Factors that Influence Economic Growth: Empirical Evidence from Albania

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Abstract: - This study aimed to analyze the impact of the demographic factors and economic factors on GDP per capita in Albania from the period 1990-2020. The variables taken into consideration were life expectancy growth rate, fertility growth rate, labor force growth rate, unemployment rate, population growth rate, trade balance to GDP, and real interest rate. This study used Ordinary Least Squares (OLS) regressions to identify factors that influence GDP per capita. Before conducting the OLS regression is tested for normality, multicollinearity, heteroscedasticity, and also if the model is correctly specified. The results of the model suggest that there is a positive significant relationship between fertility growth rate and real interest rate and GDP per capita, and a negative significant relationship between population growth rate and the GDP per capita. There is not a consensus on the main factors that impact the economic growth of a country and the main difficulties consist of a lack of empirical research on Albanian data. The life expectancy growth rate, labor force growth rate, unemployment rate and trade balance to GDP taken into consideration have no significant effect on the dependent variable.

Key-Words: - Economic growth, GDP per capita, theories, demographic factors, economic factors, OLS, Albania.

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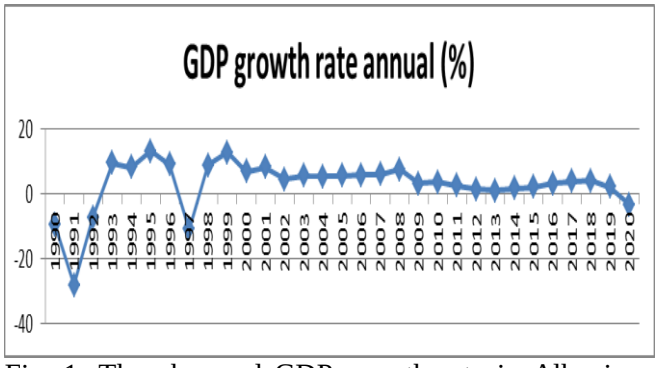
1 Introduction

1.1 Background of the Study

Economic growth is one of the main issues facing countries all over the world. Economic growth is measured through the gross domestic product growth rate or the gross domestic product per capita, which takes into consideration the number of people in the country. According to [11] economic growth is the increase in real GDP or GDP per capita.

Factors that influence economic growth can be divided into economic factors and non-economic factors. According to [25] there are some factors (culture, religion, tradition, social and political dependence, the role of government, corruption, etc.) that can influence the economic development of one country. Many government policies are focused on the reduction of employment rates, increased investments, foreign direct investments, trade opportunities, etc. Albania is considered a developing country and in 1990 passed from a centralized economy to a liberal one. During these years there have been different economic and political developments. Considering previous literature on different empirical researches and testing social and economic factors, this article is an attempt to find out some of the factors that have influenced economic growth in Albania.



Fig, 1: The observed GDP growth rate in Albania during 1990-2020
Source: World Bank

According to World Bank annual data, for the years 1990 to 2020, average economic growth was at the level of 2.84%. The years with the lowest GDP growth rate were 1991 with -28% and 1997 with -10.92. The year with the highest economic growth was 1995 with 13.32%.

For the years 1991 to 2000, the average economic growth was at the level of 1.59%. The year with the biggest economic downturn was 1991, at -28%.
The year with the highest economic growth was 1995, at the level of 13.32%.
For the years 2001 to 2011, the average economic growth was at the level of 5.21%. The year with the largest slowdown in economic growth was 2009, at 3.35%. The year with the highest economic growth was 2001, at 8.29%. For the years 2011 to 2020, the average economic growth was at the level of 2.23%. The year with the largest slowdown in economic growth was 2020, at -3.31%. The year with the highest economic growth was 2018, at 4.07%.

