



Does Tourism Reduce Income Inequality? Empirical Evidence for Türkiye

* Esra SOYU YILDIRIM ^a 

^a Aksaray University, Vocational School of Social Sciences, Department of Accounting and Taxation, Aksaray/Türkiye

Abstract

Income inequality poses a significant risk to societal harmony. While tourism presents numerous economic prospects, the ongoing discussion regarding its impact on income inequality persists. Assessing the potential of leveraging the growth in the tourism industry to address income disparities will have significant ramifications for Türkiye, a prominent player in the tourism sector. Hence, this study examines the influence of tourism on the disparity of wealth in Türkiye spanning the years 1995 to 2020. The RALS-EG method is used to examine this impact. According to the information obtained, while an increase in the GDP variable increases income inequality, an increase in the FDI variable leads to a decrease in income inequality. The tourism variable, which is the main subject of the study, has a negative sign and a 1 unit increase in tourism causes a 0.03% decrease in income inequality.

Article History

Received: 17.01.2024

Accepted: 22.03.2024

Keywords

Income inequality

Tourism

RALS-EG

Türkiye

Article Type

Research Article

* Corresponding Author

E-mail: esrasoyu@gmail.com (E. Soyu Yıldırım)

DOI: 10.21325/jotags.2024.1384

INTRODUCTION

The process of globalization, which gained momentum in the latter part of the twenty-first century, has been the primary catalyst for the rapid growth of the tourist and travel sectors. Advancements in communication technology, widespread access to information, and decreased transportation expenses have significantly contributed to the growth of the tourism and travel industry, making it one of the largest sectors globally (Shakouri et al., 2017). Consequently, the tourist industry has emerged as a primary catalyst for economic expansion in numerous established and emerging nations (Uzar & Eyuboglu, 2019). Tourism plays a significant role in stimulating economic growth through multiple avenues, including: (i) generating foreign exchange earnings, (ii) attracting international investments, (iii) boosting tax revenues, (iv) creating new job opportunities, (v) fostering competition between local and foreign businesses, and (vi) stimulating the consumption and purchase of goods and services by tourists (Alam & Paramati, 2016; Habibi et al., 2018; Manzoor et al., 2019). The tourism-led growth hypothesis posits that economic growth can be stimulated by an upsurge in tourist arrivals and/or tourism earnings, which in turn leads to increased investments and employment opportunities within the tourism sector. Foreign exchange profits from tourism activities serve as a significant means of funding imports of intermediate and capital goods, particularly for developing nations (Uzar & Eyuboglu, 2019). Furthermore, tourism is intricately connected to various other economic sectors, including agriculture, building, and commerce. As a result, its growth has the capacity to create beneficial side effects for the overall economy. Tourism development has the potential to enhance the productivity of other industries by means of industrial substitution and integration, hence resulting in structural change (Kadiyali & Kosová, 2013; Li et al., 2016).

Researchers and politicians have examined the economic effects of the tourist industry since the 1970s (Kinyondo & Pelizzo, 2015). Existing literature mostly focuses on analyzing the relationship between tourism and economic growth (Alhowaish 2016, Kırca et al. 2019, Zhang & Cheng 2019, Pata 2020, Brida et al. 2020, Rasool et al. 2021, Kumar & Stauvermann 2023); environment (Becken et al. 2020, Scott & Gössling 2022, Wolf et al. 2022); inflation (Shaari et al. 2018, Karadağ 2021, Balım & Durgun Kaygısız 2022); exchange rate (Sharma & Pal 2020, Akar & Özcan 2021, Akadiri & Akadiri 2021).

Prior research has made significant strides in comprehending the economic ramifications of tourism. However, it has overlooked the crucial aspect of how tourism income is allocated among individuals, social classes, and geographical regions. The ignoring of the impact of tourism on income disparity has been observed (Uzar & Eyuboglu, 2019). Income inequality pertains to disparities in the allocation of income within a nation, specifically the disparity between the affluent and the impoverished (Shin, 2012). Alesina & Perotti (1996) contend that elevated income disparity has a detrimental impact on investment and thus hampers economic growth. They suggest that this is mostly due to the increased likelihood of coups, revolutions, mass violence, and policy instability, which undermine property rights.

