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ECONOMIC DEVELOPMENT FACETS AND THEIR INTERRELATION*

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Received 10 November 2021; accepted 9 January 2022; published 30 March 2022

Abstract. For many years, people have been trying to examine the factors that affect life in the country in which they live. Many procedures and methodologies have emerged into the help to measure individual aspects of life. One of them is GDP. But even though it is the most used of them, it focuses mainly on the economic side of life and ignores other factors that affect the lives of people in a given country. The aim of this paper is to identify the degree of connection between the development of the macroeconomic indicator of GDP and the index of economic freedom for the Slovak Republic. Based on the analysis of their development, components and impacts on the country, their main advantages and disadvantages will be determined, as well as their effectiveness compared to GDP. As no indicator can cover all areas, each of them looks at the same issue from a different angle, so to get a more comprehensive view of a country, it is not appropriate to focus on just one of them.

Keywords: index of human development, index of economic freedom, economies competitiveness, press freedom, Slovakia

Reference to this paper should be made as follows: Gonos, J., Hrehová, D., Čulková, K. 2022. Economic development facets and their interrelation. *Entrepreneurship and Sustainability Issues*, 9(3), 88-102. [http://doi.org/10.9770/jesi.2022.9.3\(6\)](http://doi.org/10.9770/jesi.2022.9.3(6))

JEL Classifications: A13, B55, D10.

1. Introduction

Gross domestic product is one of the basic macroeconomic indicators. Its development significantly indicates the state of the economy of a given state and in the case of its conversion per capita; it can serve to compare the economic level of individual countries. GDP growth is also related to other macroeconomic indicators, such as inflation and unemployment. Quality of life is important for everyone. It affects the daily life of every person in a given country from meeting basic life needs such as basic life needs (food, water, shelter) to education, health

* This research was supported by the project KEGA No 006TUKE-4/2019 "Foreign Student's education with an emphasis on creating key competences in the context of building a working career and the inclusion into the labour market in Slovakia."

care, cultural activities and the like. However, if we want to examine the quality of life in a given country, we must be able to measure it. Here, however, there is a problem to which many people have not yet found a clear answer. The problem is that the quality of life is influenced by many factors. However, a much bigger problem is that everyone perceives it from their subjective point of view. What is the quality of life? When is a person happy? When can he say he is missing nothing? For many years, people have tried to study and measure this immeasurable quantity. Some focused only on the economic aspect, such as the well-known Gross Domestic Product or GDP. However, it did not include other influences, such as the quality of education, the quality of health care or personal freedom. In this paper, we will therefore analyze various indicators in their time development and their interrelation. We focused on the significant correlations. In consideration of the complex correlations between the indicators we regarded their extent useable for GDP evaluation in connection to HDI development, index of economic freedom, GCI development and press freedom index with aim to find obstacles for increasing of the Slovakian competitiveness, contributing to the worldwide economy.

2. Theoretical background

If we want to find out how a country is performing compared to other countries, where there are opportunities for improvement, it is necessary to find a way to compare countries. However, since there can be many aspects to compare, no way will perfectly reflect the reality of a given country. Probably the oldest way to measure a country's performance and compare it with other countries is the country's economic strength (Dvořáček et al., 2012). The most commonly used indicator is GDP. Gross domestic product (GDP), measures the number of goods and services that are produced in a country's economy. As each region has a different approach to resources and especially the number of inhabitants, which directly affects the absolute amount of GDP, this indicator is not directly applicable to the comparison of different countries, so GDP per capita is often used.

GDP is an indicator that measures a country's economic strength. Since we can also derive other quantities from the size of GDP, such as the real wage of the country's population is often used to measure the quality of life. While economically a very good tool, this indicator does not reflect other important aspects of people's lives in a country, such as education, healthcare, and freedom of speech, freedom of the business and the business environment, and especially differences between the populations. It can very easily happen that a group of very rich people distort the overall view of the whole economy of a given country. Nevertheless, it is the most commonly used indicator, which is easily usable for measuring the economic growth of the country and comparing the quality of life with the past. The main advantage of the given indicator is that it is measured in USD, which makes it very easy for people to imagine what it expresses and what the calculated number means, what can no longer be said about other indicators. Since, as mentioned, GDP measures mainly the economic strength of the country does not take into account the quality of health, respectively quality of education (Teplická et al., 2021). Therefore, an index of human development index was created (Cingranelli and Richards, 2007). One of the advantages of the human development index is that it does not take into account only one aspect, such as one's income, but rather takes into account a whole complex of variables, such as the percentage of illiterate people in a country, people's access to drinking water, people's access to health services, number of children under 5 years of age suffering from malnutrition, percentage of probability in a born individual that he will not live to 40 years of life (Jurgelevicius and Tvaronaviciene, 2021).

