

Atdhetar Gara<sup>1</sup>  
Vesë Qehaja-Keka<sup>2</sup>  
Abdylmenaf Bexheti<sup>3</sup>  
Arber Hoti<sup>4</sup>  
Driton Qehaja<sup>5</sup>

## IMPACT OF FISCAL POLICY ON ECONOMIC GROWTH: EVIDENCE FROM SOUTH EAST EUROPEAN COUNTRIES<sup>6</sup>

*This paper empirically analyses the impact of fiscal policy on the economic growth of the countries of Southeast Europe. The work was carried out with secondary data from the 12-year period and respectively from 2010 to 2021 and includes 11 countries, so the data belongs to the panel type. The purpose of this paper is to analyze social variables such as government spending, income from taxes, public debt, government effectiveness, fiscal freedom, rule of law index, and corruption in economic growth. For this purpose, we employ different econometric models and techniques such as OLS, OLS Robust fixed and random effects models, and GMM (Generalized Method of Moments). The findings from the research show that fiscal policy instruments have a positive impact on the economic growth of the countries of Southeast Europe, while the effectiveness of the government, the rule of law, and corruption show a statistically significant impact on the economic growth of these countries. The recommendations for the countries are for policymakers in the region to prioritize the development and implementation of sound fiscal policies to stimulate economic growth. By strategically managing government spending and taxation, these countries can enhance aggregate demand, encourage investment, and create a favourable business climate. Furthermore, adopting expansionary measures during economic downturns and adopting prudent debt management practices can contribute to stability, confidence, and sustainable growth.*

*Keywords: Fiscal Policy; Economic Growth; Southeast Europe; Institutions; Government*

*JEL: O4; O40; H3*

<sup>1</sup> South East European University, North Macedonia, +38349488610, ag31418@seeu.edu.mk.

<sup>2</sup> University of Prishtina, Faculty of Economics, Kosovo, veseqehajakeka@gmail.com, corresponding author.

<sup>3</sup> South East European University, North Macedonia, +38944356284, a.bexheti@seeu.edu.mk.

<sup>4</sup> University of Prishtina, Faculty of Economics, Kosovo, E-mail: arber.hoti@uni-pr.edu.

<sup>5</sup> University of Prishtina, Faculty of Economics, Kosovo, E-mail: driton.qehaja@uni-pr.edu.

<sup>6</sup> This paper should be cited as: Gara, A., Qehaja-Keka, V., Bexheti, A., Hoti, A., Qehaja, D. (2024). *Impact of Fiscal Policy on Economic Growth: Evidence from South East European Countries*. – *Economic Studies (Ikonicheski Izsledvania)*, 33(3), pp. 65-77.

## 1. Introduction

Many works have been carried out with the aim of studying or measuring the impact of fiscal policy on economic growth, the works have studied different countries and periods, offering different empirical findings. Most of these works find that countries with fiscal policies have achieved sustainable economic growth (Ojon et al., 2016; Ugwuanyi et al., 2017; Paparas et al., 2015; Makhoba et al., 2019; Rexha et al., 2021; Chugunov et al., 2019; Mugableh, 2019; Qehaja et al., 2022). Well, there are also works that find that the effect of fiscal policy has been negative on economic growth, mainly due to the lack of efficiency, weak institutions, or other reasons related to management (Agostino et al., 2016; Mauro, 2017; Ramey and Zubairy, 2018; Dladla and Khobai, 2018; Stoilova, 2017). In this paper, the role of fiscal policy in economic growth is addressed, taking as a basis institutional factors such as the efficiency of the public sector and the institutional quality of the countries of the research analysis. The countries of Southeast Europe are characterized by a lack of leadership and productivity of public expenditures, which are one of the main components of fiscal policy. This lack of fiscal policy leadership often leads to high deficits and public debt. These countries are also characterized by a lack of policy coordination, which has consequences in the lack of functioning of internal and external markets. Overall, the lack of fiscal policy leadership in Southeast European countries creates significant challenges for sustainable economic development and stability. These countries must engage in the design of sustainable and coordinated fiscal policies to improve their economic and social conditions.

