



IMPACT OF ECONOMIC FREEDOM ON THE STANDARD OF LIVING IN ALBANIA

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Abstract

This paper examines the impact of Economic Freedom on the standard of living in Albania. Using macroeconomic data for the period 2000-2020, we answer some research questions related to this issue for the Albanian economy. Economic Freedom is the fundamental right of a person to control his work and property. In an economically free society, individuals are free to work, produce, consume, and invest in whatever way they want. Taking into consideration its importance, this issue is studied for different countries, so in our paper, we are focused on Albania`s economy. The main objective of this paper is to examine the impact of economic freedom, expressed through the Economic Freedom Index of the Heritage Foundation, on the standard of living of our country. The study is based on secondary data about Economic Freedom and GDP per capita in Albania. The time-series data used are obtained from Heritage Foundation. Economic Freedom measured is based on 12 quantitative and qualitative factors, grouped into four broad categories, or pillars, of economic freedom. To determine the impact of Economic Freedom and its elements, as well as the impact in the Index of Economic Freedom

on the GDP per capita in Albania, different statistical methods are applied in the empirical research such as Descriptive statistical methods, Correlation analysis, and Linear regression. This study finds strong support for the research questions presented; the higher the level of economic activity, the higher the level of the per capita real GDP. The empirical results of our analysis are in part consistent with similar studies focused on this area. The results confirmed that Economic Freedom has a positive impact on the standard of living.

Keywords: Economic Freedom index, GDP per capita, economic growth, standard of living

INTRODUCTION

Over the past two decades, numerous studies have been conducted expressly to investigate the impact of Economic Freedom on economic growth (Cebula et. al, 2013), but very few for the Albanian Economy.

Albania is a developing country with a service-based economy (about 64%), agriculture (about 21%), and the industrial sector (15%), (INSTAT 2016). The most powerful sectors are energy, mining, metallurgy, agriculture, and tourism. Moreover, Albania has the second-largest oil deposits in the Balkans and the largest onshore oil reserves in Europe. The GDP in Albania was 13 billion euros in 2020, according to official data from the World Bank.

As mentioned above, we have chosen to study the impact of Economic Freedom on the standard of living, focusing on Albania. The Index covers 12 freedoms – from property rights to financial freedom (2021 index of Economic Freedom). The level of Economic Freedom is explained based on a defined scale, at which a value close to zero indicates a “repressed” economy (below 50 points on the scale), and then through “mostly unfree” (50-59.9), “moderately free” (60 - 69.9) and the “mostly free” economy (70 - 79.9), we get to a higher level of scale (80 - 100) which represents a “free” economy.

The principles of Economic Freedom are widely respected and accepted and this is distinguished by the fact that in 2019 we have a significant increase globally. According to the index, Economic Freedom and economic prosperity go parallel. For those countries which are still in a communist regime, there have been clear negative consequences on their economic performance as well as a decline in their index ranking. On the contrary, countries that have rigorously pursued government policies and demonstrated their commitment has had a high economic performance. Countries that have given up Economic Freedom including interventionist policies have had a hard time getting out of the crisis, as well as had a major economic stalemate.

Albania’s Economic Freedom score is 65.2, making its economy the 66th freest in the 2021’s Index. Its overall score has decreased by 1.7 points, primarily because of declines in property rights and judicial effectiveness. Albania is ranked 35th among 45 countries in the European region, and its overall score is below the regional average but above the world average (Heritage.org, 2021).

The Economic Freedom index is used successfully in a lot of papers, verifying the relationship between Economic Freedom with poverty, the standard of living, economic growth, human development, global innovation, etc.

Per capita GDP is used by economists along with GDP, to measure the prosperity of a country based on its economic growth. The richer the country is, the higher per capita GDP is. GDP per capita for 2020 was \$5,215, a 2.62% decline from 2019, for 2019 was \$5,356, a 1.35% increase from 2018. GDP per capita for 2018 was \$5,284, a 16.63% increase from 2017, for 2017 was \$4,531, a 9.87% increase from 2016. The GDP per Capita in Albania is equivalent to 35 percent of the world's average.¹

In free economic societies, governments allow labor, capital, and goods to move freely.² Economic Freedom creates prosperity and has a positive relationship between standard of living and other macroeconomics indexes.