The index is studied in connection with human rights, as presented by Jeffords (2021) that used the newly developed Sustainable Development Index (SDI) as the outcome variable and panel regression results demonstrate a positive correlation between SDI and having a substantive environmental human rights provision. In response to an increasing demand for rigorous monitoring of states in meeting their human rights obligations, a growing literature has emerged on measuring human rights fulfillment. In this connection the human rights index provides important new information compared with other measures of economic and social rights fulfillment; although it still does not fully capture some desired features such as the right to nondiscrimination and equality,

and the right to social security (Fukuda-Parr et al., 2009). The main disadvantage of GDP is that it does not take into account the environmental aspects of sustainable development. Until recently, one of the disadvantages of the human development index was the overly rough classification of countries into groups with low, medium and high levels of human development. In recent years, almost all European countries have belonged to the group of countries with a high degree of human development.

Another positive aspect of GDP is that it also notes the economic growth of the country. An extremely important factor in the globalization of the world economy is the country's competitiveness in the world economic area. The growing importance of economic relations encourages the openness of individual economies to foreign goods, services and capital. The WEF – The World Economic Forum deals with the evaluation of the competitiveness of countries, which annually compiles a ranking of countries on the basis of the global competitiveness index. We can look at competitiveness on an international as well as a national scale. We can understand it as a comparative view of the researched object and its ability to offer and sell services and goods in the market. However, international competitiveness can be defined rather as the ability to penetrate foreign markets with goods and services. The advantage and positive in assessing the competitiveness of countries around the world is that the WEF takes into account in assessing the competitiveness of various factors and sub factors, which are placed according to certain features into twelve groups, the so-called pillars of competitiveness. In this area there are some studies, as for example the Global Competitiveness index (GCI) is studied by some authors from the view of the connection to other indexes. Kalman and Toth (2021) examined the relationship of competitiveness and logistics performance. According to Poufinas et al. (2021) the more competitive a member country of the EU is, with respect to the global competitiveness index, GDP per capita, exports as a percent of GDP and unemployment rate, the smaller its shadow economy (as a percent of GDP) becomes. More precisely, as anticipated, there is a negative relationship between the shadow economy and global competitiveness, GDP per capita and exports. Global Competitiveness Index introduced a major methodological change in 2018; therefore, Dudas and Cibul'a (2018) used the new methodology on the national competitiveness of Slovakia and its position in the global rankings of national competitiveness.

The other index, influencing GDP development, is the index of economic freedom (Piątek et al., 2013). Extent of economic freedom is created each year by comparing 4 different indicators divided into five areas. A comparison of the results of the economic freedom index and indicators with the resources of the European Union, the World Bank, the UN, Transparency International and others leads to the conclusion: the prosperity of countries depends on economic freedom. The economic freedom index is one of the most important indexes on the basis of which the global economies are ranked. Hryniewicka (2018) classified the 28 EU countries into individual groups and to characterize them in comparison to the five countries of the world that create the best and worst development conditions for their businesses. Karateev (2017) demonstrated that annual Index of Economic Freedom actually describes not only country's economic freedom level but also levels of other kinds of freedom. At the same time taking population size into account raises correlation coefficient between Index of Economic Freedom and GDP (PPP) per capita demonstrating strong correlation between human income and economic freedom. Kacprzyk (2016) evaluated which aspects of economic freedom contribute to economic growth in the EU, finding a positive relationship between economic growth and four of the five aspects of economic freedom: security of property rights, quality of monetary policy, freedom to trade and regulatory policies.

GDP development on the mentioned indexes in the conditions of Slovakia is the aim of presented contribution. The conditions in Slovakia reflect a following situation: about one-third of the human development index is gross national income. Gross national income in Slovakia is GDP adjusted for income of companies operating in the country, but coming from abroad. The directives of Slovaks and Slovak companies operating abroad are also taken into account as the second possible alternative. Another alternative to measuring a country's success is, in addition to the human development index, gross national happiness. The index measures and takes into account nine areas: environment, culture, good corporate governance, education, health, life ability of communities (these

have a large representation in Slovakia) and play a significant role in measuring the success of the country, time use, mental well-being, environmental level.

The Swiss Institute for Management Development in cooperation with the Slovak F.A. Hayek Foundation Bratislava published the World Yearbook of Competitiveness Economies in 2018. According to the book, Slovak Republic ranked 55th out of 63 evaluated countries, which did not keep the competitiveness year-on-year compared to previous years partition worsened by four places. This result was mainly due to a lack of qualified staff, a high administrative burden on businesses, insufficient developments in business digitization, high recruitment and dismissal costs and, last but not least, insufficient reforms in education as well as in public services. Compared to its closest neighbors, Slovakia ranked last among the countries of the V4 region, behind the Czech Republic (29th place), Poland (34th place) and Hungary (47th place). Only in 2007-2009, Slovakia was one of the highly competitive countries (30th place).

