchrzak 2012, pp. 63–69). Universal definitions of competitiveness have been proposed by authors of this article as well. In 1984, Flejterski proposed a definition of competitiveness which said “it is the ability to design, produce and sell goods, whose prices, quality and other values are more attractive than those offered by the competition (in the case of global competitiveness we consider global competitors)” (Flejterski 1984, p. 391). On the other hand, the definition by Majchrzak says “competitiveness is the ability of mega-, macro-, mezzo- and microorganisms to present a more beneficial offer than other members of the market’s supply sides” (Majchrzak 2012, p. 69). The World Economic Forum in Lausanne, where the ranks of competitiveness were introduced in 1994, believes that term competitiveness is “the ability of the country or business to create greater wealth than competitors on the global market” (The World Competitiveness Report 1994, p. 18).

In the source literature, we distinguish many types of competitiveness. For instance, competitiveness of results and competitiveness in the factorial approach (Bieńkowski, Sadza 2000, p. 58), as well as static and dynamic competitiveness (Wziątek-Kubiak 1997, pp. 45–47). It is also common to divide competitiveness into internal, external and market type (Woś 2001, p. 5).

If we consider the scope of analyses, it is worth mentioning the microeconomic (Bieńkowski, Sadza 2000, p. 58 and further) and macroeconomic (Lubiński 1995, p. 69) character of competitiveness. In the literature, we can meet the term mezzo- (Flejterski 1984, p. 391) and mega-competitiveness, as well as the more often used term of meta-competitiveness, which can refer to the scope of mega-, macro-, mezzo- and micro-competitiveness. It involves so-called soft elements of the organism (country, sector, subsector, business), e.g., mentality, fashion, tradition, culture, customs and others.

The term ‘global competitiveness’ needs to be distinguished from the terms ‘competitiveness ability’ and ‘competitive position’. Global competitiveness ability is “the ability to fight and to compete for benefits connected with the country’s part in the global work division. This ability has the relative character in a twofold sense: firstly, in relation to other countries, secondly, in relation to characteristic features of global competitive-

ness in the current stage of development” (Bossak 1984, p. 72). It describes the market's competence to flexibly adapt to changes which occur in its surroundings. “The evolution of global competitiveness theory allows us to extend its statement with the ability of various economic entities that are operating on the territory of a certain country, to meet the competitiveness which comes from foreign entities that offer similar goods and services on the internal market of the country” (Bukowski, Misala 2011, p. 47).

The global competitive position is a significantly narrower statement which includes the state and change of share of a certain country in the global turnover. The greater these are in exported goods, services, capital and knowledge, the higher the country's competitive position (Misala 2011, p. 80). In the opinion of Bossak and Bieńkowski, “the reinforcement of this position can also occur when the share in the trading of a chosen material falls and rises in another. This situation can indicate that specialization has been extended and benefits have risen, which is connected, on the one hand, with unprofitable production cessation and, on the other hand, with enhancing the one which is the most profitable” (Bossak, Bieńkowski 2004, p. 92). In the context of the interdisciplinary approach, one should pay attention to the essence of the national economy, as presented by Zmuda and Molendowski (Żmuda, Molendowski 2016, pp. 326–330)

The basic measures of the global competitive position are the share in global trade, the trade balance of goods and services, import penetration rate, import and export relation rate, export specialization, and shares in foreign trading partners' balance; there are also hypothetical export indicators. Assessment of the economy's competitiveness is very often made with the use of the community development index, economy effects index, poverty index, policy stabilization index and others. We are still missing one generally used meter for measuring the competitive position as well as economic competitiveness. That is why great global institutions, which provide the possibility of processing advanced analyses, still play an important role.

In view of existing studies and due to the purpose of this article, it has been decided to use the competitiveness definition introduced by the WEF. The subject of the research will be the competitiveness of a particular country classified in the WEF 2017–2018 ranking. The time range of the research definitely goes further than the available publications, and it includes the ten-year period from 2008 to 2017. The main purpose of this article is a retrospective and prospective assessment of Poland's competitiveness changes in a dynamically changing economic environment. The realization of the main goal will be supported by three specific areas:

1. An analysis of the WEF method in measuring competitiveness.
2. Interpretation of the changes in the competitive position in the chosen countries classified by the WEF.
3. An analysis of the advantages and weaknesses of Poland's economy based on the WEF competitiveness rank.

