ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

EVALUATION OF INTER-COUNTRY INSTITUTIONAL QUALITY DIFFERENCES IN TERMS OF DEVELOPMENT IN CORE-PERIPHERY RELATIONS[*]

MERKEZ-ÇEVRE İLİŞKİLERİNDE GELİŞMİŞLİK DÜZEYİ AÇISINDAN ÜLKELER ARASI KURUMSAL KALİTE FARKLILIKLARININ DEĞERLENDİRİLMESİ

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Abstract

Institutional economics approach reveals that institutions are essential in increasing social welfare by comprehensively addressing social and economic life. At the same time, institutional economics approach proceeds similarly to the problems discussed in the development literature. This study evaluates the developmental differences between countries in core, semi-periphery and periphery countries according to institutional quality differences. In the first part of the analysis, the core (upper and lower), semi-periphery (upper, middle and lower) and periphery (upper, middle, and lower) country groups were determined by the club convergence method using the data between 1990 and 2017. The second part of the analysis tests the institutional approach that explains the development differences between countries for eight country groups. Findings have revealed the effect of economic freedom on development in all subgroups of core, semi-periphery, and peripheral countries. In addition, while the effect of democracy on development has an increasing effect in core and semi-periphery country groups, the results in peripheral countries are found statistically insignificant.

Keywords: Institutional Quality, Club Convergence Method, Core-Periphery, Co-integration Analysis.

JEL Classification: C23, E02, O11

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Öz

Kurumsal iktisat yaklaşımı, kurumların sosyal ve ekonomik yaşamı kapsamlı bir şekilde ele alarak toplumsal refahı artırmada önemli bir faktör olduğunu ortaya koymaktadır. Aynı zamanda kurumsal iktisat yaklaşımı kalkınma literatüründe tartışılan sorunlara benzer bir düzlemde ilerlemektedir. Bu çalışmanın amacı, kurumsal kalite farklılıklarına göre merkez, yarı çevre ve çevre ülkelerdeki ülkeler arası gelişmişlik farklılıklarını değerlendirmektir. Çalışmada, analizin ilk bölümünde 1990-2017 yılları arasındaki veriler kullanılarak merkez (üst ve alt), yarı çevre (üst, orta ve alt) ve çevre (üst, orta ve alt) ülke grupları kulüp yakınsama yöntemi ile belirlenmiştir. Analizin ikinci bölümünde, sekiz ülke grubu için ülkeler arası gelişmişlik farklılıklarını açıklayan kurumsal yaklaşım test edilmiştir. Elde edilen bulgular sonucunda merkez, yarı çevre ve çevre ülkelerin tüm alt gruplarında ekonomik özgürlüğün kalkınma üzerindeki etkisi ortaya konmuştur. Ayrıca demokrasinin kalkınma üzerindeki etkisi merkez ve yarı çevre ülke gruplarında artan bir etkiye sahipken, çevre ülkelerdeki sonuçlar istatistiksel olarak anlamsızdır.

Anahtar Kelimeler: Kurumsal Kalite, Kulüp Yakınsama Metodu, Merkez-Çevre, Eşbütünleşme Analizi.

JEL Sınıflandırması: C23, E02, O11

1. Introduction

Institutional economic approach has a significant point in the economics literature with the arguments that it suggests in explaining the international economic differences. One essential thesis put forward by institutional economics is reducing the uncertainty in interpersonal interaction between institutions. According to the institutional economics approach, the impact of inclusive institutions on the economy is positive, while corrupt institutions affect economic performance negatively. The effect of institutions on development and economic growth occurs directly and indirectly. Although institutions play a positive role in economic growth and development in general, this effect may be negative or meaningless due to the unique situations of some countries.

Institutional economy and development economy act in close interaction because they have close concepts. This is because it explains some institutional changes with economic and political changes in the development period. Development economics theorists tried to explain the trans-country development differences first. They emphasized that the social and economic structure of less developed countries and developed countries have different mechanisms. Therefore, their decision-making bodies work differently. We state that the institutional economic approach puts forth inter-country differences in the institutional structure. It bases the reasons for these differences on approximately the same reasons.

