

Tourism and Globalization Nexus in Top 20 Tourist Destinations: New Evidence from Panel Estimation

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ABSTRACT

The study aims to reveal the relationship between tourism and globalization from 1995 to 2018 for the top 20 tourist destinations. We employ the recently introduced panel Granger causality approach that is flexible enough to take into account both cross-country correlation and heterogeneity across the countries. The empirical results support the evidence for (i) the neutrality between globalization and tourism with few exceptions and (ii) the causality from tourism to globalization in five out of the top 20 tourist economies. This study proves that the tourism development of countries is an important driving force behind their economic, social, and political globalization. The originality of this study lies in its distinction from other studies in terms of the method used (considering cross-sectional dependency and heterogeneity) and sample (top 20 tourist destinations).

ملخص

تهدف الدراسة إلى الكشف عن العلاقة بين السياحة والعملة ما بين 1995 و 2018 فيما يتعلق بأفضل 20 وجهة سياحية. ونحن نستخدم نهج مجموعة بيانات غرانجر السببية الذي تم تبنيه مؤخرًا والذي يتسم بالمرونة الكافية لمراعاة كل من الارتباط وعدم التجانس عبر البلدان. وتدعم النتائج

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التجريبية الدليل على 'i' الحياد بين العولمة والسياحة مع استثناءات قليلة و 'ii' العلاقة السببية بدءا من السياحة حتى العولمة في خمسة من أهم الاقتصادات السياحية الـ20. وتثبت هذه الدراسة أن التنمية السياحية للبلدان هي قوة دافعة مهمة وراء عولمتها الاقتصادية والاجتماعية والسياسية. وتكمن أصالة هذه الدراسة في تميزها عن الدراسات الأخرى من حيث الطريقة المستخدمة (بالنظر إلى التبعية عبر القطاعات وعدم التجانس) والعينة (أفضل 20 وجهة سياحية).

ABSTRAITE

L'étude vise à révéler la relation entre le tourisme et la mondialisation de 1995 à 2018 pour les 20 principales destinations touristiques. Nous utilisons l'approche de causalité de Granger par panel récemment introduite, qui est suffisamment flexible pour prendre en compte à la fois la corrélation entre les pays et l'hétérogénéité entre les pays. Les résultats empiriques confirment (i) la neutralité entre la mondialisation et le tourisme à quelques exceptions près et (ii) la causalité entre le tourisme et la mondialisation dans cinq des 20 premières économies touristiques. Cette étude prouve que le développement touristique des pays est un moteur important de leur mondialisation économique, sociale et politique. L'originalité de cette étude réside dans le fait qu'elle se distingue des autres études par la méthode utilisée (prise en compte de la dépendance transversale et de l'hétérogénéité) et par l'échantillon (les 20 premières destinations touristiques).

Keywords: Tourism, Globalization, Panel Data Analysis

JEL Classification: Z32, F62, C23

1. Introduction

Since existence, people have been in constant travel with motives such as seeking power and resources, understanding the world, and discovering unfamiliar places. Along with these, travel through migration or conquest has also been a part of human history. Despite all these travels, it was not possible to talk about today's tourism phenomenon (as a concept) at that time. Therefore, the mass beginning of today's tourism phenomenon dates to the 19th century. With the effects of urbanization, industrialization, technology, and developments in transportation, and owing to factors such as the increase in individual incomes and the regulation of workers' rights mass tourism have developed significantly in the 20th century (Zuelow, 2016). After an extended period of growth, international tourism has become one of the largest sectors of the world economy (Ozcan et al., 2021; Theobald, 2004). Tourism provides a strong incentive for global economic growth and development as it brings income to countries and contributes to export earnings and employment opportunities. The increasing importance of tourism with globalization is also reflected in statistics. According to the 2018 data from the UNWTO (United Nations World Tourism Organization), the tourism sector accounts for 10% of global GDP and employment, 7% of exports, and 30% of service exports. There has been a significant growth in tourism in the recent years. For example, while the number of international tourists was 25 million in 1950, it was 277 million in 1980, 438 million in 1990, 681 million in 2000, and 880 million in 2009. Considering the changes in the last decade, the number of international tourists, which was 880 million in 2009, increased by an average of 59% in 2018 and reached 1.4 billion. Additionally, tourism revenue, which was 117.6 billion USD annually in 2009, increased significantly to 1.7 trillion USD in 2018 (UNWTO, 2010; UNWTO, 2019)

