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THE ANALYSIS OF ALBANIAN ECONOMIC DEVELOPMENT THROUGH THE YEARS

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Abstract. *The economic situation of a country can be explained through a dynamism of a group of indicators and factors that affect the continuity trend flow of economic growth. Also, the historical aspect is one of the most meaningful factors defining a country's development stage. Although the indication of the social and political conditions, unpredictable situations like the Covid-19 pandemic have negatively affected the economy's growth trend. However, to evaluate the overall economic situation is necessary to consider an evaluation basis that will lead to the tendency of the living standard. The study is undertaken for the Albanian case, a country in transition based on its economic development, from 1991 to 2021. The key assessment factor considered in this study is the GDP, as one of the most meaningful evaluators of the living standard. After analyzing the Albanian economy by considering the historical phases of the economic development of this country, there is a created model for identifying the potential relations between the Gross Domestic Product, Consumption Expenditures, Trade Balance, and Foreign Direct Investments for explaining the actual living standard and generating its forecast for upcoming years. At the end of the study are given the results and the recommendations.*

Keywords: *Development, Economy, Living Standard, GDP.*

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Introduction

Economic development is a complexity of indicators that change through the years and affect growth and living standards. The evaluator that is generally used for assessing this development is the Gross Domestic Product, which includes all produced goods in the country for a particular time, generally one year, using the national and foreign producing factors. This indicator is one of the most important ones for analyzing economic development because it defines growth, which is widely explained and treated by Vangjeli (2022). However, the GDP (Gross Domestic Product) cannot be studied as an independent variable, because it is the result of the common effect of investments, consumption, governmental expenses, and trade balance, regarding the studies of Alesina (1988), Nordhaus (1989) and Abel & Bernanke (2003). This can be considered in the condition of an open economy, where the country has external relations with other countries and as a result can import and export goods. This study considered the Albanian case, by considering three important periods: the period of a centralized economy, the period after communism, and the period after the pandemic of Covid-19, referring to the studies of Muço (1997), Gabel (2023) and OECD

(2020). Firstly is given a visualized form of the GDP trend during these three periods, and then created a model, where the GDP is studied through being about consumption, trade balance, and foreign direct investments instead of private investments. The study limits consist of the exclusion of some important indicators like government expenses and private expenses, but there are included foreign investments to identify the impact on the GDP and the living standard. The stochastic created model consisted in generating an optimized study and then forecasting the continuity for some upcoming years to see the trend of the economic development.

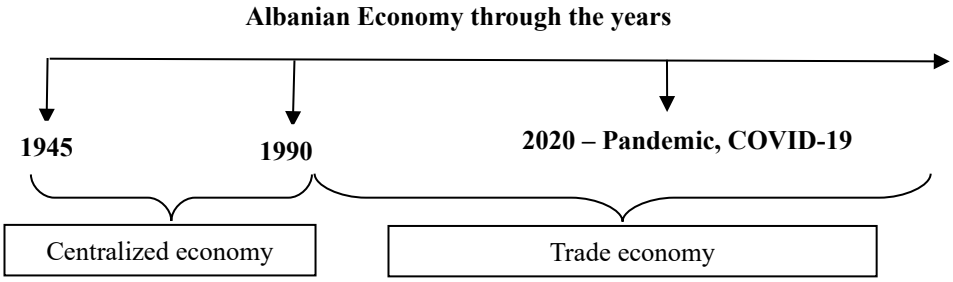


Figure 1. The phases of the Albanian economy

Source: elaborated by the authors

The Communist Regime in Albania was evident from 1945 to 1990. So, the duration of a monopolist economy was about one century. Every aspect of life was centralized and strictly controlled by the state's power. The main economic activity was agriculture, which was collectivized, because of the centralization of micro-producers and transformation into macro-state firms, based on Gabel (2023). Agricultural land, production organization, trade, and production factors were structured and administered by the state. Private investments and entrepreneurship were inexistent. From 1950 to 1960 was highly considered the industrialization of Albania. The results of this reform were optimistic because half of the GDP was generated by industrialization. However, in 1980 the economic condition worsened, the foreign capital decreased, the economic decisions were not the optimal ones, state reserves were the lowest compared to previous times and as a result, a considerable economic crisis happened. The impossibility of managing this crisis lead to the fall of the communist regime in 1990, referring to Muço (1997). After 1990, the trade economy replaced the centralized one. So, the state had not the authority of controlling and determining the functionality of economic aspects anymore. Private investments and entrepreneurship started to happen. The prices were determined by the forces of supply and demand. The micro-producers were free to continue their activity independently and without the tendency of being collectivized and centralized in a macro-state farm. After 2008 the Albanian economy was fully adapted to the market economy. One of the crucial economic shocks that happened during the decentralized years of the economy was the Covid-19 pandemic, when the lockdown affected negatively the profits of the businesses, increased the loans, lowered economic development, worsen the living standard, and as a result, the gross domestic product had experienced a decrement according to OECD (2020).

