

# Can Rent-Seeking Behavior and Corruption Impact the Economic Wealth of European Union Member States?

Mihaela Bărbuță (Matei)

“Transilvania” University of Braşov, Department of Finance and Accounting, Romania  
[mihaela.barbuta@unitbv.ro](mailto:mihaela.barbuta@unitbv.ro)

## Abstract

*Corruption and rent-seeking are widespread issues affecting economies regardless of their European Union (EU) membership or development level. This study aims to empirically analyze how these behaviors influence the economic performance of EU member states using also governance quality indicators and a panel data regression model, thereby enhancing the understanding of the relationship between corruption, governance quality, and economic wealth within the EU. The period of study is from 2000 to 2019. The regression analysis indicates a negative relationship between higher levels of corruption and economic wealth across all examined countries, demonstrating that increased corruption leads to a decline in economic growth and prosperity. For all EU states, the governance quality variables do not appear to have an impact on economic wealth. Comprehensive reforms and a stronger anti-corruption effort in the public sector are urgently needed in developing countries to enhance accountability, transparency, and sustainable economic development.*

**Key words:** economic wealth, rent-seeking, corruption, public choice

**J.E.L. classification:** H11

## 1. Introduction

Corruption and rent-seeking are ubiquitous phenomena found across various economies, regardless of their EU membership date or level of development. While these issues have been extensively explored in academic literature, their effects on the distribution of public financial resources and taxpayers' interests remain critical areas for further research, as the variability in these practices significantly impacts economic prosperity, market functionality, and the broader welfare and development of nations.

Corruption and rent-seeking behaviors, from a approach grounded in public choice theory, are indicative of systemic failures within the state, stemming from bureaucratic inefficiencies, systemic limitations, and inadequate transparency, while simultaneously reflecting the self-interested motivations of public representatives who exploit their positions to enhance their personal benefits. As a complex and multi-dimensional issue, corruption is often intertwined with rent-seeking and tax evasion, both of which contribute to adverse effects on societal progress and exacerbate inequalities within communities.

This study aims to provide an empirical analysis of how corruption and rent-seeking behaviors influence the economic prosperity of European Union member states, utilizing variables that reflect governance quality. The primary objective is to construct and implement a suitable panel data regression model to assess the effects of these detrimental behaviors on economic wealth, while taking governance quality and corruption perception index into account. This research seeks to deepen the understanding of the connections between corruption, governance quality and economic performance within the European Union by analyzing these dynamics.

## 2. Literature review

This study enriches the existing literature by providing a detailed analysis of the impact of corruption and rent-seeking on economic wealth, specifically emphasizing the value of assessing these issues in relation to governance quality. Public choice theory, which emerged more than five decades ago, has continually evolved and gained recognition, influencing both academic perspectives and societal attitudes toward political issues. Buchanan and Tullock (1962) argue that understanding the incentives and preferences of individuals is crucial for designing effective democratic institutions that align with the principles of social cooperation and public choice. A comparison with public opinions from the 1950s indicates increased skepticism among both academics and the public toward politicians and the effectiveness of political solutions to social issues (Dinca, 2006). The theory examines how public sector decision-makers, like private individuals, prioritize the maximization of their own utility, often acting in their self-interest. Individuals quickly learn to leverage any rights or powers they obtain, recognizing public resources and freedoms as avenues for wealth and control for those in possession of them (Buchanan, 1987).

According to Anechiarico and Jacobs (1994), corruption diminishes public trust in the overall welfare of society and challenges the legitimacy of political institutions. Furthermore, Aidt (2016) identifies two primary types of corruption: "helping hand" corruption, which arises when decision-making power is granted to a malicious or incompetent group, and "grabbing hand" corruption, which occurs when politicians endorse ineffective policies for personal gain, reflecting the tendency of individuals to prioritize their own interests over the common good.

From a public choice perspective, corruption is linked to a lack of transparency and excessive bureaucracy in public administration, which excludes citizen participation and adversely affects economic life, wealth, and growth due to the pursuit of individual interests. Corruption encompasses the misappropriation of public resources by officials, nepotism, embezzlement of funds, tax evasion, abuse of public positions for personal gain, neglect of social responsibilities, facilitation of transactions in exchange for bribes, and the acceptance of various benefits (Rasheed, 1993). Extensive research indicates that corruption has a substantial detrimental effect on economic growth and the efficiency of economic activities, significantly undermining private investments, reducing employment rates, and lowering income per capita (Bentzen, 2012; Shera, Dosti, and Grabova, 2014; Bayar et al., 2018; Sharma and Mitra, 2019).

