FISCAL POLICY AND ECONOMIC GROWTH: SOME EVIDENCE FROM KOSOVO

Bedri Hamza *, Petraq Milo **

* Corresponding author, Faculty of Economics, the University of Tirana, Tirana, Albania
** Faculty of Economics, the University of Tirana, Tirana, Albania

Abstract

The main purpose of this study is to analyze the effects of fiscal policy on economic growth in the Republic of Kosovo for the time period from January 2006 to September 2018 in terms of their long-term and short-term relationships. The methods used are measured using the second data (monthly series) provided by the Department of Finance as the appropriate national institution. Kosovo as one of the Balkan countries is facing the same problems as other labor countries. This study will contribute greatly to analyzing the impact of fiscal policy and will help policymakers come up with good decision-making. The econometric vector autoregression (VAR) model used in this study uses total public expenditure, total public income, fixed income structure, and consumer price index as independent variables and gross domestic product (GDP) as a dependent variable. In addition, in order of consistency time-series data were evaluated by the augmented Dickey-Fuller unit root test. The study concludes that total public expenditure significantly affects GDP; on the other hand, the total public income has a positive but visible impact on GDP, which means that the impact of government investment is more pronounced on financial development compared to public revenue; and increased demand for cooperation has decreased in monetary terms (World Bank, 2021). It is possible that government spending and structure may be related to key development quality ideas, such as the segregation of wages and environmental support (Halkos & Paizanos, 2015).

Keywords: Fiscal Policy, Economic Growth, Direct Taxes, Indirect Taxes, VAR Model, Granger Causality Test

1. INTRODUCTION

Kosovo as a changing country and the post-war economy has faced many economic and political challenges. Despite the challenges the Republic of Kosovo faces, there are many changes the country has made to support economic growth and development.

Kosovo is the smallest country in Europe, historically and demographically so as a part of the former Yugoslavia, Kosovo became a separate state under the auspices of the United Nations in 1999, declaring its independence in 2008. Evidence from a 2006–2011 study shows that economic growth has benefited all segments of society but 40% of the poor see consumption rising faster than rich groups. Public and private investment has made a significant contribution to economic growth over the past five years as efforts to rebuild the economy continue (World Bank, n.d.).

The United Nations (UN) has been in control of Kosovo since the conflict between March and June
1999. The UN mission comes from Security Council Resolution 1244 (SC1244), which gives interim authorities (UN Mission in Kosovo, or UNMIK) the power to pass regulations that violate Yugoslavia law. Thus, in the different contexts of Kosovo, a monetary policy currently takes an unusual form. UNMIK has already started designing the tax system, budgeting, and building institutions that will implement its policies so Kosovo’s initial budgets in the last four months of 1999 and 2000 focused on priorities such as revitalizing basic goods and services, social welfare net, and rehabilitation. With the assistance of the World Bank, the costs are made based on service assessments, despite the appropriateness of the barriers to the development of key programs in the education, health, and social sectors.

The negative effects of the economic crisis, which developing countries have, especially the most difficult issues for these countries, should be especially emphasized at the beginning of the new millennium. The Republic of Kosovo in building targets and instruments that achieve the desired macroeconomic objectives within its macroeconomic policy faces the limitations that are inevitably placed with a certain degree of uncertainty.

The main objectives of the macroeconomic policy of the Republic of Kosovo are to achieve economic development, to boost economic growth and domestic and foreign investment. In terms of a competitive and integrated economy, it creates equal opportunities for macroeconomic stability and gradual growth, while the government aims to recognize investment and investment in industry and construction, but also the implementation of road infrastructure and rail infrastructure, connecting Kosovo traders and partners. The government aims to invest in energy, education, health services, and agricultural product support. According to monetary policy, the basic policy, which a country’s monetary policy is based on, is to maintain a code of conduct for the budget, which means keeping small deficits and keeping debt low and improving the budget structure and increasing investment and capital. With a soft extended monetary policy, the government wants to encourage investment, which in terms of monetary policy, aims to maintain price stability and maintain a stable exchange rate against the euro. In addition, the macroeconomic policy objectives of the Republic of Kosovo include maintaining inflation and stabilizing and job creation as a result of increased economic activity, improving the business environment, and supporting small and medium enterprises.

