

THE ROLE OF SUSTAINABLE INSTITUTIONS IN PROMOTING ECONOMIC GROWTH IN SOUTHEAST EUROPE

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Abstract

This study analyzes the role and importance of sustainable institutions in promoting economic growth in Southeast European countries. It explores how institutional quality good governance, rule of law, transparency, and anti-corruption efforts affects the region’s economic performance. Institutions are essential for ensuring a stable macroeconomic environment and attracting both domestic and foreign investment. Effective institutions enable fair resource allocation, improve economic efficiency, and build trust in state structures. The study uses secondary data from reliable sources such as the World Bank, IMF, ECB, and Eurostat. It covers the period 2010–2022, a timeframe marked by significant political and economic developments, allowing for a comprehensive analysis of trends. An econometric model and statistical analyses are employed to test the research hypotheses. Findings suggest that improved institutional quality is associated with increased GDP. Political stability and inflation control also contribute positively to growth. Interestingly, in some cases, improved corruption control has had a short-term negative impact on GDP, possibly due to structural adjustments affecting economic activity. The study highlights the impact of institutional quality on economic growth in SEE countries and emphasizes the need for policies that strengthen governance, institutional effectiveness, and anti-corruption measures. The results align with empirical evidence, and the time period analyzed provides a strong basis for drawing relevant conclusions and recommendations.

Keywords: GDP, institutional quality, corruption, sustainable institutions

1. INTRODUCTION

Institutional quality is an important determinant of economic performance and facilitates productive activities, investments, and the adoption of new technologies. However, researchers have primarily focused on explaining how institutional quality positively affects national economic growth and efficiency, while less attention has been paid to its impact on firm-level performance (Jonathan Lehne, et al, 2014).

This study also contrasts the impact of various factors on economic growth, such as corruption control, political stability, and stricter rule-based environmental measures. Many economies in the region experienced a decline in Gross Domestic Product (GDP) during the 1990–1991 period, in some cases by more than 20% or even 30%. Unemployment rose from 0% to 9%, while inflation doubled. The consequences of political unrest and armed conflict had a strong impact on local economies, which at that time were completely disconnected from global markets.

Based on the analysis by Roumeen (2013), it is suggested that economic institutions tend to be stronger in

countries that are more trade-oriented, as well as in those that rely on investments and financial flows and lack significant natural resources. While natural resources can enable countries to improve effective governance, regulatory quality, and other institutional capacities that tend to improve continuously with income growth, deeper institutions such as rule of law and corruption control tend to be weaker in resource-rich countries.

Many Southeast European countries still face challenges such as weak rule of law, high levels of corruption, inefficient public administration, and lack of transparency. However, progress toward European integration, structural reforms, and the growing demand for sustainable policies create new opportunities for development. In the Southeast European region, where countries have transitioned from closed systems and undergone prolonged economic transitions, the role of institutions is even more crucial.

2. LITERATURE REVIEW

A growing body of literature emphasizes that institutional quality is a key determinant of long-term economic growth, particularly in developing and transition economies. North (1990) laid the foundational understanding of institutions as “the rules of the game” that shape economic performance by influencing the behavior of individuals and organizations. In the context of Southeast Europe, where countries have undergone profound political and economic transitions, the strength of

institutions especially the rule of law, regulatory quality, and government effectiveness has been shown to directly impact the ability of states to attract investment, stimulate entrepreneurship, and ensure macroeconomic stability (Bartlett W. , 2009; Radulović, 2020). Empirical studies using the Worldwide Governance Indicators (WGI) and similar metrics have consistently demonstrated that countries with more accountable, transparent, and efficient institutions tend to achieve higher and

more sustainable GDP growth rates (Khalid, 2021; Roumeen, 2013).

Moreover, the literature reveals a nuanced relationship between different dimensions of institutional quality and economic outcomes. While short-term effects may result from ex-ante institutions such as policy stability and administrative capacity, long-term effects are often tied to deeper ex-post institutions, including judicial independence and corruption control (Khalid, 2021). In Southeast European countries, where structural reforms and European integration efforts are ongoing, studies suggest that sustainable institutions are essential not only for meeting EU accession criteria but also for enabling private sector development and innovation (Cheng, 2019; Trivić, 2023). However, the persistence of institutional gaps within the region especially between EU and non-EU countries poses significant challenges. These disparities are particularly evident in areas such as the enforcement of property rights, transparency in public administration, and the effectiveness of anti-corruption measures, which remain critical to enhancing economic competitiveness and investor confidence (Baumöhl, 2019; Radulović, 2020).

According to Baumöhl (2019), based on numerous studies, it has been empirically shown that institutions with high quality have a significant impact on a country's economic growth, as well as at the corporate level. Moreover, institutions strongly influence a firm's performance. Although such evidence exists, institutions and their role have been largely neglected in relation to firm survival. Therefore, it is essential to contribute to the literature, first by researching and analyzing how institutional quality affects firm profitability and survival, and second, by examining company survival in the context of the Southeast European region and its developing markets, where institutional levels represent another important factor.