Fiscal policy's impact on economic growth has been the subject of extensive research, encompassing various countries and periods. Empirical findings from these studies offer divergent insights into the relationship between fiscal policies and sustainable economic growth. This paper contributes to this discourse by investigating the role of fiscal policy in economic growth, specifically focusing on Southeast European countries. The countries within Southeast Europe constitute a diverse region, marked by varying levels of economic development and outcomes achieved. In this study, we focus on understanding how fiscal policy influences economic growth across these nations during a specified time frame (2010-2021). The distinct economic trajectories of these countries make the exploration of fiscal policy's impact pertinent and timely.

The motivation behind this research lies in the importance of comprehending the dynamics of fiscal policy within the Southeast European context. As these countries navigate their unique economic challenges, understanding the role of fiscal policy can provide valuable insights into strategies for achieving sustainable economic growth. By addressing this research gap, we aim to contribute to both the theoretical literature on fiscal policy's impact and the practical policy considerations relevant to these nations. Southeast European countries exhibit a range of economic complexities that necessitate a tailored approach to fiscal policy analysis. From varying levels of institutional quality to disparities in policy coordination, these countries encounter distinct challenges that affect their economic trajectories. It is within this context that we delve into the multifaceted relationship between fiscal policy, economic growth, and institutional factors. Through an empirical analysis grounded in rigorous econometric models, we aim to shed light on the determinants that shape the interplay between fiscal policy and economic growth in Southeast Europe. By

incorporating control variables for institutional quality and effectiveness, our study not only adds to the existing literature but also provides a comprehensive perspective on the region's economic dynamics.

The research questions of the paper are:

1. What is the role of fiscal policy in the economic growth of Southeast European countries?
2. What role do institutions play in efficient fiscal policy and economic growth?

To examine the determinants of migration, the following hypotheses were raised:

H1: Fiscal Policy has a positive impact on the economic growth of Southeastern European countries

H2: Institutions have an important role in the economic growth

To evaluate the presented hypotheses, different econometric models were used, starting with the OLS and OLS Robust models. Since the data used in this study belong to the panel type, three additional models were used: fixed effects method, random effects method, and GMM. The empirical analysis was based on data from reputable sources such as the World Bank, The Global Economy, FRED, and CEIC data. In cases where data were missing, information was obtained from the statistical entities of the eleven countries under investigation.

Although this paper analyzes the effect of fiscal policy on economic growth, the additional contribution of the paper lies in the inclusion of control variables for the quality and effectiveness of the institutions of these countries, since there are very few works, especially for the countries of South-Eastern Europe, which include controlling variables such factor.

The paper is structured into five parts, where the next part presents the review of the literature which contains scientific publications relevant to our research, emphasizing the findings of other authors who have theoretically and empirically examined the effect of fiscal policy on economic growth. The third part of the study contains methodology, the fourth part presents empirical results, and the fifth part includes the conclusions derived from the results.

## **2. Literature Review**

Many works deal with the impact of fiscal policy on the economic growth of different countries. Different authors deal with different aspects of fiscal policy management. There is still no consensus among the authors since some of the authors find that the fiscal policy turns out to be positive in economic growth, while other authors find that the fiscal policy has a negative impact on economic growth, where they mainly relate this negative impact to the management of weak institutions as well as high levels of corruption. In the following, the views of these authors about the impact of fiscal policy on economic growth are presented.

### *2.1. Positive impact of fiscal policy on economic growth*

The research carried out by the authors Ojong et al. (2016) examines the impact of tax revenues on economic growth. This research is carried out for the state of Nigeria, where the special focus was the examination of revenues from oil taxes and corporate taxes on the Nigerian economy. The data for the realization of this research were taken as secondary data from the Statistical Bulletins of the Central Bank of Nigeria. For the empirical analysis, multiple regressions were used where the results show that there is a statistically significant and positive relationship between oil tax revenues and economic growth in Nigeria. The findings also confirm a positive relationship between corporate tax revenues and economic growth. As a recommendation, the authors give the Nigerian authorities to invest in the tax collection infrastructure and to empower the administration for the collection of tax revenues.