It is necessary for today's developing countries to implement their development processes in a more democratic society. When evaluated from this perspective, the social policy will constitute an essential pillar of the development process, including conflicting elements. The 'classic' developmental state is an ideal type derived from the East Asian – specifically Japanese – experience between the 1950s and the 1980s (Chang, 2011). Starting from the East Asian countries, it is possible to define a developmental state as a state with an effective bureaucracy that plays a strategic role in economic development. (Johnson, 1982). It is possible to express the factors that led to the emergence of the New Developmental State Model under three headings. The first of these is the transformation in global production and finance structures and the impact of this transformation on international

governance mechanisms. Secondly, it has been seen that the neo-liberal development strategies implemented after 1980 under the leadership of the IMF (International Monetary Fund) and the World Bank were unsuccessful and even created great social destruction. Third and lastly, in the East Asian Type of Developmental State Model, authoritarian structures were seen as tools used but not desired to achieve desired results (Evans, 2008).

The study explores the relationship between development and institutional quality in the core's context-periphery country. In this context, to determine the core, semi-periphery, and periphery countries, the Human Development Index for the period 1990-2017 was considered, and the club convergence method determined these country groups. Eight-country clubs; namely upper core, lower core, upper semi-periphery, middle semi-periphery, lower semi-periphery, upper periphery, middle periphery, and lower periphery. After that, the relationship between development and institutional quality between 1996-2016 was examined for each of the eight-country groups. While the Human Development Index, UNDP (United Nations Development Program) formed the development variable, we discuss the institution variable in two distinct ways as economic and political institution variables. While representing the economic institution variable, The Economic Freedom Index, determined by the Heritage Foundation, was used to represent the political institution variable; The Democracy Index variable obtained from the V-Dem database was used.

It points institutions out in the structural form necessary for realizing the development process. In this sense, many studies analyze the impact of institutional structure on development in literature. In these studies where development economics and institutional relations were discussed, many results were obtained using different development and institution variables for original country samples. As for the contribution of this study to the literature, we have discussed the relationship within core-peripheral country samples. Using the club convergence method for the first time in determining the core (upper and core), semi-periphery (upper, middle, lower) and periphery (upper, middle, lower) country groups will contribute to the literature. In addition, addressing the development-institution relationship separately under these three country groups also emphasizes a point not yet mentioned in the literature.

2. Literature Review

Kaufmann et al. (1999) concluded that good governance has a positive impact on development in a sample of more than 150 countries. Then, in the study during which six common indicators corresponding to six basic governance concepts (bribery, government activity, violence, regulatory burden, political instability, the rule of law, and accountability) were produced, it was concluded that governance is essential for development.

Chong and Calderon (2000) tested the relationship between institutional quality and poverty measurements through cross-sectional analysis between the years 1960-1990. The findings relate the developments in institutional quality to the developments in the situation of the poor. The degree and severity of poverty are significantly and negatively related to the development of great institutions. The study states that it develops the fact that property rights are better and that to reduce poverty.

Narayan and Smyth (2006) examined the relationship between democracy and economic growth in China with the cointegration method. Within the model, the lack of democracy, in the long run, causes a decrease in actual income; however, the relationship between democracy and economic growth was found statistically insignificant in the short run.

Fabro and Aixalá (2009) investigated the relationship between economic development and institutional quality. In doing so, it aimed to empirically test the institutions' impact on the economy and identify the factors determining the institutional quality. Regarding the results for the countries in the growth equation, the institutional infrastructure has emerged as a critical factor in explaining the level of economic development. According to the results obtained from the institutional quality equation, emerging countries with a socialist background, Muslim countries, and countries with high-income inequality are also seen to have worse institutional frameworks. However, it cannot be verified that socio-political factors explain better than cultural factors, given the institutional performance, the importance of the Muslim religion, and the insignificance of ethnic division.

