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# THE IMPORTANCE OF GOVERNMENT EFFECTIVENESS AND REGULATORY QUALITY FOR THE ECONOMIC GROWTH OF BOSNIA AND HERZEGOVINA

**Abstract**

The aim of this research is to examine the impact of government effectiveness and regulatory quality (as key components of institutional quality) on the economic growth of Bosnia and Herzegovina, using correlation and regression analysis. Data were obtained from the World Bank database (Worldwide Governance Indicators and GDP per capita) and cover the period from 2002 to 2023. The results indicate that both government effectiveness and regulatory quality have a statistically significant impact on the economic growth of Bosnia and Herzegovina, with the note that government effectiveness shows a negative effect. The main limitation of the study lies in the perceptual nature of the indicators for government effectiveness and regulatory quality, which may affect the applicability of the results. This research provides an empirically grounded insight into the relationship between government effectiveness, regulatory quality, and economic growth in a country with a specific institutional framework – Bosnia and Herzegovina. By focusing specifically on Bosnia and Herzegovina, this study addresses a gap in the domestic literature and offers valuable policy recommendations for improving institutional quality and stimulating economic growth. In the first part of the paper, introductory considerations are presented; the second part is dedicated to the review of previous literature, while the third and fourth parts of the paper relate to the methodology, discussion, and research results.

**Keywords:** *government effectiveness, regulatory quality, economic growth, GDP per capita.*

**JEL:** H11, O43, O52

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## 1. INTRODUCTORY CONSIDERATIONS

Today institutions are one of the most important topics in economics. This became even clearer after the 2024 Nobel Prize in Economics was awarded to Daron Acemoglu, Simon Johnson, and James Robinson for their research on how institutions influence prosperity.

Institutions are one of the key factors that shape modern economic growth. They are considered the main cause of long-term economic development. In every society, institutions determine how resources are distributed. Because of that, they are often more important than geography or culture in explaining differences between countries (Acemoglu et al., 2004). Within institutional quality, the rule of law and control of corruption are especially important for attracting investments and achieving sustainable growth (Rodrik et al., 2004). The goal of this research is to examine how government effectiveness and regulatory quality affect economic growth in Bosnia and Herzegovina.

Countries with strong institutions, secure property rights, and fair rules invest more in people and infrastructure. This allows them to use their resources better and reach higher income levels (Acemoglu et al., 2001). Good institutions help economic growth by attracting investment, increasing economic freedom, and supporting sustainable development. Government effectiveness and regulatory quality play a very important role in this process.Institutional quality is a long-term factor of growth. Institutions work over time, unlike some other factors that have only short-term effects. Good institutions are the foundation of development. One challenge in studying institutions is that their quality cannot be measured directly. Unlike GDP, unemployment, or inflation, institutional quality is usually measured through perception data, such as surveys and expert opinions. These data often come from the World Bank's Worldwide Governance Indicators, but they may include a level of subjectivity.

Many famous researchers have studied institutions, including Douglass North, Daron Acemoglu, James A. Robinson, Daniel Kaufmann, Robert E. Hall, Charles I. Jones, Andrei Shleifer, Robert Vishny, and Dani Rodrik. International organizations such as the World Bank, UNDP, and OECD also highlight the importance of strong institutions for development. Institutions are not only an academic topic—they are a real factor of progress.Important authors who have studied economic growth include Thomas Piketty, Robert Solow, Paul Romer, Simon Kuznets, Daron Acemoglu, Kenneth Arrow, Robert Lucas, Philippe Aghion, and others.The focus of this research is economic growth in Bosnia and Herzegovina and how it is influenced by government effectiveness and regulatory quality.

## 2. LITERATURE REVIEW

Most research that connects government effectiveness and regulatory quality with economic growth comes from foreign studies. Kaufmann et al. (2002), using data for 175 countries from 2000 to 2001 and focusing on Latin America and the Caribbean, found a strong positive relationship between income per capita and governance quality. They showed a clear causal effect from better governance to higher income per capita.