The work by the authors Ugwuanyi and Ugwunta (2017) aims to determine the effect of the fiscal policy variable on economic growth, the study was carried out for sub-Saharan African countries. The result of linearly modelled hypotheses tested using panel data estimation technique under fixed effect assumptions revealed that productive and non-productive government spending, distortionary taxes (a proportional tax on nominal output) and non-distortionary taxes have effects important in the economy. the growth of sub-Saharan African countries. The findings also revealed that budget balances of sub-Saharan African countries have a positive but insignificant effect on economic growth in sub-Saharan Africa. Another study also carried out for African countries (regarding South Africa) was carried out by the authors Makhoba et al. (2019), this work was carried out using data from 1960 to 2017. For the empirical study, the authors use the VECM Johansen approach to examine the impact in short-term and long-term impact of fiscal policy on economic growth. According to the results of the empirical models, the authors find a positive relationship between the use of fiscal policy instruments and economic growth.

Another research carried out by the author Pappas et al. (2015) emphasized that the role of fiscal policy in the long-term growth process has been decisive in macroeconomics since the emergence of endogenous growth models. The authors carry out research with the aim of presenting the relationship between fiscal policy and economic growth for 15 countries of the European Union in 14 years, while the authors also investigate which of the fiscal policy instruments is more important for economic growth. The models that were used for the realization of the empirical analysis are the models; least squares method, fixed effects model, random effects model, and GMM model. The findings from the empirical analysis show that there is a positive impact of the increase in government spending on economic growth.

The research by the authors Rexha et al. (2021) analyzes the impact of fiscal policy on economic growth, this work is carried out only for the state of Kosovo, which is part of the region of Southeast European states. The time period of the research includes 11 years (2006-2016). The econometric model used by the authors is the model with the VAR technique where the Granger test was also performed to test the randomness between the data. The findings from the results presented in this research show that there is a statistically significant positive relationship between public spending and economic growth in the Republic of

Kosovo, although the findings show that the other instrument of fiscal policy (revenues) does not show a statistically significant impact. in the economic growth of Kosovo.

The authors Chugnov and Makohon (2019) carry out research on the relationship between two indicators (fiscal policy and economic growth) in the state of Ukraine. According to these authors, budget stability is characterized by the ability of state and local government bodies to finance budget expenditures in time and in full and to support the weight of the budget deficit and public debt in the gross domestic product at an economically sound level.

The author Mugableh (2019) analyzes research for the state of Jordan in the period of 40 years, namely from 1978 to 2017. The author's purpose is to analyze the relationship between economic growth and fiscal policy. The author uses the ECM model to carry out empirical analyses, where the findings from the results show that there is evidence of causal links between economic growth and fiscal policy instruments. The findings from this author also show that in the long term, general government spending has a positive impact on the economic growth of the state of Jordan, while the other instrument of fiscal policy has a negative relationship; to tax revenues, implying that tax cuts stimulate economic growth.

A recent study carried out specifically for the countries of Southeast Europe was done by the authors Qehaja et al. (2022) where the purpose of this paper was to analyze the relationship between government spending and economic growth. The time period of the research is 21 years, respectively from the year 2000 to the year 2020. The models used by these authors include the OLS models, the fixed effects method, and the random effects method. From the empirical analyses carried out in this research, the authors find that there is a positive and statistically significant relationship between government spending and economic growth in the countries of Southeast Europe during the studied period.

The paper published by the authors Petrevski, Bogoev, and Tevdovski (2016) investigates the macroeconomic effects of the fiscal policy in three of the countries of South-Eastern Europe, respectively the research is carried out for the states of Bulgaria, Croatia, and North Macedonia. The authors use vector regression to study the relationship between fiscal policy and economic activity, where the data collected are quarterly data. Based on the authors' findings, economic activity has a statistically significant impact on the inflation rate, the authors find evidence for the expansionary effects of fiscal consolidation since fiscal tightening leads to an increase in economic activity.

According to another research carried out by the author Alexiou (2009), which deals with the impact of government spending on the economic growth of countries that are considered by the author as countries in transition and are part of South-Eastern Europe, respectively the research is carried out for seven countries of this region. Based on the author's empirical evaluation findings, four of the five variables used in the evaluation, i.e., government spending on capital formation, development assistance, private investment, and trade openness, all have positive and significant effects on economic growth. In contrast, population growth turns out to be statistically insignificant.