2. The methodical assumptions of the WEF Global Competitiveness Report

Economic competitiveness is a multidimensional category. It has internal and external aspects as well as static and dynamic ones. The issue is even more relevant, in fact, between economic competitiveness and business competitiveness as there is a feedback loop. Therefore, economic competitiveness has an impact on business competitiveness, and vice versa.

The analysis of the competitive position at the macroscale is the subject of interest of many entities. Today, competitiveness rankings are published by *the Global Competitiveness Report* prepared by the World Economic Forum (WEF) while the *International Institute for Management Development* (IMD) publishes a yearly report in the *World Competitiveness Yearbook*. Initially, *the Global Competitiveness Report* was published by the WEF and IMD, but differences in definitions and how competitiveness was measured (then it was a competitiveness index) led to individual reports being published by those institutions.

The World Economic Forum reports, published since 1979, pay particular attention to theoretical and methodological aspects (Kuszeński, Sielska 2010, pp. 143–162). In accordance with the WEF framework, the economic competitiveness refers to the country's ability to achieve high and stable GDP *per capita*. The holistic character of this approach allows us to group a wide range of competitiveness indicators into twelve competitiveness pillars (114 variables in total) (Schwab 2017, pp. 11–19):

- I. Institutions. The institutional environment specifies juridical and administrative frameworks in which natural persons, companies and governments can take actions to generate income and economic wealth. The meaning of a good institutional environment is mostly visible during an economic crisis in the more direct role of the country in many countries' economy.
- II. Infrastructure. A well-developed infrastructure is necessary for the effective functioning of the economy. Infrastructure is an important determinant when planning the location of businesses and other kinds of operations or sectors, which can develop on the site. A well-developed infrastructure reduces the distance effect between regions, and it supports integrations between them. Moreover, the quality and extension of the infrastructure network have a visible impact on economic development, and therefore it reduces income inequality and poverty in different countries.
- III. Macroeconomic environment. Macroeconomic stability does not ensure competitiveness, but its absence could interfere with competitiveness. A budget deficit limits the ability of a government to react to the turns of the economic cycle. The economy cannot develop in a balanced way if the macroeconomic environment is not stable. This issue evokes public interest and discussions about a strategy for reducing budget expenses as well as the growth of public debt in many countries.

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- IV. Health and primary education. Employee health is the key factor in a country's competitiveness. Employees' poor health raises business expenses. Sick employees are often absent or less effective. Of growing importance for economic development is the amount and quality of basic education. A good basic education increases the efficiency of certain employees. Poorly educated employees can perform only simple jobs that require only physical aptitude. It would be complicated for them to adapt to more advanced production processes and techniques. A lack of basic education can be an obstacle to the growth of business cooperation, when more and more advanced goods and services are produced. A reliable basic education is also a good beginning for further stages of education.
- V. Higher education and training. The quality of higher education has an important meaning for economies that demand more than just simple production processes. Globalization and rising competitiveness between countries and businesses force companies to search for well-educated employees who can effectively adapt themselves to a changing environment and production system requirements. Of great significance in this area is not only the level of acquired education but also people's willingness to participate in life-long learning.
- VI. Goods market efficiency effectiveness. From the point of view of market effectiveness, it is essential to have continuous competitiveness. The best opportunities for the trading of goods and services rise when government intervention is limited. Many factors can restrict the operations of market structures: concessions, permissions, suboptimal taxes, the level of customer knowledge. Competitiveness can additionally be restricted by cumbersome regulations regarding foreign direct investments, restrictions on foreign ownership as well as the limitations of global trade. The economic crisis at the beginning of the 19th century indicated the importance of global economies' interdependence and the dependence of economic growth on open markets.
- VII. Labor market efficiency. The efficiency and flexibility of the labor market are necessary to provide the most effective employees for the economy. Employers need the possibility to change employees and payment level without it having social repercussions. Labor market rigidity can be the reason for a slowdown in economic growth in many countries.
- VIII. Development of financial markets. The recent financial crisis highlighted the main role of a solid and well operating financial sector. The economy needs a relevant banking system which offers loans and credit at optimal conditions for entrepreneurs, a properly regulated stock exchange and organized access to venture capital and other financial products. The importance of access to capital has been recently highlighted by the liquidity crisis of experienced entrepreneurs and the public sector in both developing and well-de-

veloped countries. The financial system should be reliable and transparent as well as supported by proper legal regulations that protect investors and other entities in the economy.