Emara and Chiu (2016), using data for 188 countries, created a Composite Governance Index (CGI) that combines six World Governance Indicators (WGI). They found that if the index increases by one unit, GDP per capita increases by about 2%. Mehanna, Yazbeck, and Sarieddine (2010) examined 23 countries in the Middle East and North Africa from 1996 to 2005. They found that three indicators—voice and accountability, government effectiveness, and control of corruption—had the strongest impact on economic growth.

Nguyen, Dinh, and Nguyen (2018) studied 29 developing economies from 2002 to 2015 using the SGMM method. Their results showed that institutional quality has a significant positive effect on economic growth. Liko (2024), using data for eight Balkan countries from 2000 to 2022, also found a positive and significant relationship between institutions and growth. Sasmaz and Sagdic (2020) analyzed transition countries and found that government effectiveness has a positive impact on economic growth, while rule of law was not statistically significant. They also found a one-way causality from government effectiveness to economic growth.
Lopes, Packham, and Walther (2023) examined six governance indicators in Brazil, Russia, India, China, South Africa, the USA, Germany, and Japan for the period 1996–2018. They found that regulatory quality has a positive effect on growth, while rule of law has a negative effect. Nedić et al. (2020) analyzed five Western Balkan countries (Serbia, Montenegro, Bosnia and Herzegovina, North Macedonia, and Albania) from 2006 to 2016. Multiple regression showed that government effectiveness and regulatory quality had the strongest positive impact on GDP per capita.

Although most research shows that better institutions lead to growth, some studies show the opposite. For example, Poudel, Khatri, and Acharya (2025) studied Nepal from 1996 to 2022 and found that government effectiveness had a negative correlation with GDP, indicating inefficiencies in public administration. Regulatory quality showed mixed results.

Nguyen and Bui (2022) also found negative effects of government spending and control of corruption on growth. Nketia, Kong et al. (2020) analyzed African countries from 1997 to 2017 and found that rule of law, political stability, and

voice and accountability positively affect growth, while regulatory quality, control of corruption, and government effectiveness have negative effects. They also found two-way causality between economic growth and government effectiveness.

Omoteso and Mobolaji (2014), analyzing Sub-Saharan African countries from 2002 to 2009, found that political stability and regulatory quality support growth, but government effectiveness has a negative effect. Almohammed and Ekşi (2021) studied MSCI countries from 2002 to 2018 and found no significant relationship between governance and economic development. This means that government effectiveness and regulatory quality do not always lead to growth.

Babajić et al. (2025) analyzed Bosnia and Herzegovina from 2002 to 2022. They found that institutional quality is declining, while economic growth shows moderate positive trends. Correlation analysis showed significant links between voice and accountability, regulatory quality, rule of law, and control of corruption with growth. Regression analysis found that regulatory quality has the strongest impact. Babajić et al. (2024) analyzed seven Western Balkan countries (Albania, Bosnia and Herzegovina, Montenegro, Croatia, North Macedonia, Serbia, and Kosovo) from 2008 to 2022. They found a strong positive relationship between GDP per capita and institutional quality indicators. Regression showed that only the constant term and rule of law were statistically significant.

In examining the impact of institutional quality on Jordan's economic growth for the period 2002–2022 using OLS regression, it was found that government effectiveness and the rule of law exert favorable and significant effects on economic growth. The World Governance Indicators (WGI) were used as the independent variable indicators (Alkhawaldeh, Al-Shaer, Alwreikat, & Wahshat, 2025).A study employing similar methods and the World Governance Indicators (WGI) for Morocco over the period 1996–2021 concluded that corruption has a significant negative impact on economic growth, while political stability emerged as a key driver of economic expansion. The research highlights the crucial role of institutions, political stability, and effective governance in fostering economic growth (Ritahi & Echaoui, 2024).
Using the same input indicators and regression method, the relationship between the World Governance Indicators (WGI) and GDP growth in Bangladesh was examined for the period 1996–2018. The findings showed that government effectiveness, regulatory quality, and political stability were not statistically significant and had no effect on Bangladesh's economic growth (Anoy, 2020).