Casson et al. (2010) divided institutions into formal (legal order) and informal (traditions) categories and tested their impact on development. This theoretical study shows in several contexts how informal institutions affect the traits and quality of more formal institutions and how they affect the development processes. The study's most important contribution is that it focuses on the relationship between informal and official institutions. This paper discusses institutions at the macro level and provides a framework in which informal and micro-level institutions can be considered.

Earle and Scott (2010) investigated the effect of governance on poverty reduction and development. Corporate governance has been examined through justice, the rule of law, corruption, public administration reform, democratization, decentralization, and public financial management variables. The results show that management reforms do not always result in improvements expected in development results and poverty alleviation. The success of governance reforms can often be connected to political factors. According to other results of the study, poor governance has a negative impact on poverty and institutions.

Chang (2011) examined the relationship between economic development and institutions from a more theoretical point of view. The sign provided by the prevailing discourse to sustain the proposals that the institutions ensuring the highest level of freedom of business and protection of private property rights in the best way are the best of 'liberalizing' economic development is measurement problems conceptually inadequate and full of practice. Evidence comes mainly from cross-sectional econometric studies, with very little attention to data on time series (in broad terms). In particular, the problems associated with identifying and measuring the institutional nature of composite types (e.g., governance, property rights system) were overlooked and the restrictions of cross-sectional regressions for high-heterogeneous samples were not taken sincerely.

Fleitas et al. (2011) have empirically investigated the relationship between economic development and institutional quality in Uruguay since 1870. The analysis performed using seemingly unrelated regression, stated that the predicted institutional quality indicator showed a long-term orbit that matched

the country's political and economic history. Empirical results show that institutional quality (primarily contractual implementation) affects total economic performance through capital accumulation.

Akpan and Effiong (2012) tested the relationship between governance and development using sub-Saharan countries. In this context, an empirical study was conducted in 21 African countries between 1998-2007. As a result, it was determined that political stability and the rule of law are related to developing positively and significantly. The results indicate that governance in sub-Saharan African countries is related to political stability, the regulatory framework, and the rule of law.

Law et al. (2013) examined the relationship between institutions and economic development with the panel Granger causality test. The observed outcomes in 60 countries display bi-directional causality between economic development and institutions. The outcomes also show that the causality patterns between economic performance and institutions change at different income levels. While better institutional quality supports economic development in high-income countries, economic development increases institutional quality in low-income countries.

Okoi and Bassey (2015) studied the relationship between macroeconomic policy, institutional quality, and economic development in Nigeria. In the study covering the years 1995-2013, the results indicate that local institutions have an insignificant effect on the development of Nigeria. Even though growth indexes were measured, it was found that the interest rate had no significant effect on economic development in Nigeria. On the other hand, it was seen that government expenditures have a significant but minor effect on the country's development indexes. Based on these, a complete approach to the attitudinal change and methodical empowerment and development of institutions is proposed to achieve the country's development goals.

Bergougui et al. (2017) investigated the relationship between economic development and institutional quality in oil-rich countries. Empirical results show that countries with the higher regulatory quality and the rule of law have stronger economic growth. The results also shed light on the fact that the natural resources of countries with high-quality institutions support economic development. Most countries rich in Arab oil have turned out to have the inadequate institutional quality to get rid of the economy's resource curse.

3. Data and Methodology

3.1. Data Set

The study examines the relationship between development and institutional quality in the sample of eight clubs that define the core, semi-periphery, and periphery country groups between the years 1996-2016. The sample of these eight-country groups used in the study was determined by the club convergence method, which constitutes the first part of the study analysis. For the club convergence method, the Human Development Index (2017) data were used for the 1990-2017 period, and 25 countries were defined as the core, 85 countries as semi-periphery, and 33 countries as the periphery.

For the panel cointegration and panel pooled average group estimator to be applied for the second part of the analysis, the period covering 1996-2016 has been discussed.