Rent-seeking is an economic concept that describes the efforts of individuals or groups to obtain income without contributing to the production of goods and services, often by influencing public policy or exploiting advantages provided by government regulations. Gary Becker (1976) defines rent-seeking as activities aimed at gaining income based on legal advantages or regulatory benefits, which do not add economic value and distort optimal market behavior. Anne Krueger (1974) builds on this idea by stating that rent-seeking involves the use of resources to influence political decisions, enabling individuals to achieve income without producing goods or services. Consequently, rent-seeking undermines economic efficiency.

James M. Buchanan (1975) emphasizes that rent-seeking encompasses actions intended to restrict competition and influence political decisions to generate economic gains. Gordon Tullock (1967) further defines rent-seeking activities as those involving spending to obtain economic advantages through favorable regulations, which represents a form of uncompetitive behavior. William Nordhaus (2005) notes that these activities not only create inequities but also distort markets, replacing innovation and economic growth with unproductive activities. Overall, the concept of rent-seeking is consistently linked to negative effects on the economy, as it redirects resources toward unproductive activities and disrupts market equilibrium. In a previous study, Dinca et al. (2021) emphasized the necessity of effective governance reforms to mitigate corruption and enhance transparency, highlighting their importance for improving economic prosperity across EU member states, and advocating for further research to explore how these dynamics can be effectively addressed.

Public choice policies promote reforms in the state system and public financial policies to enhance economic efficiency and equity in public institutions by reducing social expenditures, curbing the influence of interest groups, and fostering meritocracy while tackling corruption.

### 3. Research methodology

This paper assesses the effects of corruption and rent-seeking behaviors on the economic prosperity of European Union nations from a public choice perspective. To achieve a comprehensive evaluation of how these behaviors impact economic wealth, a panel regression analysis encompassing all EU countries from 2000 to 2019 was conducted. Furthermore, informed by the findings of Anh et al. (2016), Sharma and Mitra (2019), and Montes and Luna (2020), the author has chosen to incorporate a set of governance quality indicators into the model, as they provide valuable insights into the dynamics of corruption and rent-seeking behaviors through the lens of public choice theory. Building upon the model developed by Shera, Dosti, and Grabova (2014), the following variables are detailed in Table no.1 below.

Table no. 1 The variables

Dependent variable	Unit	Abbreviation	Source	
Gross domestic product growth	Annual %	gdpgrowth	World Bank	
Independent variables	Unit	Abbreviation	Expected influence	Source
Gross fixed capital formation	Annual % growth	capform	+	World Bank
Corruption perception index (rescaled)	Score (0-10)	cpi	-	Transparency Int
Crude rate of total population change	%	popchange	+	Eurostat
Government expenditure	% of GDP	govexp	+	Eurostat
School enrollment, secondary	% net	edusek	+	World Bank
Total fixed assets	% of GDP	investm	+	Eurostat
Trade openness	% of GDP	trade	+	World Bank
Inflation	Annual %	inf	-	World Bank
Voice and accountability	Score (-2,5;2,5)	voice	+	World Bank Governance Indicators Database
Government effectiveness	Score (-2,5;2,5)	goveff	+	World Bank Governance Indicators Database
Rule of law	Score (-2,5;2,5)	rlaw	+	World Bank Governance Indicators Database
Control of corruption	Score (-2,5;2,5)	contrcorr	+	World Bank Governance Indicators Database