For this research, the most important studies are those that focus on Bosnia and Herzegovina or on the region of which Bosnia and Herzegovina is a part. Such studies are limited, which represents both a challenge and an additional motivation. Bosnia and Herzegovina has low and unstable economic growth. At the same time, theory and many empirical studies highlight the importance of institutional quality

for economic growth and development. However, in the specific case of Bosnia and Herzegovina, it is still unclear whether and to what extent government effectiveness and regulatory quality limit or contribute to economic growth.

The main research problem is to determine whether and how government effectiveness and regulatory quality influence GDP per capita in Bosnia and Herzegovina. It is also important to compare the results with findings from other studies. Despite many studies showing that institutional quality—especially government effectiveness and regulatory quality—has a significant impact on growth, there are very few quantitative studies that examine this relationship in Bosnia and Herzegovina using World Bank WGI indicators. Most existing research focuses on developing countries or regions, but similar studies for Bosnia and Herzegovina are rare.

This research aims to provide an empirical analysis based on available data for the period 2002–2023 for Bosnia and Herzegovina. The main goal is to examine the impact of institutional dimensions, especially government effectiveness and regulatory quality, on economic growth measured by GDP per capita.
Two hypotheses are formulated for this purpose:

**H1:** *Government effectiveness has a statistically significant impact on the economic growth of Bosnia and Herzegovina.*

Dependent variable: economic growth of Bosnia and Herzegovina; Independent variable: government effectiveness

**H2:** *Regulatory quality has a statistically significant impact on the economic growth of Bosnia and Herzegovina.*

Dependent variable: economic growth of Bosnia and Herzegovina; Independent variable: regulatory quality

Government effectiveness and regulatory quality are dimensions of institutional quality. Before explaining institutional quality, it is important to define institutions themselves. "Institutions are the rules of the game in a society or, more formally, they are humanly devised constraints that shape human interaction. As a result, they structure incentives in human exchange, whether political, social, or economic. Institutional change shapes the way societies evolve over time and is therefore the key to understanding historical change." (North, 1990)

There is no single, universally accepted definition of institutional quality. One common definition is: "Institutional quality refers to the efficiency, transparency, and strength of institutions within a country or region. It includes governance structures,

rule of law, regulatory frameworks, and the overall institutional environment that shapes economic, social, and environmental outcomes."(Ulucak, 2020)

According to Kaufmann et al. (2010), institutional quality is measured through six dimensions of governance, with two indicators for each of the three key areas. These six dimensions are: Voice and accountability, Political stability and absence of violence/terrorism, Government effectiveness, Regulatory quality, Rule of law, Control of corruption. Through these six dimensions, the World Bank operationalizes institutional quality. The next section presents the theoretical research model.

## 3. METHODOLOGY

This research is based on secondary data sources. The data were collected from the World Bank database (World Bank, 2025), meaning that only one data source was used. The main purpose of the study is to examine the relationship between institutional quality and economic growth in Bosnia and Herzegovina. The time frame of the research covers the period from 2002 to 2023, since data for 2000 and 2001 are not available. There are several reasons for selecting this period. First, a longer observation period allows more reliable statistical conclusions. Second, the chosen period includes post-war economic recovery, reform processes in Bosnia and Herzegovina, as well as global and regional shocks.

The independent variables in the study are government effectiveness and regulatory quality. These indicators come from the Worldwide Governance Indicators (WGI) provided by the World Bank. The dependent variable is economic growth, measured by GDP per capita. All data are taken as annual values for Bosnia and Herzegovina. To examine the relationship between government effectiveness, regulatory quality (institutional quality), and economic growth, two statistical methods were applied:

- Linear regression analysis – to estimate the impact of the independent variables (regulatory quality and government effectiveness) on the dependent variable (GDP per capita). Pearson correlation analysis – to examine the direction and strength of the relationship between the dependent and independent variables.
- Correlation analysis explores the relationship between variables, but does not show causality. Regression analysis, on the other hand, is a statistical method used to determine causal relationships and to estimate one variable based on another (Fazlović, 2013).

Moving from correlation to regression represents a standard research approach in economic analysis: first identifying the relationship, and then testing the causality and strength of the effect. The statistical analysis was carried out using the SPSS software package.