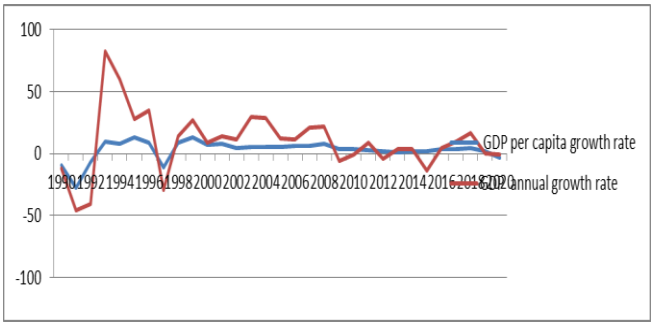


Fig. 2: The observed GDP growth rate and GDP per capita growth rate in Albania during 1990-2020
Source: World Bank

The maximum value of GDP per capita growth rate was in 1993 (82.578%) and the minimum negative value is in 1991 (45.38%).

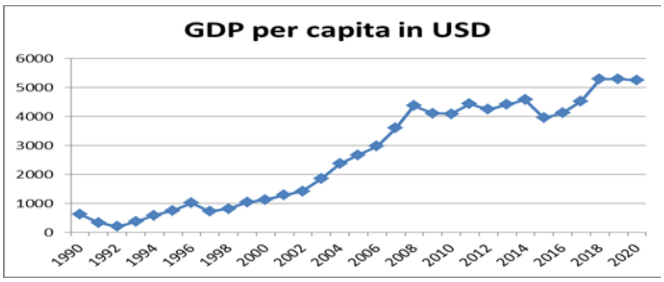


Fig. 3: The observed GDP per capita in Albania during 1990-2020
Source: World Bank

The average value of GDP per capita during the period of the study was $2,659. The maximum value is in 2019 with a value of $5,296, and the minimum value is in 1992 at $201. For the empirical study, we used recent data on the variables selected provided by the official site of the [43] during the 31 years from 1990 to 2020. Table 1 shows the mean, median standard deviation, minimum and maximum values of GDP growth rate, GDP per capita, and growth rate of GDP per capita during 1990-2020.

Table 1. Same statistics of indicators of economic development during 1990-2020

Indicators of economic development	Mean	Median	S.D.	Min	Max
GDP growth rate	2.84	4.07	7.99	-28.0	13.3
GDP per capita in USD	2659	2674	1791	201.0	5296
Growth GDP per capita (%)	9.65	9.87	25.2	-45.4	82.6

Source: World Bank

1.2 Theories of Economic Growth

Economic growth and interest rates: Different theories are developed to explain factors that influence economic growth. According to [38] GDP per capita growth rates are higher in those cases when countries first accumulate capital. Per capita income in developing countries is expected to grow faster than in developed countries. The theory of irreversible investment ([1]; [5]) states that an interest rate hike may harm a country's output (the cost of borrowing increases) but also it may have a positive effect on output (investment activity increases and the economic agents receive more income from interest rates). According to [43] Neo-Keynesian models explain that if the economy is dominated by creditors, it can be observed a positive relationship between interest rates and output. This could happen because an increase in interest rates would increase their revenues, also consumption, and output. And if the economy were dominated by borrowers, the relationship would be negative.
Economic growth and population growth: The neoclassical growth model explained by [38] suggests a negative relationship between population growth and per capita output growth. [14] explains that when population growth rates are at high levels, the capacity of the earth and its resources to generate food and other goods is lower, especially in counties considered low-income ones. [29] theory shows that population growth harms well-being. According to him, the population tends to grow in a more rapid way than food supplies. Some models suggest that there is a positive relationship between population growth and per capita economic growth. ([37], p.168) shows that greater population growth would result in a larger "stock of useful knowledge". This would increase per capita economic growth.

1.3 Research Objective

This study aims to achieve the following objectives:

1. Examine demographic variables influencing the level of GDP per capita in Albania. For this purpose life expectancy rate growth, fertility rate growth, labor force growth, and population growth rate are taken into consideration.
2. Examine the effect of economic factors, including unemployment rate, trade balance to GDP, and real interest rates on the level of GDP per capita.