The econometric method used in the analysis part of the study was performed as described in Phillips and Sul's (2007) and Phillips and Sul's (2009) studies. This method used by Phillips and Sul is called "log t" and ensures that countries are classified according to convergence groups or clubs. This method has several advantages over other available convergence measurements. It is grounded on a general non-linear time variable factor model that includes the probability of variance heterogeneity (Panopoulou and Pantelidis, 2009).

The concept of convergence is tested using a unilateral t-test where the inequality portion of the null hypothesis is $\alpha \geq 0$. A 5% significance level is used, and when t<-1.65, the null hypothesis is rejected. Also, the test statistic is performed using a consistent standard error (HAC) on the heteroscedasticity and autocorrelation.

Phillips and Sul (2007) and Phillips and Sul (2009) show that the refusal of the convergence null hypothesis does not exclude the possibility of convergence in the subclasses of individuals who fit the entire panel. Therefore, the authors developed a clustering algorithm to determine the number of potential convergence clubs and eligible members to permit this possibility.

Using the club convergence analysis method advanced by Phillips and Sul (2007) and Phillips and Sul (2009), as a result of the series obtained from the largest country sample, club convergence analysis was conducted. Convergence analysis was conducted using the Human Development Index to reveal the differences between countries. Table 1 indicates the country classification.

Table 1: Country Classification

Country Classification	Countries
Upper Core	Australia, Belgium, United Kingdom, China (SAR), Denmark, Finland, Germany, Netherlands, Hong Kong, Ireland, Sweden, Switzerland, Iceland, Canada, Norway, Singapore, New Zealand, USA
Lower Core	Austria, Czech Republic, France, Israel, Japan, Republic of Korea, Luxembourg, Slovenia
Upper Semi-Periphery	Estonia, Southern Cyprus, Italy, Spain, Latvia, Lithuania, Malta, Poland, Saudi Arabia, Slovakia, Greece, UAE
Middle Semi-Periphery	Albania, Argentina, Bahrain, Brunei, Bulgaria, China, Croatia, Iran, Qatar, Kazakhstan, Hungary, Mauritius, Mongolia, Portugal, Romania, Russia, Chile, Turkey, Barbados, Botswana, Algeria, Armenia, Costa Rica, Cuba, Kuwait, Malaysia, Panama, Serbia, Sri Lanka, Trinidad and Tobago, Uruguay, Venezuela
Lower Semi-Periphery	Bangladesh, Belize, Bolivia, El Salvador, Philippines, Gabon, Guatemala, South Africa, Iraq, Kenya, Kyrgyzstan, Lao, Myanmar, Nepal, Nicaragua, Paraguay, Samoa, Tajikistan, Dominican Republic, Indonesia, Morocco, Fiji, India, Jamaica, Cambodia, Egypt, Moldova, Tonga, Vietnam, Zambia, Brazil, Equatorial, Colombia, Libya, Mexico, Peru, Rwanda, Thailand, Tunisia, Ukraine, Jordan
Upper Periphery	Eswatini, Ghana, Guyana, Cameroon, Congo, Namibia, Tanzania, Uganda
Middle Periphery	Benin, Burundi, Ivory Coast, Gambia, Guinea, Haiti, Honduras, Congo Democratic Republic, Lesotho, Malawi, Mali, Mauritania, Mozambique, Pakistan, Papua New Guinea, Sao Tome, and Principe, Senegal, Sierra Leone, Sudan, Syria, Togo, Yemen, Zimbabwe

The study explores the relationship between development and institutional quality in the core's context-periphery countries. In this context, to determine the core, semi-periphery, and periphery countries, the Human Development Index is handled from 1990 to 2017. These country groups are decided by the club convergence method. Moreover, eight-country clubs, namely upper core, lower core, upper semi-periphery, middle semi-periphery, lower semi-periphery, upper periphery, middle periphery, and lower periphery, were obtained. After that, the relationship between development and institutional quality is examined within the period covering 1996-2016 for each of these eight-country groups identified. While the Human Development Index, formed by UNDP is used as the development variable, the institution variable is discussed in two different ways as economic and political institution variables. While representing the economic institution variable, The Economic Freedom Index, determined by the Heritage Foundation (2016) is used to represent the political institution variable; the Democracy Index variable obtained from the V-Dem (2017) database is used. From which sources are the variables used in the analysis obtained and definitions of the variables are shown in Table 2.