The table below presents the research variables, including their definitions, types, and labels. As mentioned earlier, the operationalization of variables was created in line with recognized indicators from the World Bank's WGI database.

**Table 1:** Description of variables/indicators.

| Variable/ indicator | Variable type | Label | Opis |
|---|---|---|---|
| Government effectiveness | Independet | GE | Government effectiveness includes perceptions of the quality of public services, the quality of the civil service and its degree of independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to those policies (World Bank, 2025). |
| Regulatory quality | Independet | RQ | Regulatory quality includes perceptions of the government's ability to formulate and implement sound policies and regulations that enable and promote private sector development (World Bank, 2025). |
| Gross domestic product per capita (GDP per capita) | Dependet | GDP P.C. | GDP per capita is the gross domestic product divided by the average population during the year. GDP is the sum of the gross value added by all resident producers in the economy, plus product taxes and minus any subsidies not included in the value of the products (World Bank, 2025). |

## 4. DISCUSSION AND RESEARCH RESULTS

With a limited number of observations, a single-country focus, and in line with the methodological practices of previous authors, correlation and linear regression represent an initial, well-founded, and empirically accepted approach that can provide insight into the relationship between specific dimensions of institutional quality and economic growth (Babajić, Baraković Nurikić, & Karabegović, 2025; Babajić, Baraković Nurikić, Karabegović, & Nuhanović, 2024; Alkhawaldeh, Al-Shaer, Alwreikat, & Wahshat, 2025; Anoy, 2020; Ritahi & Echaoui, 2024). Certainly, there are methods that could yield more robust results, which remains a challenge and opportunity for future research.

### 4.1. Descriptive Statistics

Descriptive statistics represent an important introductory part of the overall data analysis. They provide a simple way to present the basic characteristics of a dataset. The arithmetic mean, median, standard deviation, minimum, and maximum are the main coefficients used in descriptive statistics. As the first step in data processing, descriptive statistics summarize a large amount of data, serving as a basis for further statistical analysis (correlation and regression analysis). Based on the collected data, Table 2 presents the descriptive statistics coefficients.

**Table 2:** Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Government effectiveness | 22 | -1.075703263282780 | -.433313488960266 | -.738578431985596 | .212143130048732 |
| Regulatory quality | 22 | -.6070613861083980 | -.0416726805269718 | -.209651770916852 | .167869044073694 |
| GDP per capita (USD) | 22 | 1606.5467224336240 | 8638.6662020118710 | 4843.708878071785000 | 1771.880743470659100 |
| Valid N (listwise) | 22 | | | | |

*Source: author's calculation based on World Bank data (World Bank, 2025)*

Government effectiveness had negative values ranging from –1.08 to –0.43, with a mean value of –0.739. Since the scale for this indicator ranges from –2.5 to +2.5, it can be concluded that the level of government effectiveness is low, especially because the indicator's values were negative throughout the entire observed period. Regulatory quality showed slightly higher variability, ranging from –0.61 to –0.04, with a mean value of –0.21. This indicates a low to moderate level of regulatory quality, which is typical for transition economies. These indicator values do not automatically imply a negative impact on GDP per capita. Therefore, correlation and regression analysis are required.

Gross domestic product (GDP) per capita ranged from USD 1,606 to USD 8,639, with a mean value of USD 4,843.71. A more detailed analysis of these indicators is presented in the previous section of the paper.

## 4.2. CORRELATION ANALYSIS

Since "correlation analysis deals with examining the mutual relationships between phenomena" (Fazlović, 2013, p. 350), the aim of this part of the research is to examine the direction, strength, and form of the relationship between government effectiveness, regulatory quality, and GDP per capita in Bosnia and Herzegovina.
As correlation and regression analysis are closely related (Fazlović, 2013), this part of the data analysis begins with correlation analysis and then moves toward regression analysis. Correlation analysis, which precedes regression analysis, is used to determine whether a relationship between variables exists at all and what type it is (positive or negative). If the results show that there is no significant correlation, it raises the question of whether conducting a regression analysis is meaningful and what kind of relationship it would reveal.

