

The Relationship between Economic, Social, and Political Globalization and Economic Performance in Turkic States

Türker ŞİMŞEK¹

Türk Devletlerinde Ekonomik, Sosyal ve Politik Küreselleşme ile Ekonomik Performans Arasındaki İlişki

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Öz

Bu makale, KOF küreselleşme endeksinin alt boyutları olan ekonomik, sosyal ve politik küreselleşme endeksleri ile Türk Devletlerinde ekonomik performanslar arasındaki ilişkiyi 1991-2019 dönemi için incelemektedir. Analizde uygulanan Dinamik Sıradan En Küçük Kareler Ortalama Grubu (DOLSMG-Demean) yöntemi sonucunda, Türk Devletlerinde ekonomik performans ile ekonomik küreselleşme arasında pozitif ve istatistiksel olarak anlamlı; ekonomik performans ile sosyal küreselleşme arasında negatif ve istatistiksel olarak anlamlı bir ilişki tespit edilmiştir. Bunun yanında politik küreselleşme ekonomik büyümeyi olumlu etkilese bile istatistiksel olarak anlamlı bulunmamıştır. Bu nedenle hükümetler vergi politikalarını iyileştirerek dış ticaret engellerini azaltmalı, dış ticaret hacmini artırmalı, uluslararası ticareti teşvik etmeli ve ekonomik küreselleşmeden daha fazla yararlanmalıdır. Ayrıca, sosyal küreselleşmenin ekonomik büyüme üzerindeki olumsuz etkilerini azaltan politikalar benimsenmelidir.

Anahtar Kelimeler: Ekonomik Küreselleşme, Sosyal Küreselleşme, Politik Küreselleşme, Panel Veri Analizi

Abstract

This article examines the relationship between economic, social and political globalization indices, which are the sub-dimensions of KOF globalization index, and economic performances in Turkish States from 1991 to 2019. As a result of the Dynamic Ordinary Least Squares Mean Group (DOLSMG-Demean) method applied in the analysis, there is a positive and statistically significant relationship between economic performance and economic globalization in the Turkic States; A negative and statistically significant relationship is found between economic performance and social globalization. In addition, although political globalization positively affects economic growth, it is not statistically significant. For this reason, governments should reduce foreign trade barriers, increase foreign trade volume, encourage international trade, and benefit more from economic globalization by improving their tax policies. In addition, policies that reduce the negative effects of social globalization on economic growth should be adopted.

Keywords: Economic Globalization, Social Globalization, Political Globalization, Panel Data Analysis

Makale Türü: Araştırma Makalesi

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¹ Associate Professor Doctor, Tokat Gaziosmanpaşa University, Faculty of Economics and Administrative Sciences, Department of Economics, turker.simsek@gop.edu.tr, ORCID: <https://orcid.org/0000-0001-7581-7590>

1. Introduction

In the world economy, especially during the last 50-60 years, the increasing mutual economic dependence and the increase in the actors involved in the international system have led to certain transformations in the national economic policies of the countries, primarily commercial and financial openness. This phenomenon, called economic globalization, affects the strategies followed by countries and exposes them to the opportunities and challenges of the global age.

The phenomenon of globalization attracts researchers' attention in the social sciences field, as it closely concerns subjects such as lifestyle, trade, finance, employment, and governance. There has yet to be a generally accepted and agreed definition of globalization. Therefore, it is a difficult to understand and elusive term that can change according to the point of view.

"Globalization: Threat or Opportunity?" prepared by researcher S. Fisher by the International Monetary Fund. In this study, it is emphasized that globalization is a historical process and that it emerges as a result of the advancement of technology. According to the study, globalization refers to the increasing integration of economies, mainly due to trade and financial mobility. The mobility of labor and technology across international borders also affects countries' cultural, political, and environmental aspects. In addition, Pieterse (2015) sees globalization as a spark of conflict because it disrupts popular ideology from a socio-economic and political point of view and obliges governments to produce new paradigms. Although the effects of globalization on the economy and society are different in Turkic states, it is clear that they are more affected by international events and developments than in the past. Well-managed globalization will be beneficial in terms of resource allocation and increase potential growth. However, not all sectors in the country will benefit from this benefit at the same rate. Sectors that can adapt quickly to innovation and change and groups with qualified labor force will be the ones that benefit most from the benefits of globalization.

On the other hand, sectors or companies that cannot adapt to change will be disadvantaged and deprived of the benefits of globalization. The costs and risks of globalization, especially for developing economies, cannot be ignored. Along with globalization, a decreasing trend was not observed regarding injustice in income distribution, environmental degradation, and economic policies that did not match the facts. These deficiencies have increased the gap between the rich and poor in countries such as the developing Turkic states, especially African countries.

