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Democracy, Globalization and Economic Growth: An Empirical Analysis on Turkiye

Demokrasi, Küreselleşme ve Ekonomik Büyüme: Türkiye Üzerine Ampirik Bir Analiz

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Abstract: The research looks at the effects of globalization and democracy on economic development for Turkiye. In this study, which is based on the 1973-2020 period, unit root tests that are conventional and those that permit for structural breaks were applied to test whether the variables contain unit roots. In this study, in which time series analysis was applied, the stationarity of the series was tested in order to prevent the spurious regression problem and increase predictability. For this purpose, Augmented Dickey and Fuller (1981) and Phillips and Perron (1988) tests, which are conventional unit root tests, were used in the first stage. Then, Zivot and Andrews (1992) and Lumsdaine and Papell (1997) unit root tests, which permit two structural breaks, were preferred. Once it has been confirmed that the series are stationary at the first order I(1), Hatemi-J (2008) cointegration test is used. After establishing the series' cointegration relationship, FMOLS cointegration coefficient estimator is used for long-run coefficient estimation. In the last stage, Hacker and Hatemi (2006) cointegration test is used. In order to establish the causal link between the series, Bootstrap Causality analysis was performed. Results obtained, i) Globalization, democracy, and economic development are all interconnected over the long term. ii) An increase in the level of globalization and democracy positively affects economic growth. iii) Economic growth and globalization are both found to have a single-sided causal relationship. Based on these results, it is recommended to implement institutional policies to increase the level of democracy and globalization to ensure sustainable growth in Turkiye.

Structured Abstract: The most significant indicator of a society's level of development is economic growth. There are four approaches in the literature to explain the developmental differences between countries. The first approach is the Production Function approach. The second approach is the Trade-Integration approach. Geography, Culture and Location Approach is the third approach and the last approach is the institutionalist approach. The positive effect of institutions on economic growth has been supported by studies conducted in recent years. In the context of the institutionalist approach, it is critical to clarify the connection between democracy, globalization, and economic expansion. The entirety of the rules used in a society are referred to as institutions. Institutions are divided into formal and informal institutions. Institutions with state power and public sanction (law, justice, statute) refer to formal institutions. Unwritten rules that emerge as a result of mutual relations and interaction constitute informal institutions. In this framework, the management style of a state and the degree of cultural and economic openness directly affect its economic welfare. Because with a

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developed democracy, private property is protected, the rule of law is ensured, and the ground is prepared for a free market. With globalization, foreign capital flows are provided, new business and technologies opportunities are designed, an investment atmosphere is created and economic growth is achieved. However, the erosion of democracy on a global scale and the projections of anti-globalization are also seen in Turkiye. However, past experiences show that this trend will not be beneficial for Turkey. Considering previous studies in the literature, The impact of democracy and globalization on economic growth separately has been the subject of numerous studies. These studies cover both countries and groups of countries. Findings from the studies show that democracy and globalization have different results on the economic growth of countries. These effects can be positive as well as negative. However, studies that deal with the effects of democracy and globalization components on economic development are very rare. For this purpose, the effect of globalization and democracy on economic growth for the 1973-2020 period in Turkiye has been determined by time series analysis. Gross Domestic Product (Current $), representing economic development; globalization index was exercised as a globalization criterion and the democracy index was used for democracy. First, the stationarity of the series was tested using unit root tests that account for both conventional and structural breaks. According to Augmented Dickey-Fuller (ADF) and Phillips-Perron tests in conventional unit root tests, the series has unit root at the level. After taking the difference of the series, first order I(1) stationarity is provided. Similar results were obtained with Zivot and Andrews and Lumsdaine and Papell Unit Root Test unit root tests, that take into account structural breaks. The Hatemi-J Cointegration Test was used to determine whether there was a long-term relationship between the variables, which takes into account two structural breaks. The findings indicated a long-term relationship between globalization, democracy, and economic development in Turkey. When an examination is made in terms of break dates as a result of cointegration, the first break date obtained is 1982. It shows the economic effects of the 1980 coup in Turkey this year. The second break date is in 1996. This date shows the effects of the 1994 inflation crisis and the 1996 Asian crisis. Once the series' cointegration relationship has been established, FMOLS (Adjusted Least Squares Method) method developed by Phillips and Hansen (1990) was utilised to estimate coefficients over the long term. The results indicate that a 1% increase in the democracy variable causes a 0.47% increase in economic growth. It was determined that a 1% increase in the globalization index increased economic development by roughly 4.68 percent. To ascertain the direction of causality between the variables, the Hacker and Hatemi Bootstrap Causality test was used. A one-way causality relationship was found from democracy to economic growth. From economic growth to the globalization index, a one-way causal relationship was discovered. Due to the study's small sample size, it was not possible to use cointegration and unit root tests, which allow for multiple structural breaks. The results obtained show that the open society is important for the development and well-being of Turkey. Within the framework of this understanding, the parameters of democracy and globalization are important. It is historically clear that it is difficult for totalitarian and closed countries to achieve sustainable growth. In this context, a structure that is integrated with global trade with its institutions and organizations and has an advanced level of democracy represents important turning points for the development of Turkiye.