The most commonly used correlation coefficient is Pearson's correlation coefficient. "Pearson's correlation coefficient is a number that shows to what extent two comparable phenomena are related, that is, to what extent they change when a change in one causes a change in the other" (Fazlović, 2013). For the purpose of

this research, Pearson's correlation coefficient (r) was calculated, as the variables are quantitative, normally distributed (values cluster around the mean), and there is an assumption of a linear relationship between them.

In addition, the statistical significance of the relationships was tested at the 5% significance level ($p < 0.05$). The following section presents the Pearson correlation matrix for the paired variables.

**Table 3:** Correlation coefficients

| **Correlations** | | | | |
|---|---|---|---|---|
| | | **Government effectiveness** | **Regulatory quality** | **GDP per capita (USD)** |
| Government effectiveness | Pearson Correlation | 1 | .411 | -.168 |
| | Sig. (2-tailed) | | .057 | .454 |
| | N | 22 | 22 | 22 |
| Regulatory quality | Pearson Correlation | .411 | 1 | .658** |
| | Sig. (2-tailed) | .057 | | .001 |
| | N | 22 | 22 | 22 |
| GDP per capita (USD) | Pearson Correlation | -.168 | .658** | 1 |
| | Sig. (2-tailed) | .454 | .001 | |
| | N | 22 | 22 | 22 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | |

*Source: author's calculation based on World Bank data* (World Bank, 2025)

The results for the relationship between government effectiveness and GDP per capita ($r = –0.168$, $p = 0.454$) showed a very weak negative correlation. The coefficient obtained is not statistically significant, which means that government effectiveness is not clearly related to changes in GDP. This may indicate that there is no direct impact.

The results for regulatory quality and GDP per capita ($r = 0.658$, $p < 0.001$) showed a moderate to strong positive correlation, which is highly statistically significant. Higher regulatory quality is associated with higher levels of GDP per capita.

The two indicators of the independent variable — government effectiveness and regulatory quality ($r = 0.411$, $p = 0.057$) — showed a moderate positive correlation and a borderline level of statistical significance. This moderate connection is expected since both are indicators of institutional quality. It is important to note that the existence of a correlation between two variables does not imply causation. Correlation only shows that there is a relationship. After the correlation analysis, the results of the linear regression analysis are presented.

### 4.3. Regression Analysis

In a narrow sense, regression analysis represents a set of statistical methods that make it possible to determine the dependence between phenomena and to estimate one variable based on the values of another or several others (Fazlović, 2013). It allows for a quantitative assessment of the impact of independent variables (government effectiveness and regulatory quality) on the dependent variable — GDP per capita. Unlike correlation analysis, which examines the relationship between variables, regression analysis shows the nature, direction, and strength of the impact. It makes it possible to test hypotheses, identify the significance of individual factors when dealing with quantitative data, and serves as a solid basis for prediction and drawing conclusions about cause-and-effect relationships.

The following table presents a summary of the regression model.

**Table 4:** Summary of the regression model

| **Model Summary[b]** | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .816[a] | .665 | .630 | 1077.819794817235000 |
| a. Predictors: (Constant), Regulatory quality, Government effectiveness | | | | |
| b. Dependent Variable: BDP per capita (USD) | | | | |

*Source: author's calculation based on World Bank data (World Bank, 2025)*

The coefficient of determination ($R^2 = 0.665$, Adjusted $R^2 = 0.630$) shows that the model explains 66.5% of the variance in GDP per capita. The Adjusted $R^2$ is close to $R^2$, which indicates that the included variables contribute to the model. This is a relatively high value, suggesting that the institutional variables used are relevant predictors.

**Tabela 5:** ANOVA test of the statistical significance of the regression model

| **ANOVA[a]** | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 43858574.059 | 2 | 21929287.029 | 18.877 | .000[b] |
| | Residual | 22072214.692 | 19 | 1161695.510 | | |
| | Total | 65930788.751 | 21 | | | |
| a. Dependent Variable: GDP per capita (USD) | | | | | | |
| b. Predictors: (Constant), Regulatory quality, Government effectiveness | | | | | | |

*Source: author's calculation based on World Bank data* (World Bank, 2025)

The coefficient of determination ($R^2 = 0.665$, Adjusted $R^2 = 0.630$) shows that the model explains 66.5% of the variance in GDP per capita. The fact that the adjusted $R^2$ is close to $R^2$ indicates that the included variables contribute to the model. This is a relatively high value, suggesting that the institutional variables used are relevant predictors.