According to Cheng (2019), institutional quality is presented as a model for policy liberalization, as it serves as a detailed indicator for trade and exchange rate liberalization, privatization reforms, enterprise restructuring, general institutional reforms, and competition reforms. Through this commitment, the authors have expressed their gratitude for the support from the National Science Foundations, which have consistently shown willingness to assist in this journey.

Author Bartlett (2013) emphasizes that, in today's world, science has evolved and the business landscape has expanded, as more and more investors have begun to consider institutional quality as a highly important factor, alongside assessing the operational risks that a business or company may face. When it comes to these rules, firms are generally inclined to invest in countries that protect property rights, have strict legal frameworks, developed public services with minimal bureaucracy, and limited overregulation or corruption.

According to Radulović (2005), in transition countries, institutional quality has had a significant impact on economic growth, as it has helped these countries ensure

that their institutions function effectively in creating a market economy and in meeting the prerequisites for EU membership. A concrete example is the case of Southeast European countries, some of which are already EU members, while others are still in the accession process. Therefore, this study examines the effects of institutional quality on the economic growth of Southeast Europe and compares these effects between EU and non-EU countries for the period 1996–2017, using the Worldwide Governance Indicators (WGI) to measure institutional quality.

According to Khalid (2021), institutional quality has two types of effects on economic growth: short-term and long-term effects. The short-term effect stems from the quality of ex-ante institutions, while the long-term effect derives from the quality of ex-post institutions. Ex-post institutions are formed as a direct result of dependence on resources and the type of regime. Therefore, the aim of this study is to identify the components of institutional quality that have the greatest impact on per capita growth in resource-rich developing countries. The results show that accountability has the strongest influence in shaping institutional quality in a sample of developing countries, and there is evidence that it has the most significant and meaningful effect on growth compared to other components of institutional quality.

According to Radulović (2020), based on the quality of institutions, their impact on economic growth has consistently played a significant role, particularly in transition countries. The Autoregressive Distributed Lag (ARDL) panel approach is used to analyze the relationship between institutional quality and economic growth. EU countries have shown a short-term relationship between institutional quality and economic growth, while in non-EU Southeast European countries, regulatory quality and accountability are particularly important. Therefore, every step must be carefully reconsidered, as poor decisions can lead to long-term consequences for businesses and the economy as a whole.

A practical definition of institutions is given by author Trivić (2023), who states that institutions consist of a broad set of rules and behaviors designed by humans, which help individuals understand how to interact with one another and develop patterns of interaction that allow them to anticipate others' actions. In addition, various other authors have explored the link between institutions and entrepreneurial development, which opens a new field by revealing fresh perspectives on the importance of institutional quality for a country's overall development. What is concerning is that the gap between countries in the region is widening in terms of institutional quality. Not only are we not getting closer to developed Europe, but the disparities in institutional quality are also increasing across several areas, such as rule of law, corruption control, and the effectiveness of government policies. (Canh Phuc Nguyen, et al, 2018)

2.1. Meta-analysis

Meta-analysis refers to statistically synthesized results from a series of studies gathered through a specific

methodological procedure. In particular, meta-analysis allows the individual empirical results of different

studies to be compiled and compared, after being converted into a common metric known as the effect size.

Table 1: Meta analysis of the research

Author	Year	Variables	Method	Findings
(Radulović., 2005)	(1996-2017)	Government Effectiveness, Regulatory Quality, Control of Corruption	Panel Data Collection	The results show that in SEE countries there is a long-term relationship between institutional quality and economic growth for all key variables.
(Ilkin, 2022)	(1996-2021)	Regulatory Quality, Control of Corruption, Government Effectiveness, Political Instability	Autoregressive Distributed Lag (ARDL) Model	The findings provide an overview of the impact of control variables such as inflation, openness (OPE), and population growth rate on economic growth. Specifically, openness was found to have a positive effect on the dependent variable, while inflation and the population growth rate had a negative effect on economic growth
(Alexiou, Tsaliki, & Osman, 2014)	(1972-2008)	Institutional Quality, Corruption, Economic Performance, Politics	The ARDL approach to cointegration	The empirical results of the study suggest that, for the Sudanese economy, the quality of the institutional environment is one of the most important factors in determining economic prosperity.
(Nguyen, Su, & Nguyen, 2018)	(2002-2015)	Institutional Quality, Economic Growth,	Estimators of the System Generalized Method of Moments (System GMM)	Empirical results show that improving institutional quality can reduce competition and bring about trade openness in the areas where HDIs operate to optimize their spillover effects.
(Abubakar, 2020)	(1979-2018)	Economic Growth, Political Stability, Regulatory Quality, Control of Corruption	Johansen Cointegration Approach , Ordinary Least Squares (OLS)	The results show that economic growth is driven by variables such as domestic investments and foreign direct investments. The study found that approximately 34% of the changes in institutional quality balance its effects on economic growth.
(Barro, 1996)	(1960-1990)	Institutional Quality, Inflation, Government Regulations	GMM model	Empirical findings from a panel of around 100 countries strongly support the general notion of conditional convergence. For a specific level of initial conditions, institutional quality, proper maintenance of the rule of law, lower inflation, and improvements in trade conditions are essential for growth.
(Magda, 1998)	(1995-2005)	Political Stability, Government Effectiveness, Regulatory Quality, Control of Corruption	Panel data	Five measures of institutional quality significantly increase real GDP growth in the countries of the Middle East and North Africa (MENA). In contrast, institutional quality has a negative impact on private credit growth and private investments.

