BASIC ECONOMIC INDICATORS AND ECONOMIC WELL-BEING[1]

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ABSTRACT

The paper reviews some of the basic economic indicators that reflect the three essential macroeconomic problems (economic growth, inflation and unemployment) and correlates them with economic well-being expressed through the happiness index.

Having in mind the basic premise of the economy as a science to manage limited resources in order to meet unlimited human needs, the question that arises is when people feel well, have a feeling that they have "quality" life, and when they feel happy. Although the question of well-being has been of interest to economic science since its inception, the answer to what makes people happy is more of a philosophical than an economic question and difficult to measure and answer. Well-being depends on a huge number of economic, but also on a number of non-economic variables. In addition[2] to the economic indicators that show the level of economic development, the standard of living, employment and unemployment, the poverty rate and the inflation rate, an indicator is needed that will show the personal perception of quality of life. The level of well-being and happiness have a strong

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[1] original research paper

expression of a subjective experience and are determined in addition to economic, also by other non-economic factors (psychological, sociological, philosophical, cultural, etc.).

Taking into account the complexity of the subject and the spatial limitation of a paper of this kind, a regression analysis was done in it, using data on GDP per capita, PPP (current international $),Inflation, consumer prices (annual %), Poverty gap at $1.90 a day (2011 PPP) (%),and Happiness Index for 67 countries in the world. The analysis is based on data from 2019 as the last year for which data is available, and in which there were no restrictions of any kind.

KEY WORDS: GDP per capita, Poverty, Inflation, economic well-being, Happiness Index

INTRODUCTION

The question of well-being has been the subject of interest of economic science since its beginnings, from the time of the first ancient thinkers when it was not set apart as an independent science, through the utopians, to modern economic thought. Economic operation and the rational use of limited resources in order to satisfy unlimited human needs (and desires) is the heart of the economy (oikonomia - oikos, "household"; and nomos, "law," or "custom", all together "Household management or State management"). It is very important to mention that needs are not unlimited, while desires really have no limit. In that context, it is indisputable how needs can be measured and the degree of their satisfaction, starting from basic to luxury needs. Economic mathematics, statistics and other quantitative disciplines that find application in economics have long developed models for measuring the degree of satisfaction of needs.But things get further complicated and multidisciplinary when trying to measure the desires and sense of quality of life. Of course standards can be established to measure quality, but it is still a qualitative (descriptive) determination and it is far easier to measure quantity. The feeling of well-being and quality of life is a strongly expressed subjective experience.Quality of life is a subjective term that can measure happiness, and both can be flawed indicators because the factors can vary between people in the same geographic area or socioeconomic class. Quality of life is a more subjective and intangible term than standard of living. As such, it can often be hard to quantify. The factors that affect the overall quality of life

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vary by people's lifestyles and their personal preferences. Regardless of these factors, this measure plays an important part in the financial decisions in everyone's lives. However, although in the case of Quality of Life it is a subjective category that reflects the feeling of happiness and life satisfaction, there is still a methodology that covers certain variables on the basis of which an appropriate Quality of Life Index can be quantified (Karadjova, 2019, pp. 29).The purpose of the quality of life index is to provide a tool for community development which can be used to monitor key indicators that encompass the social, health, environmental and economic dimensions of the quality of life in the community (Susniene&Jurkauskas, 2009, pp. 58-66).Quality of Life Index (higher is better) is an estimation of overall quality of life by using an empirical formula which takes into account purchasing power index (higher is better), pollution index (lower is better), house price to income ratio (lower is better), cost of living index (lower is better), safety index (higher is better), health care index (higher is better), traffic commute time index (lower is better) and climate index (higher is better). The formula for the appropriate quantification that is currently being used has been several times amended in order to update and change the weights for the individual constituent components, thus changing the significance and impact of individual variables on the total index (Karadjova, 2019. pp. 30).In any case, regardless of changing the relative participation of the individual elements in the quality of life formula (and even adding new elements), it is indisputable that the elements in its composition achieve a direct correlation with standard of living, cost of living, purchasing power, which in turn are directly related to poverty as the inability to satisfy basic material needs and to inflation as a general increase in the price level.