Theoretical overview

Economic development is tightly connected to the Gross Domestic Product Level (GDP). The Gross Domestic Product indicates the value of all final products/services of the economy, produced through using national and international producing factors like labor, land, capital, technology, and entrepreneurship, during a particular period. The performance of the economy can be effectively assessed through GDP because it is an important indicator of economic activity, by Vangjeli (2022) and Alesina (1988), Nordhaus (1989). The types of GDP are:

- Nominal GDP- It evaluates the value of the product using the prices of the time when the product is produced
- Real GDP- It evaluates the produced product in every period using the price of a base year. So, the product is evaluated yearly, but the considered price for making the assessment is one of a particular year that is considered the base year. The rhythm of economic increment

is the one of the Real GDP increment, as a result of the: changes of economic reserves, increment of the population, increment of the capital, differences of the effectivity in the producing factors' work, and differences in the level of work occupation. The ratio in the percentage of Nominal GDP with Real GDP generates the Deflator GDP, which determines the difference in the percentage of the price level of the current period compared to the base year.

- GDP/person-It evaluates the value of output on an individual basis. The level of this type of GDP increment is the best indicator that allows assessing the living standard and the economic situation continuity in the long term.

The reconciliations of the Macroeconomics Equilibrium

The living standard can be evaluated and explained by the performance of economic development through the GDP level. Based on macroeconomic studies the Gross Domestic Product is an important indicator, which can be observed by presenting it related to other economic indicators like investments, government expenses, trade balance, and consumption, based on Vangjeli (2022), Alesina (1988), Nordhaus (1989) and Abel & Bernanke (2003).

$GDP = C + I + G + NX$,where:

C represents the expenses of families for the purchase of products/services, I represents the private investments by the private sector's businesses, G represents the government expenditures like the transfer payments, and represents the trade balance, which is the difference between the Exports and Imports, and as a result, the trade balance can be positive when the Exports exceed the Imports and the contrary.

Literature Review

Our paper provides an empirical analysis of the long-run determinants of economic growth. The factors that we have taken in our analysis are trade balance, consumption, and FDI. This section reviews some of the studies, which have examined the economic growth determinants using different estimation approaches and giving different findings. The scientific literature treats analytically the impact of the trade balance. For this factor, the question of researchers remains in what direction the changes in international trade affect economic performance. The empirical studies have wide evidence that international trade has a positive impact on economic growth. Based on all empirical studies analyzed, we can conclude that most of them have shown a significant impact on the trade balance on economic growth. The researchers [Busse and Königer (2012); Were (2015); Bakari (2017); Bakari et al. 2019a, 2019b)] in their studies have found a positive impact of the trade balance on economic growth. According to them the growth of trade in goods with other countries was associated with higher economic growth. While the others researchers such as (Abbas and Raza 2013; Bakari and Tiba 2019) have found a negative result of the trade deficit on GDP. Otherwise, [(Bakari and Tiba (2019)] have shown that trade does not affect economic growth. According to them exports negatively affect economic growth and imports have no effect. Here we want to stress that the results of previous research are depended on the analysis period, the source of data, the different units of measurement, and the statistical methods used. Also, the literature on the effect of consumption expenditures on GDP is wide. Empirical evidence shows that a 1 dollar increase in the GDP raises household consumption by 0.566 dollars in the Euro Zone (Tapsin & Hepsag, (2014). In this study, the researchers analyzed the relationship between GDP and consumption expenditure in Nigeria for the period 1981 to 2010. Also, (Akekere and Yousou (2012) found that a one-dollar increase in the GDP results in a 0.67-dollar increase in private consumption expenditure. So, according to them, final consumption expenditure is one of the most significant determinants of the GDP, considering also the corresponding multiplier effect of the consumption. Mishra (2011) tests the hypothesis by using data from India from 1950 to 2009. His findings show a negative relationship between real consumption expenditure and GDP. Amin (2011) based his study on the direction of the relationship between two macroeconomic variables like consumption expenses and economic growth in Bangladesh from 1976 to 2009. His empirical

evidence suggests that the growth of consumption in Bangladesh is a result of economic growth. The study of Chioma (2009) presents and verifies that the relationship between the GDP and the personal consumption expenditure in Nigeria from 1994 to 2007 has no considerable significance. The other researcher Baker and Orsmond (2010) reveal that the share of household consumption in the national income of China falling the last period. In our study, we have put FDI as independent to find the impact of this factor on GDP growth. Some researchers have found that FDI generates economic growth and there is a clear cause-effect relation. Other studies have shown that FDI has not to effect on Economic Growth. In their study, Oglietti (2007) and Abello (2010) have done econometric research in Argentina using statistical data for 40 years and found that FDI did not lead to Economic Growth. Also, Ferrer and Zermeño (2015) applied econometric analyses to find the effect of FDI on GDP growth. They analyzed the effect of the increase of FDI in Brazil, South Korea, Peru, and Mexico. Their findings show that has no causal link between FDI and GDP in those countries. This relationship is found only in the case of China, but contrary to the predicted direction, GDP growth is which causes an increase in FDI and not vice versa.