Source: Author’ processings

For this analysis, the regression equation is as follows:

$$gdpgrowth_{it} = \alpha + \beta_1 capform_{it} + \beta_2 cpi_{it} + \beta_3 popchange_{it} + \beta_4 govexp_{it} + \beta_5 edusek_{it} + \beta_6 investm_{it} + \beta_7 trade_{it} + \beta_8 inf_{it} + \beta_9 contrcorr_{it} + \beta_{10} voice_{it} + \beta_{11} rlaw_{it} + \beta_{12} goveff_{it} + \mu_i + \epsilon_{it}$$

where the dependent variable is represented by  $gdpgrowth_{it}$ , followed by the independent variables  $capform_{it}$ ,  $cpi_{it}$ ,  $popchange_{it}$ ,  $govexp_{it}$ ,  $edusek_{it}$ ,  $investm_{it}$ ,  $trade_{it}$ ,  $inf_{it}$ ,  $voice_{it}$ ,  $goveff_{it}$ ,  $rlaw_{it}$ ,  $contrcorr_{it}$ , and  $\mu_i$ , which captures the constant effect and particularity of each European Union state  $i=1, 2, \dots, 28$ , at the time  $t=1, 2, \dots, T$ , where  $T$  is the observed time in the model and  $\epsilon_{it}$  is the error term that is correlated with the independent variables.

The model uses the Corruption Perception Index as the main independent variable to assess perceived corruption in the public sector across EU member states, rescaling scores to reflect that higher values indicate greater perceived corruption. It is anticipated that increased corruption levels will negatively impact economic development, measured in this study as GDP growth.

Gross fixed capital formation (investment) is a control variable in the models by Shera, Dosti, Grabova (2014), and Al Qudah, Zouaoui and Aboelsoud (2020), representing the total investment in fixed capital assets within an economy, including land improvements, machinery purchases, and construction of infrastructure such as schools and hospitals.

In the model total general government expenditure and total fixed assets are key control variables, with expenditure reflecting overall governmental expenses and net acquisitions as a percentage of GDP. Research suggests that increased government spending and growing fixed assets positively impact GDP and economic growth. Additionally, the crude rate of total population change is included to assess how population growth can enhance consumption and labor supply, thereby increasing demand and production. Secondary school enrollment is also considered significant, as it fosters human development and lifelong learning, aligning with findings from Mauro (1997) and Ali and Isse (2003). Other control variables considered in this research are the level of import and exports (% of GDP), as well as the level of inflation. Trade reflects the total value of goods and services exchanged internationally and indicates a country's openness to global markets. It is expected that higher trade levels will boost production and contribute positively to overall economic growth. Consistent with theories on economic growth determinants, these variables are anticipated to have a positive impact on GDP growth, as shown in Shera, Dosti and Grabova (2014).

To examine the connection between democracy and economic wealth in relation to public choice theory, four governance quality indicators, namely voice and accountability, government effectiveness, rule of law, and control of corruption were assessed, all scored from -2.5 to +2.5, where higher scores signify improved government performance and a positive effect on economic wealth. Montes and Luna (2020) highlight voice and accountability as indicators of media freedom and individual expression. The rule of law measures compliance with laws, property rights, and judicial quality while considering crime risks. Control of corruption reflects the extent of corruption in public offices and its impact on self-interest and special interest groups, as per World Bank methodology. Government effectiveness assesses the quality of public services and policies and the commitment to governance objectives.

The effects of all these variables on the dependent variable are detailed in the empirical findings section, while Table no. 2 presents a summary of the key descriptive statistics for the variables involved in the analysis.

*Table no. 2 Descriptive Statistics for total EU28 sample*

	N	Minimum	Maximum	Mean	Std. Deviation
<b>GDP growth (annual %)</b>	560	-14.8386	25.1625	2.5225	3.4272
<b>Gross fixed capital formation (annual % growth)</b>	559	-38.9026	94.1904	3.1939	10.9420
<b>Corruption Perception Index (0-10)</b>	553	2.6000	10.0000	6.3320	1.7800
<b>Crude rate of total population change (%)</b>	560	-35.0000	41.7000	2.5729	8.5832
<b>Total general government expenditure (% of GDP)</b>	560	24.5000	65.1000	44.6341	6.4628
<b>School enrollment, secondary (% net)</b>	441	79.0943	99.8349	91.0396	4.2962
<b>Total fixed assets (gross) (% of GDP)</b>	560	10.1000	45.6000	22.1277	4.1163
<b>Trade (% of GDP)</b>	560	45.4188	408.3620	116.9484	64.9576
<b>Inflation (annual %)</b>	560	-4.4781	45.6666	2.5449	3.3133
<b>Control of corruption (-2,5; 2,5)</b>	532	-.4913	2.4700	1.0336	.7919
<b>Voice and Accountability (-2,5; 2,5)</b>	532	.2201	1.8010	1.1206	.3396