It should be noted that two strategic components are the driving force behind the modern globalization trend. The first is the technological change that has significantly reduced transport, information, and communication costs between various economies. The second is policy decisions that affect international integration structures. In developed countries, globalization is a natural platform for increasing business opportunities, accelerating innovation, and promoting global culture. Developing countries have started implementing outward-looking policies to keep up with the developments in developed countries, especially the USA, UK, and Japan, and to integrate into the global economy. Thanks to these policies, they tried to accelerate economic growth.

Turkic States are seen as states with a shared history, socio-cultural background, and structures where a strong will is institutionalized. Especially the motive of the Central Asian Turkic States to protect their independence and the increasing trade volume with each other day by day bring the Turkic States to have a solid geopolitical position in Eurasia. Globalization is crucial in promoting economic growth, creating new jobs, transferring technology, and closing the trade gap in the Turkic States. Globalization, geopolitical, economic, and social tensions in the Turkic States will likely increase or decrease. This situation directly affects the economic performance of the countries concerned. Therefore, this study aims to examine the effect of globalization on economic performance in Turkic States. The study is important because it is one of the few studies that reveal

how the sub-dimensions of globalization affect economic performance with an empirical application in this period when the Turkic States gained dynamism, attracted attention, and contributed to the relevant literature.

The theoretical framework will be discussed after the introductory part of the study, which aims to explain the relationship between globalization and economic performance. In the next section, after the literature review and econometric analysis findings are evaluated, the study will be concluded with the conclusion section.

2. Globalization And Economic Performance

While some see globalization as a tool of opportunity and wealth, others also describe it as a threat. Empirical research in the field of economics shows that globalization has positive effects on economic performance and welfare and reduces poverty. Therefore, it can be said that the optimistic approach to the phenomenon of globalization is strongly supported by academic research. In the last 50 years, when we look at the trade-in exported goods, an increase of approximately thirty times has been observed, while the world's gross domestic product has increased approximately nine times. This situation shows that the global economy is making itself feel more intensely daily. The development of communication technologies such as telegraph, fax, internet, telephone, and vehicles such as ships, planes, and trucks played an essential role in increasing world trade and economic globalization. In addition to technological progress, the exchange of production factors, legal regulations, institutional improvement in financial structures, and social insurance contributions to economic globalization.

The adverse effects of the two world wars and the accompanying trade restrictions hurt globalization and economic performance. It was only in 1980 that the share of exports and imports in the gross domestic product could reach the level before the first world war. The deepening of economic and financial crises was prevented by the rounds of negotiations led by the General Agreement on Tariffs and Trade (GATT), the establishment of the World Trade Organization in 1995, and the reduction of trade barriers on a global scale.

When international trade theories are examined, it is seen that international trade can affect countries' economic performance and welfare through different channels. David Ricardo (1817), in his work entitled *Principles of Political Economy and Taxation*, emphasized that countries should specialize in the products they are comparatively superior to and support the export of those products. This emphasis on comparative advantages implies that a country can increase its total consumption while having limited resources and must use fewer resources to reach a certain level of consumption. Trade is conducive to prosperity, for example, not because it creates employment but because the goods produced make it possible to increase imports and use limited resources more efficiently. Another Classical Economist, J. Stuart Mill, with his economic view called the Law of Mutual Demand, defended the idea that if the flexibility or severity of a country's demand for the other country's goods is known, it is easy to determine the terms of trade.

On the other hand, Alfred Marshal contributed to the role of supply and demand in determining the terms of trade, which J. S. Mill should have mentioned more through the offer curves (Marshall, 2003). In Classical Theory, Ricardo attributes countries' comparative advantages to technological differences. In contrast, Heckscher and Ohlin's Neo-Classical Trade Theory attributes it to different access to resources and factors in the first half of the 20th century. Factor Endowment Theory, or Heckscher-Ohlin Theory, is widely accepted and tries to explain why production costs differ between countries with the factor endowment countries have. Accordingly, there are labor-rich and capital-rich countries in the world. Some produced goods are classified as labor-intensive, and some as capital-intensive goods. Technology is the main factor that determines the classification of goods.

According to the technologies they have, countries produce labor-intensive goods cheaper if they are labor-rich countries and capital-intensive goods if the capital is rich. Therefore, they have a comparative advantage over other countries and should specialize in these areas (Heckscher, 1919; Ohlin, 1933). Three different foreign trade theories emerged from the Heckscher-Ohlin Theory. The first is the "Factor Price Equalization Theory," which argues that relative factor prices will be equalized between countries by only trading goods without international physical factor movement.