## 2.2. Negative impact of fiscal policy on economic growth

After the presentation of various works by authors who find a positive impact of fiscal policy on economic growth, there are also works that find a negative effect/ratio between these two indicators. Some of these researches are presented below.

Ricardian Equivalence which is proposed by economist David Ricardo, this theory suggests that individuals anticipate that future taxes will be increased to pay off government debt incurred due to fiscal expansion. As a result, they increase their saving to offset the anticipated higher future taxes. In this view, changes in government spending financed by debt are seen as having no net effect on aggregate demand and economic growth, as the private sector adjusts its behaviour to counteract the fiscal stimulus (Meissner and Rostam, 2017).

The authors Agostino et al. (2016) emphasize that countries with high levels of corruption are less productive in government spending, which then represents a negative impact of government spending on economic growth. In the research carried out by this author, a total of 106 countries are included. The results from the presented empirical analysis show that in countries with high levels of corruption, the effects of government spending in different sectors have a negative impact on economic growth. The authors suggest strengthening the institutions thus reducing the high levels of corruption to increase the productivity of government spending. Important research was also carried out by the author Mauro (2017), who emphasizes that there is a lack of work that deals with the efficiency of institutions in such a way that the fiscal policy is efficient, this mainly happened because it is difficult to measure the efficiency of institutions and there is a lack of data in this direction. The author points out that the high levels of corruption cause the efficiency of the institutions to decrease and in this case the fiscal policy does not have the desired effect so as not to have a negative effect on economic growth.

Authors Ramey and Zubairy (2018) analyze the effect of multiplying government spending during economic crises, focusing on the United States of America. The results from the author show that despite the increase in government spending during the various financial crises, the effect on economic growth has not been positive (at least in the short term).

Another research carried out by the authors Dladla and Khobai (2018) analyzes the report about the impact of taxes on economic growth in South African countries. For the empirical analysis, the authors analyzed the data for 36 years, respectively from 1981 to 2016. The model used for the analysis of this data is the model with the ARDL approach. The findings from the analysis carried out with this model show that there is a negative relationship between taxes and economic growth in South African countries. In this paper, Autroet suggests that fiscal policy is very important to promote sustainable economic growth in South Africa.

A study similar to the previous one was carried out by the author Stoilova (2017), the purpose of which is to provide assessments about the impact of taxation on economic growth. The author's analysis includes the 28 countries of the European Union in the period of 18 years, respectively from 1996 to 2013. Since the data is a panel, then the author uses panel data models where he finds that some types of taxes (taxes in personal income and property taxes)

have a positive impact on economic growth, but other taxes collected such as corporate taxes, value added tax, etc. have a negative impact on economic growth.

The author Hasnul (2015) also finds a negative effect of government spending on economic growth, this author researches the relationship between these indicators for the state of Malaysia. The author divides government expenses into two types; operating expenses and development expenses. The time period of the data included in the research is 45 years, respectively from 1970 to 2014. The author uses the OLS technique for the analysis of indicators. Findings by this author suggest that there is a negative relationship between government spending and economic growth in the state of Malaysia.

Other authors Onifade et al. (2020) finally carry out empirical research using the ARDL model with data from 1981 to 2017 for the state of Nigeria. Findings based on practical experiences support the existence of a relationship between public expenditure indicators and economic growth in Nigeria. The study shows that regular government expenditures have a significant negative impact on economic growth, while the positive impact of public capital expenditures is not as significant for economic growth during the study period. The results of the Granger causality test show that the government's fiscal expansion, which depends on debt financing, has a strong impact by causing public spending and domestic investment, and this, at the same time, causes real growth in the economy. The author points out that the increase in public debt to finance public expenses is not recommended because the high increase in public debt has a negative impact on economic growth.

### **3. Methodology**

Many works deal with the impact of fiscal policy on the economic growth of different countries. Different authors deal with different aspects of fiscal policy management. To analyze the impact of fiscal policy on economic growth in Southeast European Countries, panel data were used where 5 econometric models were applied; the first model executed is based on the method, Ordinary least squares (OLS), the second model Ordinary least squares robust (OLSR). While the models for the panel data are also used; fixed effect (FE), random effect (RE), and General method of moments (GMM).