Keywords: Economics, globalization, democracy, ınstitutions, economic growth, time series analysis, Turkiye

Öz: Bu çalışmada, küreselleşme ve demokrasinin ekonomik büyüme üzerindeki etkisi Türkiye için ele alınmıştır. 1973-2020 döneminin esas alındığı çalışmada değişkenlerin birim kök içerip içermediğini sınamak amacıyla geleneksel birim kök testleri ve yapısal kırılmaya izin veren birim kök testleri uygulanmıştır. Zaman serisi analizinin uygulandığı bu çalışmada, öncelikle sahte regresyon sorununu engellemek ve öngörülebilirliği arttırmak amacıyla serilerin durağanlığı test edilmiştir. Bu amaçla ilk aşamada geleneksel birim kök testlerinden Augmented Dickey-Fuller (1981) ve Phillips and Perron (1988) testleri kullanılmıştır. Ardından, iki yapısal kırılmaya izin veren Zivot ve Andrews (1992) ve Lumsdaine ve Papell (1997) birim kök testleri tercih edilmiştir. Serilerin birinci derecede I(1) durağanlığı sağlandıktan sonra Hatemi-J (2008) eşbütünleşme testi kullanılmıştır. Seriler arasında eşbütünleşme ilişkisi tespit edildikten sonra uzun dönem katsayı tahmini için FMOLS eşbütünleşme katsayı tahmincisi kullanılmıştır. Son aşamada seriler arasında nedensellik ilişkisinin tespit edilmesi amacıyla Hacker ve Hatemi (2006) Bootstrap Nedensellik analizi yapılmıştır. Elde edilen sonuçlara göre; i) Küreselleşme, demokrasi ve ekonomik büyüme arasında uzun dönemli bir ilişki olduğu tespit edilmiştir. ii) Küreselleşme düzeyinde ve demokrasi seviyesindeki artış ekonomik büyümeyi pozitif bir şekilde etkilemektedir. iii) Ekonomik büyümeden demokrasiye, küreselleşmeden ekonomik büyümeye doğru tek yönlü nedensellik bulgusuna ulaşılmıştır. Bu sonuçlara

bakılarak, Türkiye'de sürdürülebilir büyümeyi sağlamak için demokrasi seviyesini ve küreselleşme düzeyini arttırmaya yönelik kurumsal politikaların uygulanması önerilmektedir.

Anahtar Kelimeler: İktisat, küreselleşme, demokrasi, kurumlar, ekonomik büyüme, zaman serisi analizi, türkiye.

Giriş

A nation's ability to improve living standards for its citizens depends to a large extent on its long-term economic growth rate (Abel, Bernanke and Croushore, 2014, p. 207). Economic growth or development is a phenomenon desired by individuals and societies. With a growing economy, real income per capita in a society increases. Thanks to this increase in income, individuals can consume more of the goods and services they desire, both in terms of variety and quantity. Higher per capita income also generates expectations of improvements in education, health, security and income distribution. This process, which allows for a better life, paves the way for an increase in the level of welfare. In this context, economic development is considered as the most significant indicator showing the level of development of societies (Demir, 2013, p. 134).