**Table 6:** Regression model coefficients and multicollinearity assessment

| **Coefficients**[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 3523.098 | 851.779 | | 4.136 | .001 | | |
| | Government effectiveness | -4411.000 | 1216.174 | -.528 | -3.627 | .002 | .831 | 1.203 |
| | Regulatory quality | 9240.363 | 1536.929 | .875 | 6.012 | .000 | .831 | 1.203 |
| a. Dependent Variable: GDP per capita (USD) | | | | | | | | |

*Source: author's calculation based on World Bank data* (World Bank, 2025)

The coefficients show that regulatory quality has a strong positive effect on GDP per capita ($\beta = 0.875$, $p < 0.001$), while government effectiveness has a moderately strong negative effect ($\beta = -0.528$, $p = 0.002$). Both predictors are statistically significant, and there is no multicollinearity problem (Tolerance = 0.831, VIF = 1.203). In the correlation analysis, government effectiveness was not significant, but in the regression analysis it is. Regression analysis controls for the simultaneous effect of multiple variables. When regulatory quality is controlled for, the negative effect of government effectiveness becomes more pronounced.

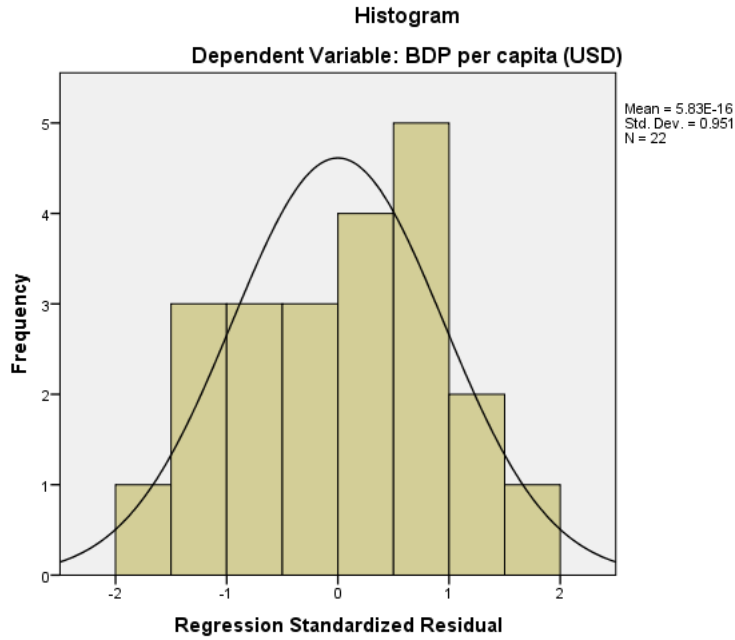
When government effectiveness increases by 1 unit, GDP per capita is expected to decrease by USD 4,411, assuming that regulatory quality remains constant. According to the results, higher government effectiveness leads to lower GDP per capita. This finding is unexpected, but there are reasons that could explain it. Similar results are possible in countries with lower institutional quality, such as Bosnia and Herzegovina.

If regulatory quality increases by 1 unit ($B = 9{,}240.369$; $\beta = 0.875$; $p < 0.001$), GDP per capita increases by approximately USD 9,240. This coefficient is strongly positive and statistically significant ($p < 0.001$). For this research, this is the most important finding. Regulatory quality and the regulatory framework represent a key driver of economic growth in Bosnia and Herzegovina. If the country has a better regulatory framework that supports private sector development, this results in faster economic growth, more jobs, higher productivity, and increased exports.

In the context of Bosnia and Herzegovina, Babajić et al. (2025) found through regression analysis that regulatory quality has the strongest positive impact on economic growth, while government effectiveness was not significant.