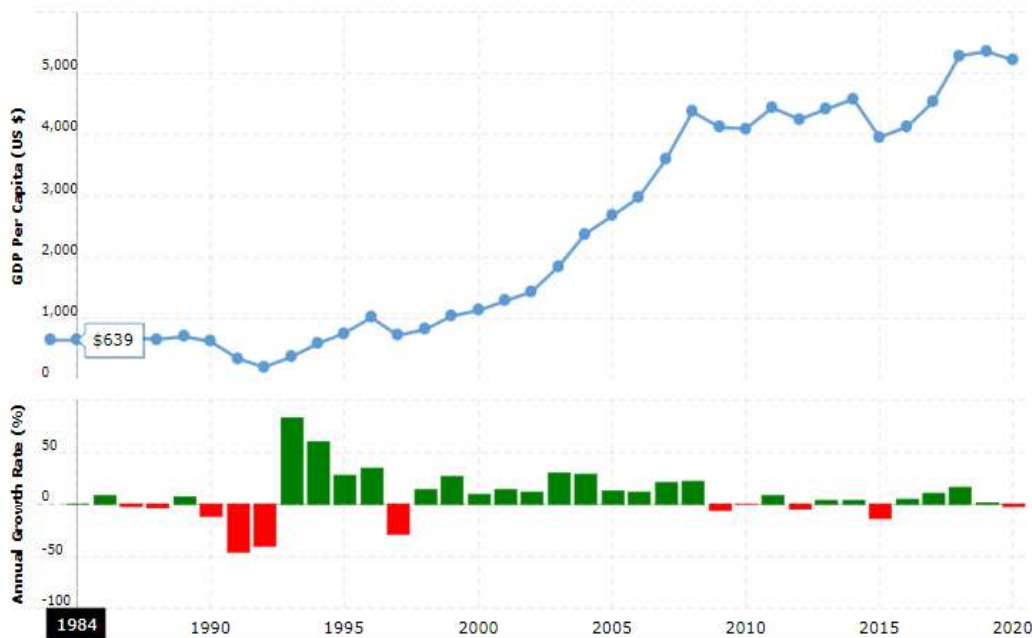


Figure 1: GDP per capita (current US\$) – Albania

Source: World Bank.org

¹ World. Bank.org

² 2021 index of economic freedom | the heritage foundation

In a narrow sense, we will measure the standard of living using GDP per capita, which provides a quick, rough estimate of the total amount of goods and services available per person. Standards of living are usually higher in developed countries. Emerging market economies usually see rising standards of living over time as they grow and develop into modern, industrialized economies³. Quality of life and standard of living are often believed to mean the same but, there is a significant difference between them.

Since in several countries, research has shown that the aggregate index of Economic Freedom is not determinant for the economic growth and GDP per capita, we made this reasearch thinking that is often necessary to specify those aspects of Economic Freedom that lead to the economic expansion of countries.

So, the main objective of this paper is to examine the impact of economic freedom, evidenced through the Economic Freedom Index of the Heritage Foundation, on the standard of living. The paper will also examine the impact of the elements of Economic Freedom on the percentage of the standard of living and also the relationship between the elements of Economic Freedom and the standard of living. Our objectives will reach answering some questions: what is the Index of Economic Freedom and for what does it serve; what is the relationship between Rule of Law, Government Size, Regulatory Efficiency, and Open Markets with the standard of living; and finally, is there a relationship between the overall index and standard of living.

LITERATURE REVIEW

A number of the researchers have confirmed a positive relationship between the index of Economic Freedom and the rate of economic growth. Most of these researchers, in their papers, have found there is a strong and positive impact of Economic Freedom on the rate of economic growth between countries.