There are 4 different approaches that explain income differences between countries and thus economic growth (Beşkaya and Koç, 2006, pp. 44-46; Unsal, 2007, pp. 286-287). Based on Solow's (1956) neoclassical theory, the first strategy is the production function strategy. This method holds that technological advancements and production factors influence economic growth. A rise in the providing of labor and capital pioneers to a rising in production. This approach, which states that more output will be obtained with the same amount of input with technological progress, emphasizes the importance of capital (physical and human) accumulation and technological progress as the determinant of per capita output. At the same time, investments and expenditures on R&D are considered as one of the determinants of this approach. Another approach is the Trade-Integration approach. Sach, Warner, and Fischer's (1995) study supported the contribution of open trade to economic development with empirical findings. The third approach is the Geography, Location and Culture approach, which refers to the contribution of geographical factors and location to country development (Acemoğlu, Johnson and Robinson, 2005, pp. 399-400; Beşkaya and Koç, 2006, pp. 44-46). The differences in income and welfare between East Germany and West Germany before the fall of the Berlin Wall, between South Korea and North Korea after the Second World War, and between some border cities in Mexico and the United States weaken the claim that geography and location are the main determinants of economic growth. This framework emphasizes the institutionalist approach. (Acemoğlu et al., 2005, pp. 399-400; Acemoğlu, 2018). The fourth approach, the Institutionalist Approach, based on Hayek (1960), is based on a well-functioning market economy, protection of property rights, freedom of competition, freedom of exchange and a minimal state.

The development gap between South Korea and North Korea, which share the same geography, location and culture, is striking in terms of showing the impact of exploitative and inclusive institutions on growth and development (Acemoğlu & Robinson, 2018, pp. 71-82). Structures that protect private property, pave the way for the rule of law and free exchange are examples of inclusive institutions. Democracy and globalization, as a reflection of the idea of an open society, enable both the construction of a space of freedom within the country and the formation of openness in the international arena.

The determination of the relationship between the level of democracy and globalization in an economy and economic development can be addressed both in terms of countries' global trade policy and their institutional approach. The construction of a democratic order in a country that guarantees that resources are not monopolized by a certain group of people, that economic

freedoms are guaranteed, and that property rights are protected can also lead to economic development. When the process of economic growth is considered in terms of globalization, it enables an increase in the level of welfare by providing free competitive advantage not only in national trade but also in international trade.

Although there are different definitions of globalization, it is generally defined as the efforts to liberalize world trade on a universal scale. Globalization refers to a concept that has social, political and cultural dimensions beyond an economic dimension (Seyidoğlu, 2017, p. 235). In this situation, economic globalization is described as the process of removing barriers to production, trade and capital movements, where market economy dominates on a global scale. Therefore, economic globalization defines the process of removing barriers such as customs walls, tariffs, quotas and capital restrictions in trade between countries (Acar, 2004, p. 2; Berber, 2019, p. 409).

Issues such as increasing income on a national scale, providing reaching to foreign monetary fund, providing new opportunities for business, enabling new investment and technology transfer, improving energy and contact infrastructure, improving working conditions, expanding human rights and providing competitive advantage show the positive effects of globalization. In addition to the positive effects of globalization, there are also negative effects. Globalization destabilizes global capital markets, weakens countries with insufficient human capital, makes economic openness unmanageable in poor countries, and exploits workers due to low real wages (Mutascu and Fleischer, 2011, pp. 1691-1692; Kılıcarslan and Dumrul, 2018, p. 115).

There are those who criticize the process of globalization in economic, political, social and cultural terms, as well as those who defend it. Along with all of these effect-response theories, rising globalization is considered to be a factor in determining economic growth. There is solid theoretical evidence that open economies grow faster (Snowdon and Vane, 2005, p. 647). Acemoğlu and Robinson have argued that the two most powerful engines of economic prosperity in recent decades have been economic globalization and the rapid development of automation technologies (Acemoğlu and Robinson, 2020, p. 526).

After the 2000s, many indices have been created to measure the globalization performance of countries in different dimensions. The Swiss Institute for Economic Research (KOF)'s (one of these indices) globalization index is one of them. The Institute addresses globalization through three sub-components. The overall KOF Globalization Index (overall KOF Globalization Index) comprise of economic, social and political index sub-components, with a total of 43 sub-indices. An overall and three sub-index values approaching 1 indicates a decrease in globalization, while an index value approaching 100 indicates an increase in globalization (KOF Globalisation Index, 2021).