Although there is no common definition of globalization in the literature, general and specific definitions of globalization are the subject of discussion. It is also possible to notice that these discussions differ according to the perspectives of the researchers. The concept of globalization, which is evaluated from a tourism perspective, is generally defined as "The world is seen as a single place, economic, political and socio-cultural borders between countries have disappeared, individuals and companies reach any part of the world in a faster, comfortable and economic way, individuality is at the forefront, intellectual separations

are resolved, and social relations become more widespread and intensified” (Ercan, 2010). The increasing interaction among national economies is reflected in global markets, production, competition, and communication. Globalization includes the development process of the world, which is reflected in expanding information, developing technology, capital, services, goods, and people’s travels (Dwyer, 2015). Therefore, globalization is a phenomenon that play a significant role in the development of tourism (Cohen, 2012; Gerçeker et al., 2019). With globalization, tourism activities have increased, and it has started to transform from a luxury consumption to a need consumption.

The globalization of tourism has economic, cultural, and political dimensions (Bridge, 2002; Hudson, 2008; Stezhko et al., 2020). The global economy, especially the liberalization of international trade, competition, free movement of capital and labor, and investments, encompasses various changes. Globalization plays a significant role in providing access to international markets and services in sectors such as tourism (Balsalobre-Lorente et al., 2021; Turner & Witt, 2001). Thus, the economic aspects of tourism and globalization are becoming more valuable to countries. However, because of globalization and the increase in the world population, has increased the interest of people, especially in distant cultures in tourist regions, but also local heritage (Jovicic, 2016). The political drivers of globalization include the increasing liberalization of trade and capital markets (Dwyer, 2015). Therefore, while globalization eliminates the geographical borders among countries, it also affects the restructuring of political borders between countries (Adaoğlu, 2008).

This article is structured as follows: the second section examines the literature on the relationship between globalization and tourism; the third section shows the proposed data and model; the fourth section describes the empirical methodology; the fifth section presents the empirical results; the sixth section reviews the discussions; and the seventh section reveals the conclusion.

2. Literature Review

In many studies examining the relationship between tourism and globalization, it is stated that globalization affects tourism, and that globalization encourages the development of international tourism

(Dwyer, 2015; Fayed & Fletcher, 2002; Sugiyarto et al., 2003; Zhao & Li, 2006). With the development of tourism, the importance given to tourism by countries has increased and the relationship between globalization and tourism has begun to be examined in the tourism literature (Balsalobre-Lorente et al., 2020)

Akadiri et al. (2019) examined the relationship between globalization, energy consumption, carbon emissions, and international tourism. The study was conducted in 15 selected tourism destinations where tourism is considered a priority in ensuring sustainable economic growth and development. The research shows a long-term balance relationship between energy consumption and environmental pollution resulting from tourism-based globalization and that globalization increases international tourism movements. Gulcemal (2020) examined the effects of globalization indicators on the development of tourism in 8 Mediterranean countries. According to the research, it was concluded that globalization factors, which are classified as economic globalization, social globalization, and political globalization, have significant and positive effects on the growth and development of tourism in selected countries. Additionally, it is among the findings obtained from the study that if there is a development in any globalization factor, tourism will grow faster in that country, there is a long-term relationship between globalization and the development of tourism, and the tourism sector significantly encourages economic growth.

While previous studies focused on a limited number of countries, Javid & Katircioglu (2017) conducted research that can be considered as global in 133 countries by examining the effects of economic, social, and political indicators of globalization on tourism. The study shows that economic, social, and political globalization has positive and significant effects on the development of tourism. It has been emphasized that development in any globalization factor will affect the growth of tourism at a higher level in countries Tzeremes (2021) analyzed the link between globalization indicators, total factor productivity index, and tourism development in a study involving 25 European countries. In the research, it was concluded that globalization and total factor productivity increase the development of tourism and that the increase in the factor indicator in economic, political, and social globalization will increase the development of tourism in European countries. The results of the research, it is state that globalization has important effects on international trade, the international

economy, and international travel, therefore, the globalization process has a significant impact on the development of tourism.