In his paper, Heckelman (2000) points out that the Heritage Foundation Index of Economic Freedom's greatest priority lies in the institutional measures for index formation, which means effective monitoring of government policies, serving as a signal if these policies are or not in the service of economic freedom.

Easton & Walker, (1992) observed how Economic Freedom affects the formation of the level of gross national product as well as its growth. They noted that Economic Freedom is a significant variable in economic growth.

³ Investopedia

Ayal & Karras (1998) in their paper, showed an important relationship between Economic Freedom and growth.

Dawson (2007), identified a positive relationship between Economic Freedom and economic growth.

On the contrary Cebula et al. 2014, stressed out that financial and labor freedom, and fiscal freedom as well, don't play major roles in determining the level of per capita real income in OECD nations.

Other authors have addressed the question that: what is the impact of Economic Freedom in certain countries, and if exists a negative or positive relationship between economic growth and economic freedom. Most of these empirical studies find that there exists a strong, positive impact of economic freedom, on the rate of economic growth (Powell 2019, Erdal 2004, Erdal & Yenipazarli 2013).

Considering that the main objective of the paper is to analyze the impact of Economic Freedom on the economy, we will analyze different macroeconomic indexes to acheive our goal.

MATERIAL AND METHOD

The methodology used will be based on empirical analysis, to examine the impact of Economic Freedom on the standard of living for the last 20 years.

We will use data generated from Heritage Foundation and according to them, the Economic Freedom measure is based on 12 quantitative and qualitative factors, grouped into four broad categories, or pillars, of economic freedom: Rule of Law (property rights, government integrity, judicial effectiveness); Government Size (government spending, tax burden, fiscal health); Regulatory Efficiency (business freedom, labor freedom, monetary freedom); Open Markets (trade freedom, investment freedom, financial freedom). The period data is from 2000 to 2020.

Each of the twelve Economic Freedoms within these categories is graded on a scale of 0 to 100. A country's overall score is derived by averaging these twelve Economic Freedoms, with equal weight being given to each.

Per capita real income is measured by the per capita real GDP in Albania over the 20-year study period from 2000 through 2020 data of World Bank,⁴ and for Economic Freedom as GDP per capita, was covered from 2000 to 2020 data of Economic Foundation⁵, which is considered to be an appropriate sample size necessary for conducting time series for the purpose of obtaining relevant and reliable results.

⁴ <http://data.worldbank.org>

⁵ Economic Foundation

Descriptive statistical methods are used for calculating, displaying, and describing the basic characteristics of statistical series. Correlation analysis is used to determine whether there is a link between economic freedom, its elements, and GDP per capita in Albania. Linear regression is used to determine the impact of Economic Freedom and its elements, as well as the impact in the Index of Economic Freedom on the GDP per capita in Albania.

The dependent variable is GDP/per capita, and the independent variable is Economic Freedom. Equation used: $\log\text{GDP_per_capita} = a + b \cdot \log\text{OS}$.

ANALYSIS AND FINDINGS

First, descriptive analysis was carried out through mean values, standard deviations, minimum and maximum, while heterogeneity across four pillar and years was presented graphically. This was followed by determining the correlation between variables for each pillar and GDP per capita, based on which the nature of the relationship as well as its statistical significance can be established.

Descriptive analysis

The most fundamental benefit of Economic Freedom stems from the strong positive relationship between Economic Freedom and levels of per capita income⁶. As indicated in Figures 2 and 3, countries moving up the Economic Freedom scale show increasingly high levels of average income.⁷