Table 1 provides a concise and symbolic overview of the interconnections between economic freedom, political freedom and economic growth, according to the scientific contributions of the authors whose work is analyzed in this dissertation.

Table 1. Overview of the interconnections between economic freedom, political freedom and economic growth in the studies presented

authors	interconnections
Farr, Lord and Wolfenbarger (1998)	Economic freedom ↔ GDP → political freedom
Vega and Alvarez (2003)	Economic freedom – GDP ↔ political freedom
Aixalá and Fabro (2009)	Economic freedom ↔ GDP ↔ civil freedom ↔ political rights
Peev and Mueller (2012)	Political freedom → economic freedom → GDP
Piatek, Szarzec and Pilc (2013)	Economic freedom → GDP → political freedom

3. Research objective and methodology

The first step in the creation of the model was the study of possible situation in Slovakia, compared with other countries. Since the GCI is a composite type of index, its pillars are not independent of each other. Thus, one cannot be selected from among them for the competitiveness increasing purpose because of mutual interactions between all the pillars, which would result in an unexpected result. However, analyzing all the correlations is unnecessary, so we only focused on the significant correlations. However, analysing all the correlations is unnecessary, so we only focused on the significant correlations. Because of considerable multicollinearities, after normalizing the value of the 0-100 pillar-score to values 1-7, we resulted from the partial correlation analyses to select the most significant ones. Then, we followed the same principle in the assessment of interactions between the six components of the LPI. In consideration of the complex correlations between the pillars, we regarded their extent useable from 0.3. Thus, we used a model with the application of significant correlations (Kálmán and Tóth, 2021), to select the most significant ones (see Table 2). In consideration of the complex correlations between the pillars, we regarded their extent useable from 0.3.

Table 2. GCI partial correlations in 2018

Pillars	Institutions	Infrastructure	ICT ado-	Macro-economic	Health	Skills	Product market	Labor market	Financial	Market size	Business	Innovative

			ption	stability					system		dynami sm	capabi- lity
Institu- tions	1											
Infra- structure	0.328	1										
ICT adoption	-0.099	0.381	1									
Macro- economic stability	0.090	0.115	- 0.00 2	1								
health	-0.024	0.085	0.04 3	0.008	1							
skills	-0.028	0.157	0.41 3	0.004	0.542	1						
Product market	0.351	-0.039	0.20 9	-0.016	0.112	-0.117	1					
Labor market	0.120	-0.051	- 0.01 1	0.135	-0.125	0.064	0.202	1				
Finan- cial system	0.169	-0.043	- 0.04 8	0.159	-0.014	0.044	0.179	0.169	1			
Size of market	-0.42	0.233	- 0.15 9	0.161	0.028	0.035	0.002	-0.169	0.082	1		
Business dyna- mism	-0.012	0.243	- 0.12 3	-0.052	-0.122	0.166	0.337	-0.085	0.268	0.203	1	
Inno- vative capability	0.339	-0.21	0.29 3	-0.086	-0.052	0.046	-0.107	0.209	-0.15	0.309	0.477	1

Source: own processing according to Kálmán and Tóth (2021)

Notes: p<0.05

Coefficients



>0.3

<0.2 - 0.3>

<0.1 - 0.2>

in other cases, there is no assessable correlation

The results of the correlation had been considered for evaluation of the HDI development in Slovakia, development of economic freedom index, GCI development and press freedom index during 13 years analysis.

Human Development Index

As stated by Kubátová (2004) the big problem of GDP is that GDP per capita does not capture the differences in the economic well-being of individual inhabitants or population groups. In an economy with social equality, GDP/capita can be as valuable as in a country with a small group of very rich people and a large group of people living in high poverty. Therefore, efforts to use other indicators are increasingly being pursued. One of the most important is the so-called Human Development Index (HDI – Human Development Index). This index takes into account the average life expectancy at birth, the literacy rate of the population, the proportion of the population attending primary, secondary and tertiary schools and the level of GDP per capita. The UN publishes an annual Human Development Report with an overview of the HDI. Slovakia is one of the countries with a high level of human development. In 2014, the Slovak Republic ranked 37th.