Fereidouni et al. (2014) examined the short and long-term relationship between globalization indicators and international tourism in 10 selected Middle East and North African countries. The results obtained from the research show that tourism increases globalization and that globalization encourages international tourist arrivals in the Middle East and North African Countries. Chishti et al. (2020) examined 5 South Asian countries in their research to determine the effects of globalization and tourism on CO₂ emissions. In the study, it is concluded that globalization and tourism have different results on pollution emissions both in the short term and in the long term. According to the results of the research, it has been found that tourism and globalization have positive effects on environmental quality by reducing pollution emissions overall. In another study with related results, Balsalobre-Lorente et al. (2020) examined the impact of international tourism and globalization on environmental degradation in OECD countries. In the study, it was concluded that the development of tourism and globalization began worsening environmental quality in the preliminary stages of growth, but these effects changed positively overall with globalization.

Globalized countries can attract more tourists, so globalized countries can increase their international tourism revenues and contribute to the development of tourism. Chiu et al. (2021) examined the effects of globalization on tourism in 53 countries in their study. The research concluded that there is a negative relationship between globalization and international tourism revenues and that globalization does not effectively increase international tourism revenues. Additionally, it has been stated that globalization will not necessarily benefit the development of inbound tourism, and it has been stated that globalized countries can of course attract more inbound tourists. When the results of the study are evaluated in general, it is stated that as the level of globalization increases, it will increase international tourism revenues and provide more foreign tourist inflows. For this reason, countries should attach importance to the role of globalization in increasing tourist arrivals and make more efforts to increase globalization levels. In the study, it was emphasized that various levels of globalization have various effects on the development of international tourism and that more efforts should be made to increase globalization levels, especially in developing countries. Akar & Saritaş

(2020) examined the impact of globalization on tourism in OECD countries between 2000 and 2018 by panel data analysis method, it was concluded that globalization positively affected tourism revenues and tourism expenditures.

The high globalization level of countries has begun affecting international tourism recently (Saha et al., 2017). Globalized countries can increase their international tourism revenues and contribute to the development of tourism since they can attract more tourists. In their study, Chiu et al. (2021) examined the effects of globalization on tourism in 53 countries and concluded that there is a negative relationship between globalization and international tourism revenues and that globalization does not effectively increase international tourism revenues. Additionally, it was stated that globalization will not necessarily benefit the development of inbound tourism and that globalized countries can of course attract more inbound tourists. When the results of the study were evaluated in general, it was pointed out that as the level of globalization increases, it will increase international tourism revenue and provide more foreign tourist inflows. For this reason, countries should attach importance to the role of globalization in increasing tourist inflows and make more efforts to increase globalization levels. In the study, it was emphasized that various levels of globalization have various effects on the development of international tourism and that more efforts should be made to increase globalization levels, especially in developing countries. Akar & Saritaş (2020) examined the effect of globalization on tourism between 2000-2018 in OECD countries with the panel data analysis method and concluded that globalization positively affected tourism revenues and tourism expenditures.

In addition to studies showing that globalization affects tourism or tourism influences globalization, there are studies indicating that there is little interaction between globalization and tourism. Adedoyin et al. (2021) investigated the effect of globalization on tourism in 10 tourism destinations in the period of 1995-2016 with the panel causality test. The study shows that the increase in tourism activities reduces globalization and therefore, tourism has negative effects on both globalization and the natural environment.

In this study, a panel data set including studies on globalization and tourism was created using worldwide panel data analysis. Because of the research, a scarcity of studies on globalization and tourism was observed. The literature of empirical studies on the relationship between tourism and globalization is summarized in Table 1.