Tablo 1: Globalisation Index: Structure, Variables And Weights

Indexes and Variables	Weights (%)
Globalisation Index	100
1. Economic Globalisation	33.3
a. Trade Globalisation	50
b. Financial Globalisation	50
2. Social Globalisation	33.3
a. Interpersonal Globalisation	33.3
b. Informational Globalisation	33.3
c. Cultural Globalisation	33.3
3. Political Globalisation	33.3

Source: KOF, (20.08.2022)

It is worth mentioning the channels through which democracy influences economic development. Ensuring the rule of law and protecting property rights through a democratic order increase the economic motivation of economic actors. It enables economic development by providing and protecting property rights with the rule of law and basing them on a solid ground. In addition, democracy contributes to economic prosperity by improving investment opportunities and promoting economic reforms. Issues such as the development of schools and health services and the reduction of social unrest are some of the areas where democracy contributes to economic growth (Acemoğlu, Naidu, Restrepo and Robinson, 2019, p. 53).

One of the indices used extensively today to evaluate democracy's level in countries is the US-based Freedom House index. The index consists of political rights (political participation, fair and transparent elections) and civil liberties (freedom of expression, rule of law). In this index, political rights correspond to 40 points, civil liberties to 60 points and the index created corresponds to 100 points. The Institute does not offer scores of 1-7 as of the 2020 edition, but high scores and low scores indicate a good level of democracy and freedoms. According to Freedom House's 2019 and 2022 reports, a score of 1 denotes the greatest degree of freedom, while a score of 7 denotes the least degree of freedom.

This study looks at how democracy and globalization have affected Turkiye's economy and it is aimed to determine the effect between variables by using time series analysis with structural breaks technique. There are numerous studies on the effects of democracy and globalization on economic growth separately, according to a review of the literature, there are very few studies on how globalization and democracy affect economic growth together. (Macedo, et al., 2013; Nasreen & Shahbaz, 2016). The current study makes an effort to close a gap in the body of knowledge regarding Turkiye. This study is divided into three sections. The introduction to the study is its first section. In this section, the sources of economic growth are analyzed within the framework of the institutional approach. The second section of the study included a review of the relevant literature. The third section provides information on the data set and variables used in the study. In addition, this section also includes the findings obtained as a result of econometric methods. In this connection, firstly, the series' stability of the factors used in the study is analyzed with ADF and PP unit root tests in addition to Lumsdaine and Papell unit root test and Zivot and Andrews unit root tests that permit multiple structural breaks. Subsequently, Hatemi-J cointegration test with multiple structural breaks is utilized to ascertain the long-term relationship between the variables. With the FMOLS estimator, long-run cointegration coefficients are predicted. The final step involves applying the Hacker and Hatemi Bootstrap causality test and The causality of the connection between the factors is examined.

Lıterature Summary

In this section, a literature review on the variables used in the study will be presented. In this context, First, we will review the research on the relation between globalization and economic development. There is disagreement regarding the direction of the general, economic, social, and political globalization index's impact on economic development. Table 2 presents the empirical studies on the dependent variable of the study, globalization index and economic growth.

It can be said that the studies carried out to determine the relationship between globalization and its sub-components and economic growth have increasingly continued after the 2000s. It was determend that there was a positive relation between the factors in most of the studies in which both panel data and time series analyzes were used and supported by empirical findings. Barry (2010), Heshmati and Lee (2010), Chang etc. (2011), Samimi ve Jenatabadi (2014), Gurgul ve Lach (2014), Sucı etc. (2015), Hasan (2019), Urut Saygın (2021) studies conducted show that there is a positive relationship between the variables. Apaydın (2019), concluded that there is a negative relationship between the variables. Ying et al. (2014), Kılıç (2015), Hayaloglu et al. (2015), Samimi ve Jenatabadi (2014), Olimpia and Stela (2017), Altıner et al. (2018) studies show that seen the effects of general globalization and its sub-components on growth vary. This difference sometimes has positive, sometimes negative and sometimes meaningless results on growth.