The logical conclusion is that, despite the weight changes, the economic variables that have already been listed have the greatest impact on the the magnitude of the Quality of Life Index and that one cannot talk about quality of life without first meeting the standards for an optimal standard of living. That is why, the paper takes into account the basic indicators that determine the standard of living and the quality of life, such as GDP per capita, Poverty gap at $1.90 a day and Inflation (consumer prices) and they are analyzed in correlation with another complex index known as the Happiness Index, which attempts to determine happiness as an even more subjective category than the quality of life.The Happiness Index was first created by the Global Happiness Council, a group of independent academic happiness specialists. This group of people has released the World Happiness Report (WHR) every year since 2012. This index rates the happiness of countries on a scale from 0 to 10.It must be borne in mind that happiness is a highly complex and

multidimensional concept.Having in mindthat the sense of happiness is such a broad and psychological category that has a strongly expressed subjective element, it is difficult to determine the same with only one number. That's why the World Happiness Report goes further. The authors have found a number of key factors that could likely explain the variance in happiness. The authors of the World Happiness Report have determined 7 key factors that are correlated most to the Happiness Index: (1) GDP per capita; (2) Social support; (3) Healthy life expectancy; (4) Freedom to make life choices; (5) Generosity; (6) Perceptions of corruption; (7) Unexplained happiness.

Common to both indicators of well-being (Quality of Life Index and The Happiness Index) is the incorporation of economic variables in their calculation such as: GDP per capita, non/employment, purchasing power, standard of living. Therefore, in the paper, an initial analysis of some of the basic economic indicators (GDP per capita, poverty and inflation) and the degree of their correlation with the happiness index is made. In order to avoid any non-standard changes of the analyzed data that could affect the result, the official data for the mentioned economic categories in 2019 were taken into account in the calculation, as the last year in which the economic life took place without any restrictions and limitations. For the greatest relevance of the obtained results, the calculation includes data for 67 countries in the world with different degrees of economic development. Such a calculation and the obtained results are only an initial result that can serve as a starting point for further expansion and deepening of similar analyzes in some related research that will confirm or not confirm the thesis of correlation (and degree of correlation) between basic economic indicators and indicators of economic well-being.

BASIC ECONOMIC INDICATORS VS.INDICATORS OF ECONOMIC WELL-BEING

The basic indicator used to measure economic growth is undoubtedly *GDP* and *GDP per capita*.GDP is considered the "world's most powerful statistical indicator of national development and progress" (Lepenies, P. & Gaines, J., 2016). An IMF publication states that "GDP measures the monetary value of final goods and services - that are bought by the final user - produced in a country in a given period of time (say a quarter or a year)" (Callen, 2017). But, nominal GDP per capita does not, however, reflect differences in the cost of living and the inflation rates of the countries;

therefore using a basis of GDP per capita at purchasing power parity (PPP) is arguably more useful when comparing differences in living standards between nations (Karadjova &Dicevska, 2018, pp. 30). On the other hand, one should consider the difference between quantitative growth and qualitative development, with GDP being an indicator of growth. Development is a broader concept that includes growth, but also technological and any other type of advancement of the social community. Development as a qualitative characteristic means the improvement of the qualitative characteristics of society and the well-being of individuals, and well-being is not just an increase in GDP, but a subjective feeling of people in the community that they live better, a feeling of improving the quality of life.Growth and development together make community progress.

