



# The Relationship of Institutional Quality and Economic Growth: The Case on Selected European Union Candidate Countries\*\*

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**Abstract:** The aim of this study is to investigate the effect of corporate governance quality of countries on growth. For this purpose, research was conducted in the sample of Turkey, Montenegro, Serbia, Albania and North Macedonia, which are candidate countries for the European Union. In the study, a period of 16 years, 2005-2020, was examined. In the study, the GDP growth rate was used as the dependent variable, and 6 variables indicating the quality of corporate governance were used as independent variables. Westerlund cointegration test and Average Group Estimator were used as methods in the study. As a result of the study, There is a cointegrated relationship between the institutional quality variables of the countries and the growth rate in the long run. In addition, it has a positive effect on the growth rate of in Albani Voice and Accountability, and a negative effect on the Regulatory Quality and Control of Corruption growth rate.

**Keywords:** The Quality of Corporate Governance, Candidate Countries to the EU, Westerlund Cointegration Test, Average Group Estimator

## 1. Introduction

The concept of corporate governance includes policies, processes and people designed to lead relevant institutions and organizations to create sustainable value. In practical application, corporate governance is believed to be an important key that reveals the true value of the institution, regardless of the size of the institution [10]. Implementing good management in an organization reduces risk, increases performance, leads to efficient financial markets, and creates an attractive investment environment that demonstrates transparency and social responsibility [33].

On the other hand, sustainable growth is becoming more and more important for all institutions in the world. Strategically, the concept of "value creation" is the ultimate goal of everything that is done [34]. Empirical evidence also shows that value creation is maximized with an organization's sustainable growth rate [5]. Therefore, by recognizing the empirical truth, many institutions make great efforts to achieve sustainable growth and integrate it into their long-term strategic plans. The concept of corporate governance is also approached within this framework.

The concept of corporate governance or institutionalization not only covers and affects private institutions, but also affects states to different degrees. Although international institutions such as the OECD and the World Bank set institutionalization and corporate governance criteria for the relevant institutions and states, it is somewhat difficult to talk about a common corporate governance practice that is accepted by everyone in the world. The main reason for this is that the socio-economic structures and cultures of the countries are different from each other. In this sense, various corporate governance practices have been and continue to be implemented in different markets. Corporate governance practices vary according to the economic and political conditions of the country, the legal regulations in the country, the position and importance of stock markets and banks in the economic system, and the capital structure of companies [15]. When we look at the studies on corporate governance in the world, it is seen that each country develops its own corporate governance practices. While these practices are created by official institutions in some countries, in others it is seen that professional organizations and associations carry out studies on corporate governance [14].

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It is known that corporate governance is also important for national economies. Because it has been observed in some studies that corporate governance has a positive effect on the growth of national economies [21-2-44-35-]. However, in some studies, contrary to the results of the studies in the literature, it is seen that corporate governance has a negative or neutral effect on the economies of the countries [19-28-3-31]. It has been observed that the sample of many of these studies are developing countries (such as Middle East and North African countries, Sub-Saharan African countries and Western Balkan countries) that have subsequently taken institutionalization moves. From this point of view, it would not be wrong to say that institutionalization studies are more important especially for the economies of developing countries.

Based on the motivation in question, countries that are candidates for the European Union (EU) and have made progress in the candidacy process were taken as the sample in this study, since they are considered as developing countries and have similar institutionalization backgrounds. With this aspect, it is anticipated that the study will contribute to the economies and institutionalization of similar countries and to the policy makers of the countries.

The period of the study is 2005-2020. In the study, the GDP growth rate was used as the dependent variable, and 6 variables indicating the quality of corporate governance were used as independent variables. Westerlund Cointegration Test and Mean Group Estimator were used as methods in the study. In the study, after the introduction, the theoretical aspect of the subject and the studies carried out, the institutionalization histories of the countries in the sample, are organized in the form of practice and results.

### *1.1. Theoretical Framework*

Regarding the economic growth of countries, there are many growth theories in the literature, each of which deals with the issue from different aspects. It is known that each theory of growth is not sufficient to fully describe growth. Some of these theories are Modernization theory, Dependency theory, World System Theory, Globalization theory, Balanced growth theory, Unbalanced growth theory, Harrod-Domar theory, Unified growth theory. These theories state that one of the ways countries grow is corporate governance. Because it is assumed that the corporate governance of countries has a strategic importance in growth.