In terms of determining the priorities of the Republic of Kosovo, in addition to constant economic growth and competition, the highest level of employment, the highest standard of living, and the quality of life of the citizens of the Republic of Kosovo, these are also the coexistence of tolerance and increased investment in education. Achieving these strategic objectives involves building a sustainable framework for implementing and maintaining the desired macroeconomic boundaries.

The monetary policy serves as a tool to achieve macroeconomic goals. Through public finances and the monetary policy, the monetary policy applies to the activities of the general economy and is, therefore, a powerful tool in the hands of the state in which it operates in national product, inflation, and employment. Public incomes and social spending contribute to reducing economic instability and promoting economic growth, maintaining price stability, and increasing employment levels.

With regard to macroeconomic stability, the monetary policy is applied by automatic stabilizers but also by optional measures, where the automatic stabilization is public money and public expense. The key points for automatic stabilization have the largest area: interest rate and different types of compensation (compensation in the event of unemployment, welfare, etc.). On the other hand, we have the monetary policy that is the right of modern economic governments to implement policies and policy changes depending on the stage of the economic cycle, which arises as a result of the lack of automatic stability in achieving macroeconomic goals. The state achieves its objectives through meaningful changes in tax rates or changes in state spending (such as large projects, public sector employment, etc.).

The implementation of the budget includes the collection and recording of other funds and expenses, as well as the expenditure of other expenses in line with the budget allocation. Budgets are made in accordance with the principles of unity, economics, efficiency, transparency, and sound financial management. All revenue and other budget funds and municipal budgets will be paid into the treasury account and recorded in the accounts found in the general treasurer book.

Monetary policy deals with government expenditure and taxes that affect the economy. The government needs to coordinate fiscal policy to create healthy economic growth. Usually, they do not. Why? The monetary policy reflects the priorities of each legislator. They focus on the needs of their constituents. These local needs exceed the priorities of the economy. There are two types of monetary policy. The first, and most widely used, is the increase. It stimulates economic growth. This is especially important in the economic downturn of the business cycle. This happens when the country is in an economic phase. The second is the restrictions, which are not widely used and this happens when the state decides to spend less money and at the same time raises taxes and it happens in developed countries. This, unlike expansion policies, does not promote economic growth.

How does the government work in these situations? The government has two options for spending more money or cutting taxes or doing both if it can. If the state decides to increase spending, the idea is to put more money in the hands of consumers, so that they can spend more money. This increases demand, which helps businesses in their focus, and at the same time adds jobs. Supporters of the federal economy favored tax cuts. They say this frees businesses that employ more workers. Some economists think that spending more money is more efficient than cutting taxes. Money goes into the pockets of consumers, who increase their demand and these businesses expand their product.

The primary function of public finance is economic stability, which means the use of public financial resources to stabilize economic cycles to achieve full employment, overall price stability, to
achieve adequate growth rate, the level of economic development (Miftari & Ziberi, 2019). In addition, high taxes on drugs and hazardous substances will reduce their use. This will slow down the production of these commodities and scarce resources will now be shifted from production to other products that are beneficial to economic growth. Similarly, tax authorization for certain products is granted in an area that is considered to be in the background. Therefore, taxes can promote regional development in moderation by allocating resources to retrospective regions. However, it is not that such a profitable outcome will always be a success. There are certain taxes that can produce negative effects on production. Taxes imposed on other useful products may divert resources from one region to another. Such serious deviations may result in reduced consumption and production of these products.

In the economic literature, there are three basic objectives of fiscal policy, of which the primary and most important objective is the provision of public goods and services. The second fundamental objective is to redistribute public revenue and reduce inequality, which can be caused by “Smith’s invisible hand” or market mechanisms that could lead to inefficiency (Bexheti, 2017). The third objective is to use the budget to reduce the temporary volatility of economic cycles.