- IX. Technological readiness. Globalization is becoming a very important factor in competitiveness. The availability of modern technology, the possibilities of using it, the ability to provide complete information and being able to communicate in day-to-day activities and production processes determine a company's competitive advantage. The availability of technology for businesses in the country should not be mistaken for the ability to innovate and enhance knowledge.
- X. Market size. Large markets allow businesses use economies of scale. In the globalization era, global markets are becoming a substitute for national markets, especially in small countries. Dynamic market trade has a positive aspect for economic growth, especially in small countries. Thus, in order to estimate the market size for businesses, we can assume that exports are a substitute for domestic demand.
- XI. Business sophistication. The economic environment includes the quality of the national network of business relationships, the quality of business operations as well their strategies. It is significant for countries which are at an advanced level of development and whose primary source of enhancing effectiveness have been mostly overused. The quality of the network of relationships, which is measured by the number and excellence of local suppliers and their impact on the interaction, is important for a few reasons. If recipients and suppliers of the current sector build close geographic groups, their efficiency is much higher, as are the possibilities for innovation, while barriers to entry for new businesses are limited. The operations of particular businesses and their strategy (branding, marketing, niche goods production) lead to modern business processes being used.
- XII. Innovation. In the long-term perspective, the standard of living can only be improved through technological innovation. Less-developed countries can raise their productiveness by adopting an existing technology or by designing innovations in different branches incrementally. For countries which develop innovation, it is no longer sufficient to simply enhance productivity. Companies in those countries must design and develop modern products and processes to maintain their competitive advantage. This means financial investments for research and development, also provided by the private sector. High profile research and development institutions should cooperate extensively with economic entities.

The role of particular competitiveness pillars is subordinate to a country's level of development. The first stage of development is directed by production factors and begins thanks to basic factors (institutions, infrastructure, macroeconomic stability, proper primary education and well-organized medical care). The second

stage of development, thanks to the rise ineffectiveness, starts by refining factors like higher education, the effectiveness of the goods and services markets, labor market flexibility, the development of the financial market, market size, and technological adoption capacity. The third and final stage of development begins with innovativeness and innovation stimulants, which have the most relevant meaning. To describe the development stage of a country and its competitiveness, we use Growth Competitiveness Index (GCI). It analyzes the relative development potential of an economy in a country over the next five years. It can assume a value from 1 to 7, in which the higher value of the indicator means greater global competitiveness of the economy.

The construction of the composite index requires the numeric measurement of the particular elemental variable featured by index subcategory as well as the system of weights. Two kinds of variable are used (Boguszewski 2010, slide 7):

- domestic components, which are available in public statistics systems' (i.e. inflation measure, medical care),
- quality data, which can be obtained from the *Executive Opinion Survey (EOS)*, a questionnaire given to business executives, which is used to compile the Global Competitiveness Report.

The GCI index is calculated with the use of the formula below (Schwab 2016, p. 38):

$$GCI_{iS} = w_{1S}BAZA_i + w_{2S}EFF_i + (1 - w_{1S} - w_{2S}) INNOV_i$$

where:

i – country's index,

S – country's development stage,

$BAZA_i$ – index value of basic factors for a country,

EFF_i – index value of effectiveness factors for a country,

$INNOV_i$ – index value of innovativeness for a country, and

w_{1S}, w_{2S} – weights, which are dependent on the country's development level.

Before the GCI index calculation, it is necessary to describe the stage of the country's development, in which the main determinant is the value of GDP per capita (see Table 1).

Table 1. Criteria and stages of country's development

Development stages	Criteria: GDP per capita (in USD)
Stage 1 – development based on production resources	< 2,000
Transition from stage 1 to stage 2	2,000 – 2,999
Stage 2 – development through increase in effectiveness	3,000 – 8,999
Transition from stage 2 to stage 3	9,000 – 17,000
Stage 3 – development through increase in innovations	>17,000

Source: own elaboration based on: Schwab, World Economic Forum, *Global Competitiveness Report 2016–2017*, Geneva, 2016, p. 38.

Particular stages of a country's development have an appropriate weight (see Table 2).

Table 2. System of weights

Weight (in %)	Stage 1	Stage 2	Stage 3
w_1	60	40	20
w_2	35	50	50
$100 - w_1 - w_2$	5	10	30

Source: own elaboration based on: Schwab, *op. cit.*, Geneva 2016, p. 38.