For the purposes of more precise quantification of growth, and in the direction of determining the development, this indicator is complemented by other economic and social indicators such as the degree of industrialization, the level of education, health and social protection, the length of life, mortality, infant mortality, and a range of other indicators. It is in this direction that specific reports on "human development" are developed within the United Nations (UN), i.e. for overall economic and social development of the community, and not only for the economic development of the country (Karadjova &Dicevska, 2018, pp. 31).*The Human Development Index*(HDI) was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.HDI is a summary measure of average achievement in key dimensions of human development: *a long and healthy life*, *being knowledgeable* and *have a decent standard of living*. The HDI is the geometric mean of normalized indices for each of the three dimensions (https://hdr.undp.org/data-center/human-development-index#/indicies/HDI).
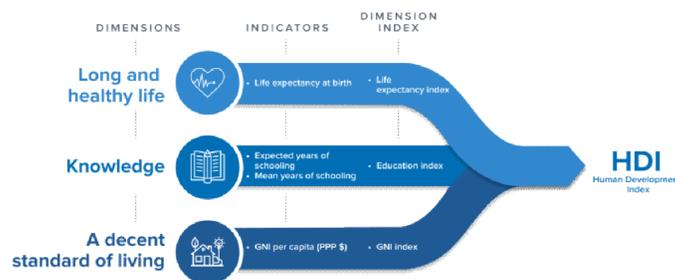

Figure 1.HDI Dimensions and Indicators

The generally accepted principle that economic development is not an end in itself, but should be in the direction of overall human development, still encounters difficulties in its application.

The standard of living on its own is also a complex concept. It basically refers to the use and enjoyment of material and spiritual goods and services that are personally acquired or provided by the state.Whenever the standard of living is discussed, inevitably is the question about the factors that determine its level, among which the basic factor is the level of economic development of the country. The higher the level of development is, the higher the average level of the standard of living for the population as a whole is (which certainly does not exclude differences between individual layers of the population).More importantly, countries with a higher level of economic development basically have higher labor productivity, primarily because of the better equipment and better human capital. This provides a more permanent basis for a high standard of living, because ultimately the standard of living depends on the achieved level of labor productivity in the given economy (Mojsoski& Karadjova, 2002, pp. 390).Apart from the level of economic development, the living standard also depends on other factors that can be summarized in the following way (Karadjova, 2019, pp. 29):
- the level of economic development of the country (in this context, labor productivity should be mentioned);
- macroeconomic (in)stability in the country;
- distribution policy, etc.

Talking about macroeconomic (in) stability in the country, we have to keep in mind the basic macroeconomic problems like unemployment (as well as poverty which is related to lack of work and income) and inflation.The simplest interpretation of *unemployment* is as a condition caused by the inability of the labor market to reach equilibrium. Following the market laws of perfect competition, buyers buy according to their own free will and sellers also sell according to their own free will, so depending on the supply/demand ratio, prices rise or fall. But these laws do not apply to the labor market.The inflexibility of wages is the cause of unemployment in the labor market. Wage inflexibility is caused by many reasons, but the main reason is the fact that the labor market cannot have the same characteristic as auction markets, that is, the price of labor cannot change quickly under the influence of demand/supply (Karadjova &Simonceska, 2005).In this sense, the emergence of *poverty* is followed, and determining the term poverty,

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according to Eurostat definition: forpoor people are considered persons, families and groups of persons whoseresources (material, cultural andsocial) are at a level that excludes them from theminimum acceptable manner of living in the country in which they live.Poverty, as defined by economics, is a state or condition in which a person or community lacks the financial resources and essentials to enjoy a minimum standard of life and well-being that's considered acceptable in society (Karadjova &Diceska, 2018, pp. 35).Living below the poverty threshold also means that a certain number of citizens are unable to meet basic needs or cover the costs of normal living (housing, food, electricity, water, etc.).The concept of living standards is closely linked to the poverty problem. In thesame time, macroeconomic stability, i.e. price stability is one of the primaryfactors that determine living standards. So, unstable prices, i.e. *inflation* inconditions of constant nominal wages or in conditions when wages grow slowerthan the rise in prices, reduce their real value. Therefore, whenever we analyze thelevel of personal consumption and the living standard, price changes must be considered.