Methods

Linear Regression Model

The linear regression model identifies a dependent variable related to one or more independent variables, using the least square method. For determining the dependent variable is generally used y, whereas the independent variables are defined by x. Mathematically the linear regression can be written as:

$$y = a + bx_i + \varepsilon \tag{1}$$

where the slope of the curve and at the same time the significant coefficient that explains the relation between the dependent and independent variable is evaluated and determined by the b coefficient. Like every study model, even the regression model contains the error term, which is represented by the symbol

However, a model can be considered a linear regression model if the condition of linearity can be proved, after the generation of the Normality Test Results, according to Welsh (1988) and HIS Global Inc. (1994-2017).

Forecasting time series

The dependent variable in this model, GDP was studied with three other independent variables to identify their impact of them on the performance of GDP. After studying the linear regression model, the time series of GDP was forecasted for years, for which the data was not available. The moving average is the main method used for realizing this forecast. However, the error term is considered in this model, because of studying the model as a stochastic one, which as a result gives a more optimized model, referring to Welsh (1988) and HIS Global Inc. (1994-2017).

Bootstrapping

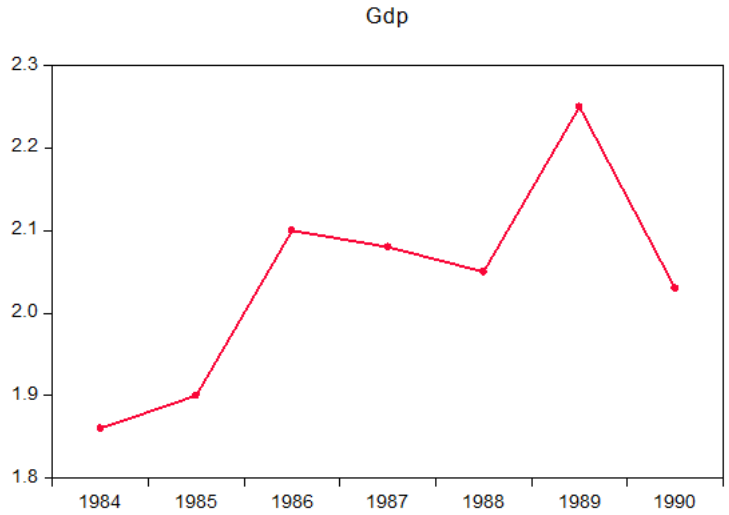
The bootstrapping technique is widely used for improving the estimation of the study case results, by repeating the samples, because this is the main function of this resampling method. For considerable repetitions of the resamples, the model is even more optimized based on HIS Global Inc. (1994-2017).

Software Packages and Programming Languages

The methodology consisted in obtaining the data through realized studies of "Trading Economics", whose data was based on the results given by the World Bank, and then studying them through creating a stochastic model using the EViews 10 software package and R programming and analyzing the results of the considered study model, by HIS Global Inc. (1994-2017) and Venables & Smith (2023).

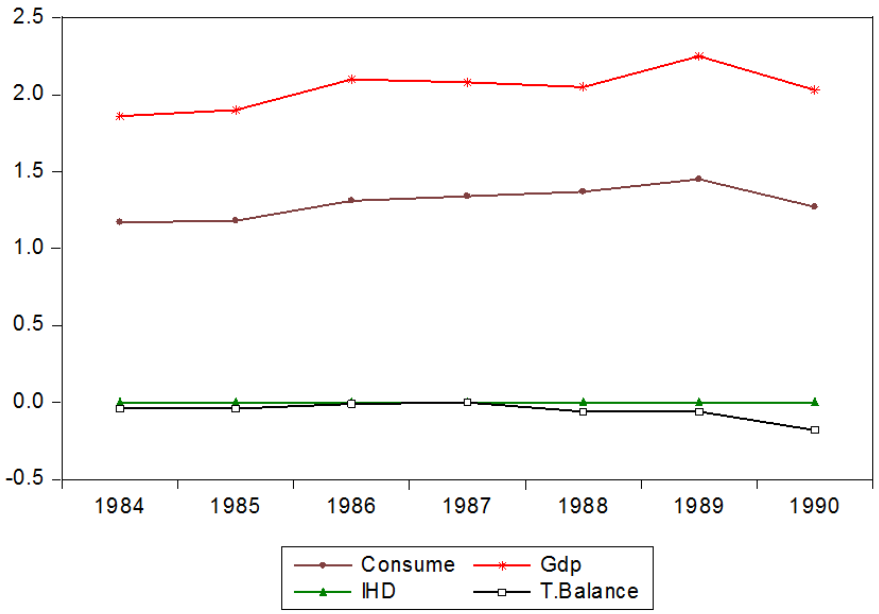
Results

The study case is based on the real data for GDP (Gross Domestic Product), Consumption, Trade Balance, and Foreign Direct Investments taken from the World Bank and represented on the "Trading Economics" official page, according to The World Bank Data (1991-2021). These indicators are used for creating an economic study model and identifying the potential possibilities of explaining and forecasting economic development.