According to this theory, in a situation where restrictive assumptions such as the absence of any barriers to foreign trade, the same production technologies, and constant cost conditions are accepted, foreign trade between countries reduces price differences and equalizes each other. Because while the demand for the intensive factor in the country will increase, the demand for the scarce factor will decrease. This, in turn, will cause the factor prices to change and ensure their equalization. The second theory, derived from the Heckscher-Ohlin Theory, is the "Stolper Samuelson" theorem. Paul Samuelson and Wolfgang Stolper put it forward during the Second World War. According to this Theory, understanding free foreign trade changes the income distribution in favor of the abundant factor of production in a country and the understanding of protectionism in favor of the scarce factor. Under free trade conditions, each country specializes in goods that use that factor intensively and exports them in whatever factor it is rich in.

On the other hand, it also imports the goods produced by the scarce factor. Due to this specialization tendency, the demand for the intensive factor increases, and the demand for the scarce factor decreases. This will lead to a relative decrease in the price of the scarce factor. Thus, the income distribution changes in favor of the intensive factor. When protectionist policies are applied, the demand for scarce resources will increase as production will increase in industries where scarce factors are used intensively. This situation will increase the cost of the scarce factor, and the income distribution will change in favor of the scarce factor (Stolper and Samuelson, 1941: 58-73). The third theory, derived from the Heckscher-Ohlin Theory, is the Rybczynski Theorem. According to the Rybczynski Theory, if the supply of one of the labor and capital factors increases while the supply of the other remains constant, the production of the goods produced by the increasing factor increases while the production of the goods produced by the other factor decreases (Rybczynski, 1955: 336-341).

Modern international trade theories have made essential contributions to explaining the reasons for foreign trade for goods of different natures between countries with different structures and levels of development. The "Skilled Labor Theory" developed by Keasing (1965, 1966) and Kenen (1966) shows the differences in skilled labor as the reason for foreign trade between developed countries in terms of industry. In the "Technology Gap Hypothesis" developed by Posner (1961), The industrialized country that invented a good becomes the first exporter because it has a technological monopoly. However, as the technology of the exporting country spreads to other countries over time, the export of the relevant country decreases. Because due to advantages such as cheap labor power, other countries can make that good cheaper. Thus, while the export amount of the new participating countries increases, the export of the inventor country decreases. Studies such as Ohlin (1933), and Grubel and Lloyd (1975) emphasized the importance of economies of scale in intra-industry trade. Thanks to international trade, expanding markets and economies of scale benefit firms. P. Krugman, who has significantly contributed to international trade theories, states that even if countries have similar technology, preferences, and production costs, free trade will benefit countries. Monopolistic competition markets and product differentiation expand markets for firms in international trade, and costs fall as firms' scale of production increases. In this respect, Krugman has made essential contributions to explain the reasons for international trade (Krugman, 1979: 469-479; Krugman, 1980, 1981). The theories of international trade, which are still very actively discussed today, state that trade through the specified channels should be positioned in a way that contributes

most to economic growth or provides added value to economic performance. Encouraging the international spread of trade technologies allows underdeveloped countries to increase their production and economic performance by using existing technologies without doing the necessary research and development activities. This situation also explains the rapid economic growth in developing countries, especially China.

3. Literature Review

There are many studies in the literature on globalization and economic performance. These studies can be broadly classified in two ways. In the first category, there are studies evaluating globalization with commercial and financial openness data; In the second category, there are studies that try to measure globalization with social and political data and commercial and financial openness. The critical studies in the literature are given in Table 1.

Table 1: Brief Literature Review on the Relationship between Globalization and Economic Performance

Article	Period and Countries	Methods	Variable(s) Used as an Indicator of Globalization	Findings
Sachs and Warner (1995)	1970-1989 122 Countries	Panel Data Analysis	Openness Level	It has been determined that the increase in openness in the country's economies positively affects economic growth/ performance.
Borensztein, Gregorio and Lee (1998)	1970-1989 69 Developing Countries	Panel 2SLS and 3 SLS	Foreign Direct Investments	It has been determined that Foreign Direct Investments and capital investments increase production and employment positively in countries with high education levels. However, the curative effect on income distribution needs to be clarified.
Brunner (2003)	1960-1992 125 Countries	OLS Approach	Openness Level	In the long term, international trade positively impacts growth, and the effect was weak in the short term.
Dreher (2006)	1970-2000 123 Countries	GMM Approach	KOF Globalization Index	It has been concluded that globalization has a positive effect on economic performance.
Chang and Lee (2010)	1970-2006 23 OECD Countries	Panel Cointegration and Panel Causality Tests	KOF Globalization Index	It has been concluded that there is a long-term and bidirectional causality relationship between social globalization, economic globalization, general globalization, and economic