The histogram shows the distribution of the standardized residuals of the regression model. It is evident from the histogram that the residuals have a shape that approximately matches a normal distribution. The distribution is symmetric and centered around zero. The black curve (the normal distribution line) closely follows the shape of the bars, which further confirms that the deviations from normality are minimal. The normality assumption of the errors is satisfied, which increases the reliability of the regression coefficients and the statistical validity of the model.

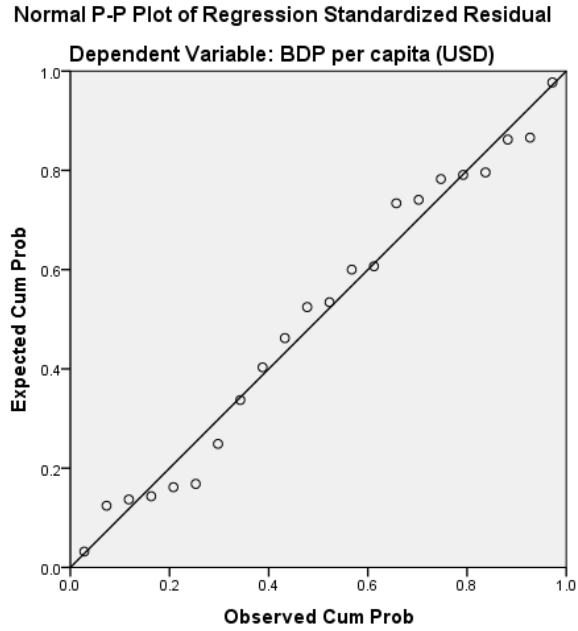
**Figure 1:** Histogram of standardized residuals – normality check




*Source: author's calculation based on World Bank data* (World Bank, 2025)

Based on the following graphical representation, it can be concluded that the residuals are approximately normally distributed. A large number of points follow the diagonal line, which indicates that there are no significant deviations from the normal distribution. This fulfills one of the assumptions of multiple linear regression — normality of errors, which in turn confirms the validity of the obtained coefficients and statistical tests.

**Figure 2:** P–P plot of standardized residuals – comparison of expected and observed cumulative values




*Source: author's calculation based on World Bank data* (World Bank, 2025)

The results of this research are partially in line with expectations. First, in the context of government effectiveness, the analysis showed a significant but negative effect of government effectiveness on the economic growth (GDP per capita) of Bosnia and Herzegovina. A positive relationship was expected, given the large body of research that confirms such a link. Some of the studies that report a significant positive relationship include Kaufmann et al. (2010), Emara et al. (2016), Mehanna et al. (2010), Nguyen et al. (2018), Liko (2024), Sasmaz et al. (2020), Lopes et al. (2023), and Nedić et al. (2020).

Contrary to the dominant scientific consensus that institutional quality drives economic growth and development, there are also studies showing results similar to this research, where government effectiveness as an institutional quality indicator has a negative impact on economic growth. Such findings were reported by Kurtz et al. (2007), Poudel et al. (2025), Nguyen et al. (2022), Nketia et al. (2020), Omoteso et al. (2014), and Almohammed et al. (2021).

This result can be explained primarily by the complex and specific institutional and political system of Bosnia and Herzegovina. Such a system can neutralize or even reverse the expected economic benefits. In addition, the use of perception-based data may affect the validity of the results. The part of the results referring to the

impact of regulatory quality on economic growth (GDP per capita) in Bosnia and Herzegovina is consistent with expectations. Regulatory quality has a significant and positive impact on the country's economic growth. In other words, regulatory quality — more specifically, the regulatory framework — represents an important instrument for economic growth in Bosnia and Herzegovina. Previous studies examining the relationship between regulatory quality and economic growth have shown similar results, including Kaufmann et al. (2010), Emara et al. (2016), Mehanna et al. (2010), Nguyen et al. (2018), Liko (2024), Sasmaz et al. (2020), Lopes et al. (2023), Nedić et al. (2020), and many others.

## CONCLUDING REMARKS

The analysis of the relationship between institutional factors and economic growth in Bosnia and Herzegovina has shown that government effectiveness and regulatory quality, as two dimensions of institutional quality, play an important role in shaping the country's economic growth.