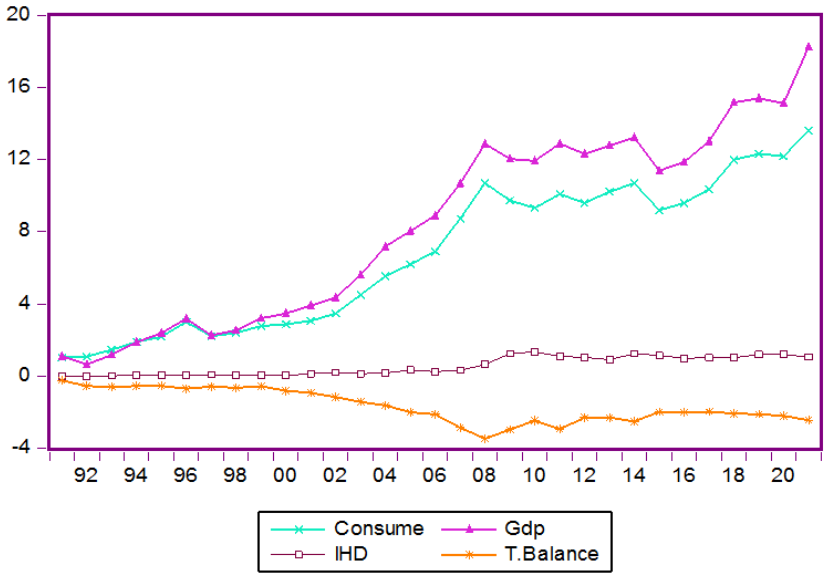
Graph 1. The trend of GDP during the centralized economy

Based on the graphical results of Graph 1, it can be concluded that the GDP had a cycled trend, where the highest monetary value (2.25 billion $) was reached in 1989, and then there was an economic decrement in 1990, because of the communist regime fall's political, social, and economic difficult consequences.



Graph 2. The common indication of the macroeconomic indicators trend in the GDP (1984-1990)

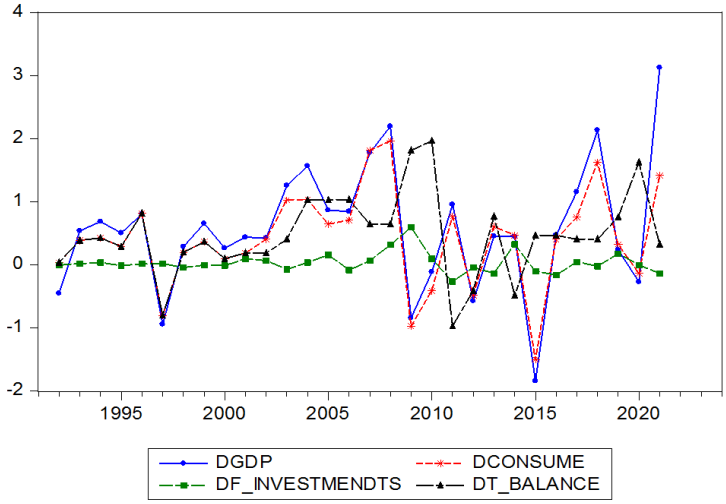
As can be identified in Graph 2, the fluctuation of the GDP is explained by the fluctuation of the consumption indicator, while the Trade Balance and Foreign Investments are approximately zero, because of the closed economy condition during the communist regime of Albania during 1984-1990.



Graph 3. The common indication of the macroeconomic indicators trend in the GDP (1991-2021)

Graph 3 presents the results of the GDP trend explained by the common indication of the considered variables like consumption, trade balance, and foreign investments. As can be identified by the results, there are two higher values of GDP, in 2019 (10.7 billion $) and in 2021 (18.26 billion $), whereas in 2020 the GDP had a decrement of 0.27 billion $. However, after the pandemic situation, the GDP had an even greater increment. From 1991 to 2008 the values of GDP are not the highest, because during this year happened the adaption process of the country's development with the trade economy, whereas since 2018 and then the economy had a significant improvement. It can easily be identified that mainly the Gross Domestic Product is explained by the consumption trend compared to foreign investments and trade balance. Based on the trade balance, tends towards being always negative, because the imports exceed the exports, but after 2008 the trade balance slightly improved. Referring to foreign investments had been almost 0 billion $ before 2008, whereas from 2008 to 2021 the values of foreign investments increased.

This study's point of interest consists in analyzing and forecasting the potential trend of the considered times series that represent the macroeconomic indicators for the Albanian case. Based on the fact that the series has no consistency, they are modeled to turn them into stationaries ones to increase the facility in studying and forecasting them. The graphical results after this modeling are presented in Graph 4.



Graph 4. The stationarity of the considered variables

Based on the theoretical frame generally, and in the macroeconomic equilibrium equation specifically, it is possible to evaluate some expectations related to the correlation between the variables. The strength of the variables' relation and the direction of this relation can be explained and assessed through the correlative analysis. The results that are obtained from the correlative analysis are better compared to the covariance analysis, because of the impossibility of being affected by average units like the wage.