One of the most important theories on the subject is the new corporate governance theory. The theory focuses on the internal institutional quality of the countries, the reform process and policies of the countries. As it is known, the institutional environment includes some dimensions that interact with each other and try to regulate the relations that bind them. The failure to achieve the desired growth targets, especially in developing countries, is not only related to the wrong strategic plans and policies, the mistakes that occur in establishing the physical infrastructure of the institutions, but also the ability of these countries to implement policies, implement strategic plans and run their institutions in an optimal way. In this respect, it is stated that the economic performances of countries are closely related to the formal or informal corporate governance elements that differ from country to country [24].

### *1.2. Institutionalization Process in the Sample Countries*

In Serbia, which is the sample of this study, it is stated that in most of the economy, the situation regarding corporate governance is more complex than other transition countries due to both the slowness of the privatization process and the characteristics inherited from self-government [42]. In Montenegro, another sample country, the transfer of ownership to the private sector through the privatization process has had an impact on the acceleration of corporate governance practice, considering that corporate governance activities started late (after 2001) due to the transition process. Similarly, in Montenegro, another transit country, after the privatization process, various foreign investors invested in the country, introducing characteristic corporate governance mechanisms for corporate governance practices from their countries of origin [23]. In this way, progress is expected in corporate governance practices.

Turkey has been trying to improve itself with various corporate governance practices since the beginning of the 2000s. Among the reasons why it started so late can be counted as its closed economy for years, the abundance of family businesses, the economic crises experienced over the years and the inadequacy of firm capital structures. The Communiqué on the Determination and Implementation of Corporate Governance Principles, dated 30/12/2011 and numbered 28158, has been published by the Capital Markets Board for the compliance of companies operating on the stock exchange with the corporate governance principles in Turkey (SPK, 2011). Again, on 01.11.2006, the Regulation on Corporate Governance Principles of Banks, numbered 26333, was published in order to regulate the corporate governance principles of banks [8].

Similarly, in Albania, another sample country, corporate governance activities gained momentum after the 2000s [22]. North Macedonia, the last sample country, is trying to increase its

institutional quality with practices such as introducing additional measures to prevent the informal economy in terms of corporate governance, introducing new measures to ensure the sustainability of public finances, and increasing capital adequacy in the banking Sector [41]. Based on all these, it would not be wrong to say that the corporate governance backgrounds of the countries in the sample have common characteristics and that the 2000s were the starting milestones in terms of improving corporate governance.

## 2. Literature Review

It is noteworthy that there are many studies on the importance of the subject in terms of the corporate governance quality of the countries, especially in terms of developing countries. The details of some of the prominent studies are as follows:

Şaşmaz and Sağdıç (2020) investigated the effect of government effectiveness and rule of law on the economy in 11 countries in the transition economies of the European Union. The period of the study is 2002-2018. The method of the study is FMOLS and Emirmahmutoglu-Köse causality test. As a result of the study, it has been determined that government activity has a positive effect on economic growth, the rule of law has no effect, one-way causality from government activity to economic growth, and two-way causality between the rule of law and economic growth.

In their study, Kömeçoğlu and Vuran (2018) aimed to explain the impact of corporate governance activities on 72 companies in production, transportation, food and various sectors that are traded in Borsa Istanbul and included in the corporate governance index. Panel data analysis was carried out with the data of 2012-2016 period. As a result of the analysis, a significant relationship was determined between corporate governance and the market value of the company, and a significant and positive result was obtained between the independence of the board of directors and corporate investor ownership, which are the components of corporate governance, and the market value of the company.

In study, Siyakiya (2017) investigated the effect of institutional quality of countries on their economic performance. The period of the study was 1995-2014 and 28 European Union member states and Turkey were included in the study as a sample. In the study, institutional quality (economic freedom index) and its sub-indicators (rule of law, regulatory efficiency and market openness) were used as independent variables, and GDP was used as dependent variable. In the study in which the GMM method was used, as a result of the analysis, it is seen that there is a positive and significant relationship between economic performance and institution quality, and this effect is more pronounced in middle-income countries than in high-income countries.