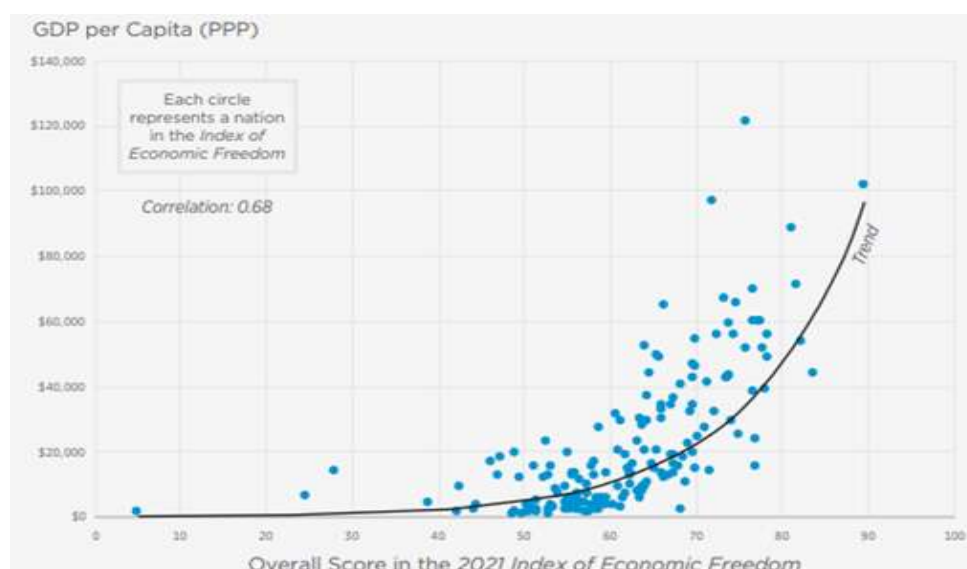


Figure 2: Economic freedom and standard of living.(World)

Source: The World Bank, Heritage.org

⁶ Heritage.org

⁷ heritage.org

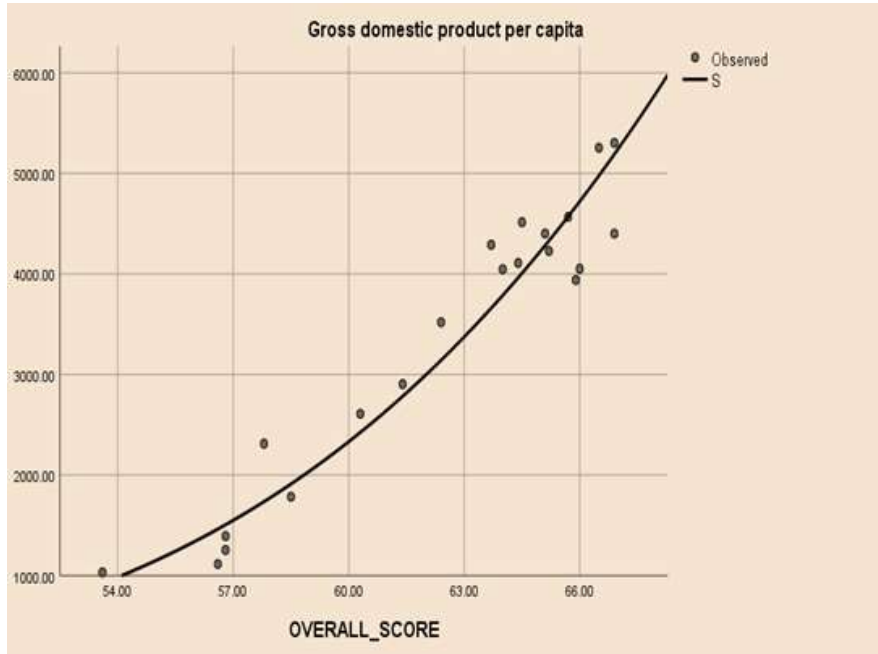


Figure 3: Economic freedom and standard of living.(Albania)

Source: Authors calculation

As we see the figures 2 and 3 show the same trend of data, and both show increasingly high levels of average income in World and Albania for the high score of the index. The relationship between Economic Freedom and gross domestic product per capita is highly significant.

The correlation coefficient depicts the basic relationship across two variables: The question that arises is: do two variables tend to increase together or to change in opposite directions and, if so, by how much?