Table 1
The expectations related to the correlative analysis of the models

Linear Regression Relations	The expected sign of b	The expected R-squared	r_{xy}
Relation (GDP~C, NX)	+; +	88%	0.93
Relation (GDP~C, NX, F.I)	+; +; +	89%	0.94

Based on the expected results, the relation between the variables is strong and with a common direction. After analyzing the models in detail, a comparative analysis of the expectations and real results will be undertaken.

Firstly it is generated the relation between the GDP and the Consume and Trade Balance as part of the main macroeconomic equilibrium equation. The considered model is the linear regression because it fulfills the condition of linearity, because of the normality expansion of the values as well as the Jacque-Bera Test, whose result was greater than the critical value of 5%, and in this way, it verifies the normality and linearity of the model.

Table 2
The results for the relation between GDP, Consume, and Trade Balance (1991-2021)

Dependent variable	GDP
Independent variables	Consume, Trade Balance
Coefficients	1.45; 0.71
C	0.016
Probabilities	0.0000; 0.0241
R-squared	91%
Adjusted R-squared	90.5%
Standard Errors	0.119; 0.297
GDP=0.016+1.45 Consumption+ 0.71 Trade Balance	

Based on the generated results, can be identified that the relation between the Gross Domestic Product and Consume and Trade Balance is strong, because of the R-squared value that is 91%. So, 91% of the GDP variable is explained by both considered indicators, whereas only 8% is explained by other indicators that are excluded in this study case, like government expenses or private investments. Also, the standard errors are low, and this confirms the optimization of the model. Based on the generated relation, if Consumption increases by 1 billion $, the GDP will increase by 1.45 billion $s, whereas if the Trade Balance increases by 1 billion $, the GDP will increase by 0.71 billion $. The greater impact on GDP is affected by Consumption. Also, both indicators that are considered are statistically important, because the particular probability values are lower than the critical value of 5%.

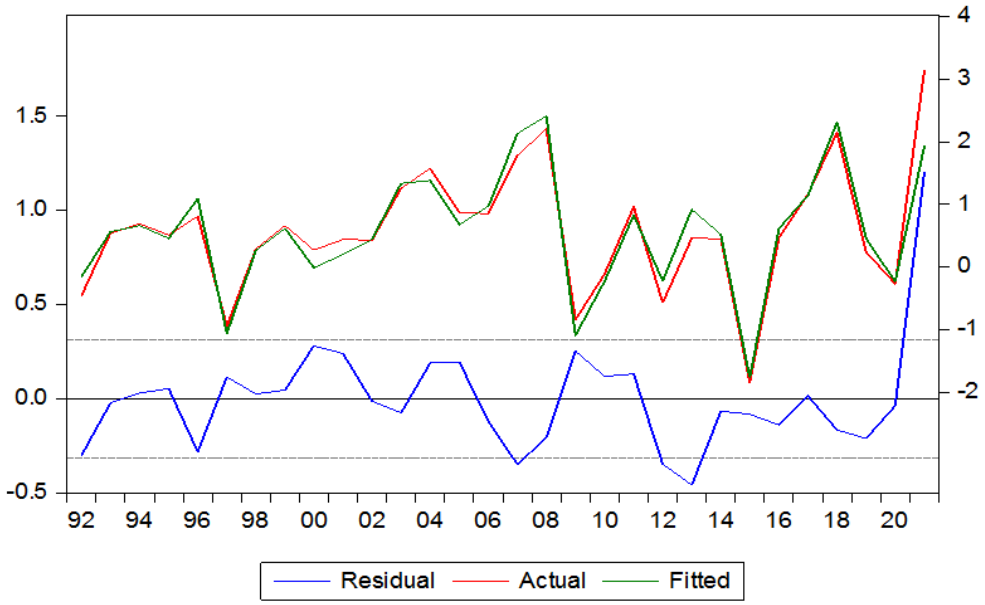
Another point of interest in this study was the identification of the inclusion of the foreign investments indicator in the created model will improve the results of the study.

After the generation of the results can be concluded that the inclusion of Foreign Investments in the study has not increased the optimization of the model at any significant level. The importance of the other indicators remained the same, whereas if the Foreign Investments increase by 1 billion $, the GDP, will decrease by 0.11 billion $ (approximately 0, which means not a big difference).

Table 3 The results for the relationship between GDP, Consume, Trade Balance, and Foreign Investments (1991-2021)	
Dependent variable	GDP
Independent variables	Consume, Trade Balance, Foreign Investment
Coefficients	1.45; 0.71; -0.11
C	0.02
Probabilities	0.0000; 0.026, 0.07
R-squared	91.3%
Adjusted R-squared	90.2%
Standard Errors	0.12; 0.3; 0.36
GDP=0.02+1.45 Consumption+ 0.71 Trade Balance-0.11 Foreign Investments	

Based on the results shown in Graph 5, the model is optimal because the deviations are at a low level, and the major deviations are because of the inclusion of the foreign investments indicator, which did not increase the explanation or optimization of the model. Also, the reason for the deviation is the exclusion of government expenses and private investments that in essence limits this study.