Source: Data processed by the authors (2025)

3. METHODOLOGY

This paper analyzes the impact of determinant factors (institutional quality, political stability, control of corruption, inflation) on economic growth in the countries of Southeast Europe. The data used in this study are secondary data, which will be obtained from the World Bank, the International Monetary Fund, and the central banks of Southeast European countries. The time period of the research will cover the years (2010-2022), and the countries to be analyzed are the following Southeast European countries: Kosovo^{7*}, Albania, Serbia, North Macedonia, Montenegro, Cyprus, Turkey, Croatia, Bosnia and Herzegovina, Bulgaria, Greece, Moldova, Romania, and Slovenia.

For extracting the results, econometric models will be applied through statistical tests in the SPSS and Excel programs, such as: linear regression, correlation analysis, heteroskedasticity, autocorrelation, and the panel effects model. These econometric tests are applied to ensure the validity and robustness of the estimated relationship between sustainable institutional quality and

economic growth in Southeast Europe. The panel regression framework allows controlling for country-specific effects, while diagnostic tests for heteroskedasticity and autocorrelation ensure the reliability of statistical inference.

The research questions for this econometric model are:

1. How has the quality of institutions affected economic growth in the countries of Southeast Europe?
2. How does the level of corruption and government effectiveness influence the pace of economic growth in the countries of Southeast Europe?
3. Is there a statistically significant relationship between political stability and foreign direct investments in the Southeast European region?

The hypotheses are:

H0: The quality of institutions does not affect the economic growth of the countries of Southeast Europe.

H1: The quality of institutions affects the economic growth of the countries of Southeast Europe.

Table 2: Description of the variables included in the econometric model

Variable	Description of the Variable	Data Source
Dependent Variable (Y)	Economic Growth (GDP)	World Bank (2010-2022)
Independent Variable (X1)	Institutional Quality (IQ)	World Bank (2010-2022)
Independent Variable (X2)	Political Stability (PS)	World Bank (2010-2022)
Independent Variable (X3)	Control of Corruption (CC)	World Bank (2010-2022)
Independent Variable (X4)	Inflation (I)	World Bank (2010-2022)

Source: Data obtained by the authors (2010-2022)

The econometric model that will be used in this study is specified as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

$$\ln Y(\text{GDP}) = \beta^0 + \beta_1 (\text{Institutional Quality}) + \beta_2 (\text{Control of Corruption}) + \beta_3 (\text{Political Stability}) + \beta_4 (\text{Inflation}) + e$$

In the econometric model, the dependent variable is economic growth (GDP), while the independent variables are: Institutional Quality, Political Stability, Control of Corruption, and Inflation. 'e' refers to the error term (stochastic variables), and $\beta_1, \beta_2, \beta_3$ are the coefficients of the econometric model.

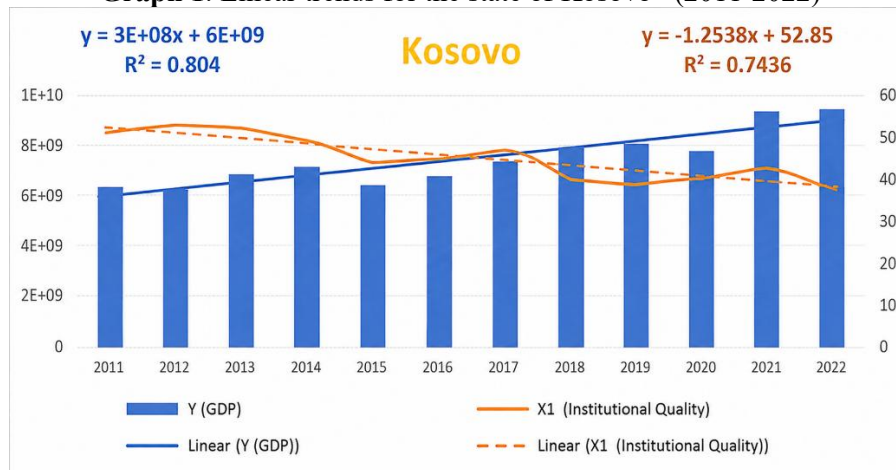
3.1 Comparative analysis of linear trends

The following data are presented, which will be analyzed through linear trends for the factors included in this paper for the time period (2010-2022) of four countries in Southeast Europe, and a comment will be made for each trend.