Mira and Hammadache (2017) investigated the relationship between good corporate governance and economic growth in MENA countries. The period of the study covers the period of 1980-1998 and a case analysis was made on the data. The independent variables of the study are violence and accountability determined by the World Bank, political stability, state effectiveness, rule of law, quality of control, control of corruption; education level, money supply, inflation. The dependent variable is GDP, which represents economic growth. As a result of the study, they concluded that there is a positive relationship between good corporate governance and economic growth, but the variables that will explain the growth of their countries are not only corporate governance.

Emara and Chui (2016) investigated the effect of corporate governance on economic growth in a total of 188 countries, including 21 MENA countries. The period of the study is 2009-2013. The variables of the study are the composite management index (CGI) and GDP. As a result of the applied panel regression, it was concluded that corporate governance has a 2% effect on economic growth, and corporate governance does not have much effect on economic growth, especially in oil-rich MENA Countries.

Pere (2015) used the period between 1996 and 2012 as the analysis period in his study examining the role and impact of good corporate governance in the economic development of the Western Balkan Countries (Albania, Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro and Serbia). Independent variables of the study; accountability of governance, political stability and violence, legal framework, state (managerial) efficiency, law enforcement and corruption control, with GDP as the dependent variable. As a result of the panel regression analysis, it is seen that a good corporate governance is effective on economic growth when viewed on a panel basis, but on a country basis, this effect is seen in some countries but not in others.

Chandra and Yokoyama (2011) investigated the effect of good corporate governance of countries on knowledge-based growth in Japan, Malaysia, China and New Industrialized Economies. In the study, they examined the period of 1998-2007. In the study, violence and accountability, efficiency of the state, regulatory quality, rules of law, control of corruption, total R&D expenditure, expenditures for information and communication technology infrastructure, general productivity variables were used. As a result of the variables analyzed as a case study, it is seen that the relationship between good corporate governance and the creation of a knowledge-based economy in East Asia is positively related.

Yenipazarlı (2010) tested its effect on economic freedoms and economic growth in the study. It was applied ARDL Bounds test and Johansen cointegration tests with Turkey's 1970-2006 data for the period. The results of the analysis support the view that there is a cointegration relationship between economic freedom and economic growth and that the liberalization recorded in the last ten years has a positive effect on the level of economic freedom and economic growth.

Black, Carvalho, and Gorga (2009) investigated the relationship between corporate governance and the quality of financial information presented to third parties. In the study, research was conducted on companies in Brazil, India, Korea and Russia. It has been concluded that there is a strong relationship between the general governance index and the market value of the firm for Brazil, but contrary to what is known in the literature, there is a negative relationship between the independence of the board of directors and the market value. While it is concluded that the independence of the board of directors affects the firm value highly in Korea, it is insignificant in Brazil and India.

Siddiqui and Qazi (2009) explore the role of government institutions in promoting growth. Institutionalized social technologies index and its sub-indices, risk reduction technologies and rent seeking technologies, were used as independent variables, and GDP was used as dependent variable. The study was conducted on 141 developed and developing countries. In the study, 1988-2003 was considered as the period. As a result of the GMM method, in which the variables were analyzed, they concluded that there is a strong causal relationship between institutional quality and economic performance.

De Nicolò, Laeven, and Ueda (2008) created an index for corporate governance quality in their study. During the period of 1994-2003, they conducted research on 22 developed countries. They derived an index from accounting standards, income transparency and stock price synchronization variables. They concluded that the quality of corporate governance has a positive and significant effect on macroeconomic variables, especially growth, especially stock price synchronization is more effective, and well-managed companies can accelerate corporate sector growth and increase productivity regardless of financial development level.

Doidge, Karolyi and Stulz (2007) investigated the importance of corporate governance for countries in their study. In the study, 901 companies from 40 countries were studied. Panel regression analysis was used as a method in the study. As a result of the study, it has been seen that the transparency of the companies contributes positively to the companies, and the corporate governance characteristics of the country are the most important determining factor of the company management.