The analysis of the trend of GDP and the creation of a model which contains other indicators that affect the trend of GDP is important to emphasize the existence of potential relations that can be studied together and identify the past and actual trend, but the future trend is also important to be forecasted. Although every potential dynamic condition limits forecasting, the approximate study of potential fluctuation is the right topic to be considered.



Graph 5. The trend of the residuals (deviations) in the model

However, for proceeding with the forecast, the model needs to be free of autocorrelation and heteroscedasticity. To verify this are used the LM Test for diagnosing the Serial Correlation problem and Breusch-Pagan Godfrey to identify if the model has the problem of heteroscedasticity.

Table 4 The results of LM and Breusch-Pagan Godfrey Tests		
Results/Test	Serial Correlation Test	Breusch-Pagan Godfrey
Obs*R-squared	5.67	3.599
Probability	0.1285	0.3081

Albeit the probabilities for both tests for the level of every observation per R-squared are higher than 5%, which is the critical value, is verified that the model is free of these two statistical problems.

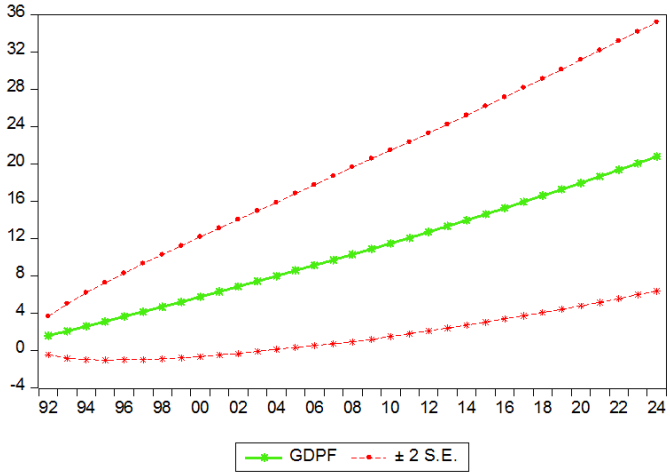
Table 5
The comparative analysis for the correlative results of the models

The models/ estimations	GDP~C, NX (forecasted)	GDP~C, NX, FI (forecasted)	GDP~C, NX (estimated)	GDP~C, NX, FI (estimated)
Sign of b	+/+	+/+/+	+/+	+/+/-
R-squared	88%	89%	91%	91.3%
r_{xy}	$0.93 \approx 1$	$0.94 \approx 1$	$0.95 \approx 1$	$0.955 \approx 1$

Based on the results of Table 5, there is not a big difference between the expectations and the estimated results, except for the sign of the importance coefficient of the Foreign Investment variable. The difference is caused, due to the theoretical overview that proves that private investments are the voice that has a considerable impact on GDP, instead of foreign investments. However, a small difference is identified in the value of the explanation of the dependent variable, GDP from the considered independent variables in the model. The real values are higher than the expected ones, which proves a higher correctness of the model in reality. Related to the correlation results, the conclusion is the same, because the variables have e strong linear positive relation, with a common direction.

In the power of the results from Graph 6 and Table 6, the GDP fluctuation will have an increasing trend. This means that the development level will be increased gradually during these years, as well as the living standard.

Also, the error levels for this forecast are at the lowest levels, which confirms that the forecast is optimal. Based on the generated results of the created model, the consumption expenses mainly contribute to GDP (Gross Domestic Product) increment. A crucial factor determining consumption expenses is the average wage/salary of families. If the average wage will be increased, the living standard of families will be improved, and as a result, they will rise their expenses for consumption, and this means that the GDP will be increased.



Forecast: GDPF
Actual: GDP
Forecast sample: 1991 2024
Adjusted sample: 1992 2024
Included observations: 33

Root Mean Squared Error	1.762430
Mean Absolute Error	1.483587
Mean Abs. Percent Error	32.17486
Theil Inequality Coefficient	0.084129
Bias Proportion	0.381197
Variance Proportion	0.001338
Covariance Proportion	0.617465
Theil U2 Coefficient	1.883815
Symmetric MAPE	24.85875

Graph 6. The forecast of the GDP trend (2022-2024)