⁷ This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo* declaration of independence.

*Added by the Editorial Board and applies throughout the document.

Graph 1: Linear trends for the state of Kosovo* (2011-2022)

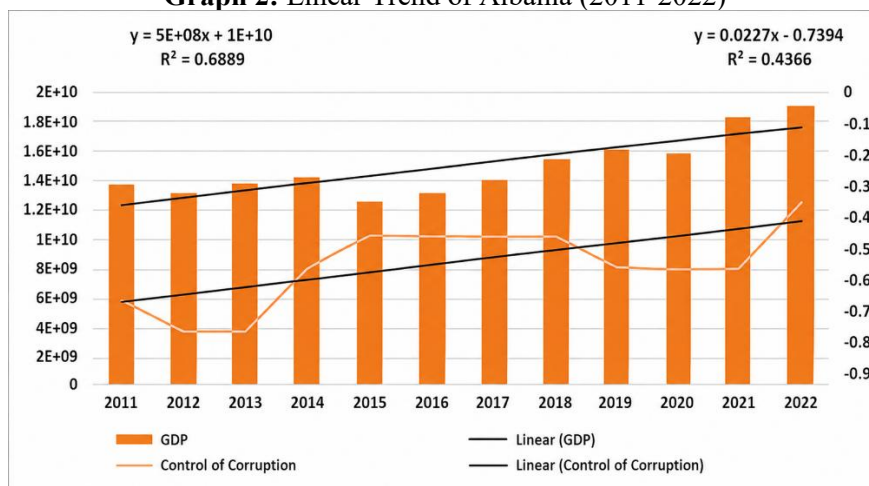


Source: Calculations made by the authors in Microsoft Excel (2025)

From the graphical presentation, it is evident that there are significant fluctuations in the institutional quality in the state of Kosovo*. Except for the year 2012, when Kosovo* experienced a growth of 1.2%, throughout this

entire period, Kosovo's* real economic growth has been between 3% and 4%. This growth is insufficient to keep up with the trend of new entrants into the labor market due to the country's low GDP base.

Graph 2: Linear Trend of Albania (2011-2022)



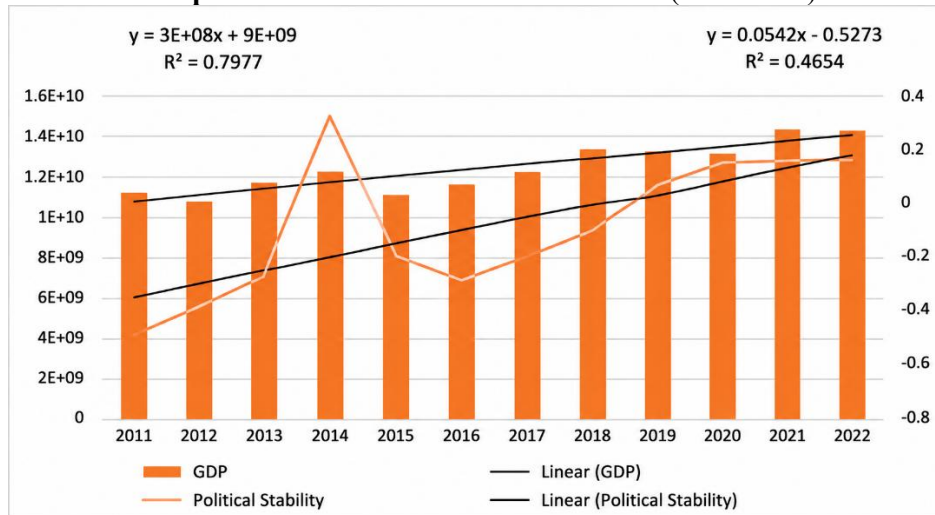
Source: Calculations of the authors using Microsoft Excel (2025)

According to the graphical presentation, it can be observed that control of corruption shows an increasing trend from 2011 to 2022, while GDP shows a rising trend for the period 2011, then again from 2015-2016-2017 up to 2021-2022.

In the first half of 2015, we observe an accelerated decline of 2.53% on an annual basis. Despite this decline,

the dynamics of household consumption indicate that its level remains above the average of the last two years by 1.6%. Additionally, in 2021-2022, there was a significant increase, with this real growth in 2021 occurring mainly in the following economic activities: hotels and restaurants with 34.7%, and wholesale and retail trade.