Table 2: Data Set and Resources

Variables	Acronym	Explanation	Source
Human Development Index (1996-2016)	HD	It is an index calculated by considering education, life length, and GDP domestic distribution.	UNDP
Economic Freedom Index (1996-2016)	EF	It is an index computed by taking the average of the government's transparency, private property rights, tax burden, independence of the judiciary, public expenditures, trade and investment freedom, monetary freedom, distance from corruption, work and labor freedom, and financial freedom indexes.	Heritage Foundation
Democracy Index (1996-2016)	DE	It is an index calculated by taking the average equal protection of rights and freedoms between social groups, equal distribution of resources among social groups, and equal access of individuals and groups to power.	V-DEM

In the first part of the analysis carried out in the study, club convergence analysis was conducted to determine the country groups in which the relationship between development and institution will be examined. Because of the club's convergence analysis, the core (upper and middle), semi-periphery (upper, middle, and lower), and periphery (upper, middle, and lower) country groups were determined. The second part of the analysis used panel cointegration and panel pooled average group estimator within specified country groups. The cointegration test was based on stationary tests in which variables were found to be conscious stationery. A cross-sectional dependency test was applied to the series of these tests healthily. Finally, the panel pooled average group estimator was used to analyze the long and short-term coefficients. According to the results obtained, which generation of unit root test would be applied was decided.

Pesaran's (2004) CDLM test was used in our analysis for cross-section dependence. It has been revealed that there is a cross-sectional dependency between series in seven country groups discussed as a result of cross-sectional addiction tests for the upper core, lower core, upper semi-periphery, middle semi-periphery, lower semi-periphery, upper periphery, middle periphery country groups

(Since the lower periphery country group has two countries (Niger and the Central African Republic). It is difficult to access the data of these countries; they are not included in the analysis after this). Thus, it is evident that any shock occurring in a country affects other countries within its country group. Cross-section dependence test results are shown in Table 3.

Table 3: Cross Section Dependence Test Results

	Cross Section Dependence Test (CDLM Pesaran 2004 Results)					
	HD		EF		DE	
	t-stat	p-value	t-stat	p-value	t-stat	p-value
Upper Core	149.402	.000*	42.779	.000*	31.330	.000*
Lower Core	69.570	.000*	10.928	.000*	8.578	.000*
Upper Semi – Periphery	96.605	.000*	24.843	.000*	12.989	.000*
Middle Semi- Periphery	239.355	.000*	55.781	.000*	68.060	.000*
Lower Semi – Periphery	301.865	.000*	57.170	.000*	71.966	.000*
Upper Periphery	53.346	.000*	1.795	.000*	4.175	.000*
Middle Periphery	136.458	.000*	24.110	.000*	18.545	.000*

Note: * indicates the rejection of the null hypothesis at 1% significance level.

Pesaran's (2007) CIPS test of HD, EF, and DE variables were applied for all panels of eight country groups handled in the analysis. Since the variables to be used in the analysis are considered in the trend model, it is determined that there are variables I(1) in the eight-country groups. Based on this situation, the analysis was done with second-generation unit root tests and the existence of horizontal cross-section dependence of the series. Unit root test results are shown in Table 4.