Table 6
The forecast of the GDP (Billion $) from 2022 to 2024

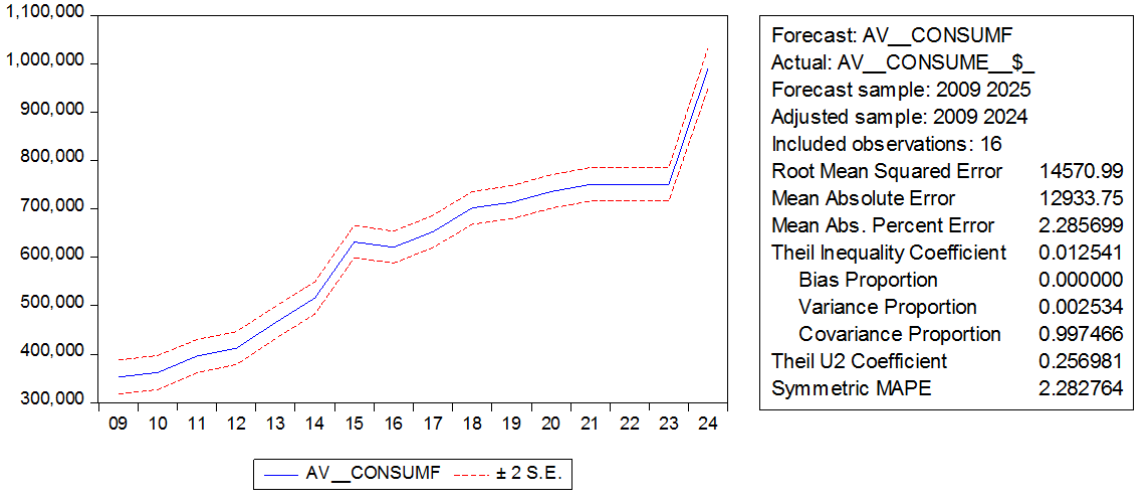
Years	2022	2023	2024
GDP (Billion $)	19.4	20.1	20.8

To concretize this theoretical frame and to see how it works in Albanian reality, the final focus of this study is based on the potential relation between average consumption expenses and average wages from 2009 to 2021.

Table 7
The results for the relation between average consumption expenses and average wages from (2009-2021)

Dependent variable	Average consumption expenses
Independent variables	Average wage
Coefficients	9.004
C	-34004.31
Probabilities	0.0000
R-squared	98.99%
Adjusted R-squared	98.889%
Standard Errors	0.27
Av. Consumption Expenses=0.27+9.004 Average Wage	

It can easily be identified that the relation between the average consumption expenses and the average wage is considerably strong, because of the R-squared value, which proves that approximately 99% of the consumption expenditures are explained by the average wages of the Albanian families.



Graph 7. The forecast of the GDP based on consumption expenditures (2023-2024)

The model is optimal, because of the low standard error value, and the average wage as the independent variable is statistically important because the probability value is lower than the critical value of 5%. From the results of Table 7, if Average Wage increases by 1$, the average consumption expenses will increase by 9$. Based on the actual government action plan, the average wage will be increased in 2024, and consequently, the consumption of families will be increased, and this increment will be reflected even in the GDP's performance.

The forecasting results in Graph 7 shows that Average Consumption expenses will reach the level of 751000$ at the end of 2023 and 991000$ during 2024. So the increment level of the consumption expenditures will be reflected in a 31.9% of GDP increment in 2024.

Conclusion

In theory, the GDP can be explained through a dependent factor on three important economic indicators like consumption, trade balance, government expenses, and private investments. In our paper, we have studied the trend of Gross Domestic Product regarding consumption, trade balance, and foreign investments, where the least factor is a new indicator referring to the basic macroeconomic equilibrium equation, which explains the generation of GDP.

The limitations of the study are the exclusion of the government expenses' contribution to the GDP's study due to the lack of published data, and the exclusion of private investments from the study, because the aim was to verify if the other kind of investments like foreign ones can indicate the trend of GDP.

The results verified that the consumption expenses mainly contribute to the explanation of GDP's trend. Also, the trade balance had significant importance in the generation of GDP, which represents the living standard of a country, while foreign investments had a very modest significance in its explanation. As long as GDP represents the living standard of a country, and the results verified that this standard is mainly explained by consumption expenses, we studied the possible factor that determines the consumption expenditures of families in Albania, the average wage. After considering the impact of the average wage on average consumption expenditures, we concluded that there is a strong relation between them, which verifies that the level of average wage directly affects the level of expenses for consumption.

In this way, logically the increment of wage derives the increment of consumption expenses, which additionally brings a higher level of GDP. This deductive study method that is used in this paper, was undertaken to see the prospect of the Albanian government's plan for increasing the level of average wage. As a result, the expectations related to this plan are for a positive tendency from a macroeconomic point of view, like the increment of GDP that means a higher living standard as a result of a simulation from a microeconomic point of view like the increment of the families' expenses for consume.

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Conflicts of Interest: The authors declare that no potential conflicts of interest in publishing this work. Furthermore, the authors have witnessed ethical issues such as plagiarism, informed consent, misconduct, data fabrication, double publication or submission, and redundancy.

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References

Abbas, Mohsin, and Hassan Raza (2013). Effect of trade deficit on the economy of Pakistan. Interdisciplinary Journal of Contemporary Research in Business 4: 176–215. [Google Scholar]

Abello, Nicolás Mauricio (2010). Relación entre Inversión Extranjera Directa y Crecimiento Económico en Argentina, Paper de la Universidad Nacional del Rio Cuarto, Rio Cuarto. http://www.eco.unrc.edu.ar/wp-content/uploads/2011/04/Abello.pdf. Consultada el 5 de julio de 2012.