Economists today think that the government’s intervention in monetary policy is crucial in overcoming inflation and to encourage and accelerate economic growth, as the monetary policy does not end there. There is no doubt that monetary and budgetary policy needs to be considered, taking into account the needs and requirements of a developing economy. In short, we can say that this is a part of the government’s policy, which is about increasing tax revenue and other means and setting standards and spending patterns. In addition, expenditure on compensation, capital, and resources has a positive and significant impact on financial development, and the use of products has a negative impact but does not have a significant impact on economic development in the case of the Republic of Kosovo.

From the point of view of the Republic of Kosovo, it is a less researched topic in the real economic sector, so the main purpose of this study is to analyze the impact of public income and expenditure on economic growth in the Republic of Kosovo. The monthly period from January 2006 to September 2018 talks about their long-term and short-term relationship and the risks of this relationship.

The research objectives include:

- The analysis of the relationship between total public expenditure and total public income;
- The measurement of the impact of direct and indirect taxes on economic growth.

The scientific research questions raised in this study include:

**RQ 1:** Has the tax rates used in the case of Kosovo contributed to the economic growth of the Republic of Kosovo?

**RQ 2:** Does public spending contribute to Kosovo’s economic growth?

The hypotheses in this study are:

**H1:** Total public expenditure has a positive impact on Kosovo’s GDP.

**H2:** There is a significant relationship between total public income and GDP in the case of Kosovo.

The increase in this commitment comes as evidence of the exploration and controversy that has existed over the years, regarding the integration of fiscal and financial development in developing countries, which could also serve as a proposal for the Government of the Republic of Kosovo to draft financial systems next time.

The rest of the paper is structured as follows. Section 2 reviews the relevant literature. Section 3 analyzes the method used to perform the dynamic research. Section 4 presents the results and Section 5 presents the conclusion of the study.

## 2. LITERATURE REVIEW

Reduced revenue checks often empower financial action by investing in expanding people’s payroll, which can lead to those people using more products and management. This approach to financial growth can be useful when the economy is down, as it reduces the negative effects of the slowdown, such as rising jobs and stagnant compensation. Rexha, Bexheti, and Ukshini (2021) find a causal link between expenditure and public revenue; the results prove that there is a twofold relationship between them, taking into account the concurrence of monetary policy in a healthy economy.

A study by Titiloye and Ishola (2020) examines the impact of monetary and financial policy on economic growth in the case of Nigeria. Data from the World Development Indicators (WDI) and the Central Bank of Nigeria Statistical Bulletin is used. The study finds that government and government spending and expenditure have a significant impact on Nigeria’s economic growth. Moreover, the study proposes to maintain sustainable economic growth in Nigeria, the central bank must invest more in the economy and the government should spend its money and expenditure fully.

A study by Muinel-Gallo and Roca-Sagalés, (2013) using panel data of 21 OCDE high-income countries during the period from 1972 to 2006, suggests that total income inequality is an important consideration of financial policy outcomes. The study concludes that those expenditures and direct taxes could result in a significant reduction in GDP growth and income inequality that reflects normal performance — stock exchanges associated with specific monetary policy measures.

Another study analyzes the impact of public debt on the economic growth in Western Balkan countries using data for the period 2003–2016. The study uses static and randomized results, 2SLS, and status tests behind the VAR panel. Their results show that public debt does not correlate well with the economic growth of the sample countries, but the coefficient is statistically significant for random outcomes and the 2SLS model. The study concludes that the results in the region are that governments should take steps to stabilize finance and effective debt management as rising debt levels above the 50.87% GDP limit will slow economic growth (Bexheti, Sadiku, & Sadiku, 2020).

Fetali and Abduli, (2014) examined the long-term impact of monetary policy on real economic activity in a small open transition economy in the Republic of Macedonia. The result shows that an
increase in government spending will have a positive effect on real economic activity and government revenue.