Income inequality significantly hampers sustainable development worldwide. The United Nations has identified the eradication of this inequality as a primary objective for achieving sustainable development by 2030. The primary factors contributing to income disparity are the emergence of various industries and the resulting disparities in income distribution (Piketty & Saez, 2003). Undoubtedly, the tourism industry has exerted a substantial and favorable influence on worldwide economic expansion and job creation, particularly prior to the onset of the COVID-19 pandemic. Within the ongoing discourse surrounding the connection between tourism and poverty alleviation,

tourism is widely acknowledged as a potent instrument for diminishing poverty and enhancing the socio-economic circumstances of impoverished rural areas (Zhang, 2021).

The earnings effect, the tax revenue effect, and the price effect are some of the theoretical frameworks that link the growth of tourism to income disparity (Incera & Fernández, 2015). Tourism serves as a viable means of generating money and creating job prospects for a significant number of economically disadvantaged households, thereby mitigating income inequality. Hence, the income generated by tourism can be utilized to redistribute wealth, mitigate income disparity, finance infrastructure development, and support various social initiatives. The "price effect" refers to the phenomenon where tourism leads to an increase in the pricing of goods and services that are often used by wealthier households, hence exacerbating income disparity (Calero & Turner, 2020; Nguyen et al., 2021; Seetanah et al., 2023).

In theory, tourism has the potential to either positively or negatively affect income inequality. For instance, the development of tourism stimulates local economic activity and raises the cost of living. Specifically, the expansion of tourism can lead to a more significant increase in inflation and property values at the local level. This phenomenon can lead to a rise in the number of households experiencing financial difficulties (Seetanah et al., 2023). Furthermore, the disparity in income will be more pronounced if the focus of employment creation in the tourism sector is mostly on skilled workers, such as those with proficiency in languages, customer service, and technology. Furthermore, the tourism sector is often controlled by international conglomerates. The prevailing influence of these dominant entities can have a detrimental impact on local enterprises that depend on people with lower levels of expertise, hence exacerbating the disparity in income levels. Nevertheless, if the process of developing tourism includes the participation of impoverished individuals in the creation of tourism-related products and services, or if the redistribution of tourism taxes is specifically intended to assist those in poverty, these favorable outcomes of tourism development can contribute to the reduction of income inequality (Paramati & Nguyen, 2023).

Within this particular scenario, the research topic arises. What is the impact of tourist development or growth on income inequality in Türkiye, either positively or negatively? The response to this inquiry holds significant relevance for Türkiye, a nation abundant in tourism. Since the 1980s, Türkiye has implemented significant structural reforms. During this period, the import substitution program was discarded in favor of the adoption of an export-oriented industrialization policy. The economic choices made on January 24, 1980, resulted in the elimination of export and import obstacles and the liberalization of markets. As a result of this shift, the tourist industry became a significant means of generating foreign currency for Türkiye. Consequently, the growth model focused on tourism was implemented. Türkiye's strategic geographic location, coupled with its rich cultural heritage and breathtaking natural landscapes, has enticed tourists from around the globe, establishing it as a prominent global tourism hub. Subsequently, as a result of government incentives, there was a notable surge in both tourism income and the influx of tourists. Consequently, tourism has emerged as a progressively vital industry for Türkiye.

As one of the most popular travel destinations in the world, Türkiye is a good case study to look at the connection between tourism and economic disparity. Despite Türkiye's notable economic progress in recent years, it remains one of the nations characterized by substantial disparities in income and wealth. To examine the societal effects of tourism, it is crucial to comprehend the allocation of tourism revenues among various income brackets (Uzar & Eyuboglu, 2019; Seetanah et al., 2023). Therefore, this paper aims to address the limited amount of existing research

on the correlation between tourism and income disparity in Türkiye.