Individual institutions and states are interested in data on the achieved economic level of a given country, which allows comparing the economic level of individual countries. Currently, the most important and most used indicator by which to measure and express the achieved level of human development is the Human Development Index - HDI, which is also used by the United Nations Development Program (UNPD) for international comparisons (National Report on Human Development of the Slovak Republic 2001 - living a healthy and creative life). The favorable political climate, democracy, political and economic freedom, law enforcement,

developed informal rules, a stable economy, a functioning and open education system, the development of science and research, quality health services, a targeted social system, environmental protection, tolerance, respect contribute to this, etc. However, this does not guarantee that the expected objectives will be met. Human development is more than being healthy, educated, and rich. It is also the ability of people to take advantage of these opportunities in everyday life. The following factors are taken into account when calculating the human development index:

- life expectancy of the population of the country,
- the achieved educational level of the population (Lisý 2005a).

The human development index determines the minimum and maximum levels for each sub-indicator as follows:

- Life expectancy at birth: 25 years and 85 years
- Adult literacy rate: 0% and 100%
- Combined enrollment rate for schools (primary, secondary and higher, respectively I., II. And III. Degrees) 0% and 200%
- Real GDP per capita (in USD) converted through purchasing power parity: USD 100 and USD 40 0000 (Lisý 2005a).

These HDI sub-indicators are calculated as follows:

$$HDI\ Index = \frac{real\ value\ xi - nominal\ value\ xi}{maximal\ value\ xi - minimal\ value\ axi}$$

The calculated level of the index ranges from zero to one. The resulting value in Table 3 shows how far the country has moved towards the maximum level 1 and at the same time, it is possible to compare the economic maturity of a given country with other countries (Lisý 2005a).

Table 3 HDI values

Range	Level of human development
0,000 – 0,5	Low
0,501 – 0,8	Medium
0,801 – 1	High

Source: UNDP (Human Development Report, 1999, p. 113)

From the above brief characteristics of the human development index, it follows that in 21st century, a developed country is considered a state that creates the conditions for its inhabitants to achieve long and healthy life.

Index of the economies competitiveness

The Index of economies competitiveness expresses how the quality of the business environment contributes to increasing the performance of the economy while evaluating and comparing individual countries in four basic areas: economic growth, government efficiency, the efficiency of the business environment, infrastructure efficiency. The most important factors that the index compares include the achieved level of GDP, investment rate, trade and balance of payments, inflation and unemployment rate, development of public budgets, labor productivity, education, science and research, health care, state intervention, law enforcement and the level of legislation, corruption, foreign relations, the impact of globalization (Lisý 2005b).

Index of economic freedom

The index of economic freedom is one of the indicators, the aim of which is to measure the degree of economic freedom in relation to the overall performance of the economy. The initiators of the compilation and regular enumeration were Nobel Prize winners for economics Milton Friedman, Gary Becker and Douglas North. More

than 50 institutions from around the world are involved in the calculation of the index, which analyzes indicators in five important areas:

- Impact of state interventions on the economy (amount of tax burden and public expenditures) (Istok and Taušová, 2021)
- protection of property rights (quality of legislative conditions, law enforcement, functioning and efficiency of the judiciary)
- price and currency stability (effective budgetary and monetary policy)
- freedom of trade and functioning of the capital market (customs policy and other obstacles to free trade)
- scope of regulatory interventions in the functioning of the financial market, the labor market and the conditions for starting a business (Lisý 2005b)

The index of economic freedom is researched according to the following categories (see Table 4).

Table 4. Categories of the Economic Freedom Index since 2017

I. Rule of law	II. Government size
1. Property rights	1. Tax burden
2. Government integrity	2. Government spending
3. Judicial effectiveness	3. Fiscal health
III. Regulatory efficiency	IV. Open markets
1. Business freedom	1. Trade freedom
2. Labor freedom	2. Investment freedom
3. Monetary freedom	3. Financial freedom

Source: Miller & Kim (2017)

$$Trade\ Freedom_i = (((Tariff_{max} - Tariff_i) / (Tariff_{max} - Tariff_{min})) * 100) - NTBi \quad (1)$$

Trade Freedom_i represents the sub-index trade freedom in country *i*, Tariff_{max} and Tariff_{min} represent the upper and lower bounds for tariff rates (expressed in %) and Tariff_i represents the weighted average tariff rate in country *i*. The lower limit is the rate of 0% and the upper 50% of the value of imported goods. NTBi represents the non-tariff barrier of the country *i* and is subtracted from the base score in the form of a penalty to obtain the final score. The penalty may be 0, 5, 10, 15 or 20 points, depending on the frequency of use of non-tariff barriers (20 for barriers that completely impede international trade due to extensive use across most goods and services). Determination of the number of points that will be deducted on account of non-tariff barriers depends on qualitative and quantitative information on the types of restrictions, the most important of which are: quantity restrictions, price restrictions, regulatory restrictions, investment and customs restrictions as well as direct government intervention.

$$Monetary\ freedom_i = 100 - \alpha \sqrt{Weighted\ average\ inflation_i} - PC\ penalty_i \quad (2)$$

In formula (1) $\alpha = 6.333$ represents the coefficient for stabilizing the variance of the results. It converts the percentage of inflation into the value of sub-index on a scale from 0 to 100. For greater accuracy, the square root of the weighted average inflation rate is used. PC penalty *i* represents penalties for price control by the state, which range from 0 to 20 and are subtracted from the monetary freedom sub-index base to obtain the final score.