#### *3.1. Research Methodology*

The empirical analysis includes 12 years, respectively, the empirical analysis is developed with data from 2010-2021 and includes 11 countries of southeast Europe. For the testing impact of fiscal policy on economic growth, the GMM model is used, while the tests applied are Arellano and Bond (1991), Blundell (2000), and Vicente et al. (1999).

A GMM model is a statistical representation that uses multiple Gaussian distributions together to analyze a specific data set. Instead of assuming that the data come from a single Gaussian distribution, a GMM aims to capture the underlying structure by considering a combination of Gaussian distributions. One area where GMMs are commonly applied is clustering, which involves grouping items based on their similarity to each other. GMMs are

particularly useful for clustering when the data have a complex structure that cannot be accurately described by a single Gaussian distribution. In such cases, GMMs approximate the underlying structure by mixing multiple Gaussian distributions. The model learns the number of Gaussian distributions and their parameters from the data, enabling it to cluster the data into different groups. Density estimation is another valuable application of GMMs. It involves estimating the underlying probability density function of a given data set. GMMs excel at density estimation when the data have a complex structure that cannot be adequately represented by a single Gaussian distribution. In these situations, GMMs model the data density by fitting a combination of Gaussian distributions to the data set. The developed GMM model can be useful for various tasks such as anomaly detection, classification, clustering, and even density prediction of new data points. Anomaly detection is particularly important, as it involves identifying data points that deviate significantly from the rest. Detecting anomalies is essential as they may indicate errors or outliers. GMM models can help detect anomalies by first fitting a series of Gaussian distributions to the data and then determining the probability score for each data point. Those with low probability values are considered anomalies, highlighting points that deviate significantly from the rest of the data.

The reliability of the toolkits utilized by the GMM estimator directly impacts the estimator's trustworthiness. To address this concern, we consider two specification tests introduced by Arellano and Bond (1991), Blundell (2000), and Viciente et al. (1999). The initial test, known as the Sargan test, assesses the accuracy of the hypothesis that there are no over-identification constraints or that the instruments, as a whole, are exogenous.

Through analyzing the sample counterpart of the moment conditions employed in the estimation procedure, this examination either verifies or disputes the overall effectiveness of the instruments. The second test examines the hypothesis that there is no autocorrelation, meaning that the error terms are not sequentially correlated with each other. In the differenced regression, we examine whether the differenced error term demonstrates a serial lack of correlation in either the first or second order.

The specification of the dynamic panel data model (GMM) is as follows:

$$GDP_{it} = \mu + B1(GDP_{it-1}) + B2(GSPEND_{it}) + B3(ITAX_{it}) + B4(PDEBT_{it}) + B5(FFI_{it}) + B6(RLI_{it}) + B7(GEI_{it}) + B8(CPI_{it}) + \delta_i + \gamma_i + \epsilon_i \quad (1)$$

Based on the equation above, economic growth (GDP) is the dependent variable of the study which is presented as a percentage, the I parameters represent the states, and t represents the time or the years in which  $\mu$  is a constant term. Whereas the independent variables of the study are: GDP(it-1) is the first lag of the dependent variable, GSPEND represents government expenditures presented as a percentage of gross domestic production, ITAX represents government revenues presented as a percentage of gross domestic production, PDEBT represents public debt also presented as a percentage of gross domestic product, FFI represents fiscal freedom index, RLI represents Rule of law index, GEI represents Government effectiveness index and last variable CPI represents Corruption Perceptions Index. The term  $\delta_i$  is the country fixed effect that enables us to control for time-invariant unobservable factors that may affect economic growth which otherwise may lead to bias



coefficients. The term  $\gamma_i$  is the common time effect that covers the business cycle effect which otherwise may lead to spurious regression between the dependent variable and explanatory variables. The term  $\epsilon_i$  represents standard error. Following the table, a definition of the study variables is presented.

### 3.2. Descriptive statistics

Table 1 shows the descriptive statistics of the study variables, so the research was conducted with a total of 132 observations (except for some variables where we have some missing data). According to the data presented in this table, the average economic growth in the 11 states of the research is 1.84% during the time period of the research, these states on average have government spending 18.98% of the value of gross domestic production, while tax revenues are 18.63% of the value than GDP-sw. Regarding public debt, the states are characterized by 56.76% of gross production on average.