Table 1: Literature Review of Studies on Tourism and Globalization

Authors and Years	Sample	Years	Variables	Research Method and Technique	Conclusion
Adedoyin et al. (2021)	Selected 10 Tourism Destinations	1995-2016	Tourist Inflows, Globalization, Ecological Footprints, GDP	Panel Causality Test, PMG-ARDL	The results of the study show that the increase in tourism-related activities reduces globalization and negatively affects environmental quality.
Akadiri et al. (2019)	Selected 15 Tourism Destinations	1995-2014	Globalization, International Tourism, Energy Consumption, Carbon Emissions	Panel Data Analysis	The results of the study show that tourism-based globalization reduces the level of environmental pollution and increases international tourism movements.
Akadiri et al. (2020)	Selected 16 Tourism Islands	1995-2014	Globalization, Tourism, Economic Growth, and Carbon Emissions	Panel Data Analysis, Granger Causality Analysis, Regression Analysis, Ward Test	The results show that the factors causing environmental pollution in relation to the causality direction between economic growth, globalization, and tourism have more profound consequences, especially in small tourism islands and the causality direction has changed specifically to tourism islands.
Akadiri et al. (2021)	Selected 16 Tourism Islands	1995-2016	International Tourism, Globalization Index, Economic Growth and Carbon Emissions	Panel Co-integration Test, Panel Granger Causality Analysis, Panel Unit Root Test	The results of the study show that there is a two-way causality between globalization and carbon emissions, and there is a one-way causality relationship between tourism and carbon emissions overall.
Akar & Saritaş (2020)	OECD Countries	2000-2018	Globalization and Tourism	Panel Data Analysis	The results of the study show that tourism revenues and tourism expenditures are positively affected by globalization.
Balsalobre-Lorente et al. (2020)	OECD Countries	1994-2014	Economic Growth, International Tourism, Globalization, Energy Consumption, and Carbon Dioxide (CO ₂) Emissions	Panel Data Analysis, FMOLS Analysis, Generalized Moments Method	The results of the research show that globalization has a positive effect on international tourism overall.

Authors and Years	Sample	Years	Variables	Research Method and Technique	Conclusion
Baltacı et al. (2018)	Selected 20 Developing Countries	1990- 2015	KOF Index, Foreign Debt, Economic Globalization, Tourism Revenues	Panel Co-integration Test, DOLS, MG	According to the results of the study, the increase in tourism revenues and economic globalization in developing countries affect foreign indebtment positively.
Brahmasrene & Lee (2017)	Selected 10 Southeast Asian Countries	1988-2011	Carbon Dioxide Emissions, Tourism, Industrialization, Urbanization, Globalization, and Economic Growth	Panel Regression Analysis	The results show that tourism and globalization directly affect economic growth in the short run and there is a long-term relationship between tourism and globalization and carbon emissions.
Chishti et al. (2020)	Selected 5 South Asian Countries	1980-2018	Globalization, Tourism, and Pollution Emissions	Panel Data Analysis	According to the results of the study, it has been found that tourism and globalization have positive effects on environmental quality by reducing pollution emissions overall.
Chiu et al. (2021)	Selected 53 Countries	1995–2014	Globalization and International Tourism	Panel Data Analysis and Dynamic Panel Threshold Regression Model	The results show that various levels of globalization for countries have various effects on the development of international tourism and that globalization does not effectively increase international tourism revenues, but a high globalization level increases the number of international inbound tourists.
Fereidouni et al. (2014)	Selected 10 Middle East and North African Countries	1995-2008	Globalization and International Tourism	Panel Co-integration Analysis, Granger Causality Analysis	The results show that tourism increases globalization and globalization encourages international tourist inflows in the Middle East and North African Countries.
Godil et al. (2020)	Turkiye	1986-2018	Tourism, Financial Development, Globalization	Panel Data Analysis, ARDL	The results show that tourism and globalization are positively and significantly related to the ecological footprint.
Gulcemal (2020)	8 Mediterranean Countries	1995-2018	KOF Globalization Index, Globalization Indicators, Tourism	Panel Data Analysis	The results of the study show that globalization indicators have positive and important effects on tourism growth and development in selected countries.

Authors and Years	Sample	Years	Variables	Research Method and Technique	Conclusion
Javid & Katircioglu (2017)	Selected 133 Countries	1995- 2014	Economic, Social, Political Globalization and Tourism	Panel Data Analysis, Panel Regression Model, Panel Generalized Moments Method	The results show that economic, social, and political globalization has significant positive effects on tourism development and economic growth.
Mete (2021)	Selected 9 industrializing countries	2002-2018	Political Stability, Globalization, and Number of Inbound Tourists	Panel Co-integration Analysis, FMOLS Analysis	The results reveal a positive and meaningful relationship between globalization and political stability with the number of tourists.
Salifou & Haq (2017)	Selected 11 Economic Community of West African States (ECOWAS)	1990-2010	Tourism, Globalization, Physical Capital, Economic Growth, and Foreign Direct Capital Effect	Panel Co-integration Analysis	The results of the study reveal that economic globalization and tourism have a positive effect on economic growth. The panel cointegration test revealed a long-term relationship between economic growth, physical capital, tourism, globalization, and foreign direct investment.
Tzeremes (2021)	Selected 25 European Countries	1995-2016	Globalization Indicators, Total Factor Productivity Index, and Tourism Development	Panel Regression Model, Panel Granger Causality Test, Panel Generalized Moments Method	The results of the study reveal that the globalization process and total factor productivity increase the development of tourism and that economic, social, and political globalization indicators positively affect the development of tourism in European countries in the long term.