However, a number of studies have examined how tourism affects income inequality in recent years. However, these studies are both limited, and there is no general consensus on the link between tourism and income inequality. For example, while studies such as Alam & Paramati (2016), Paramati & Nguyen (2023), Uzar & Eyuboglu (2019), and Akyol (2020) conclude that tourism increases income inequality, Chiu & Wang (2023), Li, Chen, Li, & Goh (2016), Seetanah et al. (2023), Subramaniam et al. (2022), Shahbaz et al. (2019), Tsaurai (2022), and Huyugüzel Kişla & Berke (2022) conclude that tourism reduces income inequality. In addition, in some studies (Alili et al. (2022), Fang et al. (2021), Nguyen et al. (2021), Wang & Tziamalis (2023), Ghosh & Mitra (2021), Raza & Shah (2017), Kumail et al. (2023), Oğuz (2022)), the result of the analysis may differ as increase or decrease. In one study (Arı (2021)), the result was ineffective. Among these studies, Uzar & Eyuboglu (2019), Akyol (2020), and Arı (2021) are Türkiye-specific studies.

The empirical studies yield conflicting findings about the direction and magnitude of the influence of tourism on income inequality. While several studies have demonstrated a positive correlation between tourism and income inequality, alternative viewpoints contend that tourism fosters a more equitable distribution of income.

The issue of income inequality is a significant societal concern that should not be overlooked in the field of tourist economics research. Increasing income disparity imposes substantial economic, political, and social burdens on nations. The exacerbation of income inequality gives rise to notable political and social issues, including political instability, social strife, and heightened crime rates. Hence, the decline in income distribution exerts substantial strain on both the general public and policymakers (Uzar & Eyuboglu, 2019).

Literature Review

Three categories can be used to describe the economic impacts of tourism: (1) direct effects from visitor spending; (2) indirect effects from resource acquisition from tourism businesses and related industries; and (3) dynamic effects from infrastructure investments and other economic activities (Paramati & Nguyen 2023). Examining the distribution of tourism's economic benefits among various socioeconomic categories in towns that rely on tourism services is essential to understanding how tourist development affects a society (Alam & Paramati, 2016). Theoretical analysis suggests that the influence of tourist development on income disparity can be both beneficial and harmful. Tourism frequently offers substantial employment prospects. Specifically, the tourist industry employs a greater number of women compared to other industries. Tourism development facilitates the involvement of impoverished individuals in the creation of goods and services associated with tourism, so enhancing their livelihoods and reducing income disparities with affluent individuals. With the advancement of tourism, traditional local means of subsistence are transitioning towards remunerated employment. However, the overwhelming presence of major players in the tourism industry, renowned for their superior service and robust financial resources, can have a detrimental impact on these small enterprises and result in the loss of employment opportunities for individuals with limited or less advanced skills. Furthermore, the growth of tourism can result in a surge in the need for real estate and essential commodities, so driving up property values and inflation rates, thereby exacerbating the challenges faced by the most economically disadvantaged people. Tourism development can result in heightened income disparity due to these factors (Paramati & Nguyen, 2023).

Depending on the context of investigation, empirical studies have been conducted in (1) a single province or country (Uzar & Eyuboglu (2019), Shahbaz et al. (2019), Oğuz (2022), Arı (2021), (2) multi-country (Alili et al. (2022), Alam & Paramati (2016), Chiu & Wang (2023), Fang, Gozgor, Paramati & Wu (2021), Nguyen et al. (2021), Paramati & Nguyen (2023), Seetanah et al (2023), Subramaniam et al (2022), Wang & Tziamalis (2023), Ghosh & Mitra (2021), Raza & Shah (2017), Kumail et al. (2023), Tsaurai (2022), Huyugüzel Kışla & Berke (2022), Akyol (2020)) and (3) multistate within a country (Li, Chen, Li, & Goh (2016)). Detailed information about the literature is given in Table 1.