<b>Rule of law (-2,5; 2,5)</b>	532	-.2601	2.1003	1.1208	.6150
<b>Government Effectiveness (-2,5; 2,5)</b>	532	-.3732	2.3540	1.1358	.6041

*Source:* Author' processings using Stata

In this model, descriptive statistics reveal that trade has the highest deviation from the average, reaching 64.96% of GDP, indicating the openness of European countries to import and export activities. Luxembourg tops the list with the highest trade value, recording 408.36% of GDP in 2015, while Malta follows, with trade activities approximately three times its GDP in 2012. Conversely, countries such as France, Greece, the United Kingdom, Spain, and Romania engage in the least import and export activities, with Italy having the lowest trade value at 45.42% of GDP in 2009.

Gross fixed capital formation, with an annual growth of 10.94%, shows another significant standard deviation, reflecting strong asset acquisitions by governments, businesses and households. A high level of this variable is a positive indicator for future economic growth, highlighted by Ireland's peak value in 2019. Investment rate differences among countries often correlate with economic development levels, as seen in Lithuania's 40% reduction in 2009 during the economic crisis, a trend also observed in Estonia, Romania, and Spain.

Voice and accountability, with the lowest standard deviation of 0.34 indicates strong citizen participation and freedom in Denmark, Finland, Luxembourg, the Netherlands, and Sweden, while Romania, Bulgaria, Croatia, and Greece exhibit limited public engagement in elections and media corruption issues.

Reduced levels of standard deviation are observed in government effectiveness, rule of law, and control of corruption across the EU countries, with the highest scores in Finland, Denmark, and Sweden, while Bulgaria, Croatia, Greece, and Romania show the lowest levels.

The corruption index demonstrates a low standard deviation (6.33), indicating data clustering around the mean, with Finland having the highest score in 2000 as the least corrupt EU country, followed by Sweden and Denmark, while Romania, Bulgaria, Slovakia, and Greece exhibit the lowest scores, reflecting higher corruption levels and consequently slower economic development.

The GDP growth rate shows a significant standard deviation, indicating data variability influenced by economic crises and investment levels, with Latvia and Lithuania experiencing negative growth rates in 2009 due to the 2008 crisis-Lithuania recording a low of -14.84%-while periods of economic growth are reflected in the maximum rates achieved by Ireland in 2015, Latvia in 2006, and Slovakia and Romania in 2007 and 2004, respectively.\

From 2000 to 2019, the average secondary school enrollment rate in the EU was 91.03%, with Sweden leading at 99.83%. While secondary education fosters lifelong learning, enrollment is lower in Greece and Portugal, around 79%. Many EU countries, such as Romania and Bulgaria, face population declines due to migration and natural causes, with Bulgaria experiencing a significant drop of 35 per 1,000 people in 2001. Conversely, more developed countries like Luxembourg, Ireland, and Malta have seen population growth, particularly Malta, which recorded an increase of 41.7 per 1,000 people in 2019.

Total government expenditures and fixed assets have standard deviations below 7%, indicating data clustering. Estonia and Ireland had high investment levels in 2019, approaching half of their GDP, while Greece, Cyprus, and Bulgaria recorded low fixed asset values, with Greece at just 10% of GDP. From 2000 to 2019, Malta, Romania, Lithuania, Estonia, and Bulgaria consistently reported government expenditures below the EU average of 44.63%, whereas Sweden, France, and Austria exceeded this average, with expenditures around half of their GDP.

#### 4. Findings

The research implements three methods for static panel data regressions inspired by Shera, Dosti, and Grabova (2014): Pooled Ordinary Least Squares (OLS), Fixed Effects Model (FEM), and Random Effects Model (REM). Pooled OLS treats all countries as homogeneous, which can be a disadvantage if it doesn't account for correlations between individual elements and independent variables. FEM treats explanatory variables as non-random and is useful for assessing the impact of variables that change annually, helping estimate the net effect by removing time-independent effects.