Abbreviations: DOLS; Dynamic Ordinary Least Square, MG; Mean Group, PMG; Pooled Mean Group, ARDL; Autoregressive Distributed Lag Bound Test

3. Data and Model

To undertake the statistical analysis, data were assembled from WDI (World Development Indicators) databases. For the purposes of estimation, imports, exports, and tourist arrivals are used. This study uses a sample of the top 20 tourist destinations countries: France, Spain, United States, China, Italy, Turkey, Mexico, Germany, Thailand, United Kingdom, Japan, Austria, Greece, Hong Kong, Malaysia, Russia, Portugal, Canada, Poland, and the Netherlands. The study uses the sample period 1995 to 2018, a period for which all relevant data are available. The fact that tourism increases globalization, and that globalization encourages international tourist arrivals is the reason for choosing the most visited and income-generating countries. In determining the relationship between tourism and globalization, the selection of countries with high tourism demand is important in terms of generalizing the research results.

Although globalization has been widely accepted by the top 20 tourist destinations countries in the last few decades, its impact on tourism development has been given little attention in the literature. Regarding the literature, previous studies have focused on specific countries as their case studies. No studies have been conducted for the top 20 tourist destinations countries in this regard. Therefore, our outcomes will broaden the tourism literature.

In the literature, there are several models to estimate the relationships between these variables. Our study is based on the model proposed by Akadiri et al. (2019) for times series and by Gerçeker et al. (2019) for panel data.

$$\ln ta_{it} = \beta_0 + \beta_1 \ln kof_{it} + \varepsilon_{it} \quad (1)$$

where at cross-section I and period t , $\ln ta$ is the natural log of tourists arriving, $\ln kof$ is the natural log of the total globalization index and ε is the error term.

The tourism variable as the total number of international tourists arriving ($\ln ta$) in this study has been done according to suggestions in Gunduz & Hatemi-J (2005), Katircioglu (2009), Katircioglu (2014), Ozcan et al. (2017), Akadiri et al. (2019) and Akadiri et al. (2020) Globalization index

Konjunktur for Schungsstelle (KOF) from the Swiss Economic Institute⁴ developed by (Dreher, 2006).

Table 2: Sample Table

Variables	Code	Unit	Source	Period
International tourism	<i>lnta</i>	Number of arrivals	WDI	1995-2018
Globalization	<i>lnkof</i>	KOF Index (0-100)	Swiss Economic Institute	1995-2018

4. Methodology

4.1. Preliminary tests

One of the main problems of panel data analysis is cross-section dependency. In panel data with cross-section dependency, if the data are estimated by methods that are insensitive to it, the results are often inconsistent and upward biased (Bai & Kao, 2006; Breusch & Pagan, 1980). For this reason, it is necessary to check the cross-section dependency before starting tests such as unit root test and cointegration test. For this reason, cross-section dependency tests are also called preliminary tests (Ozcan et al., 2017). In other words, if there is a cross-section dependency in the panel, a shock occurring in one of the sections will also affect the other sections.

The cross-section dependency test was first developed by Breusch & Pagan (1980). Breusch & Pagan (1980) proposed the CD_{LM} test to determine the dependence between cross sections. Pesaran (2004) developed Breusch & Pagan (1980)'s CD_{LM} test, in which the number of cross-section units is calculated as N constant and the number of periods $T \rightarrow \infty$ large, and found the CD test statistic, which gives strong results in the case of $N > T$, and that both N and T are large. He developed the CD_{LM} test statistic that considers the $N \rightarrow \infty$, $T \rightarrow \infty$ situations (Pesaran, 2004; Pesaran et al., 2008). Also, Pesaran et al. (2008) proposed the LM_{adj} test

⁴ The KOF index of globalization is the most used globalization measure in the international economics literature (Potrafke, 2015). The dataset for the index is updated annually, and hence, it introduces a comprehensive data set for the analysis (<http://globalization.kof.ethz.ch/>).

statistic $T \rightarrow \infty$, $N \rightarrow \infty$ where both T and N are large in order to avoid deviations that occur when N is large $N \rightarrow \infty$ and T is small.