A. B. Abel, B. S. Bernanke, "Macroeconomics". (2003). Addison-Publishing Company, Inc

A. H. Welsh, Asymptotically Efficient Estimation of the Sparsity Function at a Point, Statistics & Probability Letters, 6 (1988), 427-432. https://doi.org/10.1016/0167-7152(88)90103-4

Akekere, J., & Yousuo, P. O. J. (2012). Empirical analysis of change in income on private consumption expenditure in Nigeria from 1981 to 2010. International Journal of Academic Research in Business and Social Sciences, 2(11): 321-331.

A. Alesina "Macroeconomics and Politics" (1988) and William Nordhaus "Alternative Approaches to the Political Business Cycle" (1989).

Amin, S.B. (2011). Causal Relationship between Consumption Expenditure and Economic Growth in Bangladesh. World Journal of Social Sciences, 1(2): 158- 169.

Busse, Matthias, and Jens Königer. (2012). Trade and Economic Growth: A Re-Examination of the Empirical Evidence. Available online: http://dx.doi.org/10.2139/ssrn.2009939 (accessed on 10 December 2019).

Bakari, Sayef. (2017). Trade and Economic Growth in Germany. LIEI, Faculty of Economic Sciences and Management of Tunis (FSEGT). MPRA Paper No. 77404. Available online: https://mpra.ub.uni–muenchen.de/77404/1/MPRA_paper_77404.pdf (accessed on 30 November 2019).

Bakari, Sayef, Fatma Saaidia, and Ahlem Soualhia. (2019a). Evaluation of Trade Influence on Economic Growth in China: A Time Series Analysis. Journal of Smart Economic Growth 4: 57–72. [Google Scholar]

Bakari, Sayef, Nissar Fakraoui, and Sofien Tiba. (2019b). Domestic Investment, Export, Import and Economic Growth in Brazil: An Application of Vector Error Correction Model. MPRA Paper 95528. Available online: https://mpra.ub.uni-muenchen.de/95528/1/MPRA_paper_95528.pdf (accessed on 10 December 2019).

Bakari, Sayef, and Sofien Tiba. (2019). The Impact of Trade Openness, Foreign Direct Investment and Domestic Investment on Economic Growth: New Evidence from Asian Developing Countries. MRPA Paper 94489. Available online: https://mpra.ub.uni-muenchen.de/94489/1/MPRA_paper_94489.pdf (accessed on 15 December 2019).

Baker, M., & Orsmond, D. (2010). Household consumption trends in China. Reserve Bank of Australia Bulletin: 13-18.

Ferrer,C., & Zermeño, E. (2015). Foreign direct investment and gross domestic product International Conference on Applied Economics, ICOAE 2015, 2-4 July 2015, Kazan, Russia.

Chioma, N.J. (2009). Causal relationship between gross domestic product and personal consumption expenditure of Nigeria. African Journal of Mathematics and Computer Science, Research Vol. 2(8): 179-183

E. Vangjeli, Makro Ekonomi (2022), p. 28-36

IHS Global Inc, "Eviews 10 User's Guide I" (1994-2017), IHS Markit, p. 27-39 from https://www.eviews.com/home.html

Matthew J. Gabel "Collapse of Communism in Albania" (2023), from https://www.britannica.com/place/Albania/Economy

Mishra, P. K. (2011). Dynamics of the relationship between real consumption expenditure and economic growth in India. indian Journal of economics & Business, 10(4): 553-563.

M. Muço "Economic Transition in Albania: Political constraints and mentality barriers" (1997) from https://www.nato.int/acad/fellow/95-97/muco.pdf

OECD "Tackling COVID-19, Contributing to a Global Effort, Impact of COVID-19 in Albania" (2020) from https://www.oecd-ilibrary.org/sites/933637d0-en/index.html?itemId=/content/component/933637d0-en#:~:text=The%20pandemic%20had%20a%20significant,contracted%20by%203.3%25%20in%202020.

Oglietti, Guillermo C. (2005). "Un modelo de crecimiento con función de inversión: evidencia de causalidad para el caso de Argentina", (2008), "Demanda y Crecimiento Económico". Tesis Doctoral, Universitat Autònoma de Barcelona. Departament d'Economia Aplicada

Tapsin, G., & Hepsag, A. (2014). An analysis of household consumption expenditures in EA-18. European Scientific Journal: 10(16).

The World Bank Data (1991-2021) from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=AL

Were, Maureen. (2015). Differential effects of trade on economic growth and investment: A cross-country empirical investigation. Journal of African Trade 2: 71–85. [Google Scholar] [CrossRef][Green Version]

W. N. Venables & D. M. Smith & R Core Team "An Introduction to R" (2023), p.57-60 from https://cran.r-project.org/doc/manuals/r-release/R-intro.pdf.