The table also shows the results of the four indices, where according to the results, the fiscal freedom index on average in these countries is 79.96, the rule of law index is on average 0.08, the Government effectiveness index has an average of 0.12 and the Corruption Perceptions Index is characterized by an average of 42.70.

**Table 1. Descriptive Statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	131	1.84	3.87	-15.31	12.43
GSPEND	131	18.98	4.32	10.84	34.3
ITAX	121	18.63	3.19	12.34	26.95
PDEBT	126	56.76	44.95	4.89	206.3
FFI	132	79.96	11.67	58	95
RLI	132	.08	.39	-.52	1.11
GEI	132	.12	.43	-1.04	1.18
CPI	130	42.70	7.31	31	64

Source: Author calculation.

## 4. Results

Table 2 presents the analysis of the correlation matrix which is presented in order to identify the relationship between economic growth and independent variables. According to the results presented in this table, both government expenditures ( $r=0.12$ ) and tax revenues ( $r=0.20$ ) have a positive relationship with the economic growth of the countries of South-Eastern Europe, the fiscal freedom index also has a positive relationship ( $r=0.12$ ). Whereas public debt ( $r=-0.43$ ) has a negative relationship with economic growth along with the indices; the operation of the law ( $r=-0.09$ ), the effectiveness of the government ( $r=-0.05$ ), and the perception of corruption ( $r=-0.03$ ).

**Table 2. Correlation matrix analysis**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) GDP	1.00							
(2) GSPEND	0.12	1.00						
(3) ITAX	0.20	-0.03	1.00					
(4) PDEBT	-0.43	-0.02	0.63	1.00				
(5) FFI	0.12	-0.59	-0.30	-0.32	1.00			
(6) RLI	-0.09	0.30	-0.07	0.03	-0.72	1.00		
(7) GEI	-0.05	0.14	0.04	0.11	-0.68	0.80	1.00	
(8) CPI	-0.03	0.14	-0.01	-0.03	-0.55	0.82	0.75	1.00

Source: Author calculation.

Table 3 presents the results of the econometric models of the countries of South-Eastern Europe. The table shows the summarized results of 5 econometric models, but for the interpretation of the empirical results, the results obtained from the Gaussian mixture model (GMM) will be taken as a basis. The Sargan test for identifying constraints (obtained from the findings of the second phase) is acknowledged as a reliable tool. It supports the claim that there is no relationship between the instrument variables and the residuals. In the first order, the Arellano-Bond test of AR(1) and AR(2) is refused; in the second order, it is approved.

According to the results presented in the table, government spending has a positive impact on economic growth ( $B=1.41$ ) where the coefficient is statistically significant at the 5% significance level. So, for every 1% increase in gross local production due to government spending, the corresponding increase in economic growth is estimated to be 1.41 percentage points on average. Tax revenues also have a positive impact on economic growth ( $B=0.22$ ), this coefficient is statistically significant at the 10% significance level. So, for every 1% of the gross domestic product collected in taxes, we will have economic growth of 0.22% on average. These results are consistent with the findings of the authors (Ojong et al., 2016; Ugwuanyi and Ugwuunta, 2017; Paparas et al., 2015; Mugableh, 2019; Qehaja et al., 2022) who emphasize that the use of these two instruments fiscal policy has a positive impact on economic growth.

Freedom Fiscal Index has a positive impact on GDP ( $B=0.96$ ), which is statistically significant at the 1% level. So, for every 1 increasing unit in this index, we will have economic growth of 0.96% on average. The index of the functioning of the law ( $B=1.07$ ) has a positive impact on economic growth, this coefficient is statistically significant at the 5% level. So, for every 1 increasing unit in the index of the functioning of the law, there will be economic growth of 1.07% on average and the last variable which has a positive impact on economic growth is the government effectiveness index ( $B=4.86$ ) but the coefficient is not statistically significant Important.

Public debt has a negative impact on economic growth ( $B=0.09$ ), which is statistically significant at the 1% level. So, for every 1% of the gross domestic product increase in the public debt, we will have an economic decline of 0.09% on average. This result is consistent with the findings of the authors Onifade et al. (2020) where the authors emphasize that the increase in public spending is financed by the increase in public debt, which then has a negative impact on economic growth.