There are many academic studies on the democracy index, which is another independent variable of the study. One of these academic fields of study is the relation between economic growth and democracy. Therefore, many academic studies have been conducted on the relation between democracy and economic growth. Among the studies, it was concluded that democracy has a positive, negative or no impact on economic development. There are studies in the litterateur that conclude that democracy positively affects economic growth (Feng, 1997; Leblang, 1997; Rodrik, 2000; Acemoğlu et al., 2014; Hayaloğlu, 2015; Şahin, 2016; Heshmati and Kim, 2017; Şahin, 2017; Koçak and Uzay, 2018; Kaya and Yılmaz, 2019; Marselina and Enzovani, 2020; Chatterjee, 2022). There are some studies in the literature suggesting that democracy has an adverse effect on economic development (Barro, 1996; Tavares and Wacziarg, 2001; Acaravcı et al., 2015). There are also studies in the literature that accomplish that democracy has no impact on economic development (Butkiewicz and Yenikkaya, 2006; Sekmen and Özkan, 2012). Some of these studies examining the relation between democracy and economic development were analyzed by means of panel data analysis (Jaunky, 2013; Acaravcı et al., 2015; Hayaloğlu, 2015; Rachdi and Saidi, 2015; Malikane and Chitambara, 2017; Altıner et al., 2018; Baklouti and Boujelbene, 2018; Tütüncü, 2020; Saray, 2021), while others were analyzed by means of time series analysis (Narayan and Smyth, 2006; Mahmood et al., 2010; Razaq et al., 2020; Tütüncü, 2020; Qasim, 2021). When the literature based on Turkey data is examined, it is seen that a limited number of studies conducted with country groups, including Turkey, were examined with the help of panel data analysis (Hayaloğlu, 2015; Altıner et al., 2018; Gül and Torusdağ, 2019; Tütüncü, 2020; Saray, 2021). In the litterateur, it is seen that there are researches conducted specifically for Turkey and analyzed with the help of time series analysis (Başkaya and Menan, 2009; Acaravcı and Erdoğan, 2015; Erkuş and Karamelikli, 2016; Şahin, 2016; Koçak and Space; 2017; Erdoğan, 2020; Öz, 2021).

Data, Methods And Findings

In this research, the impacts of democracy and globalization on economic development was investigated by using time series analysis practise by using the data of 1973-2020 period in Turkiye. The model of the analyzed study is given below:

$$LNGDP = \beta_0 + \beta_1 LNGI + \beta_2 LNDI + \mu \quad (1)$$

The logarithms of the variables used in the analysis have been taken. Explanations of the factors are given in Table 2.

Table 2: Variables Used in Analysis and Their Explanations

Valuables	Shorts	Source
Gross Domestic Product (Current $)	LNGDP	World Bank
Globalization Index	LNGI	KOF Swiss Economic Institute
Democracy Index	LNDI	Freedom House

Since the data studied in this model are time series, Analyzing the time series' stationary or non-stationary status is necessary. Unit root tests are applied to test the stationarity of time series. Unit root tests are applied in two ways, with and without structural break. To determine whether the series are stabile in our model, firstly, we apply the Augmented Dickey-Fuller (ADF) and Phillip-Perron tests. The hypotheses for the tests are as follows.

H_0: Includes unit root. That is, the series is non-stationary.

H_1: Does not contain unit root. So the series is stationary.

H_0 is rejected if Prob < 0.1- 0.05- 0.01.The alternative H_1 is accepted.

Table 3: ADF and PP Unit Root Test Results

ADF Unit Root Test				
Variables	**Constant**		**Constant and Trend**	
	Test Statistics	**Probability**	**Test Statistics**	**Probability**
LNGDP	-1.643993	0.4524	-2.112586	0.5253
LNGI	-1.627024	0.4609	0.285449	0.9980
LNDI	-2.416596	0.1430	-2.637093	0.2667
ΔLNGDP	-6.906157	0.0000*	-6.914881	0.0000*
ΔLNGI	-5.274139	0.0001*	-5.586809	0.0002*
ΔLNDI	-5.564952	0.0000*	-5.508294	0.0002*
PP Unit Root Test				
Variables	**Constant**		**Constant and Trend**	
	Test Statistics	**Probability**	**Test İstatistiği**	**Test Statistics**
LNGDP	-1.619953	0.4645	-2.497679	0.3279
LNGI	-1.552635	0.4983	0.120886	0.9966
LNDI	-1.958858	0.3034	-2.280376	0.4357
ΔLNGDP	-6.900410	0.0000*	-6.908056	0.0000*
ΔLNGI	-5.320539	0.0001*	-5.540942	0.0002*
ΔLNDI	-5.500167	0.0000*	-5.437275	0.0003*

Note: Schwarz Information Criteria (SIC) was used in lag selection. *, refer to significance levels of 1%.