Table 4: Unit Root Test Results

	Unit Root Test (CIPS Pesaran 2007 Results)					
	p-value		p-value		p-value	
	HD	HD(I)	EF	EF(I)	DE	DE(I)
Upper Core	.388	.000*	.974	.010**	.810	.000*
Lower Core	.605	.000*	.939	.010**	.734	.019**
Upper Semi – Periphery	.998	.012**	.686	.010**	.970	.000*
Middle Semi- Periphery	.998	.012**	.686	.000*	.977	.000*
Lower Semi – Periphery	.966	.000*	.866	.000*	.986	.000*
Upper Periphery	.859	.000*	.774	.000*	.773	.000*
Middle Periphery	.659	.009*	.328	.000*	.671	.000*

Note: * and ** indicate the rejection of the null hypothesis at 1% and 5% significance levels, respectively.

Therefore, it is continued with the cointegration analysis to examine whether the series act together or not in the long term.

3.2. Cointegration Analysis

The existence of the cointegration relationship between the series was investigated with the LM bootstrap panel cointegration test developed by Westerlund and Edgerton. The LM bootstrap test is based on the Lagrange Multiplier test developed by McCoskey and Kao (1998). In this test, if the null hypothesis is not rejected, it is concluded that all sections have a cointegrated relationship. The LM statistics created by Westerlund and Edgerton (2007) are as follows:

$$LM_N^+ = \frac{1}{NT^2} \sum_{i=1}^{N} \sum_{t=1}^{t} \hat{\omega}_i^{-2} S_{it}^2$$

The existence of the cointegration relationship between the series was examined by the LM bootstrap panel cointegration test established by Westerlund-Edgerton. The results of the test are shown in the table below.

Table 5: Westerlund and Edgerton (2007) Cointegration Test Result

		Constant and Trend	
		LM Stat.	**Bootstrap p-value**
LM^+N	**Upper Core**	11.596	1.000
LM^+N	**Lower Core**	3.809	0.990
LM^+N	**Upper Semi-Periphery**	4.981	0.750
LM^+N	**Middle Semi-Periphery**	7.240	0.920
LM^+N	**Lower Semi-Periphery**	11.083	0.960
LM^+N	**Upper Periphery**	6.845	0.608
LM^+N	**Middle Periphery**	2.943	0.990

Note: Bootstrap probability values were obtained from 1000 repetitions. Asymptotic probability values were obtained from the standard normal distribution. Constant and trend models are used.

Table 5 gives the results of the Westerlund and Edgerton (2007) LM bootstrap panel cointegration test for seven country groups. According to the results obtained from the table, the hypothesis that in the constant and trend model under the cross-sectional dependence, there is a cointegration relationship because the bootstrap probability values are greater than 0.05 is accepted. It is concluded that there is a cointegration relationship between the series for the upper core, lower core, upper semi-periphery, middle semi-periphery, lower periphery, upper periphery, and middle periphery country groups.

According to Westerlund and Edgerton's (2007) panel cointegration test results applied separately for seven country groups, long-term cointegration groups are included in the analysis. Long-term relationships for HD, EF, and DE variables should be estimated within the model's scope included in the analysis after the long-term relationships obtained for the seven-country groups. The analysis is continued with the Pooled Average Group Estimator in this context.

Table 6: Long Term Coefficients and Error Correction Mechanism Result

	Long Term Coefficients and Error Correction Mechanism					
	EF		DE		EC(-1)	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Upper Core	.003	.006*	.163	.000*	-.050	.000*
Lower Core	.015	.000*	.091	.000*	-.037	.000*
Upper Semi – Periphery	.005	.000*	.151	.012*	.108	.255
Middle Semi-Periphery	.012	.000*	.695	.000*	-.014	.231
Lower Semi – Periphery	.007	.000*	.665	.000*	-.008	.342
UpperPeriphery	.020	.000*	-.231	.516	-.014	.342
Middle Periphery	.008	.009*	.342	.418	-.006	.952

Note: * indicates the rejection of the null hypothesis at 1% significance level.