The key difference between FEM and REM is their handling of individual effects: if these effects are random and uncorrelated with the independent variables, REM is appropriate; if there's a correlation, FEM is more suitable. Several tests can be used to choose between these three methods. The F-test, based on the Lagrange Multiplier (LM), is used to decide between Pooled OLS and FEM, while the Hausman test helps select between REM and FEM. The Breusch-Pagan test may be implemented to the FEM to detect heteroscedasticity, indicating whether the variance of residuals is constant across observations.

Table no. 3 Coefficients and p-values showing statistical significance of the considered variables

Dependent variable: GDP growth annual%								
Independent Variable	Pooled OLS		REM		FEM		PCSE	
	Coefficient (Std. err.)	P-value	Coefficient (Std. err.)	P-value	Coefficient (Std. err.)	P-value	Coefficient (Std. err.)	P-value
Gross fixed capital formation (annual % growth)	0.2246 (0.0115)	0.0000	0.2228 (0.0115)	0.0000	0.2149 (0.0122)	0.0000	0.2246 (0.0201)	0.000
Corruption Perception Index (0-1)	-0.3715 (0.2730)	0.1740	-0.3810 (0.2746)	0.1650	-0.4653 (0.2946)	0.1150	-0.3715 (0.1791)	0.038
Crude rate of total population change (%)	-0.0002 (0.0164)	0.9910	0.0023 (0.0178)	0.8970	0.0107 (0.0261)	0.6820	-0.0002 (0.0360)	0.996
Total general government expenditure (% of GDP)	-0.1332 (0.0205)	0.0000	-0.1511 (0.0230)	0.0000	-0.3130 (0.0430)	0.0000	-0.1332 (0.0240)	0.000
School enrollment, secondary (% net)	-0.0261 (0.0282)	0.3560	-0.0328 (0.0310)	0.2900	-0.0580 (0.0493)	0.2400	-0.0261 (0.0516)	0.613
Total fixed assets (gross) (% of GDP)	0.0266 (0.0335)	0.4290	0.0125 (0.0361)	0.7290	-0.1211 (0.0524)	0.0210	0.0266 (0.0514)	0.605
Trade (% of GDP)	0.0020 (0.0020)	0.3150	0.0013 (0.0023)	0.5790	-0.0064 (0.0071)	0.3680	0.0020 (0.0018)	0.254
Inflation (annual %)	-0.0121 (0.0580)	0.8350	-0.0149 (0.0585)	0.7990	-0.0053 (0.0627)	0.9330	-0.0121 (0.0921)	0.895
Control of corruption (-2,5; 2,5)	1.0224 (0.7681)	0.1840	1.1530 (0.7815)	0.1400	1.9413 (0.9383)	0.0390	1.0223 (0.8072)	0.205
Voice and Accountability (-2,5; 2,5)	0.8166 (0.9694)	0.4000	0.7193 (1.0400)	0.4890	0.1879 (1.4034)	0.8940	0.8166 (1.2728)	0.521
Rule of law (-2,5; 2,5)	-1.1124 (0.7213)	0.1240	-1.1896 (0.7822)	0.1280	-0.4454 (1.1727)	0.7040	-1.1124 (0.7064)	0.115
Government Effectiveness (-2,5; 2,5)	0.6167 (0.6232)	0.3230	0.6576 (0.6509)	0.3120	-0.0622 (0.8283)	0.9400	0.6167 (0.7504)	0.411
Constant	10.2704 (0.6232)	0.0010	12.1563 (3.5149)	0.0010	25.8662 (5.8523)	0.0000	10.2704 (5.1974)	0.048
Obs.	414		414		414		414	
R-squared	0.6250		0.6241		0.5618		0.6250	
Prob>F	0.0000		0.0000		0.0000		0.0000	

Source: Author' processings using Stata

Applying the Pooled OLS regression model, it is observed (Table no. 3) that only gross fixed capital formation and total general government expenditure are significant predictors in this analysis; however, this is based on a simplified OLS model. The adjusted R-squared value indicates that the estimated model explains 62.5% of the variance in annual GDP growth. Specifically, a one-unit increase in government expenditure is associated with a reduction in GDP growth of 0.133%, while a one-unit increase in gross fixed capital formation is associated with a 0.22% increase in GDP growth (statistically significant at  $p < 0.001$ ). This confirms that investment is a key driver of economic growth.