It is also seen in the literature review that the effects of corporate governance in terms of different country groups or countries are examined. It is seen that the GDP variable is used especially for economic growth. It is expected that this study will contribute to the literature due to the fact that it is carried out in 5 countries that are candidates for the European Union and whose negotiation process has started, the period of the study is different and the method in which the variables are analyzed is different.

### 3. Analysis

In this part of the study, the results of the analysis of the variables will be given:

#### 3.1. Purpose, Sample and Methodology

In the study, the effect of the corporate governance quality of the countries on the growth was examined. All of the variables used for this purpose were taken from the World Bank database. In the study, the effect of corporate governance quality on growth of Turkey, Albania, Montenegro, North Macedonia and Serbia, which are candidate countries for the European Union, between 2005 and 2020 has been examined. Since there are deficiencies in the data of our sample countries before 2005, the period of the study started in 2005. The main reason for the selection of these countries is that the countries in the sample have started accession negotiations and have progressed, that is, they are homogeneous. The reason for choosing this period, which is the period of the study, is the thought that this period may be a stable period for the countries in the sample.

In the study, first of all, the descriptive statistics of our variables were included, and then their correlations were calculated. In the correlation table, the highly correlated variables between the variables were removed from the model and a new model was created.

As it is known in econometric studies, there are time series, cross section data and panel data techniques created by combining these series. Panel data analysis is a type of analysis in which both the variables in the model and the time section are brought together [20]. By means of panel data analysis, the cross-section observations of each unit can be gathered together at a certain time interval [7]. While the observation values of any period constitute the cross-sectional dimension of

the panel data analysis, the values taken by the variables used in the analysis over time constitute the time dimension of the panel data analysis.

In panel data analysis, Westerlund cointegration test, one of the cointegration tests, was used to determine the existence of the relationship between the variables in the long term. If there is a cointegrated relationship, the Average Group Estimator is used to determine the direction of this relationship [40] (107).

The Average Group Estimator (AMG) method developed by Pesaran and Smith (1995) obtains the long-term parameter by using the average of the long-term parameters of the autoregressive distributed lagged models created for each unit in the panel. Therefore, it allows the valuation of long-term parameters according to units [40] (242).

### 3.2. Data and Model Specification

The panel data analysis model is usually created as follows;

$$Y_{it} = \beta_{0it} + \sum \beta_{kit} x X_{kit} + u_{iti} = 1, \dots, N; t = 1, \dots, T \quad (1)$$

In the model, *i*: countries, that is, cross-section, *t*: time dimension,  $\beta_{0it}$ : constant term,  $\beta_{kit}$  the parameters vector,  $X_{kit}$  is *k*. *i* at time *t* of the next argument, country value, and  $Y_{it}$  represents the value of the dependent variable belonging to country *i* at time *t*.

In the study, the institutionalization levels of the countries and the variables selected by using similar studies in the literature are given in the table below:

**Table 1.** Variables Included in the Study

Variable	Code	Source
GDP growth (annual %)	GSYIH	World Bank
Voice and Accountability	VA	World Bank
Political Stability and Absence of Violence/Terrorism	PSV	World Bank
Government Effectiveness	GE	World Bank
Regulatory Quality	RQ	World Bank
Rule of Law	RL	World Bank
Control of Corruption	CC	World Bank
Dummy Variable	DUM	

As can be seen in Table 1, in the study, to test the effect of each of the corporate governance indicators published by the World Bank, they were used as an independent variable, and the GDP data obtained from the World Bank database were used as the dependent variable.

The reference range for all corporate governance indicators variables published by the World Bank is between -2.5 and +2.5. The World Bank also states that as the values approach +2.5, the corporate governance performance for the relevant variable is strong, and as the values approach -2.5, the corporate governance performance is weak. In addition, since 2009 is included in our data set, a dummy variable was used for the years 2009 and 2010, taking into account the effects of the global crisis.

The panel data model to be applied in the research is as follows.

$$GDP = \beta_0 + \beta_1 VA_{it} + \beta_2 PSV_{i,t} + \beta_3 GE_{i,t} + \beta_4 RQ_{i,t} + \beta_5 RL + \beta_6 CC_{i,t} + \beta_7 DUM_{it} + \varepsilon_{it} \quad (2)$$

### 3.3. Results

It is necessary to see the descriptive statistics of the variables determined according to this model at the first stage.