4. Results and discussion

Results of human development index (HDI) development are given in table 5, illustrating development in time horizon 2006-2018 from the view of the index development as well as the index ranking.

Table 5 HDI development

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
HDI development	0,802	0,813	0,82	0,822	0,829	0,835	0,838	0,841	0,842	0,845	0,853	0,855	0,855
HDI Ranking	41	40	36	37	37	37	38	37	35	40	39	38	38

The Human Development Index was created to emphasize the fact that people and their abilities should be the final criterion for assessing a country and not economic development itself. The Human Development Index is one of the aggregated indicators measuring the progress of society in three dimensions, which relate to health, education, living standards of the population. The aim of the human development index is to measure the level of human development achieved by a single index and to enable comparisons between different countries of the world. HDI expresses the geometric mean of three normalized indices calculated from three dimensions.

The Human Development Index expresses the ratio of the current indicators of a given country to the maximum value of indicators, such as the life expectancy of the population of a given country, the achieved educational level of the population and the quality of life of people. HDI has so far adopted the only alternative that successfully breaks the hegemony of focusing on economic growth. These statistics include the country's gross domestic product and two other factors. These two factors are the education of the population, based on the level of literacy and completion of individual levels of education and average life expectancy. Education is measured by two indicators. The average length of schooling for adults aged 25 and the expected length of schooling for children aged six when they start school are monitored. Both indicators are normalized by setting a maximum and a minimum value, which is compared with the fair value reported by the country. The maximum value of the expected length of school attendance is set in 18 years. The partial value of the education index is then determined as the geometric average of the indicators. Life expectancy at birth is standardized using a minimum and a maximum value. The maximum is set in 83.4 years and the minimum in 20 years.

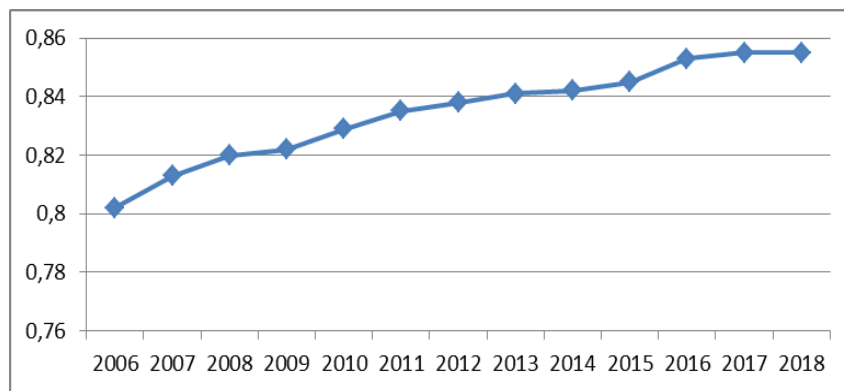


Figure 1. HDI development in Slovak republic

Source: own processing

As we can see in Figure 1, the human development index has been growing regularly over the last ten years, maintaining a value above 0.8, which means a high level of quality of life in Slovakia. Slovakia's HDI in 2015 reached a value of 0.845, which puts the Slovak Republic in 40th place on a global scale. This position speaks of the improving state of socio-economic variables in Slovakia, while the HDI indicator has had an increasing tendency since 2005 from 0.793 to the current value of 0.845 (2015). In general, we can assess such a state of living from 2005 with a slowdown from 2008 to the present as an increase. In recent years, the quality of services, health care, education has grown. However, if we look at HDI on a global scale, Slovakia was almost constantly around 37th place. In 2015, it even dropped to 40th place. We can therefore say that the overall growth of HDI is a global trend. Although the quality of life is increasing in Slovakia, the growth of HDI is proportional to other developed countries of the world and is, therefore, a global trend. On the other hand, we can say that, compared to other countries, Slovakia does not lag behind in improving the quality of life. If we look at the individual components of the HDI index, we will find that the main components for the development of HDI were the life expectancy and quality of life of the people, which is based on GDP. Life expectancy and compared to 2005 increased by 2.2 years. The expected period of school attendance has been around 15 years for a long time, while compared to 2015 it increased by 0.7 year.

Development of the index of economic freedom in the Slovak republic

A result of the index of economic freedom development is given in table 6, illustrating development in time horizon 2006-2018 in Slovak republic.