				growth.
Chang, Lee and Hsieh (2011)	1970-2006 G-7 Countries	Panel Cointegration and Panel Causality Tests	KOF Globalization Index	There is a long-term relationship between social globalization, globalization, and economic growth, and it was concluded that these variables positively affect growth.
Rao and Vadlamannati (2011)	1970-2005 21 Low-Income African Countries	Panel Data Analysis	KOF Globalization Index	The existence of a long-term relationship between social globalization, general globalization, and economic growth was determined, and it was concluded that these variables positively affect growth.
Leitao (2013)	1995-2011 27 EU Countries	GMM Approach	KOF Globalization Index	It has been determined that international trade and cultural globalization positively affect economic growth.
Samimi and Jenatabadi (2014)	1980-2008 Selected OIC Countries	Panel Data Analysis	KOF Globalization Index	It has been concluded that economic globalization has a positive effect on growth.
Maqbool-ur-Rahman (2015)	1981-2011 Pakistan, India, and Bangladesh	Johansen Cointegration Test and Granger Causality Test	KOF Globalization Index	It has been concluded that globalization has a positive effect on growth.
Elsherif (2016)	2001-2014 MENA Countries	GMM Approach	KOF Globalization Index	It has been concluded that globalization affects growth negatively.
Savrul and Incekara (2017)	1970-2015 ASEAN Countries	Panel Data Analysis	KOF Globalization Index	It has been concluded that while economic and social globalization positively affects growth, political globalization is not statistically significant.
Bataka (2019)	1980-2015 40 Sub-Saharan African Countries	Panel Data Analysis	KOF Globalization Index	It has been stated that globalization has a positive effect on growth.

Çelik and Ünsür (2020)	2000-2016 Selected 88 Countries	Panel Causality Test	KOF Globalization Index	While a two-way causality relationship was determined between economic, social, and technological globalization and growth, it was determined that there was one-way causality from economic growth to general globalization and from economic growth to political globalization.
Xu et al. (2021)	2003-2017 45 Asian Countries	Two-step System GMM	KOF Globalization Index	It has been concluded that globalization positively affects economic growth.
Liu et al. (2022)	1996-2019 8 South Asian Countries	Pooled ARDL	KOF Globalization Index	While globalization positively affects economic growth, increasing interest rates and inflationary pressures cannot sustain this effect.

When the relevant literature is examined, it is seen that most of the studies indicate that globalization has a positive effect on economic performance. However, studies such as Elsharif (2016) have also concluded that globalization negatively affects economic performance oppositely. Savrul and Incekara (2017) state that globalization has no statistically significant effect on economic growth. As can be seen, there are different views on the impact of globalization on economic performance. This difference may be due to the different countries included in the analysis and the consideration of different time zones. Examining the effects of sub-dimensions of globalization on economic performance in Turkic states will contribute to this literature, which is attracting more and more attention from researchers.

4. Econometric Model and Methodology

In the study, globalization data was introduced by Dreher (2006). Then Dreher et al. (2008) used the KOF Globalization Index's economic, social, and political sub-dimensions developed in their studies. Globalization integrates national economies, cultures, technologies, and governance by creating links through knowledge, ideas, and trade. Thus, the economic boundaries between the international are blurred, and a system of interdependence is formed (Clark, 2000; Norris, 2000). Economic globalization is a type of globalization that refers to the widespread international movement of goods, capital, and services, as well as technology and knowledge. Political globalization is characterized by the diffusion of government policies implemented toward structural transformation in political power, authority, and forms of government. Social globalization refers to the spread of ideas, images, and cultures.

In the study, which deals with Turkic States such as Azerbaijan, Kazakhstan, Kyrgyzstan, Turkmenistan, Turkey, and Uzbekistan, globalization data were obtained from the KOF Swiss Economic Institute website as annual data covering the period 1991-2019, where there was no problem in providing data in order to create a balanced panel. Economic growth data was taken from

the World Bank Development Indicators Database as an economic performance indicator. The KOF globalization index is divided into three as economic globalization, political globalization, and social globalization. The model used in the econometric analysis is shown in Equation 1.

$$RGDP_{ij} = \alpha + \beta_1 ECOGL_{it} + \beta_2 POLGL_{it} + \beta_3 SOCGL_{it} + \varepsilon_{it} \quad (1)$$

The dependent variable is the RGDP variable, real gross domestic product growth rate, ECOGL variable economic globalization, POLGL variable political globalization, and SOCGL variable social globalization in Equation (1). The parameter α represents the constant term, the parameter β represents the slope coefficients, and the parameter ε shows the error term.