Looking at the results of Table 2; correlation table was prepared in order to measure the direction and severity of the relationship between the variables. According to this table, highly correlated variables will be excluded from the model. Because high correlation coefficients between independent variables may cause multicollinearity. According to the correlation results between the variables, a high correlation was found between Government Effectiveness (GE) and Rule of Law (RL) and Control of Corruption (CC), while a high correlation was found between Control of Corruption (CC) and Rule of Law (RL) variables. The highly correlated Government Effectiveness

(GE) and Rule of Law (RL) variables were removed from the model and the analysis continued in this way. The latest state of the correlation between the variables is given in the table below:

**Table 2.** Descriptive Statistics

Variables	Number of Observations	Mean	Standart Error	Minimum	Maksimum
<b>GSYİH</b>	80	3.034509	3.799522	-15.15898	11.1135
<b>VA</b>	80	.0201886	.2590504	-.8616992	.3356198
<b>PSV</b>	80	-.2765566	.5923065	-2.009063	.8162645
<b>GE</b>	80	.00479	.2099801	-.6594524	.4085236
<b>RQ</b>	80	.1395635	.2379037	-.5829304	.5249679
<b>RL</b>	80	-.2241852	.2300384	-.9067186	.1597313
<b>CC</b>	80	.277875	.2219205	-.803845	.1577393
<b>DUM</b>	80	.125	.3328055	0	1

**Table 3.** Correlation Matrix

Variables	GDP	VA	PSV	RQ	CC	DUM
<b>GDP</b>	1.0000					
<b>VA</b>	-0.0840	1.0000				
<b>PSV</b>	0.2545	0.7136	1.0000			
<b>RQ</b>	-0.1702	-0.1844	-0.0103	1.0000		
<b>CC</b>	-0.0147	-0.1689	-0.2400	0.3637	1.0000	
<b>DUM</b>	-0.2159	0.1850	0.0170	0.0001	0.1006	1.0000

In line with the results in Table 3, the new model created by considering the correlation between the variables is as follows.

$$GDP = \beta_0 + \beta_1 VA_{it} + \beta_2 PSV_{i,t} + \beta_3 RQ_{i,t} + \beta_4 CC_{i,t} + \beta_5 DUM_{it} + \varepsilon_{it} \quad (3)$$

At the end of the analysis, it is necessary to test the varying variance, autocorrelation and cross-section dependence in order to reach the correct results and to ensure that the analysis is valid and reliable. The following table shows the tests applied and their results.

**Table 4.** Heterocestasticity, Autocorrelation, Cross Sectional Dependence Tests

Heterocestasticity		Autocorrelation		Cross Sectional Dependence	
Breusch-Pagan / Cook Weisberg test		Wooldridge test for autocorrelation		Pesaran's test of cross sectional independence	
Chi2(1)	Prob.	F Value	Prob.	Value	Prob.
5.14	0.0233	4.349	0.1054	4.722	0.0000

Breusch-Pagan / Cook Weisberg test was performed for the Heterocestasticity, according to the test result, it is seen that there is a problem of Heterocestasticity in the study. On the other hand, it was also tested whether there was an autocorrelation problem between the variables. The Wooldridge test was used for this. According to the test results, it is seen that there is no autocorrelation problem in the model. Finally, Pesaran's test of cross sectional independence was applied to measure the cross-sectional dependence between the variables used in the model. If the cross-section dependency is not taken into account, the model established and the analysis made may produce inconsistent parameters. A cross-sectional problem arose in the model and whether there

was a cross-sectional problem among the variables was expressed in Table 5 with the Pesaran (2004) CD Test.

**Table 5.** Cross-Section Dependence Between Variables

Variable	CD-Test	P-Value	Corr	Abs(corr)
<b>GDP</b>	7.13	0.000	0.564	0.564
<b>VA</b>	3.51	0.000	0.278	0.444
<b>PSV</b>	-0.52	0.602	-0.041	0.572
<b>RQ</b>	4.17	0.000	0.330	0.657
<b>CC</b>	1.04	0.299	0.082	0.399
<b>DUM</b>	12.65	0.000	1.000	1.000

As a result of cross-sectional dependency tests between variables, cross-sectional dependence is observed in other variables except PSV VE RL variable. For this reason, the analysis will continue with the 2nd generation unit root tests. It is necessary to test whether all variables contain a unit root, that is, their stationarity, and for this, the results of the 2nd generation unit root with Pesaran's CADF test are shown in Table 6.