According to the empirical findings, non-rejection of the null hypothesis (H_0 : no cross-sectional dependency) indicates that there is no cross-sectional dependency between countries. In other words, a macroeconomic shock in one country does not affect other countries. In this case, first generation panel unit root tests should be applied to the model. However, if cross-sectional dependency is found, second-generation panel unit root tests should be applied to the model. In this sense, cross-section dependency tests allow to decide whether the series contain unit roots and whether it is correct to test with first or second generation tests.

Another preliminary test is the homogeneity test. Homogeneity tests developed by Pesaran & Yamagata (2008) were used to obtain statistical results on whether the slope coefficients of the cross sections were homogeneous. Pesaran & Yamagata (2008) proposed two separate tests for large and small samples, using the Swamy (1970) test, which allows N and T to be of different sizes and to test the homogeneity assumption; used the $\tilde{\Delta}$ test in large samples and the $\tilde{\Delta}_{adj}$ test in small samples.

4.2. Panel Granger causality test

To overcome this problem, Toda & Yamamoto (1995) developed an intuitive causality approach by augmenting the VAR model with the maximum integration degree of variables, which leads to valid Wald tests with the asymptotic distribution irrespective of whether the variables are non-stationary or co-integrated. Emirmahmutoglu & Kose (2011) extended the Toda-Yamamoto approach to Granger causality in time series data for panel data sets effortlessly. This approach to panel causality thereby accounts for cross-country heterogeneity irrespective of whether the variables of interest are non-stationary or co-integrated. In addition to this flexibility because the critical values for panel statistics are derived from bootstrap distributions, it considers the cross-section dependency.

In the Emirmahmutoglu and Kose approach, the following VAR model is estimated for each cross-section:

$$y_{it} = \mu_i + A_{1i}y_{i(t-1)} + \dots + A_{pi}y_{i(t-p)} + \dots + A_{(p+d)i}y_{i(t-p-d)} + \varepsilon_{it}. \quad y_{it} = \mu_i + A_{1i}y_{i(t-1)} + \dots +$$
(2)

where y_{it} is the vector of endogenous variables (*Inta* and *Inkof*), μ_i denotes the p dimensional vector of fixed effects, p_i is the optimal lag(s) and d_i is the maximum integration degree of the variables. The null hypothesis of no-Granger causality against the alternative hypothesis of Granger causality is evaluated by imposing zero restriction on the first p parameters. The so-called modified Wald statistic has an asymptotic chi-square distribution with p degrees of freedom. To evaluate the Granger non-causality hypothesis for the panel, the Fisher statistic is developed that defined as:

$$\lambda = -2 \sum_{i=1}^N \ln(\pi_i) \quad (3)$$

where π_i is the probability corresponds to the individual-modified Wald statistic. The Fisher statistic has an asymptotic chi-square distribution with $2N$ degrees of freedom. However, the limit distribution of the Fisher test statistic is no longer valid in the presence of cross-section dependance. To accommodate for cross-section dependency in the panel, Emirmahmutoglu & Kose (2011) suggest obtaining an empirical distribution of the panel statistic using the bootstrap method⁵.

5. Empirical Results

5.1. Cross-section Dependency Tests

Table 3: Result of Cross-Section Dependency and Homogeneity

Constant Model	lnkof		Inta	
	Statistic	p-value	Statistic	p-value
(BP,1980)	251.926	0.002	539.534	0.000
(Pesaran, 2004)	3.177	0.001	17.931	0.000
(Pesaran, 2004)	-1.512	0.065	11.537	0.000
(PUY, 2008)	29.992	0.000	5.675	0.000
Homogeneity Test				
	48.855***	0.000	23.310***	0.000
	52.080***	0.000	24.840***	0.000

Note: Lag lengths (p_i) taken as 1. *, **, and *** respectively denote statistical significance at 10, 5 and 1 percent.

⁵ In order to save space, the detail of bootstrapping method is not outlined here. An interested reader is referred to Konya (2006) and Emirmahmutoglu and Kose (2011).

The cross-section dependency test results clearly show that there is a cross-section dependency between the series. The null hypothesis of “there is no cross-sectional dependence” is rejected, and the alternative hypothesis is accepted. Homogeneity tests whether the change in one of the cross sections affects other countries at the same or different levels. For this purpose, the homogeneity test (known as (Slope Homogeneity Test) or Delta () test) developed by Pesaran and Yagamata (2008) was used in the study. The homogeneity test results show that the variables are heterogeneous, that is, tourism or globalization shocks affect each country at different levels.