Table 3 states the results of ADF and PP unit root tests on logarithmized data. To the outcomes of the ADF and PP unit root tests, the LNGDP dependent variable contains unit root both with constant and with constant and trend (Prob>1%, 5%, 10%). So, the H_0 hypothesis is accepted. A unit root in the LNGDP series indicates that the series is unsteady. The independent variables LNGI and LNDI contain unit root in both fixed and trandly constant regressions (Prob>1%, 5%, 10%). So, in the same way, hypothesis H_0 is accepted. The fact that these series contain unit roots

indicates that the series are non-stationary. Therefore, ADF and PP unit root tests were implemented again by taking the first difference of the series. Similarly, the differenced series are given in Table 1. To the results of PP and ADF unit root tests, the differenced LNGDP dependent variable does not contain a unit root both with constant and with constant and trend (Prob<1%, 5%, 10%). So, H_0 hypothesis is rejected. The fact that the LNGDP series does not include a unit root indicates that the series is steady. The independent variables LNGI and LNDI do not contain unit root both in the fixed regression and in the trandelined regression (Prob<1%, 5%, 10%). So in the same way, H_0 hypothesis is rejected. The fact that these series do not contain unit roots indicates that the series are stationary.

Since there were developments that may cause structural breaks in Turkiye between 1973 and 2020, Zivot and Andrews (1992) unit root tests, which permit for structural breaks, were applied to LNGDP, LNGI and LNDI variables, and the test results obtained are given in Table 4.

H_0: The series includes unit root without structural breaks.

H_1: The series is stable with structural breaks.

Table 4: Zivot and Andrews Unit Root Test Results

Variables	Model	Structural Breaks Dates	Test Statistics	Critical Value		
				1%	5%	10%
LNGDP	**A**	2003	-3.270215	-5.34	-4.93	-4.58
	C	2004	-3.623442	-5.57	-5.08	-4.82
LNGI	**A**	1988	-1.696693	-5.34	-4.93	-4.58
	C	2008	-2.029133	-5.57	-5.08	-4.82
LNDI	**A**	2002	-3.704238	-5.34	-4.93	-4.58
	C	2002	-3.592159	-5.57	-5.08	-4.82

Note: Critical values were obtained from Zivot, Andrews (1992).

When the outcomes of the Zivot and Andrews unit root test are analyzed in Table 3, the null hypothesis indicating the existence of a unit root in Model A and Model C cannot be rejected since the test statistics for LNGDP, LNGI and LNDI series are smaller than the crucial values in complete value. This indicates that these series contain unit root at the level. When the break periods of the variables are analyzed, it is observed that LNGDP had a structural breaks in the steady in Model A in 2003 and in the constant and the slope in Model C in 2004. There is a structural break in the globalization index in Model A in 1988 in the constant and in Model C in 2008 in both the constant and the slope. In the democracy index, the structural break was found in Model A and Model C in 2002 in the constant and in both the constant and the slope.

Table 5: Lumsdaine and Papell Unit Root Test Results

Variables	Model	Structural Breaks Dates	Test Statistics	Critical Value		
				1%	5%	10%
LNGDP	**AA**	1989 2003	-4.2760	-6.74	-6.16	-5.89
	CC	2000 2009	-4.3656	-7.19	-6.75	-6.48
LNGI	**AA**	1987 2013	-2.4882	-6.74	-6.16	-5.89
	CC	1987 2013	-3.3492	-7.19	-6.75	-6.48
LNDI	**AA**	1992 2001	-4.1954	-6.74	-6.16	-5.89
	CC	1992 2012	-4.6381	-7.19	-6.75	-6.48

Table 5 presents the outcomes of the Lumsdaine and Papell (1997) unit root test that permits for two structural breaks. In the table in question, for both Model AA, which considers the breaks in the constant term, and Model CC, which considers the breaks in the constant and trend, the test statistics calculated at the 1% important level for the dependent factor LNGDP and the independent variables LNGI and LNDI are more splendid than the crucial values. According to the results of the Lumsdaine and Papell unit root test, the variables are found to contain unit root at the level. Therefore, the series are found to be non-stationary at the level. Accordingly, the null hypothesis (H_0), which assumes the presence of a unit root with structural break in the factors, is accepted. Likewise, the break dates of the factors are also accepted.