Table 6. Development of the index of economic freedom in the Slovak republic

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
index	69,0	69,6	70,0	69,4	69,7	69,5	67,0	68,7	66,4	67,2	66,6	65,7	65,30

Source: own processing

The Index of Economic Freedom has been measured by the Heritage Foundation and the Wall Street Journal since 1995. It covers ten areas: freedom of enterprise, freedom of trade, monetary freedom, government sector size, fiscal freedom, property rights, freedom to invest, financial freedom, corruption, labor freedom. It evaluates the level of economic freedom. It analyzes economic openness, the effectiveness of regulation, the competitiveness of countries and the application of the law. The country's final score can range from zero (minimum economic freedom) to 100 (maximum economic freedom).

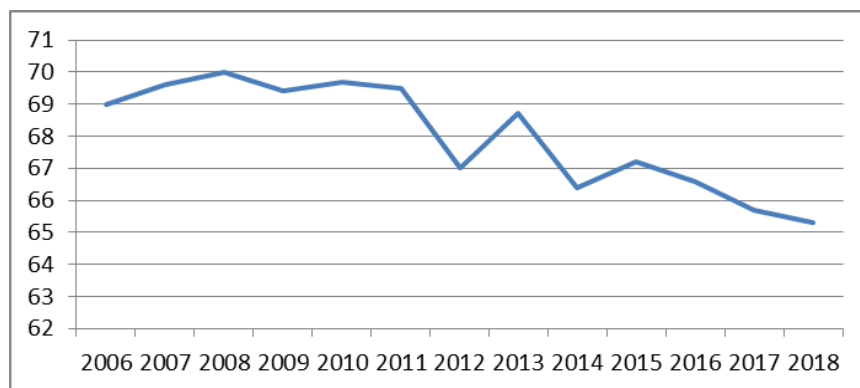


Figure 2. Development of the index of economic freedom in Slovakia

Source: own processing

As we can see from Figure 2, the index of economic freedom from 2006 to mid-2008 had an upward trend. From 2008 to mid-2009 there was a slight decrease. From mid-2009 to mid-2010, there was another slight increase. In the following years, however, it was marked by a decline to 66.4 in 2014. From this value to mid-2015, it rose slightly to 67.2, already fell to its lowest value of 65.3 in 2018. As we can see, the index of economic freedom fell from 69 to 65.3, despite a slight increase, which means a decrease of 3.7 points, which is not a favorable situation for doing business in Slovakia. The government of Slovakia has also seen a sharp decline in recent years, which may be due to government crises. The Slovak Republic ranked 59th out of 180 countries compared in the economic freedom index.

Development of global competitiveness index

The Global Competitiveness Index is an indicator measured since 1975 (GCI). GCI is used to compile the Global Competition Report. It is being prepared by the World Economic Forum. Based on the 90 variables contained in nine headings, an index will be compiled that will clearly classify countries into countries with economies based on factors of production, countries with economies driven by increasing efficiency and countries with economies based on innovations. The report was last evaluated by 133 countries. The categories of evaluated categories can be summarized as follows: institutions, infrastructure, macroeconomic indicators, health and basic education, higher education and training, market efficiency, technological addition, implementation of new practices in business, innovation. The results of the index development in Slovakia are given in Table 7 and Figure 3.

Table 7. Development of the Global competitiveness index in Slovakia

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Index	4,54	4,45	4,40	4,31	4,25	4,19	4,10	4,10	4,10	4,20	4,28	4,33	4,93

Source: own processing

As we can see from the Figure 3 from 2006 to mid-2012, the index of competitiveness of economies has been constantly declining. From that period onwards, it stagnated until about the middle of 2014 and then continued to grow slightly until 2017, where it was 4.33. The highest increase to 4.93 was recorded in the Index of Competitiveness of Economies in 2018. This year, the Slovak Republic ranked 41st out of 140 countries, evaluated and achieved a score of 66.8 out of 100. Possible solutions for the growth of competitiveness for Slovakia in the coming years are improvements in the area of:

- a) Insufficient number of qualified staff
- b) Reduction of administrative burdens on businesses
- c) Advances in business digitization
- d) Reducing recruitment and redundancy costs
- e) Reforms in public services and education

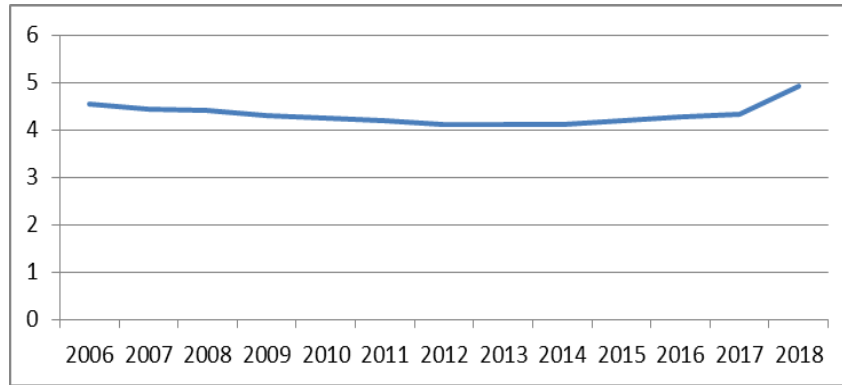


Figure 3. Development of Global competitiveness index in Slovakia
Source: own processing

Development of press freedom index in Slovakia

The results of the index in the analyzed period in Slovakia are given in table 8.