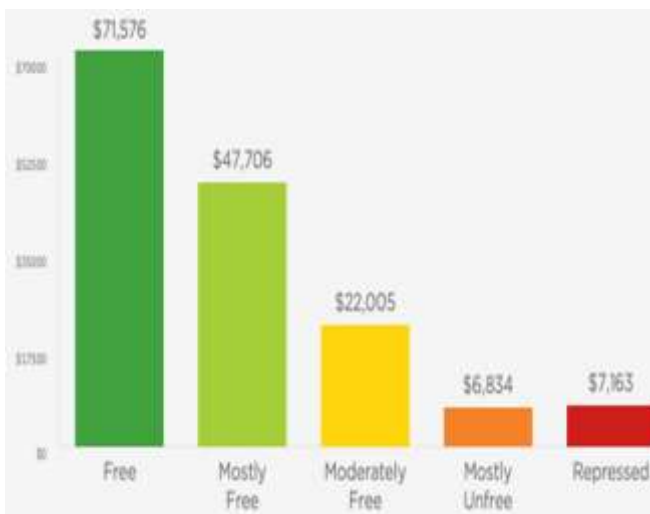


Figure 4: Category in the 2021 Index of Economic Freedom (World)
Source: The World Bank, Heritage.org,

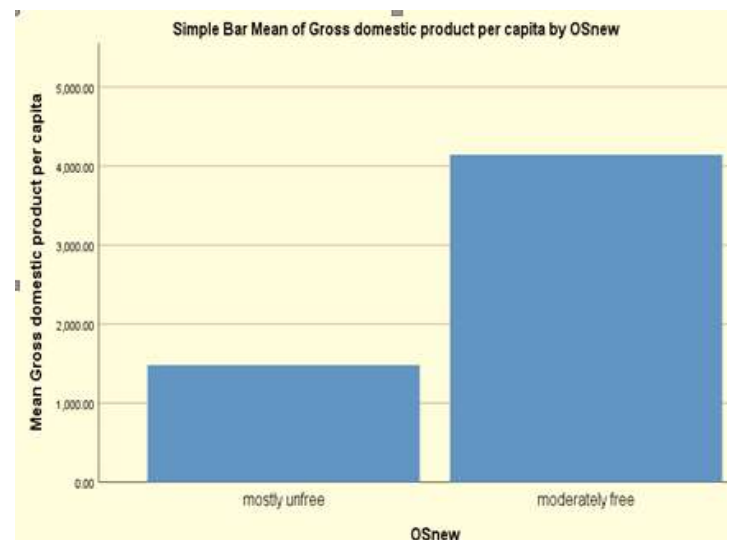


Figure 5: Category in the 2021 Index of Economic Freedom (Albania)
Source: Authors calculation

As indicated in Figures 4 and 5, the category in the 2021 Index of Economic Freedom shows that the more the economy is free, the greater the GDP per capita is.

Table 1 represents the basic characteristics of the dependent and independent variables by descriptive statistics. The dependent variable GDP per capita has a maximum value of 5303.00, a minimum value of 1032.00, and a mean value of 3382.1905.

Table 1: Descriptive Statistics

| | N | Minimum | Maximum | Mean |
|-----------------------|----|---------|---------|-----------|
| GDP per capita | 21 | 1032.00 | 5303.00 | 3382.1905 |
| Rule of Law | 21 | 21.00 | 42.97 | 30.2984 |
| Government Size | 21 | 63.80 | 82.27 | 70.5540 |
| Regulatory Efficiency | 21 | 58.23 | 70.47 | 65.2921 |
| Open Markets | 21 | 52.60 | 77.50 | 69.0444 |

Correlation analysis

Bivariate correlations estimate the correlation coefficients between two variables at a time, ignoring the effect of all other variables. If the two variables have a positive correlation, they move in the same direction. If they move in opposite directions, they have a negative correlation.

The correlation coefficient is > 0 in all the cases. This implies that the variables (GDP per capita, Rule of Law, Government Size, Regulatory Efficiency and Open Markets) move in the same direction. If one is higher, then so is the other. This result is expected. The two asterisks indicate that the estimate of 0.674 is statistically significant at the 0.01 level—a 99% degree of confidence. A positive relationship is an expected result.