A study by Fetai, Mustafi, and Fetai (2017) using OLS, a planned model with random results, and the Hausman-Taylor model, compares policies affecting economic growth in the Western Balkan countries from 1994 to 2015. Acquisitions, direct investment, total savings, and domestic credit in the private sector have a positive impact on per capita GDP growth, while corruption, unemployment, and exploitation have a negative relationship with GDP per capita.

Morina (2017) analyzes the impact of monetary policy on the economic growth of southeastern European countries (1994–2015), using the panel data model, namely Pooled OLS, fixed effects, random effects, and Hausman-Taylor-IV. It has been found that government tax policies have a positive impact on economic growth, with a 1% increase in tax revenue having a positive impact on 0.04% growth, while government spending has a negative impact on economic growth, which will increase government spending by 1% slowing economic growth at 0.15%, it keeps the rest of the variable.

3. RESEARCH METHODOLOGY

The research approach to this study is based on the basic economic models of the monetary policy, in the context of today’s economically developed society, including the use of taxes and state spending in the country. The monetary policy has its economic consequences in terms of productivity or productivity. GDP growth is a major indicator of economic growth in the country. In this study, the actual rate of GDP growth ($r_{GDP}$) is used as the model-dependent variable; total expenditure (TE), total public income (TR), and total fixed income (GFCF) and error period $\varepsilon$ — the model-independent variables. Monthly data was collected for the period 2006–2018 from reliable sources, such as state institutions, the Department of Finance, and the Central Bank of the Republic of Kosovo. A number of models and methods were used to plan to test the impact of monetary policy on GDP within the Republic of Kosovo over the period 2006–2018.

In addition, there are other studies that use different tenet example techniques on the study from used (Titiloye & Ishola, 2020). Test bound and autoregressive distribution lags (ARDL) alone will be accepted as a measurement process. This study uses an ex-post-facto structure that allows us, the researchers to see the dynamics in the long run. In addition, Granger causality test is performed to assess how each individual granger is responsible for dependent variability.

Pre-measurement tests were performed to determine the time delay according to three basic criteria such as AIC, HQIC, and SBIC in addition to the timeline additions that were attempted to stabilize, using the full Dickey-Fuller unit root test. At that time an unlimited VAR model or known as VAR was connected. Also, in planning to analyze the relationship that led to consumption, open income, and economic development within the Republic of Kosovo during the bookkeeping period, the Granger causality test is linked. In addition, quantitative evaluation after LM autocorrelation test, Jarque-Berra analyzer, skewness and kurtosis test for heteroskedasticity, VAR test stability \& standard dispersion test was performed. The econometric equation is as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \cdots + \beta_nX_n + \varepsilon \quad (1)$$

In the next section, the study continues with the interpretation of the measurement effect and economic model.

4. RESULTS

The econometric analysis of this study includes data or timeline of the second character, in which the same is collected by relevant state institutions such as the Department of Finance and the Central Bank of the Republic of Kosovo. In addition, the second data included in this study include the 12-month series (January 2006–December 2018).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Name</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>$r_{GDP}$</td>
<td>The Central Bank of the Republic of Kosovo</td>
</tr>
<tr>
<td>Total public income</td>
<td>TR</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>Total public expenditure</td>
<td>TE</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>GFCF</td>
<td>The Central Bank of the Republic of Kosovo</td>
</tr>
</tbody>
</table>

Table 1 shows the variables that are included in the economic model, illustrating the sources from which they are collected and their abbreviations included in the econometric model and throughout the paper.

A general system of the VAR model can be expressed as follows:

$$Z_t = \mu + A_1Z_{t-1} + A_2Z_{t-2} + \cdots + A_pZ_{t-p} + \varepsilon_t \quad (2)$$

where, $Z$ is a vector of endogenous variables at time $t$, $A_i$ ($i=1\ldots p$) is the matrix of coefficients, $p$ is the number of time delays included in the system, $\mu$ is the constant vector and $\varepsilon_t$ is the long vector. The VAR model is therefore a delay in the time series $k$, where the regressor is the time delay of the entire $k$ series. Unlike other traditional models, the VAR model in economic analysis is based on a small number of assumptions and constraints on the basic structure of the economy, but instead, focuses entirely on obtaining good coverage of economic integration statistics. In the past. In addition, the VAR model introduces a non-structural multi-equation model.