According to Model AA, breaks were observed in 1989 and 2003 for LNGDP, in 1987 and 2013 for LNGI, and in 1992 and 2012 for LNDI. According to Model CC, structural breaks were observed in 2000 and 2009 for LNGDP, in 1987 and 2013 for LNGI, and in 1992 and 2012 for LNDI.

Table 6: Hatemi-J Cointegration Test Results

ADF*		**Z_t**		**Z_α**	
Test Statistics	**Structural Breaks Dates**	**Test İstatistiği**	**Structural Breaks Dates**	**Test İstatistiği**	**Structural Breaks Dates**
-7.382*	1982	-7.464*	1982	-51.293	1982
	1996		1996		1996
Critical Value		**Critical Value**		**Critical Value**	
1%	**5%**	**1%**	**5%**	**1%**	**5%**
-6.928	-6.458	-6.928	-6.458	-99.458	-83.644

Note: *, refer to significance levels of 1%.

When the co-integration test outcomes in Table 5 are analyzed, the test statistic value is -7.382. This value is greater in absolute value than the table critical values of 1% (-6.928) and 5% (-6.458). This result implies that there is a long-term cointegration relation among democracy, globalization, and economic development for Turkiye. Looking at the breaking dates, it can be said that it was the effect of the 1980 coup in Turkiye in 1982. The break in 1996 can be attributed to the 1994 inflation crisis and the Asian crisis that signaled a crisis in 1996.

Tablo 7: FMOLS Estimator Results

Variables	Coefficient	Standard error	T-Statistics	Probability
C	-8.599246	2.128754	-4.039568	0.0002*
LNDI	-0.469957	0.182936	-2.568961	0.0139**
LNGI	4.684996	0.527090	8.888409	0.0000*
D1982	-0.341637	0.161141	-2.120107	0.0401**
D1996	0.050264	0.168823	0.297734	0.7674

Note: *,** respectively refer to significance levels of 1% and % 5

Table 7 presents the results of FMOLS, the long-term coefficient estimator. According to the results obtained, all variables except the D1996 variable are statistically significant. A 1% increase in the democracy variable (LNDI) enhances economic development by approximately 0.47%. A 1% rise in the globalization index (LNGI) increases economic growth by approximately 4.68%. The fact that the dummy variable D1982 is statistically significant is noteworthy in terms of indicating that there was a splendid alteration in the economy at that date. Indeed, military coups have a negative effect on economic development as they affect both democracy and international relations. The fact that the 1980 coup coincided with such a break supports the conclusion of the study.

Table 8: Hacker and Hatemi Bootstrap Causality Results

Basic Hypothesis	Test Statistics	Critical Values			Result
		1%	5%	10%	
LNGDP≠>LNDI	3.989	10.866	6.626	4.939	There is no causal relationship
LNDI =>LNGDP	5.238***	10.502	6.640	5.105	There is a causal relationship
LNGDP=>LNGI	6.560**	7.521	4.191	2.937	There is a causal relationship
LNGI ≠>LNGDP	0.058	7.413	4.119	2.902	There is no causal relationship

Note: **,*** respectively refer to significance levels of 5% and 10%.

When the causality test results in Table 8 are analyzed, a one-way causality relation is found from democracy to economic development since the test statistic is higher than the bootstrap critical value at the 10% significance level. Likewise, since the test statistic is greater than the bootstrap critical value at the 5% importance level, a unidirectional causality relationship is found from economic growth to the globalization index. When the relationship between the other variables is analyzed, the existence of unidirectional or bidirectional causality cannot be mentioned because the test statistic values are smaller than the boostrap crucialvalues.

Conclusion

The international division of labor and specialization approach based on the classical growth model and the production function approach based on Solow's neoclassical theory are insufficient to explain the income differences between countries. The Geography, Location and Culture approach, another approach to explaining economic growth, also fails to fully explain differences in economic growth. In this context, there is a need for studies in which globalization policy, which enables international global trade on the one hand, and democracy, which explains the effect of institutional structure on economic development, on the other hand, are considered together.