Table 8. Index of press freedom in Slovakia

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Index	2,50	1,00	3,00	11,00	11,50	0,00	0,00	13,25	11,39	11,66	13,26	15,51	20,26

The Press Freedom Index is prepared each year by Reporters without Borders. Every year, Reporters without Borders prepares an index evaluating press freedom. This index evaluates 180 countries around the world. The index is compiled on the basis of the following criteria: pluralism - determines the degree of representation of opinions in the media.

1. Environment and self-censorship - analyzes the environment in which news and information providers operate.
2. Legislative framework - measures the impact of the legislative framework governing intelligence and information activities.
3. Transparency - measures the transparency of institutions and procedures that have an impact on reporting and information.
4. Infrastructure - measures the quality of the infrastructure that supports the production of messages and information.
5. Abuse - measures the level of abuse and violence. The calculation also takes into account a seventh indicator based on data collected on abuses and acts of violence against journalists and the media during the period under review.

Each indicator has a score between zero and 100, with 0 being the best score and 100 being the worst value. The RSF calculates two indicators. The first is based on the first six of the seven indicators listed above. The second combines the first six indicators with the seventh (abuse). The country's final score is the higher of the two results. This method avoids the disproportionately low score (high rating) awarded to a country where there is little or no violence against journalists, as the disclosure of news and information is strictly controlled.

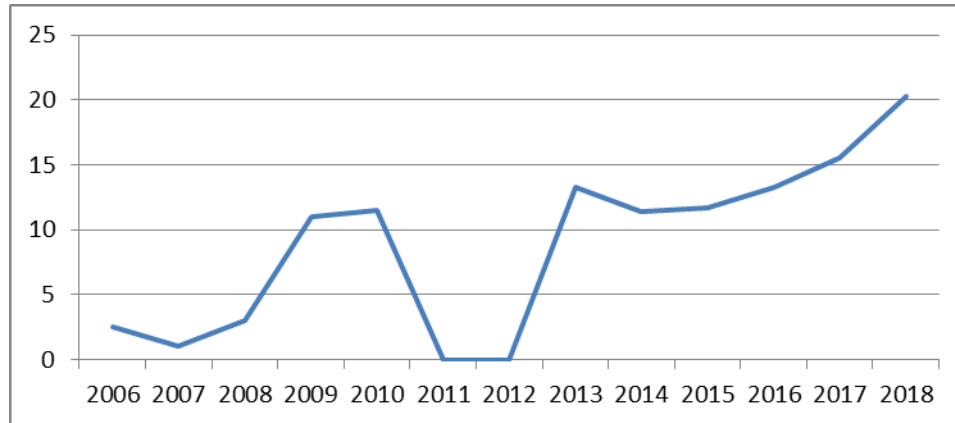


Figure 4. Development of press freedom index in Slovakia

Source: own processing

In 2006, the press freedom index scored 2.50. From this period to mid-2007, there was a slight decrease from 2.50 to 1.00. From mid-2007 to mid-2008, it showed an increase of 2.00. By 2009, there was a sharp increase from 3.00 to 11.00. By mid-2010, we are recording a slight increase from 11.00 to 11.50. From this period until mid-2011, there was a sharp decline from a score of 11.50 to 0.00. In the period 2011-2013, the index remained zero. From mid-2013 to mid-2014, there was a sharp increase from 0.00 to 13.25. Since this period in 2014, there has been a slight decrease to 11.39. Since mid-2015, there has been a slight increase to 11.66. We record a sharp increase from about the middle of 2015 to 2018 up to the value of 20.26.

As we see in the development of the economy in Slovakia, in recent years, GDP in Slovakia has been constantly growing, which was caused by the global trend, deflation and investment in Slovakia. However, GDP growth slowed in the last year compared to previous years. In contrast, however, the index of freedom of enterprise and the index of press freedom declined. This can also have an impact on GDP growth. In recent years, various political cases, overpriced public procurement have adversely reflected the overall situation in Slovakia. Civil unrest also has an adverse effect on economic growth and living standards. If the Slovak Republic wants to continue to grow, it must improve mainly in the following sectors:

1. Improving the business environment - infrastructure must be created for the development of the business environment in Slovakia: the development of small and medium-sized enterprises and the support of self-employed persons help both to increase employment and to increase competition and the quality of services. At present, there are many barriers that prevent small businesses from settling in the market, and current legislation is not very helpful, which is also reflected in the declining index of economic freedom.
2. Investment in research and development: research and development is the engine of economic growth. Unfortunately, there is currently very little investment in this area in Slovakia.
3. Stabilization of the political situation: political cases and confusing public procurement not only undermine people's confidence in the state but also adversely affect the business environment, foreign trade, and economic development.