**Table 6.** CADF Unit Root Tests

Constant						
	t-bar	Cv10	Cv5	Cv1	Z (T-bar)	P-Value
GDP	-0.808	-2.210	-2.340	-2.600	2.002	0.977
GDP(I)	-2.720	-2.220	-2.370	-2.660	-2.072	0.019
VA	-1.822	-2.210	-2.340	-2.600	-0.200	0.421
VA(I)	3.099	-2.220	-2.370	-2.660	-2.849	0.002
PSV	-1.552	-2.210	-2.340	-2.600	0.387	0.651
PSV(I)	-2.848	-2.220	-2.370	-2.660	-2.334	0.010
RQ	1.597	-2.210	-2.340	-2.600	0.289	0.614
RQ(I)	-3.341	-2.220	-2.370	-2.660	-3.346	0.000
CC	1.605	-2.210	-2.340	-2.600	0.271	0.607
CC(I)	-3.667	-2.220	-2.370	-2.660	-4.015	0.000
Constant and Trend						
	t-bar	Cv10	Cv5	Cv1	Z(T-bar)	P-Value
GDP	-2.089	-2.740	-2.880	-3.150	0.422	0.664
GDP(I)	-2.714	-2.760	-2.920	-3.210	-0.935	0.175
VA	-1.542	-2.740	-2.880	-3.150	1.634	0.949
VA(I)	-3.534	-2.760	-2.920	-3.210	-2.586	0.005
PSV	3.369	-2.740	-2.880	-3.150	-2.411	0.008
RQ	-2.620	-2.740	-2.880	-3.150	-0.753	0.226
RQ(I)	-3.247	-2.760	-2.920	-3.210	-2.009	0.022
CC	1.335	-2.740	-2.880	-3.150	2.091	0.982
CC(I)	-3.239	-2.760	-2.920	-3.210	-1.992	0.023

As a unit root test, the CADF test, which was suggested by Pesaran in 2003, was applied from the second generation test, since there was a cross-sectional dependence between the model and the variables. CADF is a method used in heterogeneous models based on a combination of p probability values in cases where there is cross-sectional dependence. It is a method based on the average of the t statistics of each unit in the panel [27].

In order to investigate the stationarity of each variable, the CADF unit root test, which is one of the secondary generation tests, was used because of the cross-section dependency problem in the variables. Considering the t-bar values because the time section is less than 30, the H0 hypothesis of the series is rejected as the absolute values of all variables at the level are less than the absolute values of the critical values. In other words, the series are not stationary at the level, they contain a unit root. It is stationary when its primary difference is taken.

The existence of a long-term relationship between the variables is also investigated by cointegration tests. It is known that there are many cointegration tests in the literature. However, due to the cross-section dependency problem between the variables, the Westerlund Cointegration test, one of the second generation cointegration tests, was used. However, the assumption that the variables must be heterogeneous in order to use the Westerlund cointegration test is valid. Therefore, the homogeneity test results of the variables are as follows:

**Table 7.** Swamy S Homogeneity Test Results

	Chi2 Statistics	Probability	Result
<b>Dependent Variable: GDP</b>	chi2(119)= 53.58	0.0098	Parameters in the Model are Heterogeneous

According to the Swamy S Homogeneity Test Results, the H0 hypothesis that the parameters are homogeneous as a result of the probability value being below 5% was rejected, that is, the variables are heterogeneous. The heterogeneity of the variables allowed the Westerlund cointegration test to be used and the results of the analysis are as follows:

**Table 8.** Westerlund Cointegration Test Results

Dependent Variable: GDP	Independent Variable: VA			
	Statistics	Value	Z Value	Probability
	Gt	-2.100	-2.415	0.008***
	Ga	-5.816	-0.990	0.161
	Pt	-4.050	-2.492	0.006***
	Pa	-5.528	-3.477	0.000***
	Independent Variable: PSV			
	Statistics	Value	Z Value	Probability
	Gt	-1.986	-2.170	0.015**
	Ga	-6.642	-1.396	0.081*
	Pt	-3.835	-2.307	0.011**
	Pa	-6.061	-3.888	0.000***
	Independent Variable: GE			
	Statistics	Value	Z Value	Probability
	Gt	-2.197	-2.624	0.004***
	Ga	-5.941	-1.052	0.147
	Pt	-5.381	-3.632	0.000***
	Pa	-6.820	-4.475	0.000***
	Independent Variable: RQ			
	Statistics	Value	Z Value	Probability
Gt	-2.100	-2.416	0.008***	

	Ga	-6.629	-1.389	0.082*
	Pt	-4.492	-2.870	0.002***
	Pa	-7.758	-5.199	0.000***
<b>Independent Variable: RL</b>				
	<b>Statistics</b>	<b>Value</b>	<b>Z Value</b>	<b>Probability</b>
	Gt	-1.952	-2.097	0.018**
	Ga	-7.139	-1.640	0.051*
	Pt	-3.538	-2.054	0.020**
	Pa	-5.864	-3.736	0.000***
<b>Independent Variable: CC</b>				
	<b>Statistics</b>	<b>Value</b>	<b>Z Value</b>	<b>Probability</b>
	Gt	-1.545	-1.222	0.111
	Ga	-7.058	-1.601	0.055*
	Pt	-3.304	-1.853	0.032**
	Pa	-4.946	-3.028	0.001***

Note: Since the data is annual, the lag length was taken as 1 in the cointegration test.  
\*, \*\*, \*\*\* respectively, expressing 10%, 5% and 1% significance levels.

As a result of the analysis, it was concluded in the study that there is a long-term cointegrated relationship between all corporate governance variables of the countries and the growth rate. In other words, it is seen that the growth rates of countries are affected by corporate governance variables.

After determining the cointegration relationship between the variables as a result of the West-erlund cointegration test, the Average Group Estimator (AMG) was made to determine the direction of this relationship. The results of the analysis are given below:

**Table 9.** Research Findings

<b>Turkey</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>
VA	5.19937	12.19714	0.43	0.670
PSV	.1627081	4.583038	-0.04	0.972
RQ	12.35294	14.37632	0.86	0.390
CC	-11.62594	16.26556	-0.71	0.475
DUM	-4.043167	3.483767	-1.16	0.246
_cons	3.246705	5.186873	0.63	0.531
<b>Albania</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>
VA	53.64656	10.64494	5.04	0.000 ***
PSV	-2.914734	2.750032	-1.06	0.289
RQ	-7.199201	3.168133	-2.27	0.023**
CC	-15.01916	7.47842	-2.01	0.045**
DUM	.6926375	1.418414	0.49	0.625
_cons	10.92858	5.355786	-2.04	0.041**
<b>Montenegro</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>
VA	1.104862	46.3232	0.02	0.981
PSV	-2.845251	7.756146	-0.37	0.714

<b>RQ</b>	-9.033757	28.19605	-0.32	0.749
<b>CC</b>	-7.974596	35.09614	-0.23	0.820
<b>DUM</b>	-4.791855	5.320097	-0.90	0.368
<b>_cons</b>	2.825279	13.03086	0.22	0.828
<b>Macedonia</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>
<b>VA</b>	.3704346	6.431491	0.06	0.954
<b>PSV</b>	1.247344	4.423693	0.28	0.778
<b>RQ</b>	-8.545862	7.478871	-1.14	0.253
<b>CC</b>	3.083021	5.309253	0.58	0.561
<b>DUM</b>	-1.817706	2.53343	-0.72	0.473
<b>_cons</b>	6.699342	4.173525	1.61	0.108
<b>Serbia</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>
<b>VA</b>	4.674615	6.270523	0.75	0.456
<b>PSV</b>	1.046384	4.824187	0.22	0.828
<b>RQ</b>	-7.804999	6.410053	-1.22	0.223
<b>CC</b>	-15.45302	18.45649	-0.84	0.402
<b>DUM</b>	-3.889885	2.291752	-1.70	0.090*
<b>_cons</b>	-3.364589	6.74459	-0.50	0.618

\* indicates significance at the 1% level, \*\* at the 5% level, and \*\*\* at the 10% level.