Table no. 3 also presents the results from the evaluation of the Random Effects Method (REM), highlighting a negative impact of corruption on economic growth, with only capital formation and government expenses identified as statistically significant within the model. The adjusted R-squared value reveals that the model accounts for 62.41% of the variance in GDP growth. Specifically, a one-unit increase in government expenses is associated with a 0.151% decrease in GDP growth, whereas a one-unit increase in capital formation correlates with a 0.223% increase in GDP growth.

Using Fixed Effects Method for the EU28 sample, the analysis highlights significant variables influencing economic growth, including gross fixed capital formation, government expenditures, total fixed assets, and control of corruption, although only three display expected positive relationships, while investment unexpectedly shows a negative correlation. The adjusted R-squared value indicates that the model accounts for 56.18% of the variance in GDP growth. Furthermore, a one-unit increase in total fixed capital formation and control of corruption leads to annual GDP growth increases of 0.215% and 1.94%, respectively. In contrast, a one-unit rise in government expenditures results in a 0.313% decrease in GDP growth annually, while a corresponding increase in investments correlates with a 0.121% reduction in GDP growth. This underscores the complex dynamics between these variables and economic growth within the EU28 context. All three evaluations yield an F-statistic value of less than 0.05, allowing us to reject the hypothesis that the estimated model is significantly invalid and affirming the validity of the model.

Table no. 4 Heteroskedasticity LR Test

<b>Null hypothesis: Residuals are homoscedastic</b>		
	<b>Value</b>	<b>Probability</b>
<b>Likelihood ratio</b>	396.98	0.0000

Source: Author’ processings using Stata

The primary concern with Pooled OLS regression is its assumption that diverse EU countries are similar, disregarding their distinct economic and cultural differences. This highlights the need for a model that incorporates these unique characteristics, supporting the recommendation for a panel data regression. Additionally, the heteroskedasticity LR test produced a p-value of 0.0000 which is less than 0.05, further favoring the REM over Pooled OLS. (see Table no 4).

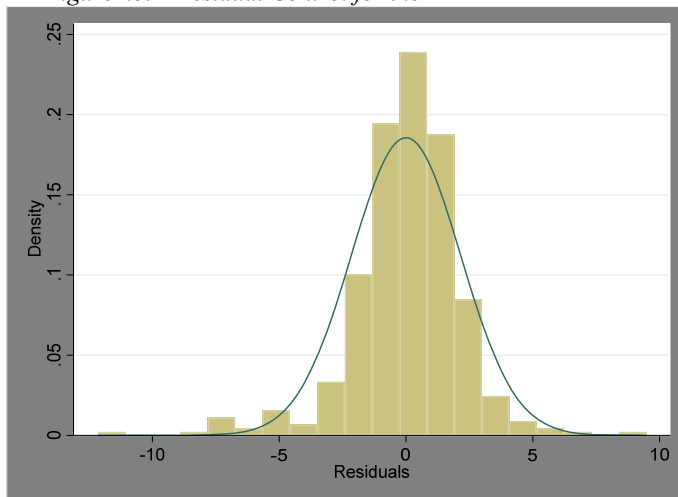
Table no. 5 Hausman Test

<b>Test Summary</b>	<b>Chi-Sq. Statistic</b>	<b>Chi-Sq. d.f.</b>	<b>Probability</b>
<b>Cross-section random</b>	31.32	12	0.0018

Source: Author’ processings using Stata

The Hausman test is a statistical method utilized in econometrics to decide between the Fixed Effects Model and the Random Effects Model. Model in panel data analysis. According to Greene (2008), the results presented in Table no.5 demonstrate a Chi-square statistic with a probability value of 0.0018- significantly lower than 0.01- which leads author to reject the null hypothesis in favor of the Fixed Effects Model as the more efficient choice over the Random Effects Model.

Figure no. 1 Residual Control for the FEM



Source: Author’ processings using Stata

The results from the Normality test for the residuals (Table no.6) indicate that the variables do not follow a normal distribution, as evidenced by a probability value of 0.0000, which is significantly less than the conventional significance level of 0.01. This finding suggests that the distribution of the residuals deviates substantially from normality, indicating potential issues with the assumptions underlying the regression model. The normality in the residuals undermines the validity of statistical inferences from the model, necessitating further analyses to explore the characteristics of the residuals, identify potential specification errors, and implement adjustments to enhance the robustness and credibility of the analysis (Figure no.1).