According to the estimation results of the error correction coefficient, different results were obtained for the country groups. While the error correction coefficient was negative and statistically significant only in the upper and lower core country groups, it was statistically insignificant in the other country groups. Accordingly, a deviation in the equilibrium level will be rebalanced only in the core country groups in the long term. The error correction coefficient, which indicates how long the deviation from the long-term balance will return to equilibrium, took the value of 0.05 in the upper core country group and 0.03 in the lower core country group. Therefore, a deviation in the short term in the core countries returns to the long-term equilibrium. It is seen from the results of the analysis that the error correction mechanism does not work for the semi-periphery country groups and periphery country groups. This situation stems from the fact that the country groups are economically and politically different. A return to balance is achieved due to the economically and politically free environment in the core countries and the better functioning of institutions in this country group. The continuation of the economic and political liberation process in semi-periphery countries and the institutional structure are problematic; In periphery countries, the environment of freedom is limited, the economic structure is not on solid ground, and the institution's structure cannot be established due to many reasons, and the correction does not work.

Table 6 shows the long-term coefficients and statistical significance of the variations of development, political and economic institutions for the upper core, lower core, upper semi-periphery, middle semi-periphery, lower semi-periphery, upper periphery, and middle periphery country groups. Factors such as economic freedom and democracy are among the most critical indicators of the institutional structure; they also give information about the quality of the institutional structure in the country. As a result, indicators such as economic freedom and democracy support the development of the institutional structure through the behaviors of individuals while supporting the realization of economic development. At the same time, they are establishing a legal order in a country that supports individual freedom and improves economic freedom (Çukurçayır and Tezcan, 2011). As a result of the analysis, it has been concluded that there is a positive and statistically significant relationship between economic freedoms and development in the long term for seven-country groups. Most of the other studies in the literature have also achieved a positive relationship between economic freedoms and development.

According to the relationship between development and political institution, the relationship between the used political institution variable democracy and the Human Development Index used as the variable of development reveals different results between the seven-country groups. With many studies on the relationship between economic development and democracy, it is concluded that there is a positive relationship between the improvement of the level of democracy and economic development and growth. For this reason, to improve their level of development, countries should handle civil and political freedoms and economic freedoms and make arrangements in this regard (Çukurçayır and Tezcan, 2011). Those who think there is a positive interaction between democracy and economic growth can be divided into three groups. While some economists argue that the interaction occurs directly, others think it occurs indirectly (through different channels). Others support the idea that it can be both directly and indirectly. For example, according to the New Institutionalist perspective, democracy can increase prosperity, indirectly or directly, using policy measures implemented by democratic institutions, economic institutions, or incentives. From this point of view, priority should be given to democratic structures to form the basis for economic growth. Those who argue that there is an indirect relationship between democracy and economic growth think that economic growth will be realized due to factors such as physical and human capital savings supported by property rights and the rule of law (Sunde, 2006).

The result obtained for the core country groups and semi-periphery country groups reveals a statistically significant and positive relationship between the level of development and democracy. In this context, Tavares and Wacziarg (2001) discussed the steps that should be taken. This study states that democratic institutions affect economic development through several channels. According to Tavares and Wacziarg, democracy affects economic development: political instability, quality of management, breadth of government (public), human capital accumulation, income inequality, trade openness, and physical capital accumulation. It should not be understood that all of these channels listed by Tavares and Wacziarg would affect the economy positively. This study concluded that some channels positively affect economic development and others negatively. In addition, these channels may differ on a country basis; in this case, they are thoroughly related to the governance structures of the countries. The total impact on these channels will determine the ultimate effect of democracy on economic development. If the overall impact on the channels is positive, democracy is positive for economic development; if the total effect is negative, it affects negatively. Although the total effect is zero, democracy does not affect growth. According to the analysis results, this effect appears to be positive for the upper core, lower core, lower semi-periphery, middle semi-periphery, and lower semi-periphery countries. In some studies in the literature, it is concluded that there is a meaningless relationship between development and democracy. Therefore, the meaningless relationship obtained due to the analysis made for the countries in the neighboring country group is attributed to the failure of the transfer mechanisms that provide the relationship between the development of political institutions in the neighboring countries.