Table 1. Literature on the Relationship between Income Inequality and Tourism

Author(s)	Region/sample period	Technique	Conclusion (tourism→ income inequality)
Alili vd. (2022)	Developed and Developing countries/ 1995-2018	Panel	Developing country - Decrease Developed country- Inverted U
Alam & Paramati (2016)	49 developing economies/ 1991-2012	Panel	Increase
Chiu & Wang (2023)	102 economies/ 1996–2017	Panel smooth transition regression	Decrease
Fang et al. (2021)	102 countries/ 1995 - 2014	Panel	Decrease (developing countries)
Li et al. (2016)	30 provinces in China/ 1997-2010	Spatial analysis Local spatiotemporal autoregressive model	Decrease
Nguyen et al. (2021)	97 countries/ 2002–2014	Panel	Increase- Decrease
Paramati & Nguyen (2023)	21 Asia Pacific economies/ 1995-2020	ARDL	Increase
Seetanah et al. (2023)	83 countries/ 1990–2019	Panel Vector Autoregressive Error Correction	Decrease
Subramaniam et al. (2022)	9 countries/ 2001 - 2016	FMOLS, DOLS	Decrease
Uzar & Eyuboglu (2019)	Turkiye/ 1974–2015	ARDL	Increase
Wang & Tziamalis (2023)	71 developed and developing countries/ 1996–2016	Dynamic panel threshold approach	Increase- Decrease
Ghosh & Mitra (2021)	41 countries/ 1995–2016	Panel FMOLS	Developing country - Decrease Developed country- Increase
Raza & Shah (2017)	43 countries/ 1995–2015	FMOLS Panel	Increase
Shahbaz et al. (2019)	Malaysia/1991Q1–2017Q4	ARDL Granger causality	Decrease
Kumail et al. (2023)	South Asia/ 1996-2020	Driscoll–Kraay and Dumitrescu Hurlin panel causality	inverted U-shaped
Tsaurai (2022)	Transitional economies/ 1999 - 2019	FMOLS GMM OLS	Decrease
Oğuz (2022)	Turkiye / 1997-2020	ARDL	Short run Increase Long run Decrease
Huyugüzel Kışla & Berke (2022)	Eurozone/ 2002-2016	Panel	Decrease
Akyol (2020)	Developed and developing countries/ 2003-2018	System-GMM method	Increase
Arı (2021)	1988-2018/ Turkiye	Bootstrap causality test	Long term: ineffective

Data and Methods

Data

The objective of this study is to analyze the influence of tourism on the disparity of income in the Turkish economy. Hence, the dataset is generated by employing yearly data spanning from 1995 to 2020. The Gini index, which is calculated using disposable income, is used to quantify income disparity. A higher GINI coefficient signifies greater disparity in income distribution, while a lower coefficient indicates less inequality.

The global prevalence of income inequality has escalated, posing significant economic and social implications. The Gini coefficient, in economic terms, represents the measure of income inequality by quantifying the ratio of total household income distribution. The term "income inequality" in this study specifically pertains to the Gini coefficient (Zhang, 2021).

Table 2. Description of Data

Variables	Description	Source
LNGINI	Gini index	WB
LNTOUR	International tourism, number of arrivals	WB
LNGDP	GDP (constant 2015 US\$)	WB
LNFDI	Foreign direct investment, net inflows (% of GDP)	WB

Note: In order to obtain more robust and robust results, the variables are transformed in natural logarithmic form.

Econometric Method: RALS Cointegration

The cointegration test developed by Engle and Granger (1987) (EG) is one of the most frequently used cointegration tests in the literature. This cointegration test, which is preferred due to its ease of application, is a two-stage test. In the first stage of the EG cointegration test, in equation (1), the following regression model is estimated by the ordinary least squares (OLS) method between two series that are difference stationary at the same level and the error terms are obtained.

$$y_t = \beta x_t + u_t \quad (1)$$

The residuals of this estimated model are subjected to the ADF unit root test in the second step of the EG cointegration test.

$$\Delta \hat{u}_t = \alpha_0 + \rho \hat{u}_{t-1} + \sum_{i=1}^k \alpha_i \Delta \hat{u}_{t-1} + e_t \quad (2)$$

If the residual series exhibits stationarity, it indicates the presence of a persistent relationship between the variables being examined. While the ADF unit root test is employed to examine the stationarity of the residuals, it is important to note that the test statistic cannot be directly compared with the crucial values in the Dickey-Fuller (DF) table. The reason for this is that the EKK approach employed in the initial stage produces residuals with the lowest sample variance, hence maximizing their stationarity, despite the absence of cointegration among the variables. Consequently, the conventional distribution of DF results in an overly high rate of rejecting the null hypothesis. However, the distribution of the test statistic under the null hypothesis is influenced by the number of variables in the model. Consequently, as the number of variables increases, various critical values are required. Hence, it is advisable to utilize the critical values provided by EG rather than relying on the Dickey-Fuller critical values.