Table no. 6 Skewness and kurtosis tests for normality

Variable	Pr(skewness)	Pr(kurtosis)	Adj chi2(2)	Prob>chi2
Residuals	0.0000	0.0000	71.18	0.0000

Source: Author’ processings using Stata

To assess cross-sectional dependency among the residuals in the dataset, the Pesaran CD test was conducted, evaluating whether the residuals are correlated across countries. The null hypothesis states that there is no correlation among the residuals. The results showed a Pesaran CD statistic with a probability value of 0.0000, which is significantly lower than the 0.01 threshold, leading the author to reject the null hypothesis and confirm the presence of cross-sectional dependency in the model. This correlation indicates that the errors across countries are not independent, underscoring the need to address this issue in the analysis to avoid biased estimates and invalid statistical inferences.

Taking this into consideration, Panel-Corrected Standard Errors (PCSE) is a valuable approach for addressing issues of non-normality and cross-sectional dependence in residuals. This method adjusts standard errors for both heteroskedasticity and correlation across cross-sectional units, providing more reliable coefficient estimates. Utilizing Panel-Corrected Standard Errors (PCSE) enhances the validity of hypothesis tests and confidence intervals, thereby reinforcing the robustness and credibility of the findings in panel data analyses, particularly for the EU28 sample, where the number of countries exceeds the number of time periods in the dataset.

The PCSE regression analysis demonstrates, as expected, a statistically significant negative correlation between both corruption perception and government expenditure, and economic growth (GDP growth). The model indicates that increased perceived corruption and higher government spending are associated with reduced economic growth. Higher levels of perceived corruption significantly decrease economic growth, with a one-unit increase in the corruption perception index associated with a 0.37% annual decrease in economic output. This suggests that EU member states experiencing slower GDP growth are disproportionately affected by corruption. Conversely, gross fixed capital formation exhibits a positive relationship with economic development. This model shows moderate explanatory power, accounting for approximately 62.5% of the variance in GDP growth. The model's high overall statistical significance (indicated by a very low p-value) confirms that at least one independent variable significantly influences GDP growth.

Nevertheless, the majority of the remaining independent variables show no statistically significant relationship with economic growth within this particular model specification. Further research, potentially incorporating additional variables or utilizing alternative econometric methods, may be required to gain a more comprehensive understanding of the determinants of economic growth.

This study of the EU28 found that measures of governance quality failed to show a statistically significant positive impact on economic growth, contrary to the predictions of public choice theory. While public choice theory posits that improved governance—characterized by reduced rent-seeking behavior, minimized influence of personal interests, and lessened political pressure on state administration—should foster economic prosperity, this analysis did not support that hypothesis. The lack of a significant positive relationship suggests that other factors may be more influential in determining economic growth within the EU28 or that the measured governance indicators may not fully capture the relevant aspects of governance quality impacting economic outcomes. Further investigation is warranted to explore potential mediating variables or alternative theoretical frameworks.



## 5. Conclusions

Corruption in the European Union negatively impacts society and economic wealth, with varying effects based on each country's level of development, supporting public choice theory's emphasis on the adverse effects of self-interest overriding social welfare. It is a well-documented issue affecting both developed and developing countries worldwide. The results section of the study reveals a negative correlation between corruption levels and economic wealth across all EU member states, with a notable impact in countries experiencing lower GDP growth. This suggests that as corruption increases, economic wealth—measured by GDP growth—tends to decrease. The correlation is particularly pronounced in newer EU member states, which generally have lower GDP levels and are more severely affected by corruption compared to older member states. Overall, this relationship indicates that higher corruption levels can restrict economic development and prosperity within these nations.

This research contributes to the existing literature by offering a new perspective that encourages policymakers to implement measures that foster sustainable development for all stakeholders, particularly the populations they represent. The topic of corruption and its multifaceted effects is too vast to be thoroughly examined within the confines of this paper. Issues such as systemic corruption, its interaction with governance structures, and the socioeconomic implications require extensive exploration.

Measures of governance quality in this study do not show a statistically significant positive effect on economic growth, challenging public choice theory, which posits that improved governance should lead to greater economic prosperity by mitigating rent-seeking behavior and political pressures. Additional research is necessary to examine potential mediating variables or to consider alternative theoretical frameworks because of the limitations of the study.