In addition, when analyzing the VAR model it is important to consider the robustness of the model.
If the process is not sustainable, then it can bring unimportant results. The process is stable only when the opposing model has no unit root, and the compass circle also has no unit root, and there is no point lying in a circular line.

Granger causality test hypotheses are as follows: 

\[ H_0: \text{ does not cause } X_t; \]
\[ H_1: \text{ causes } X_t; \]

where, \( X_t \) and \( Y_t \) are random time series.

The impact of fiscal policy on economic growth in developing countries is a topic that has been widely analyzed by various authors but has led to mixed evidence proving the heated debate presented by researchers and policymakers. The view of the Republic of Kosovo is a less researched topic in the real economic sector, so the main purpose of this paper is to address the effects of total public expenditure and total public revenues on economic growth in the Republic of Kosovo. Kosovo’s monthly period from January 2006 to September 2018 talks about their long-term and short-term relationship and the complexity of this relationship.

The economic model of this study as an independent variable determines the total cost of society, total public income, fixed income structure, and consumer price index, and the actual GDP represents the reliability variance. Based on the initial test, the buyer price index was not included in the model due to the insignificance expressed in this model. In addition, a monthly series is provided by the Department of Finance as the appropriate national institution. Also, the time series was tested according to the unit root in order of consistency, using the augmented Dickey-Fuller unit root test.

In addition, the results show that the data is at their level, the VAR model can be used to analyze the effects of total public income and total public expenditure on the economic growth of the Republic of Kosovo.

\[
\ln r_{\text{GDP}} = \beta_0 + \beta_1 \ln_{\text{expend}} + \beta_2 \ln_{\text{revenue}} + \beta_3 \ln_{\text{GFCF}} + \varepsilon
\]

Table 2. The VAR model

| Variable          | Coefficient \( \ln \text{GDP} \) | Standard errors | Values \( E-Z \) | \( P>|Z| \) |
|-------------------|----------------------------------|-----------------|-----------------|-------------|
| \( L1.\ln_{\text{rGDP}} \) | 0.5734173                      | 0.08291         | 6.94            | 0.000       |
| \( L1.\ln_{\text{expend}} \) | 0.0826092                      | 0.0296326       | 2.79            | 0.05        |
| \( L1.\ln_{\text{revenue}} \) | -0.0013062                     | 0.0234067       | -0.05           | 0.959       |
| \( L1.\ln_{\text{GFCF}} \) | -0.009846                      | 0.0110385       | -0.96           | 0.335       |

Source: Authors’ elaboration.

Based on Table 2, we are able to emphasize that there is a critical relationship between total public investment and GDP in the case of Kosovo, such an effect is based on a positive coefficient with \( p = 0.005 \). The impact of public revenue is not significant, based on \( p = 0.959 \). Although in terms of fixed budgeting, it contains a negative and significant impact on the financial development of 95% noticeable realities in the Kosovo case (January 2006–December 2018).

The following is another measurement test that will be able to analyze compliance, robustness and determine whether a model is adequate. In addition, in the following calculation, we can see the results of the model, which strongly indicates that we have a stable VAR model, respectively GDP level forecasts can be predicted for public spending and stable construction over time in the Republic of Kosovo. There are no unit roots and all roots are contained in a matrix circle.

Figure 1. Stability of the VAR model

![Figure 1](image)

Source: Authors’ elaboration.

The following are the results of the LM autocorrelation test, in which we can see that since the value of \( p \) is insignificant, we accept the null hypothesis that mutations do not have autocorrelation during their delay.