Graph 3: Linear Trend of North Macedonia (2011-2022)

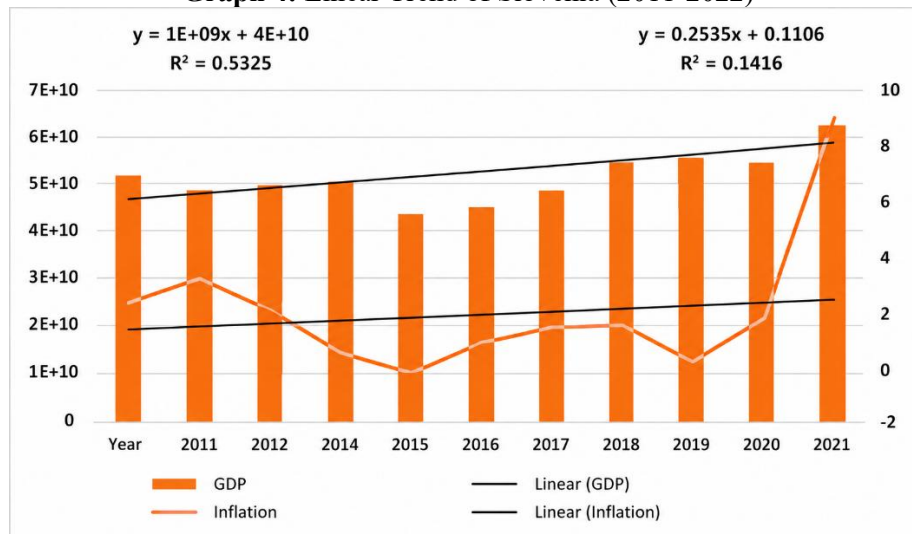


Source: Data calculated by the authors in Microsoft Excel (2025)

From this figure, we observe that the dependent variable, GDP, has shown a positive and steady upward trend, while political stability has exhibited a rapid growth trend during the period 2011-2022, reaching its highest point. Between 2009 and 2019, the inflow of Macedonian and foreign nationals into the country

increased by approximately 60%. About 90% of the foreigners entering were from European Union member states. Meanwhile, the number of Macedonian citizens leaving the country doubled, and the number of foreign nationals leaving North Macedonia increased by 25%.

Graph 4: Linear Trend of Slovenia (2011-2022)



Source: Data calculated by the authors in Microsoft Excel (2025)

According to Graph 4, we can observe that the dependent variable GDP has shown a positive growth trend, while inflation exhibits a rapid increasing trend starting from 2011, continuing through 2014-2015 and

persisting until 2022. Slovenia's economy records an average growth rate of 2.6% per decade, which is above the Eurozone average of 1.4%. In 2022, the real GDP growth was 2.5%.

4. RESULTS

In this part of the econometric analysis, the results of descriptive statistics, correlation coefficients, Pearson coefficient, R-squared, heteroskedasticity,

autocorrelation, panel effect models, and hypothesis testing through statistical tests for the variables included in the econometric models will be presented.

Table 3: Descriptive Statistics for the Variables Included in the Econometric Model

Variable	Mean	Standard Deviation	Number of Observations
lnY (Economic Growth, GDP)	24.6478	1.41085	168

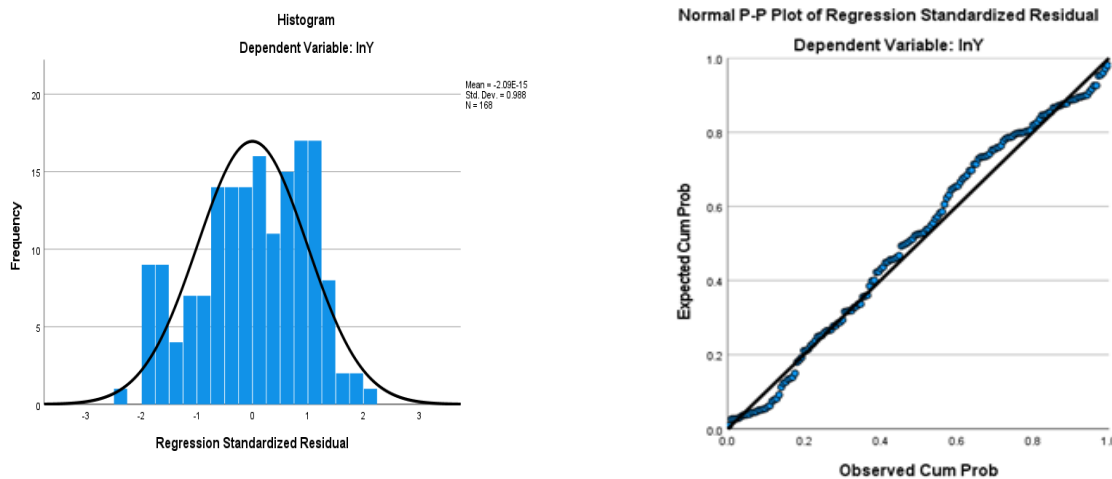
X1 (Quality of Institutions)	62.67	10.500	168
X2 (Political Stability)	0.01	0.560	168
X3 (Control of Corruption)	-0.13	0.464	168
X4 (Inflation)	3.72	6.955	168

Source: Calculations by the authors using SPSS software (2025)

According to Table 3, we observe that there are 168 observations, with each variable presenting its mean value and standard deviation. It is important to highlight the

third variable, control of corruption, which has a negative average that differs from the means of the other variables.