Table 2: Correlation between GDP per capita and four pillars of the Economics freedom index

| | | GDP per capita | Rule of Law | Government Size | Regulatory Efficiency | Open Markets |
|----------------|---------------------|----------------|-------------|-----------------|-----------------------|--------------|
| GDP per capita | Pearson Correlation | 1 | .811** | .845** | .809** | .945** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 |
| | N | 21 | 21 | 21 | 21 | 21 |
| Rule of Law | Pearson Correlation | .811** | 1 | .842** | .678** | .745** |
| | Sig. (2-tailed) | .000 | | .000 | .001 | .000 |
| | N | 21 | 21 | 21 | 21 | 21 |

| | | | | | | |
|-----------------------|-----------------|--------|--------|--------|--------|--------|
| Government Size | Pearson | .845** | .842** | 1 | .541* | .733** |
| | Correlation | | | | | |
| | Sig. (2-tailed) | .000 | .000 | | .011 | .000 |
| | N | 21 | 21 | 21 | 21 | 21 |
| Regulatory Efficiency | Pearson | .809** | .678** | .541* | 1 | .817** |
| | Correlation | | | | | |
| | Sig. (2-tailed) | .000 | .001 | .011 | | .000 |
| | N | 21 | 21 | 21 | 21 | 21 |
| Open Markets | Pearson | .945** | .745** | .733** | .817** | 1 |
| | Correlation | | | | | |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 21 | 21 | 21 | 21 | 21 |

Table 2...

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The table 2 gives us the value of the correlation (between -1 and 1) and its level of significance. As we see from the variable GDP per capita has a strong positive correlation with Rule of Law, Government Size, Regulatory Efficiency, and Open Markets

Linear regression

The first assumption of linear regression is that there is a linear relationship between the two independent variables. The easiest way to detect if this assumption is met is to create a scatter plot of one vs. other. This allows us to visually see if there is a linear relationship between the two variables. If it looks like the points in the plot could fall along a straight line, then there exists some type of linear relationship between the two variables and this assumption is met.

The points in the plot below look like they fall on roughly a straight line, which indicates that there is a linear relationship between the Economic Freedom index score and GDP per capita.