Table 3. The LM autocorrelation test

<table>
<thead>
<tr>
<th>Lag</th>
<th>( \text{chi}^2 )</th>
<th>Prob.-( \text{chi}^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29.3617</td>
<td>0.2161</td>
</tr>
<tr>
<td>2</td>
<td>37.1084</td>
<td>0.2024</td>
</tr>
</tbody>
</table>

Note: \( H_0: \) no autocorrelation at lag order. Source: Authors’ elaboration.
In addition, the Jarque-Bera analyzer, skewness, and kurtosis tests were performed so that we could see the general distribution and as we can see from the results of these tests, we have a standard distribution of data.

Next, the following table presents the results of the Granger causality test, which shows the short-term social spending and revenue growth of the Republic of Kosovo during January 2006-December 2018.

### Table 4. The results from the Granger causality test

<table>
<thead>
<tr>
<th>Independent variables (time delay)</th>
<th>ln_rGDP</th>
<th>ln_expend</th>
<th>ln_revenue</th>
<th>ln_GFCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln_rGDP</td>
<td>7.7717</td>
<td>0.00264</td>
<td>0.57016</td>
<td></td>
</tr>
<tr>
<td>ln_expend</td>
<td>6.5906(0.010)</td>
<td>0.68805(0.407)</td>
<td>0.08994(0.889)</td>
<td></td>
</tr>
<tr>
<td>ln_revenue</td>
<td>4.3465(0.037)</td>
<td>0.22034(0.639)</td>
<td>0.00337(0.954)</td>
<td></td>
</tr>
<tr>
<td>ln_GFCF</td>
<td>7.2991(0.007)</td>
<td>3.0286(0.082)</td>
<td>0.30346(0.582)</td>
<td></td>
</tr>
</tbody>
</table>

Note: F-statistics with p-values in parentheses, 5% level of significance in bold. Source: Authors’ elaboration.

Over time, depending on the results of the cause, we see that there is a two-way relationship between total public expenditures and GDP growth in the Republic of Kosovo. It is also noteworthy that there is a one-way link between total public income and GDP growth in the Republic of Kosovo for the period from January 2006 to September 2018.

### 5. CONCLUSION

Fiscal policy and economic growth are the subjects of debate in developing countries. The main economic model of this study uses independent variables of total public expenditure, total public income, fixed income, and consumer price index, while total GDP as a dependent variable. Based on the initial test, the price index was not included in the model due to the insignificance expressed in this model. In addition, a monthly series is provided by the Department of Finance as the appropriate national institution. In addition, the time series was tested according to the root of the unit, in order of consistency, using the augmented Dickey-Fuller unit root test.

The study concludes that the economic model (VAR model) is acceptable and can be used to analyze the impact of total public income and total social expenditure on the economic growth of the Republic of Kosovo. Therefore, pre-measurement tests were used so the results showed that there was a delay of about four times according to the three conditions AIC, HQIC, and SBIC, while the data had no unit roots, the data stood at their level. The VAR model is used to analyze the impact of total public expenditures and revenues on the country’s real GDP over the calculation period. The results show that there is a positive impact on public spending on GDP, while overall public income has a positive but not significant impact on economic growth, which means that the impact of government spending is much higher on economic growth compared to public income.

This research is particularly important as the fiscal policy can promote human growth and development through macroeconomic tools (for example, through the impact of budget deficits on growth) and microeconomic tools (using its influence on resource efficiency). Based on the above results, it is worth mentioning some of the following recommendations. Productive public spending must be increased to boost economic growth. Government must ensure that spending is increased and that production costs are properly managed to increase productivity in the country. Directing spending on other productive sectors, such as education, health, energy, industry, and agriculture, will reduce the cost of doing business, and increase social welfare in the country. The focus of the policy is to increase sensitivity to the level of public spending and national income.

The data used is the second data available from the Kosovo Treasury and Central Bank respectively, although the study uses appropriate economic models that also have some limitations. Its main limits are the length of time and the reliability of the data, even if it is collected from official reports of state institutions. In addition, the analysis period only covers the period after the transfer of the Republic of Kosovo, making it difficult to compare with the previous one.

### REFERENCES