The study used panel data analysis to determine the relationship between globalization and economic performance in the Turkic States. The stationarity of the series is essential so that the analysis results are reliable; that is, there is no spurious regression problem. In panel data analysis, the stationarity of the series can be tested with first and second-generation unit root tests. Cross-sectional dependence (correlation between units) tests are used to choose between first and second-generation unit root tests. If there is a correlation between the units in the series, the second-generation unit root tests are used, and if there is not, the first-generation unit root tests are used. In the study, the Pesaran (2004) CD test, which is used in cases where the cross-section size (N) is larger than the time dimension (T) and which is based on the error terms obtained from the Augmented Dickey-Fuller (ADF) regression estimation, should be considered in the study. Formulated versions of cross-sectional dependence tests are given in Equations (2), (3), and (4).

$$LM = T \sum_{i=1}^{N-1} \sum_{j=i+1}^N \hat{\rho}_{ij}^2 \sim X_{N(N-1)/2}^2 \quad (2)$$

$$LM_{adj} = \sqrt{\left(\frac{2}{N(N-1)}\right) \sum_{i=1}^{N-1} \sum_{j=i+1}^N \left[\hat{\rho}_{ij}^2 \left(\frac{(T-k)\hat{\rho}_{ij}^2 - \mu_{Tij}}{\vartheta_{Tij}} \right) \right]} \sim N(0,1) \quad (3)$$

$$CD = \sqrt{\frac{2}{N(N-1)}} \left(\sum_{i=1}^{N-1} \sum_{j=i+1}^N \sqrt{T_{ij}} \hat{\rho}_{ij} \right) \quad (4)$$

After determining the cross-sectional dependence, it is determined whether the panel used is homogeneous or heterogeneous to determine which cointegration test will be used and which method will be applied in the coefficient estimation. Swamy S (1970) and Pesaran-Yamagata (2008) Delta tests were used to determine this. The mathematical representation of these tests is given in Equations (5), (6), and (7).

$$\hat{S} = X_{k(N-1)}^2 = \sum_{i=1}^N (\hat{\beta}_i - \bar{\beta}^*)' \hat{V}_i^{-1} (\hat{\beta}_i - \bar{\beta}^*) \quad (5)$$

$$\hat{\Delta} = \sqrt{N} \frac{N^{-1}\bar{S}-k}{\sqrt{2k}} \quad (6)$$

$$\hat{\Delta}_{adj} = \sqrt{N} \frac{N^{-1}\bar{S}-k}{\sqrt{Var(t,k)}} \quad (7)$$

After determining the presence of cross-sectional dependence, second-generation unit root tests are used to determine the stationarity of the series. In his study, Pesaran (2007) showed that the Pesaran CADF (Cross Sectional Augmented Dickey-Fuller) unit root test validates unit and time

dimensions regardless of size. In the panel CADF unit root test, the null hypothesis $H_0: \beta_i = 0$ is valid for all i 's. The alternative hypothesis is $H_1: \beta_i < 0$; expressed as $i=1,2, \dots N_i$ and $\beta_i = 0, i= 1+2, \dots N$. Pesaran CADF unit root test t value is given in Equation (8):

$$t_1(N, T) = \frac{\Delta Y_i' \bar{M}_w Y_{i-1}}{\hat{\sigma}(Y_{i-1}' \bar{M}_w Y_{i-1})^{1/2}} \tag{8}$$

First and second-generation cointegration tests can be performed to determine the existence of cointegration, that is, a long-term relationship between the series. The determination of these tests is evaluated in terms of whether there is a correlation between the units between the series and homogeneity/heterogeneity in the constant and slope parameters. If there is a correlation between units in the series and the heterogeneous parameters, it is appropriate to use second-generation cointegration tests. In the study, Gengenbach, Urbain, and Westerlund panel cointegration tests, which are among the second-generation cointegration tests, were used due to the presence of cross-sectional dependence and heterogeneity of slope-constant parameters. Developed by Gengenbach, Urbain, and Westerlund (2015), this test has an error correction model and can be used in cross-sectional dependence and heterogeneity cases. While the Gengenbach, Urbain, and Westerlund panel cointegration test statistic is shown in Equation (9), the panel test statistic, which is the average of the test statistics of the units, is shown in Equation (10).

$$t_{c_i} = t_{\alpha_{y_i}} = \frac{\hat{\alpha}_{y_i}}{\hat{\sigma}_{\hat{\alpha}_{y_i}}} \tag{9}$$

$$\bar{t}_c = \frac{1}{N} \sum_{i=1}^N t_{c_i} \tag{10}$$

While the null hypothesis $H_0: \alpha_{y_i} = \dots = \alpha_{y_N} = 0$ shows no cointegration relationship, the alternative hypothesis $H_1: \alpha_{y_i} < 0$ confirms a cointegration relationship for at least one unit. After determining the existence of a long-term relationship, various methods are used to estimate the long-term coefficient according to the cross-sectional dependence and whether the parameters are homogeneous or heterogeneous. In the study, the dynamic ordinary least squares mean group (DOLSMG) method, a second-generation heterogeneous estimator that considers the cross-sectional dependence and heterogeneity of the parameters, was developed by Pedroni (2001), was used. After the methods used in the study are explained theoretically, the findings can now be included. Table 2 below shows the test results for the cross-sectional dependence.