An additional crucial aspect of the EG test pertains to the incorporation of deterministic components into the models. Hansen (1982) highlighted in his research that including a deterministic component in the model diminishes the test's effectiveness. Thus, in the second phase of the EG test, model (2) is employed without incorporating a trend.

Hence, to enhance the efficacy of the EG approach, this work also incorporates the utilization of the RALS-EG cointegration test devised by Lee et al. (2015). The RALS-EG test utilizes the RALS method, proposed by Im and Schmidt (2008), as a substitute for EKK in order to enhance the power of the EG test. According to Lee et al. (2015), it is unnecessary to predefine a particular density function in RALS-based tests. Testing for normal distribution is unnecessary.

\hat{e}_t , denotes the residuals from model 2. To apply the RALS-EG method, model (2) is extended with the following term:

$$\hat{w}_t = h(\hat{e}_t) + \hat{K} - \hat{e}_t \hat{D}_t, \quad t = 1, 2, 3, \dots, T$$

Here; $h(\hat{e}_t) = [\hat{e}_t^2, \hat{e}_t^3]'$, $\hat{K} = \frac{1}{T} \sum_{t=1}^T h(\hat{e}_t)$ ve $\hat{D}_t = \frac{1}{T} \sum_{t=1}^T h'(\hat{e}_t)$ is in the form.

The term \hat{w}_t can be represented as follows with $m_j = T^{-1} \sum_{t=1}^T \hat{e}_t^j$

$$\hat{w}_t = [\hat{e}_t^2 - m_2, \hat{e}_t^3 - m_3 - 3m_2 \hat{e}_t]'$$

The first term of \hat{w}_t is constructed conditional on the moment condition $E[(e_t^2 - \sigma_e^2)y_{t-1}] = 0$ which implies the constant variance assumption. This condition is efficient as long as the residuals are not symmetric. The second term of \hat{w}_t is related to the determination condition $\mu_j = E(e_t^j)$ ile $\mu_4 = 3\sigma^4$, which is only satisfied when the distribution of interest is normal. For non-normal distributions, this condition leads to the derivation of a stationary term, for which extending the test equation leads to the derivation of more powerful tests. Adding the term \hat{w}_t to model (2) of the EG cointegration test yields the following regression:

$$\Delta \hat{u}_t = \alpha_0 + \rho \hat{u}_{t-1} + \sum_{i=1}^k \alpha_i \Delta \hat{u}_{t-1} + \hat{w}_t' \gamma + v_t \quad (3)$$

The null hypothesis that there is no long-run relationship between the variables can be tested with the standard t-statistic $\rho = 0$. There is a relationship between the RALS-EG method test statistic and the EG test statistic as follows:

$$t^* \rightarrow p \cdot t + \sqrt{1 - p^2} \cdot Z$$

Here, t^* denotes the RALS-EG test statistic, t denotes the EG test statistic, Z denotes a standard normally distributed random variable, and p denotes the long-run correlation between the residuals (\hat{e}_t) from equation (2) and the residuals (v_t) from equation (3). Lee et al. (2015) recommended using the nonparametric estimation method proposed by Hansen (1995) for the estimation of p based on cointegration tests estimated by RALS-EG (Yılancı & Aydın, 2018).

Empirical Findings

Prior to the analysis, certain protocols were adhered to. Initially, the series is subjected to descriptive statistics analysis. Subsequently, the stationarity of the series was ascertained.