1.4 Significance of the Study

Different factors impact the GDP per capita growth of one country. The following variables have been analyzed in Albania: life expectancy rate growth, fertility rate growth, labor force growth, unemployment rate, population growth trade balance to GDP, and real interest rate. Several studies have been done in developed countries ([34]; [9]) and also in developing countries ([3]; [32] ; [41]; [1]; [28]; [20]; [46]).
These study results can be useful for giving information to policymakers on the factors that increase GDP per capita, also by increasing knowledge, by determining the relationship between GDP per capita and different factors for researchers in the same field.
Using OLS regression this study tests several factors and suggests variables that influence economic growth measured by GDP per capita. Many researchers have studied determinants of economic growth but there is not much evidence on the Albanian economy.
The rest of this paper is as follows. Section 2 discusses the literature review. Section 3 discusses variables, methodology, and hypothesis. Section 4 presents empirical results and econometric models. Finally, section 5 presents the conclusions and the study's recommendations.

2 Literature Review

Different studies are focused on searching for determinants that influence the economy of the countries. The research of [23] found that small and medium-sized businesses are key determinants in the economic growth of Eastern European countries taken as a sample. The study of [11] was focused on finding empirical evidence of the relationship between external debt and economic growth in the Western Balkan countries.
According to [24] the GDP per capita indicates the level of productivity per person. GDP per capita is influenced by factors that affect population and economic factors. GDP per capita indicates how the economy of a country is raising with its population.
Below there is a literature review on the variables taken into consideration in this study:
GDP per capita and life expectancy: [36] study examined the relationship between life expectancy and per-capita GDP in Russia and Moscow in comparison with 61 other countries through the Preston curve. According to data between 2005 and 2015, Russia had rapid growth in per-capita GDP, also a gain of six additional years of life expectancy. [34] study explored the impact of life expectancy and population growth on GDP per capita income in G7 countries using regression analyses. They concluded that the increase in life expectancy was followed by an increase in Gross Domestic Product per capita income.
GDP per capita and fertility: Previous literature shows that economic growth harms fertility ([16]; [13]). The fertility growth rate measures the average number of children per woman and is also an indicator of population growth. [3] found that a reduction in fertility raises income per capita by an amount that some would consider economically significant for Nigeria at a horizon of 50 years. The study by [28] took into consideration 120 developing countries from 1970 to 2014 and found that high fertility rates resulted in lower economic growth. So, according to him, fertility rates harm economic growth. [15] studied to see if they could find evidence of a positive relationship between fertility and economic development. They investigated data from 20 European countries between 1990 and 2012 and found that the negative relationship between fertility and economic development was weaker in many countries, and positive among some others. [17] found that fertility correlates negatively with GDP per capita.
GDP per capita and labor force: [12] investigated the influence of economic development on labor force participation rates of older men and women. The study used national data for 134 countries and suggests a negative relationship between per capita income and labor force participation rates. Also, they verified that this relationship is stronger for older men than for older women and is most apparent in middle-income countries. According to [22] labor force has a positive and statistically significant impact on economic growth (GDP). [1] study analyzed factors that influence real gross domestic product (RGDP) in Palestine during the years 1994 to 2013. The results showed a positive relationship between the size of the domestic working labor force, real gross domestic capital formation, real domestic exports, and real gross domestic product (RGDP), and a negative relation between real domestic imports, and political

instability, and the real growth of GDP. In developed countries, it is noted an increase in older age groups as a percent of the total population. Older people are less likely to be in the labor force contrary to younger people, causing a reduction in overall labor force participation. [45] studied the effect of a possible interaction between age for the population of males and GDP per capita and labor force: females aged 18 to 74 and region-level GDP per capita. They were focused on labor market data in Italy during the period 2004-2013. The results showed a joint effect between region-level GDP per capita and worker age. [46] used panel data for 62 developing countries from 2010 to 2018. Using Pooled OLS model and GDP per capita as dependent variables this study found a negative significant relationship with the labor force growth rate (the percentage change in labor force participation), which is the proportion of the population aged 15 and older.

GDP per capita and unemployment: Unemployment is a crucial issue in developing economies and especially in Albania. During the last years, our country has experienced a high unemployment rate (the maximum value was 18.06% in 2014) meaning that labor resources are not being used efficiently. The study of [33] measured the relationship between the unemployment rate of a country and its economic growth rate known as Okun's law. According to his empirical study, if one economy intends to decline unemployment rates by 1% the real GDP must increase by approximately 2% during the same period. [30] analyzed effects of unemployment rates on per capita real GDP in Iran during the years 1971-2006. They used an Auto-Regressive Distributed Lag and the results imply that the unemployment rate has a negative and significant influence on per capita real GDP both in the long-run and short-run. [32] study investigated the impact, of economic growth and the unemployment rate in Albania according to Okun's law. The results did not explain Okun's law. If the unemployment rate had been reduced by 1% the GDP would have increased only by 1.11 percent, but the impact was negative. [20] study in Jordan during 1991-2019 showed a negative relationship between economic growth and unemployment on Jordan's economy during 1991-2019.