In the WEF ranking from 2017–2018, there were 35 countries classified at the 1st stage of development. In the transition from the 1st to the 2nd stage, there were 15 countries, while at the 2nd stage there were 31 countries. In the transition from the 2nd to the 3rd stage, there were 20 countries, and at the 3rd stage, there were 36 countries.

In these rankings, countries are grouped according to the value index, starting with the highest value and going to the lowest Proximity between countries on the list does not reflect any similarity between the countries.

It is worth adding that work on the WEF reports is made with the presence of the national banks of particular countries. The National Bank of Poland has supported the WEF since 2009. Its role involves methodological consultations, execution of questionnaires among domestic entrepreneurs every year (in 2017 there were 206 questionnaires. In total, there were 14,000 questionnaires distributed for the WEF report published in 2017), involvement in the process of analysis, and a national presentation of the report and participation in educational events (Schwab 2017, pp. 336–337). The reliability of data on each nationality and questionnaire data is verified using Mahalanobis distances. Every year, on this basis, a certain percentage of questionnaires are deleted. This method is also reviewed by audit control. The last control took place in 2012. Exceptional reliability of the results and the stability of this methodology indicates the high level of trustworthiness of the ranking.

3. The World and Europe. Winners and Losers 2017–2018

The WEF ranking from 2017–2018 included 137 countries. In the list of the top 10 countries, some countries changed position, but the make-up of the group did not change radically in comparison with the previous year (see Table 3).

Table 3. Ten countries with the highest position in the WEF ranking 2017–2018 (GCI)

Position in rank	Country
1	Switzerland
2	The USA
3	Singapore
4	Netherlands
5	Germany
6	Hong Kong
7	Sweden
8	The UK
9	Japan
10	Finland

Source: Schwab, *op. cit.*, Geneva 2017, p. 13.

Based on Table 4, we can state that there is no country from the G20 group outside the top ten most competitive economies in the world.

First place was taken by Switzerland (9 times in a row). It achieved this mostly thanks to the high flexibility of the labor market, advanced innovation possibilities and strong cooperation between the business and education environments. The last factors are the ability to attract talent as well as continuously raising the quality of the academic environment. An additional attribute of Switzerland is the relatively great number of major manufacturers which are global leaders in their fields, but also the great number of small and medium businesses. Weaknesses of Switzerland's economy include the permanent and increasing deflation, the quite large obstacles in entering the market and the low number of working women in comparison with other advanced economies.

Second place goes to the USA (up one position from last year), which indicates improvements in its macroeconomic stability (as a result of lowering the budget deficit). Non-tariff barriers seem not to be as cumbersome as in the past. Though the forecasts are good, the USA is not in the top 10 countries when we consider factors like institutions, infrastructure, macroeconomy stability, medical care and primary education, or the efficiency of the goods market as well as the adoption of new technology. It seems that putting greater attention on innovativeness and higher education would be a rational decision. The USA will face challenges, especially in the long-term perspective. The bottleneck could decrease the effectiveness of the monetary policy and slow technological development.

Singapore is in third place. The main advantages of its economy are the high level of higher education development, the effectiveness of the goods market and transparent and effective public institutions. Singapore's infrastructure is one of the best in the world (second after Hong Kong), and its stable macroeconomic environment encourages entrepreneurs. Areas which need further development are the business environment and innovation. The Netherlands is in the same position as last year, with progress noted. The result of this progress derives mainly from

improvements in adopting new technologies, upgrading innovations (social innovations are crucial), and closer cooperation between business and education. The level of development of the financial market is a great weakness (28th position on the list). The reason is society's relatively low level of trust of financial institutions.

The German economy is in the same position as last year. Its advantages are macroenvironment stability with low budget deficit and an inflation rate close to 0. The country occupies a high place in the matter of technology adoption (8th position), innovation (5th position) and business sophistication (5th position). An important challenge seems to be the efficiency of the market's operation due to the growing number of migrants as well as matters connected with internal security that involves many areas.

Hong Kong is in 6th position in the 2017–2018 ranking, which means its position has advanced three places compared to a year ago. The main advantages of the economy are the quality of its infrastructure, the financial sector, and a flexible as well as effective goods market (2nd position). The economy distinguishes itself through the efficient usage of the Internet by businesses and the development of the mobile phone market. Market size could be a problem (41st position). Sweden has fallen one position, down to 7th place. The budget deficit has been lowered while the labor market operates efficiently with a high employment rate, and women are well represented in employment. Sweden is an innovative country, but the number of scientists is continuously falling, which necessitates investment in human capital. Improvements should be considered in labor market flexibility; in this point, Sweden dropped nine positions down to 129th. Continuously increasing property prices could be a difficulty as it limits employee mobility.