According to OECD, the poverty gap is the ratio by which the mean income of the poor falls below the poverty line. The poverty line is defined as half the median household income of the total population. The poverty gap helps refine the poverty rate by providing an indication of the poverty level in a country. This indicator is measured for the total population, as well as for people aged 18-65 years and people over 65 (https://data.oecd.org/inequality /poverty-gap.htm).In the analysis in this paper, the lowest poverty threshold is taken ($1.90 a day) as an extremely low point with which to measure the correlation with the feeling of well-being. It leaves room to expand the analysis with other poverty indicators in subsequent analyses.

While the achieved standard of living refers to the level of wealth, comfort, material goods and necessities available to a particular socioeconomic class or geographic area, *quality of life* is a subjective term that can measure happiness. If not properly defined, the two terms are often confused and at first glance may appear to be the same category.The factors that affect the overall quality of life vary by people's lifestyles and their personal preferences. Regardless of these factors, this measure plays an important part in the financial decisions in everyone's lives. However, although in the case of quality of life it is a subjective category that reflects the feeling of happiness and life satisfaction, there is still a methodology that covers certain variables on the basis of which an appropriate quality of life Index can be quantified.Quality of life Index (higher is better) is an estimation of overall quality of life by using an empirical formula which takes into

account purchasing power index (higher is better), pollution index (lower is better), house price to income ratio (lower is better), cost of living index (lower is better), safety index (higher is better), health care index (higher is better), traffic commute time index (lower is better) and climate index (higher is better) (Karadjova, 2019, pp. 30).The formula set up in this way for measuring the quality of life has been changed and corrected several times, the weights of individual components have been changed, but it is basically based on the already mentioned components with which the quality of life is "measured".The most accurate determination of the quality of life refers to the satisfaction from work and life in general, through all aspects that make up the complex of people's needs, not just material needs, but needs that give meaning to life in every way, even in philosophy of life ultimately.

An indicator closely related to the quality of life is the indicator called *World happiness score*.World happiness score (WHS) is another indicator for development which is in use from 2012 when first World Happiness Report was released (April 1, 2012). Data is collected from people in over 150 countries (157 in 2018 Report, 149 in 2021 Report - https://world happiness.report/ed/2021/#appendices-and-data). Each variable measured reveals a populated-weighted average score on a scale running from 0 to 10.As stated in the 2021 Report, "our measurement of subjective well-being relies on three main indicators: life evaluations, positive emotions, and negative emotions (described in the report as positive and negative affect). Our happiness rankings are based on life evaluations, as the more stable measure of the quality of people's lives" - https://world happiness.report/ed/2021/happiness-trust-and-deaths-under-covid-19/.

Although this indicator is based on the UN General Assembly resolution 65/309 Happiness: Towards a Holistic Definition of Development, adopted on 19 July 2011, it is clearly stated that The World Happiness Report was written by a group of independent experts acting in their personal capacities. Any views expressed in the report do not necessarily reflect the views of any organization, agency or program of the United Nations. So, taking into consideration the evolution of measuring happiness, first index was created by the Global Happiness Council, a group of independent academic happiness specialists in 2012. The definition of the Happiness Index originates from the Bhutanese Gross National Happiness Index. In 1972, Bhutan started prioritizing happiness over other factors such as wealth, comfort and economic growth. World Happiness Report now determines the same concept as that of a "Happiness ladder". So, we can talk about

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happiness index, happiness ladder or happiness score as almost identical terms.If we consider the seven key factors most related to the Happiness Index: (1) GDP per capita; (2) Social support; (3) Healthy life expectancy; (4) Freedom to make life choices; (5) Generosity; (6) Perceptions of corruption; and (7) Unexplained happiness, quite logically, the need to correlate the indicators of economic growth and development, and the indicators of economic well-being is imposed, and all that in order to measure their mutual connection and mutual influence, i.e. the correlation of real economy and so called economy of happiness.At the same time, beyond the philosophical considerations of happiness, in a sustained economic analysis, the postulate known as The Easterlin Paradox[3]must also be taken into consideration, according to which at a point in time happiness varies directly with income, both among and within nations, but over time the long-term growth rates of happiness and income are not significantly related.In that direction, this paper offers another quantitative analysis on the connection of indicators of economic growth and development, and economic well-being and subjective well-being on the other side.