GDP per capita and population growth: [25] study found no correlation between population growth and growth in income per capita. Several studies have been done to verify the influence of population changes and GDP per capita. Empirical work on the impact of population growth rate on a country's economy has concluded with contradictory results. [4] and [44] conclude that there is a negative relationship between population and per capita GDP growth in China and Australia. [21] found that current population growth harms economic growth while lagged population growth has a positive effect so there is no long-term relationship between these variables. In contrast, [35] and [40] studies conducted in India and the Eastern and Southern Africa region, found that population growth had a positive impact on per capita economic growth.

GDP per capita and trade: [25] found strong effects of trade openness on growth and real income for the developed countries, but negative effects for the developing countries. [39] found that an increase in exports of an economy has a positive effect on growth. [41] studied the relationship between export, import, and GDP in Albania for the period from 1984 to 2012. They concluded that both imports and exports have a significant relationship with GDP. [6] focus on reviewing other studies on determinants of economic growth. They have identified some economical (natural resources, capital goods, human resources, and technology, and some others as public expenditure, trade components, FDI capital formation, private or public investment, employment rates, exchange rates), and non-economic factors (government efficiency, institutions, political and administrative systems, cultural and social factors, geography and demography). [9] studied the Granger-causal relationships between trade openness and real economic growth in Turkey from 1950 to 2014. They found evidence for the relationship between trade openness and economic growth.

GDP per capita and interest rates: [7] found evidence that interest rate liberalization had a positive effect on savings and economic growth. [22] focused on the impact of the financial liberalization index and economic growth in Pakistan during 1971-2007. Using Auto-Regressive Distributed Lag (ARDL) technique, they found that the real interest rate had a negative and statistically significant effect on economic growth (GDP). The study of [31] examined the impact of interest rate reforms on economic growth. He concluded that interest rate reforms had a positive impact on GDP growth rate through savings and investments in 15 SADC (Southern African Development Community) countries during the period 1990-2015.

3 Variables, Methodology, and Hypothesis

A descriptive study was done to analyze the relationship between the factors chosen and Gross Domestic Product per capita in Albania. This section presented in detail the data used, period of the study, descriptive statistics of the variables, and diagnostic tests necessary to use the Ordinary Least Square regression model.

3.1 Data and Model

The secondary data were retrieved from the database of World Bank Indicators from 1990 to 2020 (retrieved from World Bank official site, January 2022). The statistical package Gretl (2012) was used to analyze the data. The pooled OLS model [46] was used to test the influence of selected variables on economic growth as measured through a natural logarithm of GDP per capita. The dependent variable is transformed to complete the test for linearity, normality, multicollinearity, heteroscedasticity, and Ramsey Reset Test.

Table 2 reports descriptive statistics for the variables used in this study. It shows some of the descriptive statistics (mean, median, standard deviation, minimum values, and maximum values) of the variable chosen.

Table 2. Descriptive Statistics, using the observations 1-31 (during 1990-2020)

Variables of the model	Mean	Median	S.D.	Min	Max
LNGDPC	7.54	7.89	0.961	5.30	8.57
LIFE	0.290	0.296	0.164	-0.0459	0.518
FERT	-2.08	-2.45	1.61	-4.24	0.783
LABOR	-0.849	-2.63	9.44	-20.4	36.5
UNEMP	15.4	16.3	1.75	11.5	18.1
POPG	-0.0041	-0.0057	0.0046	-0.0093	0.0182
TRADE	-31.3	-22.7	42.7	-251.	-8.63
RINT	3.29	8.55	17.7	-63.8	19.3

Table 3 shows the expected sight of each variable chosen taking in consideration previous literature.