For many years, the UK has been the most competitive economy in the world. The country changed its place in last 10 years by four places. It is worth mentioning that the competitiveness research was carried before the vote regarding Brexit, which means that results of this processes cannot completely present its index value. The UK's economy is highly competitive, thanks to the market size, innovations, the effectiveness of the financial market and the goods market. A significant decrease in macroeconomic stability occurred in 2017 – dropping from 23rd place to 68th. Further effects of Brexit will be visible in the next ranking.

Japan has fallen one place. The reason can be found mostly in its macroeconomic stability, with a high budget deficit. The flexibility of the labor market is still rather low (15th place) and the number of women in employment is low. The domestic market is relatively big, but it is characterized by difficult obstacles to entry. Japan can be proud of its excellent infrastructure, high-quality institutions (1st place) and high investment in research and development made by businesses (3rd place). In connection with the excellent availability of scientists and engineers (8th place), the country receives high results for innovativeness (8th place).

In the newest rank, Finland takes 10th place (the same as last year). It is a result of weakness in the macroeconomic environment. It seems that decreasing exports to Russia and a drop in the demand for paper are to blame. In the labor market,

we can observe an improvement in talent management, but it is still balanced with rigid organization (137th place). Restrictive labor market regulations are the most difficult obstacle in business management. Advantages include effective and transparent institutions and the high-quality education system. Finland is also a very innovative country with a high availability of scientists.

The ten most competitive economies in the world are characterized mostly by great efficiency of basic factors, medium or high innovativeness, stable and intense cooperation between business and science, and macroeconomic stability, including financial stability.

4. The long-term competitive position of Poland

International institutions put Poland in the list of medium-developed countries (IMD and WEF ranks). In the WEF 2017–2018 list, Poland was classified in 39th place out of the 137 assessed countries. It is a relatively high position in comparison with 2008, when it was placed 53rd out of 134 countries (see Figure 1).

One crucial attribute in Poland's assessment is the number of countries assessed. It can be observed that the larger the number of assessed countries, the lower Poland's position is on the list. It seems that ranking from 2009–2010 is an exception. In this period report's, the authors agreed that the results of the global economic crisis were visible in many countries. During the crisis, governments took unusual actions, which differed from the WEF's normal research methodology. Moreover, those actions were supported by activities derived from countries being members of different groups, e.g., the EU, the eurozone, OECD. Regardless of the changes in Poland's position in the rank, including the number of assessed countries, we can conclude that our country's economy did not change radically over the last 10 years compared to the countries. It does not mean that the competitiveness of economy did not change through this years. Significant changes were observed in elementary factors. In 2016, Poland had been promoted 25 places compared to 2008 (see Table 4). The development of the quality of infrastructure was a factor that influenced this promotion (from 96th place in 2008 to 53rd in 2016). Thus, the extensive changes were not a result of macroeconomy stability, medical care or primary education. A worrying matter is the fall in institutions' operational effectiveness – particularly after 2012. In the latest ranking (2017–2018), there was a drop in the Polish position by three places. This is a result of a further weakening of the efficiency of institutions (a fall of seven places compared to the previous year).