RELATIONSHIP AMONG BASIC INDICATORS OF ECONOMIC DEVELOPMENT AND INDICATORS OF ECONOMIC WELL-BEING

Multiple regression model has been used in the research to determine the relationship between selected basic indicators of economic development and the happiness index as an indicator of economic well-being.

Economic well-being is expressed with the happiness index which is taken as dependent variable. We have regression with an intercept and we took the following regressors to determine the relationship:

- **Inf.** - Inflation, consumer prices (annual %). Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used.

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[3]Richard A. Easterlin, University Professor and Professor of Economics, University of Southern California;Best known for the economic theory named after him, the Easterlin paradox;(main topics of interest: Subjective Well-Being, Demography, Economic History)
https://scholar.google.com/citations?user=pBYzJL8AAAAJ&hl=en

- **GDPperC** - GDP per capita, PPP (current international $). This indicator provides per capita values for gross domestic product (GDP) expressed in current international dollars converted by purchasing power parity (PPP) conversion factor. GDP is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. conversion factor is a spatial price deflator and currency converter that controls for price level differences between countries. Total population is a mid-year population based on the de facto definition of population, which counts all residents regardless of legal status or citizenship.
- **PovertyGap** -Poverty gap at $1.90 a day (2011 PPP) (%). Poverty gap at $1.90 a day (2011 PPP) is the mean shortfall in income or consumption from the poverty line $1.90 a day (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

The basic economic development indicators data used in the research are taken from the World Bank data set: https://databank.worldbank.org/. Happiness index are taken from the World Happiness Report. Source: https://worldhappiness.report/. Number of observations (sample) used for the research is 67, which means 67 countries have available data for the selected indicators. The reported data are for the same year (2019).

The population regression model is:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + u \qquad (1)$$

It is assumed that the error u is independent with constant variance (homoskedastic) and the regression line is estimated as:

$$y = b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 \qquad (2), \text{ where}$$

y = Happiness index
x_1 = Inflation
x_2 = GDP per capita
x_3 = Poverty gap
b_0 = intercept of the population
b_1, b_2, b_3 = slope of the population (the least square estimates)

Excel's data analysis package is used for the purpose of the research and for calculating regression output which has three components: (1) Regression statistics table, (2) ANOVA (analyze of the variance) and (3) Regression coefficient table

Table 1. Regression statistic output

Multiple R	0.853193
R Square	0.727939
Adjusted R Square	0.714984
Standard Error	0.56624
Observations	67

Source: own calculations

Multiple R is the value of the correlation coefficient which indicates positive correlation between variables. More important for the research are the values of adjusted R^2 that represents Coefficient of Determination which explains the intensity of variation of the dependent variable caused by independent variables in the model.

Adjusted R^2 value of 0.71 indicates that 71% of the variation of y values around the mean is explained by the regressors x_1, x_2, x_3, or 71% of the values fit the model. From the results, we can conclude that there is significant connection between selected economic development indicators and economic well-being.

To determine the population coefficients of the regresses, data from the table 3 are used. As seen from the calculated values, the model can be interpreted through the following equitation:

$$y = 5.26 - 0.002x_1 + 0.00003x_2 - 0.07x_3 \qquad (3)$$

As seen from the model results, even very small increase of the GDP per capita will have a highly positive impact on the economic well-being. On the other hand there is a negative relation between inflation and people happiness and poverty and people happiness which is expected. Still, to confirm the results we need to test the model.

Testing the model. The null and alternative hypotheses are needed to be established to test the statistical significance of the model. It can be determined whether significant relationship between explanatory and response variable exists by testing whether β1 is equal to zero. If this

hypothesis is rejected, it can be concluded that there is evidence of linear relationship. Therefore, the following hypotheses were stated:

- H_0: β_1=0 (there is no relationship between variables);
- H_1: β_1≠0 (variables are related)

Level of significance α is set on 0.05. Testing the hypotheses can be done by using ANOVA to calculate F value and significance F or using t-test statistic to calculate p and t–values. MS Excel software is used for all the calculations. Results of ANOVA are given in table 2. Results indicate that F>Fsignif which confirms that the used model has statistical relevance. It means that probabilities that the regression output could have been obtained by chance are very small.