Table 4: Descriptive Statistics

	<i>lnkof</i>	<i>lnita</i>
Mean	1.875	7.338
Median	1.893	7.336
Maximum	1.957	7.950
Minimum	1.643	6.524
Std. Dev.	0.058	0.308
Skewness	-0.937	-0.135
Kurtosis	3.623	2.543
Jarque-Bera	77.588***	5.600*
Probability	0.000	0.060
Sum	894.74	3500.691
SumSq. Dev.	1.629	45.426
Observations	477	477

Note: *, **, and *** respectively denote statistical significance at 10, 5, and 1 percent.

According to the descriptive statistics analysis table 4, the Jarque-Bera test statistic shows that the series is normally distributed for both variables. There were 477 observations.

Table 5. Causality Between Globalization and Tourism (lnkof Inta)

<i>H₀: lnkof does not cause Inta</i>			
Countries	Lag	Wald	p-value
France	1	0.311	0.577
Spain	1	0.068	0.795
United States	1	1.488	0.223
China	1	3.154*	0.076
Italy	3	6.972*	0.073
Turkey	1	0.58	0.446
Mexico	2	0.013	0.994
Germany	1	0.281	0.596
Thailand	1	1.056	0.304
United Kingdom	3	5.452	0.142
Japan	1	0.901	0.343
Austria	1	0.136	0.712
Greece	1	0.172	0.678
Hong Kong	3	2.482	0.478
Malaysia	1	0.276	0.599
Russia	1	0.025	0.876
Portugal	1	0.23	0.632
Canada	2	8.224**	0.016
Poland	2	1.943	0.379
Netherlands	1	0.15	0.699
Panel Fisher Stat.	42.083		
Asymptotic p-value	0.381		
Bootstrap p-value	0.022**		

Notes: denotes non-Granger causality hypothesis. The optimal lag(s) are selected by the Schwarz information criterion by setting the maximum lags to 3 in the VAR model. The bootstrap critical values are based on 1000 bootstrap replications. *, **, and *** respectively denote statistical significance at 10, 5, and 1 percent.

The findings are shown in table 5, where the null (H₀) hypothesis of "globalization is not the cause of tourism" is evaluated. The obtained findings confirm the causality relationship only in Italy and China. No causality relationship was found in other countries. When the panel group effect is examined, the bootstrap probability value shows that tourism is the cause of globalization at the 5% significance level.

Table 6: Causality between Tourism and Globalization (ln_{ta} lnk_{of})

<i>H₀: lnta does not cause lnkof</i>			
Countries	Lag	Wald	p-value
France	1	2.682	0.101
Spain	1	0.293	0.589
United States	1	1.036	0.309
China	1	1.749	0.186
Italy	3	12.946***	0.005
Turkey	1	0.466	0.495
Mexico	2	9.957***	0.007
Germany	1	5.381**	0.02
Thailand	1	3.02*	0.082
United Kingdom	3	2.214	0.529
Japan	1	0.104	0.747
Austria	1	0.1	0.752
Greece	1	2.08	0.149
Hong Kong	3	0.518	0.915
Malaysia	1	0.683	0.409
Russia	1	1.72	0.19
Portugal	1	0.815	0.367
Canada	2	0.072	0.965
Poland	2	0.128	0.938
Netherlands	1	5.011**	0.025
Panel Fisher Stat. 67.292			
Asymptotic p-value 0.004**			
Bootstrap p-value 0.085*			

Notes: denotes non-Granger causality hypothesis. The optimal lag(s) are selected by the Schwarz information criterion by setting the maximum lags to 3 in the VAR model. The bootstrap critical values are based on 1000 bootstrap replications. *, **, and *** respectively denote statistical significance at 10, 5, and 1 percent.

When Table 6 examined, the findings obtained from the causality results show the causality relationship in Italy, Mexico, Germany, Thailand, and the Netherlands. Therefore, tourism has been the cause of globalization in these countries. When the panel group effect is examined, the bootstrap probability value shows that tourism is the cause of globalization.