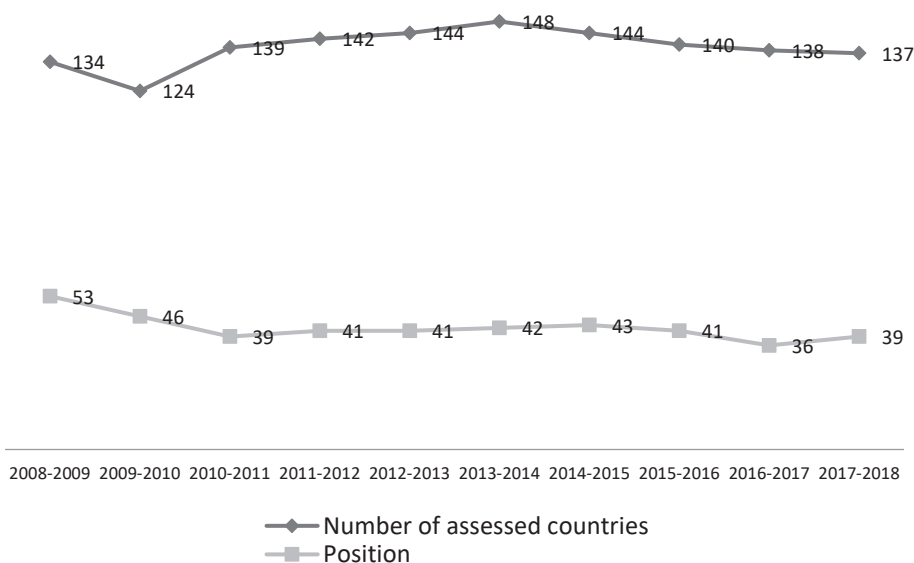


Figure 1. Competitive position of Poland in the WEF rank, 2008–2018

Source: Own elaboration based on Table 7.

Table 4. Poland's position in WEF rank in terms of basic factors in years 2008–2017

Basic factors	Year of the report/position in rank									
	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Institutions	88	66	54	52	55	62	56	58	65	72
Infrastructure	96	103	72	74	73	74	63	56	53	44
Macroeconomic environment	50	74	61	74	72	65	63	46	45	41
Health and primary education	39	35	39	40	43	42	39	40	38	38
Basic factor in general	70	71	56	56	61	59	55	44	45	45

Source: World Economic Forum, *Global Competitiveness Report* 2008–2009, 2009–2010, 2010–2011, 2011–2012, 2012–2013, 2013–2014, 2014–2015, 2015–2016, 2016–2017, 2017–2018.

The increase in Poland's position regarding the effectiveness of stimulating factors was noticed in 2017 in comparison with 2008 (from 41st place to 34th). It is worth pointing out that this position was significantly higher in 2012 than in 2017 (Poland was in 28th place). The main factors that influenced the improvement are market effectiveness and financial market development. The lower position of higher education could be a worrying fact, mainly decreasing the flexibility of the labor market (here we can observe a substantial decline in rank from

2013/2014). Market size and technology adoption ability did not influence changes in Poland's position regarding the effectiveness of stimulating factors (see Table 5).

Table 5. Poland's position in the WEF rank in terms of the effectiveness of stimulating factors in the years 2008–2017

Effectiveness stimulants	Year of the report/position in rank									
	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Higher education and training	34	27	26	31	36	37	34	31	37	40
Goods market efficiency	65	53	45	52	51	57	51	46	47	45
Labor market efficiency	62	50	53	58	57	80	79	81	79	78
Financial market development	68	44	32	34	37	38	35	43	46	53
Technological readiness	46	48	47	48	42	43	48	41	46	47
Market size	20	20	21	20	19	20	19	21	21	21
Effectiveness stimulants in general	41	31	30	30	28	32	32	34	34	34

Source: See Table 4.

Between 2008 and 2017, Poland's position slightly increased in terms of the effectiveness of stimulating factors (promotion from 61st to 59th place). The level of development of the business environment was the main factor which influenced it (promotion from 62nd place to 57th). The growth of innovation was slightly less influential—it has risen five places over the last 10 years (see Table 6).

In conclusion, we may say that Poland's position in the WEF rank has not changed much in the past 10 years. There are some factors which could allow competitiveness to be improved significantly if they were developed more. This potential is unfortunately limited by the underdevelopment of other determiners. This situation has an impact on Poland's position in the development stages determined by the WEF. Over the last 10 years, Poland has been categorized as being in transition between the 2nd and 3rd stage of development, and it has not been promoted to the group of the most developed countries in the world. A comparison of Poland's position among other countries in the WEF rank in the years 2008–2017 is presented in Table 7.

Table 6. Poland's position in the WEF rank in terms of the innovativeness of stimulating factors in the years 2008–2017

Innovativeness stimulants	Year of the report/position in rank									
	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Business sophistication	62	44	50	60	60	65	63	55	54	57
Innovation	64	52	54	58	63	65	72	64	60	59
Innovativeness-stimulants in general	61	46	50	57	61	65	63	57	55	59

Source: See Table 4.

Table 7. Competitiveness growth factor rank (GCI)

Year	The UK	Germany	France	Spain	Hungary	The Czech Republic	Italy	Slovakia	Poland	Number of ranked countries
2008–2009	12	7	16	29	62	33	49	46	53	134
2009–2010	13	7	16	33	58	31	48	47	46	124
2010–2011	12	5	15	42	52	36	48	60	39	139
2011–2012	10	6	18	36	48	38	43	69	41	142
2012–2013	8	6	21	36	60	39	42	71	41	144
2013–2014	10	4	23	35	63	46	49	78	42	148
2014–2015	9	5	23	35	60	37	49	75	43	144
2015–2016	10	4	22	33	63	31	43	67	41	140
2016–2017	7	5	21	32	69	31	44	65	36	138
2017–2018	8	5	22	34	60	31	43	59	39	137

Source: See Table 4.