The study intends to investigate the relationship among globalization, democracy, and economic development with annual data covering the period 1973-2020 for Turkiye. In this framework, KOF globalization index, democracy index and per capita income as an indicant of

economic development were used for econometric analysis. In order to investigate whether the variables are unit rooted or not, ADF and PP unit root tests, which are conventional unit root tests, are used. The series were found to be unstable at their level values, and the unit root problem was eliminated after first differences were taken. Then, Zivot-Andrews, Lumsdaine and Papell unit root tests that permit for structural breaks are used. In these tests, the null hypothesis (H_0) assuming the presence of a unit root is accepted. Hatemi-J (2008) cointegration test was implemented to decide the existence of a long-term relation between the variables that allows structural breaks. As a result of the test, it is observed that there is a long-term cointegration relation among globalization, democracy and economic development for Turkiye. At the same time, the existence of two breaks in 1982 and 1996 was detected. After the cointegration relationship was detected, FMOLS, the long-run coefficient estimator, was applied. The findings show that a 1% increase in the democracy variable (democratic development) increases economic growth by approximately 0.47%, while a 1% increase in the globalization index increases economic growth by approximately 4.68%. To the results of Hacker and Hatemi-J (2006) Granger causality test, oneway causality was found from economic growth to democracy and from globalization to economic development.

The findings of the study show that the developing democracy and the increasing level of globalization in Turkiye contribute to economic development. This study is important owing to the fact that there are very scant researches in the litterateur on the joint impact of democracy and globalization on economic development. The most obvious limitation on the study is that it is based on 48 observations due to limited data. This limitation does not allow the usage of unit root tests and cointegration tests that permit multiple structural breaks.

Increasing the level of globalization reduces barriers to foreign trade and allows for an expanding volume of trade. Moreover, financial and trade openness paves the way for building innovative opportunities and new production techniques between countries. However, with globalization, international cultural ties are established. This ensures the flow of information and cultural proximity between countries. Each of these elements refers to factors that contribute to a country's economic development. The provision of democratic governance in a country guarantees economic freedoms, protects property rights and thus provides a basis for economic development/growth.

The impact of democracy on economic growth is a controversial issue. In some studies, it was concluded that the effect of democracy on economic growth was positive, while in other studies it was concluded that this effect was negative or uncertain. However, it is a fact that democracy has many positive aspects on macroeconomic stability in general and economic development in particular. In this context, although the effect of democracy on direct economic growth is controversial, it is expected that physical, human, social and political capital will develop in that economy with the continuation of a democratic regime (Gerring et al, 2005, p.326). In democratic societies, foreign investors prefer to invest in democratized countries for reasons such as the rule of law, protection of property rights, and a transparent and accountable government. This situation causes local businesses to face more competition and enables them to develop by enabling them to produce higher quality products and provide better service. In addition to this, foreign investments invest in businesses within the country, and these investments provide opportunities for businesses within the country to open up to new markets. In addition, foreign direct investments in the country provide information sharing to domestic enterprises in the form of technology transfer, production methods and innovative applications. In this way, individuals and businesses support innovative ideas and initiatives. This is seen in the form of productivity increases and increases in competitiveness in local businesses. Therefore, businesses competing in a democratic environment try to innovate more and reveal innovative ideas. It increases the investment in human resources and creates a society rich in human resources. As a result, the

contribution of democracy to the economy is multifaceted and it is seen that it has a positive effect in many areas, including foreign direct investments.

The design and transformation of institutional structures is important to ensure sustainable and stable economic growth in the Turkish economy. To this end, it is noteworthy that, especially in the last two decades, Turkiye has advanced its economic integration process in the international arena and restructured its institutions and organizations with a democratic approach. In today's world, it is highly unlikely that countries with a closed system of governance can achieve a good and high quality standard of living. With this understanding, policies to integrate with the international arena in financial, trade and cultural dimensions through globalization should be pursued without eliminating national capabilities and capabilities. However, steps should be taken to increase the democratic level by avoiding the increasing authoritarianism trends on a global scale.

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    1. Yazar/First author %50

    2. Yazar/Second author %50

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