6. Discussion

The hypothesis that globalization is the cause of tourism is quite weak among the top 20 tourism destinations, contrary to the results of the studies in the literature. Chiu et al. (2021) also supports this result. In their study, Chiu et al. (2021) concluded that like the results of this study, globalization does not increase international tourism revenues effectively. However, it was also obtained from the study that there is a slight positive relationship between globalization and the number of incoming tourists and that the important level of globalization does not necessarily increase the number of international tourists. In the literature, studies showing that globalization has a higher effect on tourism are in the majority. (Akadiri et al., 2019; Balsalobre-Lorente et al., 2020; Fereidouni et al., 2014; Gulcemal, 2020; Javid & Katircioglu, 2017; Tzeremes, 2021). Contrary to the studies showing that the effect of globalization on tourism is high, Adedoyin et al. (2021) state that the increase in tourism-related activities reduces globalization and negatively affects environmental quality. These results may be due to the globalization dimensions of the selected sample countries. However, it is concluded that there is a bidirectional causality relationship only in Italy in the selected sample. When the results of the analysis are evaluated in general, it is concluded in a way that is consistent with the studies showing the relationship between globalization and tourism, which are also included in the literature. This hypothesis is confirmed by the studies of (Akadiri et al., 2019; Akadiri et al., 2020; Fereidouni et al., 2014; Tzeremes, 2021) concluded in their study that there is a long-term bidirectional causality relationship between economic, social and political globalization indicators and inbound tourism Akadiri et al. (2019) examined the relationship between globalization, tourism, economic growth, and carbon emissions and concluded that the causality direction between the variables is specific to tourism islands. Akadiri et al. (2020) also examined the relationship between globalization, GDP, carbon emissions, and tourism in their study and concluded that there is bidirectional causality between globalization, GDP, carbon emissions, and tourism and that there is a unidirectional

causality relationship between international tourism and carbon emissions in the long run. Similarly, in his study, Tzeremes (2021) found that there is a bidirectional causality relationship between globalization indicators and tourism.

7. Conclusion

The effect of the globalization phenomenon continues around the world, and people's interest in cross-border countries is increasing due to this phenomenon.

In this study, which was conducted to examine the effect of globalization level on international tourist inflows, the level of a long-term relationship between international tourist inflows and globalization level was evaluated in the period of 1995-2018 in the 20 countries that accept the most tourists. According to the findings of the study, it was concluded that tourist inflows in other countries, except Italy, do not affect globalization bidirectionally. Accordingly, the positive effect of globalization level on tourism in the countries that accept the most tourists varies according to the country. In short, while the overall results of the model were validated in Italy, the opposite result was obtained in France, Spain, the United States, China, Turkey, Mexico, Germany, Thailand, the United Kingdom, Japan, Austria, Greece, Hong Kong, Malaysia, Russia, Portugal, Canada, Poland, and the Netherlands. In these countries, it was seen that the level of globalization does not play a triggering role in tourist inflows, that is, globalization does not have any effect on tourism.

When examining whether globalization is the cause of tourism, the findings only confirm the causality relationship between Italy and China. No causal relationship was found in other countries. In other words, the results of the Granger causality analysis are an indicator of a long-term causality relationship between the variables, and globalization is not the cause of tourism in other countries. According to the results of the causality relationship conducted within the scope of the study, tourism has been identified as the cause of globalization in Italy, Mexico, Germany, Thailand, and the Netherlands. In short, the findings obtained from the causality results show the causality relationship in Italy, Mexico, Germany, Thailand, and the Netherlands. Therefore, tourism in these countries is the cause of globalization.

The results of the study reveal that the different globalization levels of the countries that attract the most tourists have various effects on tourist inflows. The results also show that globalization does not effectively increase international tourist inflows and that globalization does not encourage an increase in inbound tourists, that is, countries with more globalizations do not attract more foreign tourists as inbound tourists. The findings of the study are indicative of the top 20 tourist destinations and offer important policy implications that may be of interest to governments and academics in the field of international tourism.

Undoubtedly, the liberalization of transportation with the level of globalization and worldwide cultural tourism mobility directly or indirectly affects the development of inbound tourism by encouraging travel demand. Although the results of the study differ according to the country, the role of globalization should be given importance to increasing tourist inflows at the international level and more efforts should be made to increase the levels of globalization to be at the forefront of tourism. To be able to increase the level of globalization, it is necessary to increase tourism revenues and the number of inbound tourists. For this, the policies adopted by these countries should be aimed to promoting international trade and investment. Because globally developing countries will be more advantageous in the intense competition environment of the tourism market.

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