Table 2. ANOVA

	Df	SS	MS	F	Significance F
Regression	3	54.04689	18.01563	56.18854	8.56E-18
Residual	63	20.19957	0.320628		
Total	66	74.24646			

Source: own calculations

Validity of regression output can also be confirmed by comparing p value with α level of confidence. If p < α than the Ho will be rejected and it can be concluded that selected variables are statistically significant for the model.
Another way to test the validity of the model is calculating t statistics. Critical value of t is calculated using MS Excel formula for a two tailed t distribution having n-k = degrees of freedom and α=0.05 level of confidence, where n=67 (number of observation) and k=4 (number of regressors with intercept). If $|t|>t_{63}$, H_0 will be rejected. The value of t_{63} was calculated at 1.998341.

Table 3. Regression coefficient table

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	5.264535	0.127324	41.34763	2.27E-47	5.010099	5.518971
Inf	-0.00204	0.001066	-1.9168	0.059801	-0.00417	8.69E-05
GDPperC	2.92E-05	3.56E-06	8.192917	1.64E-11	2.2E-05	3.63E-05
Poverty gap	-0.07097	0.015083	-4.70516	1.43E-05	-0.10111	-0.04083

Source: own calculations

The results in table 3 indicate that:

a. The coefficient of Inflation has estimated standard error of 0.001066, t-statistic of -1.9168 and p-value of 0.059801.Using the p value approach, null hypothesis cannot be rejected and it shows that the variable is statistically insignificant at significance level $\alpha = 0.05$ as $p>0.05$. The t-values approach indicates that $|t|<t_{63}$, which means H_0cannot be rejected and also indicates that inflation is statistically insignificant for the model.

b. The coefficient of GDP per capita has estimated standard error of 0.0000036, t-statistic of 8.2 and p-value of 0.0000000002.Using the p value approach, null hypothesis will be rejected and it shows that the variable is statistically significant at significance level $\alpha=0.05$ as $p<0.05$. The t-values approach indicates that $|t|>t_{63}$, which means H_0will be rejected and also indicates that the variable is statistically significant for the model.

c. The coefficient of Poverty gap has estimated standard error of 0.015, t-statistic of -4.70 and p-value of 0.000014.Using the p value approach, H_0will be rejected and it shows that the variable is statistically significant at significance level $\alpha=0.05$ as $p<0.05$. The t-values approach indicates that $|t|>t_{63}$, which means H_0will be rejected and also indicates that the variable is statistically significant for the model.

As the results from the model testing indicates that the inflation cannot be considered as statistically significant for the model, we created another model using two significant variables of the previous model.
The second model is estimated as:

$$y = b_0 + b_1x_1 + b_2x_2 \qquad \text{(4), where}$$

y = Happiness index
x_1 = GDP per capita
x_2 = Poverty gap
b_0 = intercept of the population
b_1, b_2 = slope of the population (the least square estimates)

Table 4. Regression statistic output (model 2)

Multiple R	0.843844
R Square	0.712072
Adjusted R Square	0.703075
Standard Error	0.577949

Observations	67

Value of the Adjusted R^2 is 0.70 (table 4) indicates that 70% of the variation of y values around the mean is explained by the regressors x_1, x_2, or 70% of the values fit the model. From the results, we can conclude that there is significant connection between selected economic development indicators (GDP per capita and Poverty gap) and economic well-being (Happiness index).

To determine the population coefficients of the regresses, data from the table 3 are used. As seen from the calculated values, the model can be interpreted through the following equitation:

$$y = 5.26 + 0.00003x_2 - 0.08x_3 \qquad (4)$$

As seen from the model results, even very small increase of the GDP per capita will have a highly positive impact on the economic well-being. On the other hand there is a negative relation between the poverty gap and people's happiness which is expected. To confirm the results we did another model testing.