Table 3. Descriptive Statistics

	LNGINI	LNFDI	LNGDP	LNTOUR
Mean	1.612297	0.027026	11.76694	7.325617
Median	1.616410	0.118072	11.76212	7.379803
Maximum	1.632457	0.559114	12.00677	7.713885
Minimum	1.584331	-0.515149	11.52915	6.874308
Std. Dev.	0.012856	0.319475	0.156315	0.273088
Skewness	-0.750037	-0.280155	0.132271	-0.278855
Kurtosis	2.601158	1.893308	1.654079	1.610471
Jarque-Bera	2.610069	1.666939	2.038278	2.428649
Probability	0.271163	0.434539	0.360906	0.296910
Sum	41.91971	0.702670	305.9404	190.4660
Sum Sq. Dev.	0.004132	2.551603	0.610857	1.864426
Observations	26	26	26	26

Table 4. ADF Unit Root Test Results

		Level		First differences		Decision
		Test ist.	Prob	Test ist.	Prob	
Constant	lnFDI	-2.108	0.2434	-5.950	0.0000	I(1)
	lnGDP	0.2442	0.9704	-4.758	0.0008	I(1)
	lnGINI	-2.077	0.2545	-4.556	0.0014	I(1)
	lnTOUR	-1.709	0.4145	-2.899	0.0602	I(1)
Constant and trend	lnFDI	-2.465	0.3407	-5.880	0.0003	I(1)
	lnGDP	-2.823	0.2020	-4.763	0.0040	I(1)
	lnGINI	-2.034	0.5561	-4.408	0.0093	I(1)
	lnTOUR	1.386	0.9999	-3.340	0.0859	I(1)

The ADF test is employed to examine the stationarity of the series. All series become stationary when the first difference is taken. In other words, the series are I(1). In the next stage of the study, EG and RALS-EG cointegration tests were applied to test the long-run relationship between these variables, which were found to be non-stationary at their levels, and the test results are given in Table 5.

Table 5. Cointegration test results

	Test statistic	k	p²
EG	-1.629477	4	-
RALS-EG	-3.039402	4	0.18

Note: k indicates the appropriate lag length obtained by the general-to-specific t-significance method. The critical values of the RALS-EG test are -3.51879, -2.87872, -2.52713 at 1%, 5% and 10% significance levels, respectively.

The results obtained show that there is no long-run relationship between the series according to the EG test. When the RALS-EG test, which is more powerful than the EG test, is applied, it is found that there is a long-run relationship between tourism and income inequality (at 5% and 10% levels). The results of the long-run coefficient estimates to determine the magnitude of this long-run relationship are given in Table 6.

Table 6. Long-Term Model Estimation Results

	FMOLS	DOLS	Canonik
lnGDP	0.092 (0.007)	0.187 (0.024)	0.109 (0.040)
lnFDI	-0.023(0.056)	-0.026 (0.291)	-0.023 (0.098)
lnTOUR	-0.037 (0.096)	-0.085 (0.144)	-0.047 (0.164)
C	0.798(0.007)	0.035(0.945)	0.669(0.100)

Note: Values in parentheses indicate probability values.

The study employed DOLS, FMOLS, and Canonical cointegration tests to derive the long-run coefficients. The conducted tests produced reliable outcomes. Given the superior efficacy of the FMOLS methodology compared to other methods, the interpretation of FMOLS results is prioritized. Therefore, all variables have statistical significance.

The GDP variable exhibits a positive correlation, whereby a one-unit rise results in a 0.09% increase in income inequality. The correlation between income disparity and economic growth can be elucidated as follows:

The affluent in industrialized nations exhibit a higher savings rate compared to the less affluent. The reallocation of wealth from affluent individuals to less privileged individuals diminishes the overall savings rate of the economy, perhaps resulting in a contraction of economic growth. Additionally, income redistribution can potentially diminish the motivation of affluent individuals to exert significant effort, thereby resulting in a decrease in economic growth. Consequently, it may be inferred that income equality has a negative impact on economic growth, whereas income inequality has a positive impact on it (Shin, 2012).

The FDI variable has a negative sign and an increase of 1 unit causes a 0.02% decrease in income inequality. Choi (2006) argues that as FDI intensity increases, the Gini coefficient also increases. These findings indicate that foreign direct investment (FDI) will result in the division of the labor market, with skilled workers receiving higher earnings and income inequality rising.