The perception of corruption also has a negative impact on economic growth ( $B=-0.41$ ), which is statistically significant at the 1% significance level. So, for every 1 increasing unit in the corruption index, there will be an economic decline of 0.41% on average. This result is consistent with the findings of the author Agostino et al. (2016) who point out that countries characterized by high levels of corruption are less productive in government spending, therefore the effect is negative on economic growth.

**Table 3. Results of econometric models**

Variable/Model	OLS	OLSR	FE	RE	GMM
GSPEND	0.284**	0.284*	0.727***	0.284**	1.411**
	2.75	2.28	4.09	2.75	2.56
ITAX	0.0142	0.0142	0.495*	0.0142	0.221*
	0.11	0.07	2.04	0.11	2.13
PDEBT	-0.0475***	-0.0475**	-0.235***	-0.0475***	-0.0908***
	(-5.28)	(-3.16)	(-6.47)	(-5.28)	(-5.30)
FFI	-0.184**	-0.184**	-0.198*	-0.184**	0.965**
	(-2.86)	(-2.71)	(-2.04)	(-2.86)	2.6
RLI	-1.740**	1.740*	-1.711	-1.740**	1.07**
	(-2.74)	2.62	(-0.63)	(-2.74)	2.40
GEI	-0.892	-0.892	2.097	-0.892	4.86
	(-0.65)	(-0.61)	0.93	(-0.65)	0.43
CPI	0.124	0.124	0.327***	0.124	-0.419***
	1.65	1.45	4.21	1.65	(-4.15)
L.GDP					0.299
					-0.34
_cons	19.51*	19.51*	20.70*	19.51*	6.579
	-2.29	-2.29	-2	-2.29	-0.07
N	114	114	114	114	106
Arellano – Bond test for AR (1)					0.0481
Arellano – Bond test for AR (2)					0.56
Sargan					151.56
VIF					3.65
Hetttest					0.2452

*t statistics in parentheses*  
 \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## 5. Conclusions

Fiscal policy plays a crucial role in driving economic growth by shaping government spending and taxation. Through the strategic allocation of resources and management of public finances, fiscal policy can stimulate aggregate demand, promote investment, and create a favourable business environment. By implementing expansionary measures during times of economic downturn and adopting a prudent approach to debt management, governments can foster stability and confidence, leading to increased private sector activity, job creation, and overall economic prosperity. The effective utilization of fiscal policy tools is imperative for policymakers to ensure sustained and inclusive growth, address socioeconomic challenges, and steer economies toward long-term development and resilience.

The findings from the empirical analysis presented in this paper, which includes 11 countries in Southeast Europe during the period 2010-2021, that is, a 12-year time period, show that fiscal policy instruments such as government spending and tax revenues have a statistically significant impact and positive in the economic growth of these countries. From the empirical results presented in the paper, we have sufficient statistical evidence to support the first hypothesis of the research, which is in line with the findings of other authors. So, Fiscal Policy has a positive impact on the economic growth of Southeastern European countries, based on the results presented in the paper for every 1% increase in government spending we will have economic growth of 1.41% on average, while for every 1% increase in tax revenues, we will have an economic growth of 0.22%. The second hypothesis of the research "Institutions have an important role in economic growth" also has sufficient statistical evidence to accept it since the effectiveness of the government and the rule of law had a positive impact on economic growth, while corruption on the other hand has an effect negative.