Results of ANOVA test of the new model are given in table 5. Calculations indicate that F>Fsignif which confirms that the used model has statistical relevance. It means that probabilities that the regression output could have been obtained by chance are very small.

Table 5. ANOVA (model 2)

	Df	SS	MS	F	Significance F
Regression	2	52.86886	26.43443	79.13907	4.98E-18
Residual	64	21.3776	0.334025		
Total	66	74.24646			

The results in table 6 indicate that:

The coefficient of GDP per capita has estimated standard error of 0.0000036, t-statistic of 8.05 and p-value of 0.0000000002.Using the p value approach, null hypothesis will be rejected and it shows that the variable is statistically significant at significance level $\alpha = 0.05$ as $p < 0.05$. The t- values approach indicates that $|t| > t_{64}$, ($t_{64} = 1.99773$, as n=67, k=3 as there is 1 intercept and 2 regressors) which means H_0 will be rejected and also indicates that the variable is statistically significant for the model.

Table 6.Regression coefficient table (model 2)

	Coefficients	Std.Er.	t Stat	P-value	Lower 95%	Upper 95%
Intercept	5.259555	0.129929	40.48008	2.55E-47	4.999991	5.519118
GDPperC	2.93E-05	3.63E-06	8.056814	2.56E-11	2.2E-05	3.65E-05
Poverty gap	-0.07779	0.01496	-5.20002	2.23E-06	-0.10768	-0.04791

Source: own calculations

The coefficient of Poverty gap has estimated standard error of 0.015, t-statistic of -5.20 and p-value of 0.000002.Using the p value approach, null hypothesis will be rejected and it shows that the variable is statistically significant at significance level $\alpha = 0.05$ as $p < 0.05$. The t- values approach indicates that $|t| > t_{64}$, ($t_{64}= 1.99773$, as n=67, k=3 as there is 1 intercept and 2 regressors), which means H_0 will be rejected and also indicates that the variable is statistically significant for the model.

CONCLUDING CONSIDERATIONS

In order to draw the final conclusions from the theoretical elaboration, as well as from the quantitative part of the analyzed indicators in the paper, first of all, the question should be taken into account: Does economic growth bring happiness? Before that, of course, we should have at least some perception of what happiness is, what makes people happy and why? With economic terminology, it means to answer the question about the level of living standards and about the level of economic well-being and quality of life. It is precisely the close intertwining and mutual dependence of these categories that imposes the need for their parallel monitoring, and that is where the idea for the analysis made in this paper came from.

Through a quantitative analysis that was made with a multiple regression model, the relationship between selected basic indicators of economic development (inflation, GDP per capita, Poverty gap) and the Happiness index as an indicator of economic well-being was examined. Happiness index was taken as dependent variable.From the results, we can conclude that there is significant connection between selected economic development indicators and economic well-being.

As seen from the model results, even very small increase of the GDP per capita will have a highly positive impact on the economic well-being. On the other hand there is a negative relation between inflation and people happiness and poverty and people happiness which is expected. Still, to confirm the results we test the model. As the results from the model testing indicates that the inflation cannot be considered as statistically significant for the model, we created another model using two significant variables of the first model.To confirm the final results, we did another model testing, which indicates that the probabilities that the regression output could have been obtained by chance are very small. The results confirm that the coefficient of GDP per capita and the coefficient of Poverty gap are statistically significant for the model. Even inflation (although the model used shows that cannot be considered as statistically significant) does not have too much deviation in the error, and if not directly, then indirectly have an impact on the feeling of well-being.Such results impose the need for additional analyses, especially in periods of higher inflation and reduction in the purchasing power of the population, which makes a direct connection with the coefficient of the poverty gap. Once again the question of the mentioned Easterlin paradox is raised and there is a need to monitor long time series. In the regression model used in the paper, data from only one year has been analyzed and the model indisputably confirms the connection between the selected indicators of economic growth and development and the feeling of well-being and happiness.

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