Table 3. Description of the variables and their expected effects on GDP per capita

Abbreviation of the variable	Description	Expected sight
GDPC	GDP per capita	Dependent variable
LIFE	Life expectancy growth rate	-
FERT	Fertility growth rate	-
LABOR	Labor force growth rate	-
UNEMP	Unemployment rate	-
POPG	Population growth rate	-
TRADE	Trade Balance Exp.-Imp. to GDP	+
RINT	Real interest rate	+

Dependent variable: GDP per capita, which is the output of an economy divided by the number of its total population. To fit the OLS model is taken the natural logarithm of GDP per capita [19].

Independent variables:

1-Life expectancy growth rate (the change in the life expectancy at birth): The life expectancy for Albania in 2020 was 78.67 years, a 0.147% increase from 2019. We expect a negative relationship between the two variables because if longevity increases, GDP per capita will decrease.

2-Fertility growth rate: The change in births per woman was 1.58 in 2020 compared with 1.597 in 2019. If the birth rate declines, there will be a positive impact on per capita income growth.

3-Labor force growth rate: An increase in the labor force can cause a reduction in income per capita. A negative relationship between labor force participation rates and GDP per capita income is expected.

4-Unemployment rate: Taking into consideration other literature a negative relationship between unemployment rates and GDP per capita is expected. So if the unemployment rate is high, it means that fewer persons are working and that their incomes are lower.

5-Population growth: A negative relation between population growth and GDP per capita is expected.

6-Trade Balance (the difference between exports and imports to GDP). Trade growth affects economic growth also GDP per capita. So a positive relationship between GDP per capita and trade balance is expected.

7-Real interest rate: A positive effect is expected between real interest rate and GDP per capita.

Hypothesis

Ho: There is no significant relationship between GDP per capita and the variables.

H1: There is a significant relationship between GDP per capita and the variables.

3.2 Diagnostic Tests

Table 4. Correlation coefficients, 5% critical value (two-tailed) = 0.3550 for n = 31

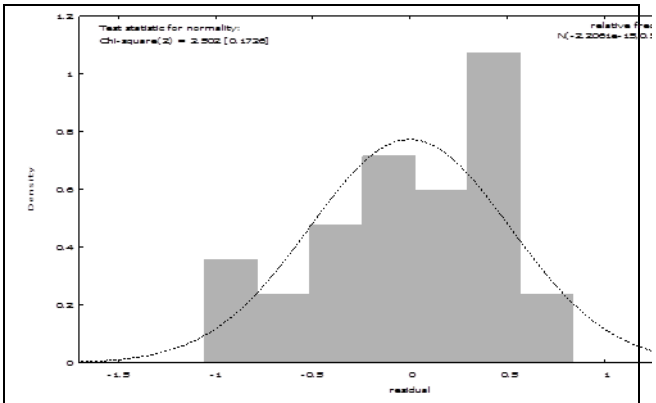
LNGDPC	LIFE	FERT	LABOR	UNEMP	POPG	TRADE	RINT	Variable	VIF
1.0000	0.2574	0.6156	-0.0499	-0.5194	0.0213	0.0296	0.5871	LNGDPC	
	1.0000	-0.0269	-0.2148	0.2227	-0.3575	-0.1063	0.6583	LIFE	3.187
		1.0000	0.1751	-0.5508	0.2054	-0.2188	0.0361	FERT	1.645
			1.0000	-0.2086	0.2334	0.1011	-0.1119	LABOR	1.135
				1.0000	-0.1972	0.0439	-0.1086	UNEMP	1.850
					1.0000	0.1324	0.0295	POPG	1.454
						1.0000	0.1876	TRADE	1.263
							1.0000	RINT	2.793

Source: Author's computation

The model was estimated using the OLS (ordinary least square model). Diagnostic tests are undertaken to make sure that the model is valid. To fulfill all the tests required (Normality, Multicollinearity, Heteroskedasticity, and Ramsey Reset Test-Stability test) we have transformed the dependent variable by taking the natural logarithm of GDP per capita. The results of the tests are below:

Normality Test

The standard errors of OLS estimates won't be reliable if error terms are not normal. Jarque-Bera normality test of residuals is used for linear regression. The P-value should be greater than 0.05 ([8]).