Table 2: Cross-Sectional Dependence Tests Results

Tests	Statistics	p-value
LM	28.88	0.0167
LM _{adj}	6.2	0.0000
CD	3.312	0.0009

The study used LM, LM_{adj}, and CD tests to test the cross-sectional dependence. According to the results of these three tests, the panel has a cross-section dependency. Since the time dimension in the panel is larger than the unit size, the Pesaran CD test should be looked at from the test results performed above. As seen in the CD test, it does not accept the null hypothesis of "no cross-sectional dependence." As a result, there is a correlation between the units in the panel. Table 3 includes panel homogeneity tests.

Table 3: Results of Swamy S and Pesaran-Yamagata Homogeneity Tests

Tests	Chi ² /Statistics	p-value
Swamy S	135.97	0.0000
Δ	5.316	0.0000
Δ_{adj}	5.844	0.0000

According to the results of the Swamy S and Pesaran-Yamagata Δ tests in Table 3, the null hypothesis of "the panel is homogeneous" is not accepted. Attention should be paid to the Swamy S test results of these three tests because the panel's unit size is smaller than the time dimension (N<T). Therefore, when looking at the Swamy S result, the panel created for the Turkic States has a heterogeneous structure. Second-generation unit root tests should be applied instead of first-generation unit root tests due to the presence of cross-section dependency and heterogeneity of the panel. Table 4 shows the results of the Pesaran CADF test, the second-generation panel unit root test frequently used in the literature.

Table 4: Pesaran's CADF Panel Unit Root Test Results

Variables	Constant		Constant and Trend	
	I(0)	I(1)	I(0)	I(1)
RGDP	-3.154 (0.000)	-4.766 (0.000)	-3.316 (0.004)	-4.760 (0.000)
ECOGL	-2.307 (0.083)	-3.330 (0.000)	-2.935 (0.050)	-3.439 (0.001)
POLGL	-1.359 (0.844)	-2.396 (0.047)	-1.278 (0.997)	-2.872 (0.042)
SOCGL	-3.023 (0.001)	-3.933 (0.000)	-3.094 (0.020)	-4.478 (0.000)

When the results in Table 4 are examined, it is seen that while the POLGL variable is not stationary at the level, it becomes stationary when the first-degree difference is taken, both with constant and constant+trend. A similar situation applies to the ECOGL variant. RGDP and SOCGL variables are stationary at this level. Gengenbach, Urbain & Westerlund's (2015) Panel EC test was used to test whether the variables have a long-term relationship.

Table 5: Gengenbach, Urbain & Westerlund (2015) Panel EC Test Results

d.y	Coefficient	T-bar	p-value
y(t-1)	-1.121	-5.089	<=0.01

When the p-value in Table 5 is examined, the null hypothesis that "there is no cointegration" is rejected. This error shows that there is a coefficient of correction and the existence of a long-term relationship between variables. After a long-term relationship between the variables is determined, this relationship's long-term coefficient should be estimated. Since all the variables included in the

analysis are stationary in a different order, it will be appropriate to use ARDL-based methods. In addition, the presence of cross-sectional dependence on the panel and the heterogeneous structure of the panel requires the use of the Dynamic Ordinary Least Squares Mean Group (DOLSMG-Demean) method. Table 6 shows the results of the DOLSMG-Demean developed by Pedroni.

Table 6: Pedroni's DOLSMG Test Results

Dependent Variable: RGDP		
Variables	Beta	t-stat
ECOGL	0.146***	6.209
SCOGL	-1.262***	-8.702
POLGL	0.412	0.414

***, **, * values indicate that the variables are statistically significant at 1%, 5%, and 10% significance levels, respectively.

When the results in Table 6 were examined, ECOGL and SCOGL variables were statistically significant at 5% significance levels, while the POLGL variable was not statistically significant. Political globalization does not have a statistically significant effect on economic performance in the Turkic States. In addition, a unit increase in economic globalization increases economic performance by 0.146, while a unit increase in social globalization decreases economic performance by 1.262 units. As can be seen, the spread of government policies in Turkic States only significantly affects economic performance. However, the diffusion of ideas, knowledge, and culture in the Turkic States has an interesting negative impact on economic performance. This situation can be explained by the fact that the understanding of management and governance of the Turkic States differs from each other. The spread of social globalization in states governed by a more despotic management approach may lead to the emergence of negative thoughts against the government and political instability, leading to a decrease in economic performance. The increase in economic globalization will positively affect economic performance as it will stimulate the flow of goods, capital, and services entering the country.