In summary, fiscal policy instruments have a positive impact on the economic growth of the countries of Southeast Europe. This study serves as a valuable resource for future research on the impact of fiscal policy on economic growth in South East European countries. Building upon the findings presented in the article, we recommend that policymakers in the region prioritize the development and implementation of sound fiscal policies to stimulate economic growth. By strategically managing government spending and taxation, these countries can enhance aggregate demand, encourage investment, and create a favourable business climate. While ensuring no undue burden on the populace, efforts should be made to simplify tax systems, ensuring broad coverage and compliance. Revenue generated should be transparently and effectively reinvested into growth-inducing sectors. Policymakers should prioritize reforms that bolster government effectiveness, uphold the rule of law, and combat corruption. This can include measures such as transparent governance initiatives, judicial reforms, and anti-corruption campaigns. Furthermore, adopting expansionary measures during economic downturns and adopting prudent debt management practices can contribute to stability, confidence, and sustainable growth. Policymakers need to leverage fiscal policy tools effectively to foster long-term development, address socio-economic challenges, and strengthen the resilience of their economies. Fiscal policy instruments undeniably influence the economic trajectory of Southeast European countries. As established in this study, effective utilization of these tools can stimulate robust economic growth. Policymakers in the region, therefore, should prioritize developing and implementing fiscal policies that capitalize on these findings. Doing so will promote aggregate demand, encourage investments, and foster a favourable business environment, leading to sustainable and resilient growth.

## References

- Agostino, G., Dunne, J. P., Pironi, L. (2016). Government spending, corruption and economic growth. – *World Development*, 84, pp. 190-205.
- Alexiou, C. (2009). Government spending and economic growth: Econometric evidence from the South Eastern Europe (SEE). – *Journal of Economic and Social Research*, 11(1), p. 1.
- Chugunov, I., Makohon, V. (2019). Fiscal strategy as an instrument of economic growth. – *Baltic Journal of Economic Studies*, 5(3), pp. 213-217.

- Dladla, K., Khobai, H. (2018). The impact of taxation on economic growth in South Africa. – MPRA Paper N 86219.
- Hasnul, A. G. (2015). The effects of government expenditure on economic growth: the case of Malaysia. – MPRA Paper N 71254.
- Makhoba, B. P., Kaseeram, I., Greyling, L. (2019). Assessing the impact of fiscal policy on economic growth in South Africa. – *African Journal of Business and Economic Research*, 14(1), pp. 7-29.
- Mauro, P. (2017). The effects of corruption on growth and public expenditure. – In: *Political Corruption*. Routledge, pp. 339-352.
- Mugableh, M. I. (2019). Fiscal policy tools and economic growth in Jordan: Evidence from time-series models. – *International Journal of Economics and Finance*, 11(1), pp. 1-7.
- Meissner, T., Rostam-Afschar, D. (2017). Learning Ricardian equivalence. – *Journal of Economic Dynamics and Control*, 82, pp. 273-288.
- Ojong, C. M., Anthony, O., Arikpo, O. F. (2016). The impact of tax revenue on economic growth: Evidence from Nigeria. – *IOSR Journal of Economics and Finance*, 7(1), pp. 32-38.
- Onifade, S. T., Çevik, S., Erdoğan, S., Asongu, S., Bekun, F. V. (2020). An empirical retrospect of the impacts of government expenditures on economic growth: new evidence from the Nigerian economy. – *Journal of Economic Structures*, 9(1), pp. 1-13.
- Paparas, D., Richter, C., Paparas, A. (2015). Fiscal policy and economic growth, empirical evidence in European Union. – *Turkish economic review*, 2(4), pp. 239-268.
- Petrevski, G., Bogoev, J., Tevdovski, D. (2016). Fiscal and monetary policy effects in three South Eastern European economies. – *Empirical Economics*, 50, pp. 415-441.
- Qehaja, D., Gara, A., Qorraj, G. (2022). Allocation of Government Expenditures in Sectors and Their Impact on Economic Growth-Case Study: Western Balkan Countries. – *InterEULawEast: journal for the International and European Law, economics and market integrations*, 9(1), pp. 33-50.
- Ramey, V. A., Zubairy, S. (2018). Government spending multipliers in good times and in bad: evidence from US historical data. – *Journal of political economy*, 126(2), pp. 850-901.
- Rexha, D., Bexheti, A., Ukshini, K. (2021). Impact of The fiscal policy on economic growth: an analytical approach from the Republic of Kosovo. – *International Journal of Public Sector Performance Management*, 7(4), pp. 534-547.
- Stoilova, D. (2017). Tax structure and economic growth: Evidence from the European Union. – *Contaduría y administración*, 62(3), pp. 1041-1057.
- Ugwuanyi, U. B., Ugwunta, O. D. (2017). Fiscal policy and economic growth: An examination of selected countries in Sub-Saharan Africa. – *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(1), pp. 117-130.