Test for normality of residual -
Null hypothesis: error is normally distributed
Test statistic: Chi-square(2) = 3.5024
with p-value = 0.1736
Jarque-Bera test = 1.9326, with p-value 0.3805

Fig. 4: Graph for Normality

Based on the results presented above, the joint p-value of the Jarque-Bera statistic is approximately 38.05% greater than the 5%, so we have insufficient evidence to reject the null hypothesis that the residuals of the model are normally distributed. Hence, it can be concluded that residuals are normally distributed.

Multicollinearity Test

We tested the existence of multicollinearity among the variables of the model by examining correlation coefficients that shouldn't be greater than 0.8 or minor than -0.8, and also by using the variance inflation factor.

The results of table 4 show that there isn't evidence of multicollinearity among the variables chosen. When VIF is higher than 10, there is significant multicollinearity between the variables.

Heteroskedasticity Test

The study of [8] suggests White Test for Heteroscedasticity. OLS assumption is violated, if errors are heteroscedastic it will be difficult to trust the standard errors of the OLS estimates.

Table 5. Heteroscedasticity test

White's test for heteroskedasticity -
Null hypothesis: heteroskedasticity not present
Test statistic: LM = 14.5195
with p-value = P(Chi-square(14) > 14.5195) = 0.4118

The results of White's test revealed that the joint P-value for the Chi-square Statistic of the VAR Residual Heteroskedasticity Tests is equal to 0.4118 greater than 0.05. Therefore, we cannot reject the null hypothesis of no-heteroscedasticity.

Ramsey Reset Test

The goodness of fit of the model can be tested using Ramsey Reset Tests. Equation Specification Error Test shows if fitted values of the independent variable help explain the dependent variable [8].

Table 6. Ramsey Reset test

RESET test for specification -
Null hypothesis: specification is adequate
Test statistic: F(2, 21) = 0.6792
with p-value = P(F(2, 21) > 0.6792) = 0.5178

Finally, by conducting the Ramsey Reset test, is concluded that at 5% significance level, the model was correctly specified because the p-value resulted 0.5178 greater than 0.05. This result means that independent variables can describe the variations in the dependent variable.

4 Empirical Results and Econometric Model

This section presents the results; the coefficients of each dependent variable also an interpretation of each result is given. This study used multiple linear regression models to access the relationship between the independent variables and the dependent ones. This study used OLS regression [18] and through Gretl statistical package following results are obtained (Table 7):

Table 7. Results from the regression analyses (OLS, using observations 1-31, Dependent variable: natural logarithm of GDP per capita, LNGDPC)

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	9.5106	0.9831	9.674	<0.0001	***
LIFE	−1.5562	1.0242	−1.519	0.1423	
FERT	0.3499	0.0751	4.660	0.0001	***
LABOR	−0.0111	0.0106	−1.047	0.3061	
UNEMP	−0.0706	0.0733	−0.9638	0.3452	
POPG	−45.6425	24.4758	−1.865	0.0750	*
TRADE	0.0009	0.0025	0.3764	0.7101	
RINT	0.0388	0.0089	4.359	0.0002	***
Mean dependent var	7.5398	S.D. dep. var	0.9613		
Sum squared resid	6.1156	S.E. of regression	0.5157		
R-squared	0.7794	Adjusted R-squared	0.7123		
F(7, 23)	11.6101	P-value(F)	3.07e-06		

Source: Author's computation

Variables statistically representative: *p<0.05; ***p<0.001

The regression coefficient of the life expectancy growth rate is negative (1.5562) and statistically insignificant. The above results show that the fertility growth rate is positive and statistically significant at a 1% level of significance (column 5 of Table 7) confirming the positive relationship between the variables. The regression coefficient is positive (0.3499) showing that a 1% increase in fertility growth rate will increase 0.3499 units of LNGDP per capita. The regression coefficient of the labor force growth rate is negative (0.0111) but insignificant. The policy on the labor market does not help increase economic growth. The regression coefficient of the unemployment rate is negative and insignificant (0.0706). The regression coefficient of the population growth rate is negative (45.6425). This result indicates that a 1% increase in population growth rate results in a 45.6425 unit decrease in LNGDPC. The coefficient is statistically significant at a 5% level of significance (column 5 of Table 7) showing the negative relationship between the variables. The regression coefficient of the trade balance to GDP is positive (0.0009) but statistically not significant. The regression coefficient of the real interest rate is positive (0.0388) and statistically significant at a 1% level of significance (column 5, Table 7), showing that a 1% increase in real interest rate GDP will increase 0.0388 units of the LNGDPC.