5. Conclusion

Globalization is a complex process affecting the performance of national economies with its economic, social, and political dimensions that increase global dependency. In this study, the economic, social, and political dimensions of globalization in the Turkic States were discussed separately, and its effect on economic performance was examined. As a result of the analysis, a positive relationship between economic globalization and economic performance; A negative relationship was found between social globalization and economic performance. Although there was a positive relationship between political globalization, a sub-dimension of the KOF Globalization Index, and economic performance, it was not statistically significant. The increase in economic globalization in Turkic States causes economic growth, and the increase in social globalization causes a decrease in economic growth. Economic globalization occurs with factors such as trade liberalization, financial integration, and technology transfer around the world. This process enables companies to access broader markets, increases production efficiency, accelerates technology transfer, facilitates investment and capital flows, encourages competition, and supports innovation. All these have a positive effect on economic performance in the Turkic States. Social globalization in Turkic states can be associated with factors negatively affecting economic performance. Among

these factors, income inequality, cultural differences, lack of education and human resources, infrastructure deficiencies, and high dependency stand out. Migration and economic mobility can lead to social tensions by increasing income inequality. Cultural differences, on the other hand, can create economic instability by hindering cooperation and trade. Low education and lack of human resources can make it challenging to follow technological developments and realize innovation potential. Infrastructure deficiencies can limit economic performance by negatively affecting trade and investment. Finally, high dependency may weaken domestic production by disrupting the foreign trade balance. It can be said that these factors are an issue where social globalization can negatively affect economic performance in Turkic states. In the study, no statistically significant effect was observed since political globalization is not under the control of the factors expected to be effective on economic growth. In light of all this information, governments should reduce foreign trade barriers, increase foreign trade volume, encourage international trade, and benefit more from economic globalization by improving tax policies. In addition, policies that reduce the adverse effects of social globalization on economic growth should be adopted.

Statement of Research and Publication Ethics

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Conflicts of Interest

There is no conflict of interest in this article.

References

- Bataka, H. (2019). De jure, De facto Globalization and Economic Growth in SubSaharan Africa. *Journal of Economic Integration*, 34(1), 133-158.
- Borensztein, E., Gregorio, J. D., & Lee, J.-W. (1998). How Does Foreign Direct Investment Affect Economic Growth? *Journal of International Economics*, (45), 115-135.
- Breusch, T. & Pagan, A. (1980). The Lagrange Multiplier Test and Its Applications to Model Specification in Econometrics. *Review of Economic Studies*, 47(1), 239-253.
- Brunner, A. D. (2003). The Long-run Effects of Trade on Income and Income Growth. IMF Working Paper (No 03/37). Washington: International Monetary Fund Institute.
- Chang, C.-P., & Lee, C.-C. (2010). Globalization and Economic Growth: A Political Economy Analysis for OECD Countries. *Global Economic Review*, 39(2), 151-173.
- Chang, C.-P., Lee, C.-C., & Hsieh, M.-C. (2011). Globalization, Real Output, and Multiple Structural Breaks. *Global Economic Review*, 40(4), 421-444.
- Clark, W. C. (2000). Environmental Globalization, In Governance in a Globalizing World (eds. Joseph S. N. and J. D. Donahue), Brookings Institution Press, Washington, DC.
- Çelik, M. Y., & Ünsür, Z. (2020). Küreselleşme ve Büyüme İlişkisinin Dumitrescu-Hurlin Panel Nedensellik Testi İle Belirlenmesi. *İzmir İktisat Dergisi*, 35(1), 201-210.
- Dreher, A. (2006). Does Globalization Affect Growth? Evidence from a new Index of Globalization. *Applied Economics*, 10(38), 1091- 1110.
- Dreher, A., Gaston, N. & Martens, P. (2008). Measuring Globalization - Gauging its Consequence, New York: Springer.
- Elsherif, M.A. (2016). The Impact of Globalization on Economic Conditions: Empirical Evidence from the MENA Region. *International Journal of Business and Economic Development*, 4(1), 1-14.
- Fisher, S. (2000). Globalization: Threat or Opportunity? IMF Issues Brief.
- Gengenbach, C., Urbain, J. P., & Westerlund, J. (2015). Error Correction Testing in Panels with Common Stochastic Trends. *Journal of Applied Econometrics*, 31(6), 982-1004.
- Grubel, H. & Lloyd, P. (1975). Intra-industry Trade. London: McMillan.
- Heckscher, E. E. (1919). The Effect of Foreign Trade on the Distribution of Income. *Economisk Tidskrift*. Reprinted in Heckscher, E.E. & Ohlin, B. (1991). Heckscher-Ohlin Trade Theory. (Translated, Edited and Introduced by Flam, H. & Flanders, H. J.). Cambridge, Mass.: The MIT Press.
- Jan Nederveen P. (2015). *Globalization and Culture: Global Mélange* (Lanham: Rowman and Littlefield, 2015).
- Keesing, D. B. (1965). Labor Skills and International Trade: Evaluating Many Trade Flows With A Single Measuring Device. *The Review of Economics and Statistics*, 287-294.
- Keesing, D. B. (1966). Labor Skills and Comparative Advantage. *The American Economic Review*, 56(1/2), 249-258.
- Kenen, P. B. (1965). Nature, Capital, and Trade. *Journal of Political Economy*, 73(5), 437-460.
- Krugman, P. (1979). Increasing Returns, Monopolistic Competition and International Trade. *Journal of International Economics*, 9(4), 469-479.