As can be seen from Table 7, three out of then in countries improved their positions, two countries did not change position, and four countries (including Poland) fell in comparison with the previous year. It seems that the biggest “loser” in the period 2008–2017 is Slovakia (down 11 places). The increase in Poland's competitiveness level in the years 2008–2017 could be caused by the reaction of a weaker economy to the crisis compared to other EU countries, as well as more prudent government economic policy. Poland was the only country in the EU which noted a rise in the economy in 2009. In this perspective, it is worth drawing attention to the UK's position in crease; however, we need to consider that, after Brexit, many options will no longer be available Brexit. Stability can be observed in Germany, France (although France had a better position in 2008 than in 2017), Spain, the Czech Republic and Italy (it rose 6 positions compared to 2008).

A detailed analysis of the competitiveness of the Visegrad Group countries was conducted by Molendowski (Molendowski 2017, pp. 5–21).

Knowledge of Poland's economic position among the countries to which we often compare ourselves regarding different factors, and the awareness of the advantages of the most competitive economies in the world, allow us to identify opportunities and threats with which Poland will struggle to reach a better level of economic competitiveness.

5. Competitiveness of the Polish economy in 2008–2017

According to the WEF ranking, Poland was promoted 14 places. The improvement of the position of the Polish economy position derives from two factors:

1. Changes (improvement) in Polish economic assessment.
2. Changes (deterioration) in other countries' assessment which had been assessed in a similar way to Poland in previous years.

It appears that the first point is more important, as the second one might be less permanent. In the ranking from 2010/2011, Poland moved up seven places, to 39th. This meaningful improvement could be a reflection of Poland's weaker economic reaction to the crisis than in other EU countries. It might also be due to prudent economic policy and an increase in the size of the domestic market. In fact, Poland was one of the EU countries which recorded an economic increase in 2009. Subsequent years gave us a lower position in the list until the ranking in 2016/2017, where we can observe a significant increase to 36th place. In the 2017/2018 ranking, there was a deterioration of the Polish position by three places. Potential possibilities for improvement in the future come from the advantages and weaknesses of the Polish economy, which were noted in the report (see Table 8).

Poland's economic advantages are the large market size and high standards of education, in particular, wide access to education. The financial sector is well developed and the increase in trust of the banking sector contributed the country's excellent results in previous years. Achieving a better position in the ranking will require infrastructure modernization, which compared to international standards is rather low. The quality of Polish roads is still quite low despite the general improvement in recent years. The institutional system has improved but government effectiveness is still rated rather low. In the coming years, Poland will need to focus on innovations and development of the business environment. Stronger clusters, businesses focused on research and development, and stronger cooperation between business and higher education could help the country reach a higher level of general development. In the 12 pillars of competitiveness, Poland has recorded a decrease in five of them. The report is divided into five groups of countries, with

Poland in the 4th group – transitioning between the second and third stage of development (inclusion in this group relates to small yearly changes). It means that Poland increased its position of Poland in the previous two years. There is a potential for further development through infrastructure investment. However, there are also threats, like the situation with public finances and the lack of satisfactory progress in the field of technology. Due to the changeability of particular factors, economic competitiveness should be continuously observed.

Table 8. Main advantages and weaknesses of the Polish economy in the WEF ranking 2017–2018

Advantages	Weaknesses
Noticeable improvement of infrastructure quality (promotion from 96 th position in 2008 to 44 th in 2017/2018 rank)	Low assessment of institutions (1 st pillar – 72 nd position)- excessive regulatory burdens (112 th position) and low transition of procedures (116 th position).
Labor market effectiveness (7 th pillar – 78 th position) – high flexibility of salaries (24 th position)	Labor market effectiveness (7 th pillar – 78 th position) – negative effect of taxes on employee motivation (128 th position), net worth outflow of human capital (89 th position)
Market effectiveness (6 th pillar, 45 th position) – the number of procedures required to start a business (218 th position)	Market effectiveness (6 th pillar, 45 th position) – time required for implementing procedures to start a business (122 nd position)
Business sophistication (11 th pillar, 57 th position) – high assessment of number and quality of local suppliers (34 th position)	Business sophistication – lack of indicators which merge local suppliers’ potential – clusters (64 th position), lack of active attitude in international distribution network (64 th position) and lack of product competitiveness (100 th position) – the dominance of cost competitiveness
Strong position in education category (5 th pillar, 40 th position)	Low innovativeness (12 th pillar, 59 th position)
Market size (10 th pillar, 21 st position)	
Financial market development (promotion from 68 th position in 2008 to 53 rd in 2017/2018 rank)	