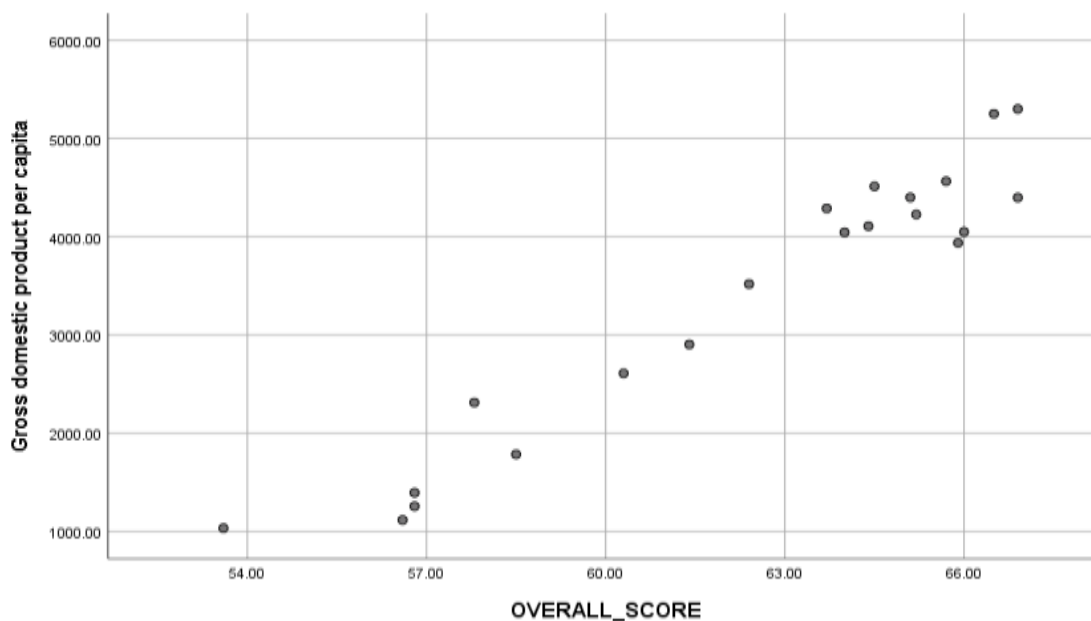


Figure 6: Scatter plot (GDP per capita and Economic Freedom index score)

The table below shows the result of the tests of independence, homoscedasticity, and normality. As we see from the results, we accept the null hypothesis, which means that there is no correlation among the residuals, there is no presence of Heteroskedasticity among data, and the residuals follow the normal distribution.

Table 3: Assumption of linear regression

| Assumption of linear regression | Hypotheses | Test | Significance |
|---------------------------------|--|-----------------------|--------------|
| linear relationship | N/A | visual | Scatter plot |
| Independence | H0 (null hypothesis): There is no correlation among the residuals. HA (alternative hypothesis): The residuals are autocorrelated. | Durbin-Watson test | 1.635 |
| Homoscedasticity | H0 (null hypothesis): Homoskedasticity HA (alternative hypothesis): Heteroskedasticity | Breusch-Pagan-Godfrey | 0.1295 |
| Normality | H0 (null hypothesis): Residuals are normal distribution HA (alternative hypothesis): Residuals are not normal distribution | Kolmogorov-Smirnova | 0.2 |

Regression

Linear regression is a useful statistical method we can use to understand the relationship between two variables. In table 5 are presented the results of an empirical study on determining the impact of Economic Freedom on GDP per capita.

Table 4: Output of linear regression

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|---------|-------------------|
| 1 | Regression | 1.008 | 1 | 1.008 | 266.170 | .000 ^b |
| | Residual | .072 | 19 | .004 | | |
| | Total | 1.080 | 20 | | | |

a. Dependent Variable: logGDP_per_capita

b. Predictors: (Constant), logOS

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized | t | Sig. |
|-------|------------|-----------------------------|------------|--------------|---------|------|
| | | B | Std. Error | Coefficients | | |
| 1 | (Constant) | -10.268 | .843 | | -12.184 | .000 |
| | logOS | 7.664 | .470 | .966 | 16.315 | .000 |

a. Dependent Variable: logGDP_per_capita

According to F test, we conclude that the model is significant with a p-value <0.005 and from the table of coefficients we can compute the equation of the relationship between Dependent Variable: logGDP_per_capita and Predictors: (Constant), logOS. (t-test significant)

$$\log\text{GDP_per_capita} = 7.664 + 0.966\log\text{OS}$$

Based on these results, we conclude that we accept that Economic Freedom has a positive impact on standard of living.

CONCLUSIONS

This study of the impact of Economic Freedom on per capita real GDP over the 2000-2020 period, finds strong initial support for the research questions proffered here, namely, that the higher the degree of economic freedom, the higher the level of economic activity and, hence, the higher the per capita real GDP level.

From the analysis performed for the years under review but also looking at the progress since 2000, Albania has had improvements in Economic Freedom.

Using these research questions, it will be clearly defined which aspects of Economic Freedom have a positive correlation and which negative, that is, which do not have any (statistically significant) impact on GDP per capita.

The relationship between standard of living and Rule of Law, Government Size, Regulatory Efficiency, and Open Markets have a positive impact and they are statistically significant.

For further studies in the suggestions add alternative data, longer study period, and variables. Furthermore, alternative specifications that include additional variables can provide broader insights. These results would appear to suggest a strong relationship between real income per capita and economic freedom.

To conclude, we can say that the results of this study are in line with other papers in this field. This paper contributes to the demonstration of the impact of the Freedom Economy in the standard of living in Albania, and also to points out the importance of good government policies in high economic performance and economic growth of a country.

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