## 6. References

- Aidt, T. S., 2016. Rent seeking and the economics of corruption. *Constitutional Political Economy*, 27, 142–157, <https://doi.org/10.1007/s10602-016-9215-9>
- Al Qudah, A., Zouaoui, A. and Aboelsoud, M.E., 2020. Does corruption adversely affect economic growth in Tunisia? ARDL approach. *Journal of Money Laundering Control*, <https://doi.org/10.1108/JMLC-12-2018-0076>
- Ali, A. M., & Isse, H. S., 2003. Determinants of economic corruption: A cross-country comparison. *Cato Journal*, 22(3), 449-466.
- Anechiarico, F., & Jacobs, J. B., 1994. Visions of corruption control and the evolution of American public administration. *Public Administration Review*, 54(5), 463-473, <https://doi.org/10.2307/976432>
- Anh, N. N., Minh, N. N., & Tran-Nam, B., 2016. Corruption and economic growth, with a focus on Vietnam. *Crime, Law and Social Change*, 65(4), 307-324, <https://doi.org/10.1007/s10611-016-9603-0>
- Bayar, Y., Odabas, H., Sasmaz, M. U., & Ozturk, O. F., 2018. Corruption and the shadow economy in transition economies of European Union countries: A panel cointegration and causality analysis. *Economic Research-Ekonomska Istraživanja*, 31(1), 1940-1952, <https://doi.org/10.1080/1331677X.2018.1498010>
- Becker, G. S., 1976. *The Economic Approach to Human Behavior*. University of Chicago Press, <https://doi.org/10.7208/chicago/9780226217062.001.0001>
- Bentzen, J. S., 2012. How Bad is Corruption? Cross-country evidence of the impact of corruption on economic prosperity. *Review of Development Economics*, 16(1), 167-184, <https://doi.org/10.1111/j.1467-9361.2011.00653.x>
- Buchanan, J. M., 1975. *Rent-Seeking*. In *The Collected Works of James M. Buchanan*, Volume 1. Liberty Fund.
- Buchanan, J. M., 1987. *Economics: Between Predictive Science and Moral Philosophy*, Clarendon Press.
- Buchanan, J. M., & Tullock, G., 1962. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. University of Michigan Press.
- Dinca, G., 2006. *Public Choice Theory*. Infomarket: Braşov, Romania, 111-128.

- Dinca, G.; Dinca, M.S.; Negri, C.; Barbuta, M. *The Impact of Corruption and Rent-Seeking Behavior upon Economic Wealth in the European Union from a Public Choice Approach*. Sustainability 2021, 13, 6870. <https://doi.org/10.3390/su13126870>
- Krueger, A. O., 1974. The Political Economy of Rent-Seeking Society. *American Economic Review*, 64(3), 291-303.
- Mauro, P., 1997. *The effects of corruption on growth, investment, and government expenditure: A cross-country analysis*. In K. A. Elliott (Ed.), *Corruption and the Global Economy* (pp. 83-107). Washington, DC: Institute for International Economics. <https://doi.org/10.2139/ssrn.882994>
- Montes, G. C., & Luna, P. H., 2020. Fiscal transparency, legal system, and perception of the control of corruption: Empirical evidence from panel data. *Empirical Economics*, 59, 1-33.
- Nordhaus, W. D., 2005. *Economics in the Long Run*. Yale University Press.
- Rasheed, S., 1993. Ethics and Accountability in African Public Services. Nairobi, Kenya: *ICIPE Science Press*. pp. 43-63.
- Sharma, C., & Mitra, A., 2019. Corruption and economic growth: Some new empirical evidence from a global sample. *Journal of International Development*, 31(8), 691-719, <https://doi.org/10.1002/jid.3433>
- Shera, A., Dosti, B., & Grabova, P., 2014. Corruption impact on economic growth: An empirical analysis. *Journal of Economic Development, Management, IT, Finance, and Marketing*, 6, 57-77.
- Tullock, G., 1967. The Welfare Costs of Tariffs, Monopolies, and Theft. *Western Economic Journal*, 5(3), 224-232, <https://doi.org/10.1111/j.1465-7295.1967.tb01923.x>