Figure 6: Graphical Presentation of the Histogram



Source: Authors' calculations using SPSS software (2025)

According to the graphical presentation of the histogram, we can conclude that the data used in the study follow a normal distribution, as the histogram curve has a symmetrical (mesokurtic) shape and tends to be centered. Based on the probability plot, we can observe a strong linear relationship between GDP and the

independent variables (quality of institutions, political stability, control of corruption, and inflation), as the data points are positioned very close to the regression line.

The following presents the econometric model with the coefficients obtained from the coefficients table:

$$\begin{aligned}
 Y &= \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + e \\
 \ln Y (\text{GDP}) &= \beta_0 + \beta (\text{Institutional Quality}) + \beta (\text{Corruption Control}) \\
 &\quad + \beta (\text{Political Stability}) + \beta (\text{Inflation}) + e \\
 \ln Y &= 19.713 + 0.077x_1 - 1.111x_2 + 0.432x_3 + 0.054x_4 + 0.636 \\
 e &= 100 - R^2 \\
 e &= 100 - 36.4 = 63.6\% \text{ or } 0.636
 \end{aligned}$$

Table 4: Coefficient Analysis of the Variables Included in the Econometric Model

Coefficients ^a	B	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	19.713	0.878	-	22.451	0.000
Institutional Quality	0.077	0.013	0.571	5.716	0.000
Political Stability	-1.111	0.205	-0.441	-5.424	0.000
Corruption Control	0.432	0.295	0.142	1.463	0.145
Inflation	0.054	0.014	0.265	3.895	0.000

Source: Authors' calculations using SPSS (2025)

β_0 – If all other factors remain constant (X_1, X_2, X_3, X_4), then GDP will be 19.713 units. This assumption is valid

because the p-value = 0.000 < 0.05, indicating statistical significance.

β_1 – If institutional quality increases by 1 unit, while keeping the variables political stability, control of corruption, and inflation constant, then GDP will increase by 0.077 units. This assumption is statistically valid because the p-value = 0.000 < 0.05, meaning it falls within the range of statistical significance. Logically, we can say that institutional quality positively influences foreign direct investment (FDI) and trade openness, both of which enhance economic growth. However, improving institutional quality might also mitigate the competition created by trade openness in the sectors where FDIs operate, to optimize their spillover effect.

β_2 – If political stability increases by 1 unit, holding the other variables constant (institutional quality, corruption control, and inflation), then GDP will decrease by -1.111 units. This result is statistically valid because the p-value = 0.000 < 0.05. This suggests that the more frequently governments change in a country, the more unstable it becomes, and the lower the economic growth it may experience.

β_3 – If corruption control increases by 1 unit, keeping the variables institutional quality, political stability, and inflation constant, then GDP will increase by 0.432

units. However, this hypothesis is not statistically valid, as the p-value = 0.145 > 0.05, which means it falls outside the confidence interval. From an economic perspective, we can say that when a country manages to keep corruption under control, it contributes to economic stability, because resources are managed more efficiently, funds are distributed more fairly, investments are made where needed, new investors are attracted, and the business climate improves ultimately boosting economic growth through this chain effect.

β_4 – If inflation increases by 1 unit, keeping institutional quality, political stability, and corruption control constant, then GDP will increase by 0.054 units. This assumption is statistically valid as p-value = 0.000 < 0.05. However, studies show that 6 to 12 months after inflation exceeds 15%, real effects on the economy begin to be felt because people have lower income and have spent their savings, which impacts businesses. This means that businesses will face lower sales, reduced cash flow, and may even go bankrupt. Companies heavily burdened with debt are more likely to collapse, which in turn negatively affects economic growth.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.603	0.364	0.348	1.13922	1.412

Note: a. Predictors: (Constant), X4 (Inflation), X3 (Control of Corruption), X2 (Political Stability), X1 (Institutional Quality)

Source: Authors' calculations in SPSS (2025)

Correlation Coefficient R = 0.603 or 60.3%

The correlation coefficient R = 0.603 indicates a moderate positive relationship between economic growth and the explanatory variables such as institutional quality, political stability, control of corruption, and inflation in the countries of Southeast Europe. This result suggests that improvements in sustainable institutions and macroeconomic stability are generally associated with higher economic growth, supporting the important role of institutional factors in economic development. However, the moderate strength of the relationship indicates that economic growth is also influenced by other structural factors; therefore, further econometric analyses are required to confirm the stability and reliability of this relationship.