Through the regression analyses is found that only three factors from seven chosen to be studied can positively or negatively influence the variability of GDP per capita.

The value for the R-squared in the model demonstrates that 77.94% of the variation in the dependent variable is explained by the independent variables of the model. The P-value for the F-

statistic is 3.07e-06. This value supports the validity of the model in this study. Using Ordinary Least Squares (OLS) we conclude with the following econometric model:

Model:
LNGDPC=9.5106-1.5562*LIFE+0.3499*FERT-0.0111*LABOR-0.0706*UNEMP-45.6425*POPG+0.0009*TRADE+0.0388*RINT+ε (1)

5 Conclusions and Recommendations

Empirical research on the main drivers of economic growth has been of great interest to different authors, governments, and investors. This paper focused on establishing factors affecting economic growth per capita in Albania from 1990 to 2020. The CLRM assumptions and test of the model specification have been performed to develop the OLS estimation technique. Fertility growth rates, population growth, and real interest rate were factors that significantly affected GDP per capita.

Live expectancy growth rate has a negative but not significant effect on GDP per capita. This result is not consistent with the findings of [34] which found a positive relationship between the two variables.

The fertility growth rate has a significant positive effect on GDP per capita. This result is not consistent with the findings of [16], [13], [3], [28], and [17] which found a negative relation between the two variables.

The labor growth rate has a negative but not significant effect on GDP per capita. This result is not consistent with the findings of [22] and [1] which found a positive and significant effect on labor and economic growth. The negative influence of the labor force was found in the studies of [10] and [46].

The unemployment growth rate has a negative but not significant effect on GDP per capita. The same relation was found in the studies of [30] and [20] population growth rate has a negative and significant effect on GDP per capita. This result is not consistent with the findings of [35] and [40] which found a positive relationship between population and economic development. Also, it is consistent with the findings of [4] and [20] which found a negative relation between the variables.

Trade balance to GDP has a positive but not significant effect on GDP per capita. This result is not consistent with the findings of [39] study which found a positive relationship between the variables contrary to the study of [26] which found a negative relation for the developed countries.

The real interest rate has a positive and significant effect on GDP per capita. This result is consistent with the results of [31] and [7] but is not consistent with the findings of [22] who found a significant negative influence on interest rates and economic growth.

Live expectancy growth rate, labor force growth rate and the unemployment rate can harm economic growth per capita, especially population growth rate, as its coefficient results are negative and statistically significant. The study recommends that to increase the level of GDP per capita, it is necessary to undertake several reforms to decrease the unemployment rate and stimulate trade. Albania as a developing country should take advantage of access to regional and global markets.

Governments throw different policies can increase birth rates. They can often utilize financial incentives; for example, birth bonuses, child benefits, or subventions. The Albanian government has increased birth bonuses from 1 January 2019, but still, fertility growth rates are low.

Real interest rates influence positively GDP per capita, especially during the period 1997-2013; the real interest rates have been higher than 8% with an average value of 11% showing that individuals took advantage of high interests to invest their money.

Even though there is a vast literature on the subject, there are still areas for completing further research on a country's economic development. This article can be useful as a literature review for further studies as it lacks evidence on a developing county such as Albania. Also, this paper's findings can be used to evaluate economic policies useful to improve economic growth. So as a reduction in the fertility growth rate harms the economic policymakers should provide incentives to the population to increase this variable. Also, monetary policy focusing on the interest rate can improve the economic condition of the population.

Some other independent variables were tested, but the regression models didn't fulfill the requirements of the OLS linear regression model. Future research could explore other indicators, for example, tourism expenditure, education levels, technological advancements, etc., or other measurements of economic development rather than GDP per capita could be used as the dependent variable.

The limitation of this study consists of not taking into consideration other factors such as education that can contribute to economic growth or if the factors found significant are the same or different for other countries which have similar economic and political conditions as Albania.

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