4. Conclusion

Many views have been put forward to explain the development differences between countries and many studies have tried to explain this situation in different ways until today. Many studies use different country groups and analysis methods in the literature dealing with the relationship between

development and institutions. This study examines the development differences between countries in terms of core, semi-peripheral, and peripheral countries by using the relationship between development and institutional economics. First of all, core (upper and lower), semi-periphery (upper, middle, and lower), and periphery (upper, middle, and lower) country groups were determined. Then the development and institution relations were examined separately for these country groups.

The study aims to group the countries in the context of the core-periphery relationship with the club convergence method, which is a method that has not been used in the literature before. In addition to the definitions of core, semi-periphery, and periphery in the literature, it is thought that the analyses made by obtaining more subgroups in the context of the core-periphery will yield more precise results. The second part of the analysis is how the development differences in these countries, divided into clubs according to the human development index, are affected by institutional changes. The extent to which countries in clubs with different levels of development are affected by democracy and economic freedoms is another part desired to be achieved.

In the analysis, the cross-sectional dependency tests were performed for the three-country groups obtained by the convergence method and it was concluded that there is a horizontal cross-sectional dependence in the variables. Then, the second-generation unit root tests were applied to the variables. As a result of these tests, it was concluded that the series were stationary at the first difference and the cointegration test was applied. As a result of the cointegration test, it was concluded that the development variable, economic institution variable, and political institution variable act together in the long term in terms of upper core, lower core, upper semi-periphery, middle semi-periphery, lower semi-periphery, upper periphery, and middle periphery country groups. This result coincides with the other results in the literature that show that economic and political institutions act together with the level of development. After such a relationship was achieved, the pooled average group estimator using long term coefficients was used to demonstrate how these relations occur. The error correction coefficients obtained from the analysis were significant and negative for the upper and lowered core country groups. In this context, the deviation from the balance in the short term for the upper and lower country groups will return to equilibrium in the long term. The core country groups' good economic, political, and institutional structure ensures the return to balance in the core countries.

As a result of the analysis, it has been concluded that a positive and statistically significant relationship between economic freedoms and development exists in the long term for upper core, lower core, upper semi-periphery, middle semi-periphery, lower semi-periphery, upper periphery, and middle periphery country groups. Most of the other studies in the literature have also achieved a positive relationship between economic freedoms and development. The results confirmed that the institution's hypothesis positively affects development and growth of economic institutions. In this context, countries need to take remedial steps in determining economic freedom such as property rights, state integrity, judicial activity, government spending, tax burden, financial health, freedom of business, monetary freedom, financial freedom, investment freedom, and trade freedom. In addition, the rule of law, the size of the state, policies to regulate efficiency, and open market transactions need to be regulated to eliminate economic restrictions.

As a result of the analysis, the democracy index, which is used as a political institution variable, positively affects the development across the country groups. According to the results obtained from the core and semi-periphery country groups, a positive relationship has been determined between the political institution and development. Increasing the level of democracy in the core and semi-periphery countries and the administration forms to increase political freedoms increase the creativity of individuals and support the inflow of foreign investment. In addition, since democracy is essential for individuals and the society to participate in government and support management, in democracies, the property rights of individuals are secured, their education level is increased, individuals are provided with a more peaceful life and their living standards are raised. Thus, providing rights and freedoms enables productivity and productivity increases in society, and an increase is observed in the investment stock in the economy, thereby increasing the level of development. Therefore, even a minor democratic recovery in the core and semi-periphery countries positively affects development due to the good functioning of the transmission mechanisms. The meaningless relationship obtained for the neighboring country groups is due to the insufficient institutional structure in these countries and the poor economic and political transmission mechanisms. Providing economic and political stability in the surrounding countries and increasing the functionality of the mechanisms that enable interaction in the relationship of democracy to development will make the effect of democracy on development meaningful within the semi-periphery country group.

In future studies, different results can be obtained for countries by using different indices showing the level of development. In addition, by using different variables as institutional variables, the effects of those variables on the level of development can be seen.

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