The correlation analysis revealed a weak, negative relationship between government effectiveness and GDP per capita in Bosnia and Herzegovina. The coefficient obtained was not statistically significant, indicating that government effectiveness is not clearly related to changes in GDP. On the other hand, a strong, positive, and statistically significant correlation was found between regulatory quality and GDP per capita.

The regression analysis further confirmed that regulatory quality has a statistically significant and positive effect on economic growth. This result suggests that a better regulatory framework can encourage economic activity and growth. Government effectiveness, however, has a statistically significant but negative effect on GDP per capita. This result may be explained by the complex legal and political structure of the country, as well as weak coordination within the public sector. Although unexpected, such results are possible in countries with low institutional quality and high levels of corruption.

Based on the regression analysis, both government effectiveness and regulatory quality have a statistically significant impact on the economic growth of Bosnia and Herzegovina, measured by GDP per capita. Even though the correlation analysis did not show a statistically significant relationship between government effectiveness and GDP, the regression model, controlling for both variables simultaneously, showed a significant negative effect of government effectiveness. In contrast, regulatory quality showed a strong and positive effect, confirmed by both regression and correlation results.

Accordingly:

- H1: Government effectiveness has a statistically significant impact on the economic growth of Bosnia and Herzegovina.
  - Hypothesis accepted/confirmed, with a negative direction of impact.

- H2: Regulatory quality has a statistically significant impact on the economic growth of Bosnia and Herzegovina.
  - Hypothesis accepted/confirmed, with a positive direction of impact.

Bosnia and Herzegovina should focus its efforts on reforms that improve the regulatory framework and strengthen institutional capacity, in order to create an environment that supports economic growth. Improvements in the regulatory framework will facilitate business operations, attract investment, and ultimately lead to higher GDP per capita. This research deepens the discussion on the institutional economics of Bosnia and Herzegovina and enriches the empirical body of research on Bosnia and Herzegovina, where a relatively large gap still exists.

Future research could focus on including more dimensions of institutional quality and a broader set of countries or country groups, in order to provide a more comprehensive and robust analysis. Although the results indicate a stable and significant relationship between the variables, it is important to emphasize that stationarity testing was not conducted, which represents a limitation of this study; therefore, the results should be interpreted with a certain degree of caution.

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# ZNAČAJ EFIKASNOSTI VLADE I KVALITETA REGULATIVE ZA EKONOMSKI RAST BOSNE I HERCEGOVINE

**SAŽETAK**

Cilj istraživanja je ispitati uticaj efikasnosti vlade i kvaliteta regulative (kao bitnih odrednica institucionalnog kvaliteta) na ekonomski rast Bosne i Hercegovine a putem korelacione i regresione analize. Podaci su prikupljeni iz baze podataka Svjetske banke (Svjetski indikatori upravljanja, BDP p.c.) i obuhvataju vremenski interval od 2002. do 2023. godine. Dobijeni rezultati ukazuju da efikasnost vlade kao i kvalitet regulative imaju statistički značajan uticaj na ekonomski rast Bosne i Hercegovine s napomenom da efikasnost vlade ima negativan uticaj. Glavno ograničenje istraživanja odnosi se prvenstveno na perceptivni karakter indikatora efikasnosti vlade i kvaliteta regulative, što može uticati na primjenjivost rezultata. Ovo istraživanje pruža empirijski utemeljen uvid između efikasnosti vlade, kvaliteta regulative i ekonomskog rasta u zemlji sa specifičnim institucionalnim okvirom – Bosni i Hercegovini. Samo istraživanje je usmjereno primarno na Bosnu i Hercegovinu i popunjava prazninu u domaćoj literaturi te kao takvo pruža korisne preporuke za unapređenje institucionalnog kvaliteta i ekonomskog rasta. U prvom dijelu rada iznesena su uvodna razmatranja, drugi dio posvećen je pregledu prethodne literature dok se treći i četvrti dio rada odnose na metodologiju, diskusiju i rezultate istraživanja.

**Ključne riječi:** *efikasnost vlade, kvalitet regulative, ekonomski rast, bruto domaći proizvod p.c.*

**JEL:** H11, O43, O52