Looking at the panel results; According to AMG results, it is seen that the Anti-Corruption variable affects GDP negatively (-9.397938), and at the same time, due to the 2008 global crisis in our analysis period, the dummy variable we added also negatively affects GDP (-2.769995). In the study, no statistically significant relationship was found between the other variables and the Gross Domestic Product dependent variable.

However, because the variables are heterogeneous, the results will be analyzed on a country basis. In Albania, Voice and Accountability variable is at 1% significance level on growth; Regulatory Quality and Control of Corruption variable is effective on growth at 1% significance level.

Voice and Accountability değişkeni 1 birim arttıkça büyüme % 53 artmaktadır. Regulatory Quality değişkeni 1 birim arttıkça Regulatory Quality %7, Control of Corruption değişkeni %15 azalmaktadır.

#### 4. Conclusion

In the globalizing world, the scandals caused by companies, especially in recent years, have led global regulatory institutions such as the World Bank to take initiatives and make regulations on institutionalization and corporate governance issues. As a result of these initiatives, different institutions have brought regulations and rules on the subject. These initiatives carried out at the level of companies, over time, have been made for the economies of the countries. The main reason for this is that countries have to develop economically. All kinds of socio-economic factors that can positively affect development, especially for the developing country economies that constitute the sample of this study, are carefully analyzed in terms of the policy makers of the countries. Based on this importance, there are studies conducted with examples from different countries in the literature on the subject. In this study, in which a total of 5 countries (Turkey, Albania, Montenegro, Macedonia, Serbia) including our country, that have made progress in the negotiation process with the EU, are analyzed with panel data techniques, the World Bank's global management indicators data are used. These are Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, regulatory quality, rule of law, and Control of Corruption.

In the study, first of all, the Westerlund cointegration test was applied to determine the relationship between the variables. As a result of the analysis, there is a cointegrated relationship between the corporate governance variables, which are considered to determine the corporate governance of the countries, and the GDP, that is, the growth rate of the countries in the long run. In other words, it is seen that corporate governance variables are important in the growth rates of

countries. These results support that developed countries and countries with growth rates above the world average have reached a certain level in their corporate governance quality.

According to the results of the analysis of the average group estimator, it is seen that Albania the Anti-Corruption variable has a negative (-9.397938) effect on the GDP the Voice and Accountability variable has a positive (53.64656) effect on the GDP, and at the same time, Regulatory Quality (-7.199201) and Control of Corruption (-15.01916) variables have a negative effect on the GDP. In addition, according to the average group estimator test results, no statistically significant relationship was found between the other countries and variables on Gross Domestic Product dependent variable in the study.

According to these results, countries should focus on fighting corruption in every field in the country in order to achieve their expected growth rates. It is seen that the increase in corruption affects the growth rate of countries in the opposite direction. This result is supported by the negative effects of variables such as the stock market and exchange rate, which change instantly as a result of corruption in some countries. In addition, the increase in the Voice and Accountability variable also affects growth positively. As this rate increases, corruption in that country will decrease and the level of participation of citizens in the administration will increase [45]. Finally, the increase in the Regulatory Quality variable affects growth negatively.

It is inevitable that corruption will cause many negative developments such as creating negative prestige for countries, increase in CDS premiums, decrease in portfolio investments to the country, except for the amount of corruption.

In addition, according to the results of the average group estimator analysis, since 2009, the starting year of the data set, was under the influence of the global crisis, it is seen that the dummy variable (DUM), which is among the variables, affects the percentage changes in the Gross Domestic Product significantly. In other words, there is a significant decrease in GDP in the given year due to the effects of the global crisis. It is expected that countries will take precautionary measures that will be minimally affected by the crisis.

The results obtained from the analyzes were correlated with [38-31-43-37] studies and in the opposite direction with [19], and partially with [28]. conclusion has been reached.

The findings of this study should be approached within its limitations. In addition, in future studies, it is possible to include different variables in the model and to work with different samples.

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