The downside of the competitiveness process is that it is affected by what is happening on the political scene. At the same time, the state plays the role of a creator of the business environment and should create such conditions that companies in the Slovak Republic are as competitive as possible not only on the domestic market but can also develop in foreign markets. However, we can only argue whether the current stability in government circles is sufficient and whether the current policy of supporting domestic and foreign investors is correct and non-discriminatory for Slovak entrepreneurs. In the institutional environment of the country where we encounter problems such as high levels of corruption, the inefficiency of state offices (or their inability), the unreliability of

the population in the judiciary, these factors negatively affect the value of the competitiveness index. Deficiencies in the business environment and a high tax burden, as well as constantly changing tax regulations and the Labor Code, only contribute to the deterioration of the situation and the reduction of the country's index.

We see the advantages of GDP in the fact that it is a common indicator, which has been used for several years for comparisons of individual countries, i.e. the administrations in the states are set to simply calculate the given indicator. The disadvantages, as we have mentioned, are that, in our opinion, this indicator has a weak explanatory power. It is not the amount of production in sales that is important, but also the sales. It would be appropriate to move farther in measuring the economy and to propose a new way, a new indicator, which would be able to better point out the development and prosperity of individual countries, which would be mutually measured. We can say that if we were to think about a new indicator that could compare the prosperity of countries, we would combine the indicator of the average wage, the average cost of living, and also the tax and contribution burden, which would bring us to the living standards of the population. It could be helpful to develop this indicator with the satisfaction of citizens in the country.

Conclusions

Measuring the quality of life in a country is not easy. The contribution focused on the most used macroeconomic indicator - GDP. We approached its development in Slovakia. In recent years, GDP has grown almost steadily, but the growth rate is now lower than it was ten years ago. From the development of GDP, we could think that the quality of life in Slovakia has improved. However, the problem with this statement is that GDP alone does not cover various other aspects such as education or health care. This shortcoming seeks to address the Human Development Index (HDI). It no longer takes into account only the income of the population itself, as GDP does, but also takes into account life expectancy and level of education. This index has been growing for a short time. Based on the analysis, we found out which main aspects caused this growth. However, even this index does not cover many aspects.

The creators of the Index of Competitiveness of Economies took a different view of the given issue. It tries to compare the competitiveness of individual countries. The ranking of the countries with the highest competitiveness is determined every year. This index uses 15 criteria based on which individual countries are evaluated. However, the height of a given index depends to a large extent on external influences. The latest indexes have focused mainly on the freedom side. While the index of economic freedom speaks mainly about freedom of enterprise and the economic side of freedom, the index of freedom of the press focused mainly on freedom of information and media. As we can see, none of the indicators takes into account all possible aspects of human life, while some of them are closer to GDP and economics, others focus on other aspects. GDP is a good indicator if we want to look at the country only in terms of its economic strength. But if we want to focus on other aspects of life, we must also use some alternatives.

The results of the contribution provide important information for increasing of the competitiveness of the Slovakia in the frame of globalized worldwide economy, initiating to the openees of the Slovakian economy toward national and international business effectiveness. The results can be used as comparative view. However presented research with its results demand regarding various factors of the competitiveness pillars that had not been considered in the frame of the contribution, such as quality of public institutions, infrastructure, macro economic stability, education and qualification, effectiveness of markets with goods and services, financial and labor market, technological preparedness, volume of the market and innovation potential of the business. This could be object of the future research in Slovakian conditions.

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Funding: *This research was supported by the project KEGA No 006TUKE-4/2019 "Foreign Student's education with an emphasis on creating key competences in the context of building a working career and the inclusion into the labour market in Slovakia*

Data Availability Statement: All data is provided in full in the results section of this paper.

Author Contributions: Conceptualization: *Jaroslav Gonos*; methodology: *Jaroslav Gonos, Katarína Čulková*; data analysis: *Jaroslav Gonos, Katarína Čulková*; writing—original draft preparation: *Katarína Čulková, Daniela Hrehová*; writing; review and editing: *Jaroslav Gonos, Daniela Hrehová*; visualization: *Katarína Čulková, Daniela Hrehová*. All authors have read and agreed to the published version of the manuscript.

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