Coefficient of Determination R² = 0.364 or 36.4%

The coefficient of determination R² = 0.364 indicates that approximately 36.4% of the variation in economic growth in Southeast European countries is explained by institutional quality, political stability, control of

corruption, and inflation included in the model. This relatively limited explanatory power suggests that, although sustainable institutions play an important role in promoting economic growth, they are not the only determinants of economic performance in the region. Economic growth is also influenced by other structural and macroeconomic factors not captured in the model, such as investment, human capital, trade openness, and fiscal conditions. Therefore, the result should be interpreted as evidence of a meaningful but partial contribution of institutional factors to economic growth.

Autocorrelation

According to the Durbin-Watson statistical results, we can conclude that this econometric model exhibits a moderately positive autocorrelation (Durbin-Watson = 1.41), since the value is quite close to 0. The standard errors of this econometric model are very small. However, this value is not within the preferred range for the DW coefficient, which is between 1.5 and 2.5.

Table 6: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	120.868	4	30.217	23.283	0.000
Residual	211.545	163	1.298		
Total	332.413	167			

Note: a. Dependent Variable: lnY (GDP); b. Predictors: (Constant), X4 (Inflation), X3 (Control of Corruption), X2 (Political Stability), X1 (Quality of Institutions)

Source: Authors' conclusions based on SPSS analysis (2025)

Based on the overall significance of the ANOVA test, we conclude that the model is generally valid because the significance value is less than the threshold (P-value = 0.000 < 0.05).

Another important aspect to comment on is hypothesis testing using the T-test and F-test, where the main

condition is that the calculated t-value (tf) must be greater than the critical t-value (tkr). Based on calculations, the critical t-value is tkr = 1.973 and the critical F-value is fkr = 2.655. Therefore, the comparison will be made with the tf values for the parameters β1, β2, β3, and β4.

T- test: Actual value <Critical value » H0 ✓, H1 x	
Actual value >Critical value » H0 x, H1 ✓	
tf	tkr
β1 = 5.716 > 1.973	H0 x, H1 ✓
β2 = -5.424 < 1.973	H0 ✓, H2 x
β3 = 1.463 < 1.973	H0 ✓, H1 x
β4 = 3.895 > 1.973	H0 x, H1 ✓

X1 – Based on the T-test results, we observe that the calculated value (5.716) is greater than the critical value (1.973), therefore the null hypothesis is rejected, and the alternative hypothesis H1 is accepted. This means that the quality of institutions affects the economic growth of the countries in Southeastern Europe.

X2 – Based on the T-test results, we observe that the calculated value (-5.424) is less than the critical value (1.973), therefore the null hypothesis is accepted, and the alternative hypothesis H2 is rejected. This means that political stability does not affect the economic growth of the countries in Southeastern Europe.

X3 – Based on the T-test results, we observe that the calculated value (1.463) is less than the critical value (1.973), therefore the null hypothesis is accepted, and the alternative hypothesis H3 is rejected. This means that control of corruption does not affect the economic growth of the countries in Southeastern Europe.

X4 – Based on the T-test results, we observe that the calculated value (3.895) is greater than the critical value (1.973), therefore the null hypothesis is rejected, and the alternative hypothesis H4 is accepted. This means that inflation affects the economic growth of the countries in Southeastern Europe.

F- test:
Actual value <Critical value » H0 ✓, H1 x
Actual value >Critical value » H0 x, H1 ✓
Ff > Fkr
23.283 > 3.05

Based on the results of the Fisher test, we observe that the calculated value (23.283) is greater than the critical value (3.05), therefore the null hypothesis is rejected and the alternative hypothesis H1 is accepted, which means that the model is significant.

Table 7: Panel Effects Model – Coefficients

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound
(Constant)	23.022	0.222	-	103.653	<.001	22.573	23.471
Albania	0.689	0.116	0.202	5.916	<.001	0.453	0.924
Croatia	1.940	0.177	0.569	10.988	<.001	1.583	2.296
Montenegro	3.714	0.200	1.090	18.579	<.001	3.310	4.118
Quality of Institutions	-0.004	0.005	-0.030	-0.821	0.417	-0.015	0.006
Political Stability	0.086	0.092	0.026	0.930	0.358	-0.100	0.271
Control of Corruption	0.269	0.171	0.066	1.577	0.123	-0.076	0.615
Inflation	0.022	0.007	0.036	3.197	0.003	0.008	0.035

Source: Authors' calculations in SPSS (2025)

$$Y_{it} = b_0 + b_1D_{1i} + b_2D_{2i} + b_3D_{3i} + b_4X_{1t} + b_5X_{2t} + b_6X_{3t} + b_7X_{4t} + e_{it}$$

$$Y_{it} = 23.022 + 0.689 D1i + 1.940 D2i + 3.714 D3i - 0.004 X1t + 0.086 X2t + 0.269 X3t + 0.022 X4t + 0.005 e = 100\% - 99.5 = 0.5\% \text{ or } 0.005$$

$\beta_0 = 23.022\%$ is the average GDP in Kosovo*. (P-value = $0.001 < 0.05$).