- Krugman, P. (1980). Scale Economies, Product Differentiation, and the Pattern of Trade. *American Economic Review*, 70(5), 950-959.
- Krugman, P. (1981). Intra-industry Specialization and the Gains from Trade. *Journal of Political Economy*, 89(5), 959-973.
- Leitao, N.C. (2013). Cultural Globalization and Economic Growth. *The Romanian Economic Journal*, 17-28.
- Liu, Y., Adejumo, A. V., Adejumo, O. O., & Aderemi, T. A. (2022). Globalization and Economic Growth: A Sustainability Analysis for South Asia Countries. *Global Policy*.
- Maqbool-ur-Rahman, M. (2015). Impacts of Globalization on Economic Growth-Evidence From Selected South Asian Countries. *Journal of Management Sciences*, 2(1), 185-204.
- Marshall A. (2003). *Money, Credit, and Commerce*. New York: Prometheus Books.
- Norris, P. (2000). Global Governance and Cosmopolitan Citizens. In: *Governance in a Globalizing World* (eds. Joseph S. N. and J. D. Donahue), Brookings Institution Press, Washington, DC.
- Ohlin, B. (1933). *Interregional and International Trade*. Cambridge, MA: Harvard University Press.
- Pedroni, P. (2001). Purchasing Power Parity Tests in Cointegrated Panels. *The Review of Economics and Statistics*, 83 (4), 727-731.
- Personal del Fondo Monetario Internacional (FMI), "La Globalización: ¿Amenaza u Oportunidad?", *IMF*, abril de 2020, <http://www.imf.org/external/np/exr/ib/2000/esl/041200s.htm>.
- Pesaran, M. Hashem. (2004). General Diagnostic Tests for Cross Section Dependence in Panels, Working Paper No:0435, University of Cambridge.
- Pesaran, M. Hashem. (2007). A simple panel unit root test in the presence of cross-section dependence. *Journal of Applied Econometrics*, 22(2), 265-312.
- Pesaran, M. Hashem & Takashi Yamagata (2008). Testing Slope Homogeneity in Large Panels. *Journal of Econometrics*, 142(1), pp. 50-93.
- Pieterse, J. N. (2015). History and Hegemony: The United States and Twenty-First Century Globalization. In *The Routledge International Handbook of Globalization Studies* (pp. 131-147). Routledge.
- Posner, M.V. (1961). *International Trade and Technical Change*. (Ed.: Lamberton, D.M.). *Economics of Innovation and Knowledge*. London: Penguin Modern Economics.
- Rao, B. B., & Vadlamannati, K. C. (2011). Globalization and Growth in The Low-Income African Countries with The Extreme Bounds Analysis. *Economic Modelling*, 28(3), 795-805.
- Ricardo, D. (1817). *On the Principles of Political Economy and Taxation*: London.
- Rybczynski, T. (1955). Factor Endowments and Relative Commodity Prices. *Economica*, New Series, 22(88), 336- 341.
- Sachs, J. D., & Warner, A. (1995). Economic Reform and The Process of Global Integration. *Brookings Papers on Economic Activity*, (1), 1-118.
- Samimi, P., & Jenatabadi, H. S. (2014). Globalization and Economic Growth: Empirical Evidence on The Role of Complementarities. *PloS one*, 9(4), 1-7.

- Savrul, M., Incekara, A. (2017). The Effect of Globalization On Economic Growth: Panel Data Analysis for ASEAN Countries. *International Conference On Eurasian Economies*, 2017, 16-22.
- Stolper, W.F. & Samuelson, M.A. (1941). Protection and Real Wages. *Review of Economic Studies*, 9(1), 58-73.
- Swamy, P. A. (1970). Efficient Inference in a Random Coefficient Regression Model. *Econometrica: Journal of the Econometric Society*, 38(2), 311- 323.
- Xu, X., Abbas, H. S. M., Sun, C., Gillani, S., Ullah, A., & Raza, M. A. A. (2021). Impact of Globalization and Governance Determinants on Economic Growth: An Empirical Analysis of Asian Economies. *Growth and Change*, 52 (2), 1137-1154.