Source: own elaboration based on: Schwab, World Economic Forum, *Global Competitiveness Report 2017–2018*, Geneva 2017, p. 240–241.

6. Conclusions

To become competitive and remain so, a country needs to follow the principles of competitiveness detailed below (10 gold competitiveness principles) (Garelli 2003):

- create stable and predictable legal conditions,
- endeavor to create an economic structure that is flexible and robust for external activities,
- promote the formation of national savings and support national investments,
- develop activity on external markets and create an environment for direct external investments,
- endeavor to improve and enhance the transition of administrative operations,
- maintain a proper relationship between salary level, productiveness and taxes,
- endeavor to reduce salary differences and strengthen the middle class,
- invest in education and lifelong learning,
- invest in infrastructure,
- balance local and global aspects of economic processes.

In the future, further development of the Polish economy could be a by-product of supporting market competitiveness and the professionalism of managerial staff. There will be a necessity to transfer cost competitiveness to products (a sin more developed countries). Further growth also requires knowledge sharing between universities and enterprises.

Changes should be made to change the lack of willingness to participate in risky projects in business but also in the social dimension. After all, there is no universal recipe for competitiveness. "Different elements of economic policy can be used for *benchmarking*, but every country should work out different standards to suit their own circumstances. It is underlined that competitiveness strategies play a role if there is sustainability of economic imperatives imposed by the global markets together with the social requirements of a particular country that were shaped by its history, value system and traditions" (Ministerstwo Gospodarki i Pracy 2004, p. 6). It is necessary to improve the position of Polish competitiveness in the rankings and to achieve and use social and economic benefits which will derive from further development. The relevance of this statement can be found in "the tendency of pushing the Polish economy to the peripheries", which was pointed out in the Polish Development Fund's Special Report. The same report also underlined the fact that, so far, the development factor, which has relied on technology transfer, institutions and capital, is slowly becoming exhausted. If we want to reach the level of the world's biggest economies, we need to become a technology leader instead of a follower. This is a very difficult task. Maybe there will be a need

to build a new socio-economic model which will be effective and operational, also in a less conducive environment, and which will allow us to maintain social cohesion (Polish Development Fund's Special Report 2017).

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Streszczenie

POZYCJA KONKURENCYJNA POLSKI Z PERSPEKTYWY RAPORTÓW GLOBALNEJ KONKURENCYJNOŚCI ŚWIATOWEGO FORUM EKONOMICZNEGO

Konkurencyjność nie jest jednoznacznie definiowana. Różne są także metody jej pomiaru. Analiza poziomu konkurencyjności w skali makro jest przedmiotem zainteresowania wielu podmiotów. Rankingi konkurencyjności publikowane są m.in. przez Global Competitiveness Report przygotowywany przez World Economic Forum (WEF). Pozycja kraju w rankingu zależy od wielu czynników sklasyfikowanych w 12 filarach. W Raporcie 2017–2018 w rankingu WEF uwzględniono 137 krajów. W grupie 10 krajów o najwyższym rankingu zaszły zmiany w kolejności, nie zmienił się jednak diametralnie skład tej grupy w porównaniu do roku poprzedniego. W rankingu tym Polska została sklasyfikowana na 39 miejscu. Jest to relatywnie wysoka pozycja w porównaniu do roku 2008, w którym Polska zajmowała 53 miejsce na 134 kraje. Dalszy wzrost konkurencyjności polskiej gospodarki może w przyszłości zależeć między innymi od profesjonalizmu kadry kierowniczej oraz przedstawienia się na konkurencyjność produktową. Niezbędne jest także dzielenie się wiedzą na linii uczelnie-sektor biznesowy oraz pomiędzy samymi przedsiębiorstwami.

Słowa kluczowe: konkurencyjność, konkurencyjność międzynarodowa, raport konkurencyjności, Światowe Forum Ekonomiczne, ranking