β_1 – This regression coefficient represents the difference in GDP between Albania and Kosovo*. In Albania, GDP increases by 0.689% compared to Kosovo's* GDP. The average GDP in Albania is: $23.022\% + 0.689\% = 23.711\%$. (P-value = $0.001 < 0.05$).

β_2 – This regression coefficient represents the difference in GDP between Croatia and Kosovo*. In Croatia, GDP increases by 1.940% compared to Kosovo's* GDP. The average GDP in Croatia is: $23.022\% + 1.940\% = 24.962\%$. (P-value = $0.001 < 0.05$).

β_3 – This regression coefficient represents the difference in GDP between Montenegro and Kosovo. In Montenegro, GDP increases by 3.714% compared to

Kosovo's* GDP. The average GDP in Montenegro is: $23.022\% + 3.714\% = 26.735\%$. (P-value = $0.001 < 0.05$).

β_4 – This regression coefficient represents the predicted value of GDP when institutional quality increases by 1 unit. (P-value = $0.417 > 0.05$).

β_5 – This regression coefficient represents the predicted value of GDP when political stability increases by 1 unit. (P-value = $0.358 > 0.05$).

β_6 – This regression coefficient represents the predicted value of GDP when control of corruption increases by 1 unit. (P-value = $0.123 > 0.05$).

β_7 – If inflation increases by 1 unit while keeping all other factors constant, GDP increases by 0.022 units. (P-value = $0.003 < 0.05$).

5. DISCUSSION

The results of this study clearly demonstrate the importance of institutional quality in promoting economic growth in Southeast European countries. Through econometric and statistical analyses, a significant and positive relationship was confirmed between institutional quality and GDP growth. The coefficient for this variable was positive and statistically significant, indicating that improvements in institutional quality contribute meaningfully to economic development. This finding aligns with existing literature, which emphasizes that the effective functioning of institutions is essential for creating a stable and predictable investment environment, as well as for the efficient allocation of resources in the economy.

Furthermore, inflation was also found to have a positive impact on economic growth, although this impact is more complex and may reflect increased aggregate demand during certain periods. However, it is important to highlight that this positive effect is valid only within a controlled range since high and uncontrolled inflation can seriously harm consumers' purchasing power and overall economic stability. This is especially true for transition economies, where supervisory institutions and monetary stability are still under development.

Although political stability is generally seen as a driver of economic development, in this analysis it showed a negative relationship with GDP. While this result is statistically significant, it must be interpreted with caution. In some cases, countries undergoing political reforms or institutional transitions may experience short-term uncertainty, which reduces economic activity. Nevertheless, this does not imply that political stability is unimportant on the contrary, in the long run, it is essential for sustainable economic growth. This result may reflect the complexity of measuring political stability and the need for more detailed indicators to accurately capture this dimension.

Contrary to theoretical expectations, corruption control did not show a statistically significant impact in the model. This may be explained by the fact that in the analyzed countries, anti-corruption reforms are still ongoing and often occur in a fragmented or inconsistent manner. Another possible explanation is that the positive effects of corruption control take time to materialize and reflect in productivity growth and investor confidence. In some cases, strict anti-corruption measures may temporarily slow down economic activity, especially in sectors where informal practices are widespread.

The coefficient of determination (R^2) of 36.4% suggests that the model used in this study explains only a part of the variation in GDP. This indicates that while the included variables have an impact, there are other important factors not captured in the current model such as private investment, international trade, technology, or human capital. Therefore, for a more comprehensive understanding of the drivers of economic growth, it is recommended that future research expand the model.

Lastly, all statistical tests (ANOVA, t-test, F-test) confirmed the validity of the model and the significance of some of the selected variables. The Durbin-Watson value of 1.41 indicates a slight positive autocorrelation, though not severe enough to compromise the model's reliability.

6. CONCLUSION

This study highlights the essential role of institutional quality in driving economic growth in Southeast European countries. The results of the econometric analysis show a strong and significant relationship between well-functioning institutions and GDP growth, confirming that stable, transparent institutions capable of upholding the rule of law are key factors for sustainable economic development. Additionally, it was observed that controlled inflation can have a positive impact on economic growth, often reflecting increased aggregate demand. However, high and uncontrolled inflation remains a risk that must be carefully managed by the relevant institutions. Political stability, although theoretically expected to have a positive effect, showed a negative relationship

with GDP in this analysis. This may be due to temporary uncertainty during periods of reform or transition. Similarly, corruption control was not found to be statistically significant, suggesting that its impact takes longer to manifest in the economy particularly in contexts where reforms are fragmented or inconsistent. Overall, the model explains a considerable portion of the variation in GDP but also emphasizes the need to include additional variables in future studies to gain a more comprehensive understanding. Therefore, policies aimed at strengthening institutions, improving the political climate, and effectively managing inflation represent key foundations for long-term and sustainable economic growth in the region.

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