The tourism variable, which is the main subject of the study, has a negative sign and an increase of 1 unit leads to a 0.03% decrease in income inequality. There are studies (such as Alili et al. (2022), Chiu & Wang (2023), Fang et al. (2021), Li et al. (2016), Seetanah et al. (2023), Subramaniam et al. (2022), Shahbaz et al. (2019), Tsaurai (2022), Huyugüzel Kışla & Berke (2022)) that claim that tourism development reduces income inequality. These studies are consistent with the results of the present study.

Tourism mitigates income inequality by generating prospective income and job prospects for individuals with low socioeconomic status. Supporting the disadvantaged through tourist development can contribute to the reduction of income inequality (Paramati & Nguyen, 2023). To put it simply, tourism can be utilized as a means to decrease economic disparity by leveraging the pro-poor impact of tourism. Pro-poor tourism is a strategy that seeks to maximize the positive impact of tourism on impoverished communities by ensuring that the benefits outweigh the costs. According to this perspective, tourism is regarded as a method to develop enhanced prospects, foster widespread employment, and positively impact the most economically disadvantaged segments of society by engaging them in the production of tourism-related goods and services. Tourism, being a significant contributor to government revenue, can also serve as a means of redistributing money (Incera and Fernández, 2015).

Conclusion

The significant disparity in the allocation of wealth and resources among nations and within populations is a prominent issue in contemporary society. Income inequality denotes disparities in the allocation of income within a nation, specifically the disparity between affluent and impoverished individuals. The disparity in income between the wealthy and the impoverished is substantial in both advanced and emerging economies.

The United Nations aims to eradicate income inequality as a key objective for sustainable development by 2030. The primary factors contributing to income inequality are the emergence of diverse industries and the subsequent distribution of revenue. It is widely recognized that the tourism industry has made a substantial and favorable contribution to worldwide economic expansion and job creation, particularly before the onset of the COVID-19 pandemic. In the continuous discourse surrounding the correlation between tourism and poverty alleviation, tourism is widely acknowledged as a potent instrument for diminishing poverty and enhancing the socio-economic circumstances of impoverished rural areas.

How does the rise of tourism impact income disparity within this specific framework? Empirically, it is remarkable that research examining the correlation between income inequality and tourism lack a consensus. This study examines the influence of tourism on the disparity of wealth in Türkiye from 1995 to 2020. Hence, assessing the potential of leveraging the growth in the tourism industry to address economic disparities holds significant ramifications for Türkiye, a prominent player in the tourism sector.

The RALS-EG methodology was employed to examine the correlation between tourism and income inequality. Based on the acquired data, the GDP variable exhibits a positive correlation, where a one-unit rise results in a 0.09% increase in income disparity. The FDI variable exhibits a negative coefficient, indicating that a one-unit increase in FDI results in a 0.02% drop in income inequality. The tourism variable, the primary focus of the investigation, exhibits a negative coefficient, indicating that a one-unit increase in tourism results in a 0.03% reduction in income inequality. The results of this study will be crucial for policymakers to implement effective strategies in order to reduce income disparity.

There are studies (such as Alili et al. (2022), Chiu & Wang (2023), Fang et al. (2021), Li et al. (2016), Seetana et al. (2023), Subramaniam et al. (2022), Shahbaz et al. (2019), Tsaurai (2022), Huyugüzel Kışla & Berke (2022)) that claim that tourism development reduces income inequality. These studies are consistent with the results of the present study.

In order to enhance the effectiveness of tourism, it is imperative to allocate additional resources towards the establishment of suitable tourism initiatives. Education and training programs should be implemented to enhance the employability of local residents in the tourism industry. It is essential to set policies and give financial support to incentivize local communities to engage in tourism development. These steps will enhance the tourism industry as a whole, with a specific emphasis on attracting both international and domestic tourists, so enhancing the overall economic performance. Implementing this measure would mitigate disparities within society. Alternatively, if income inequality reaches a point of excessiveness, it stimulates social discontent and heightens the risk of social and political turmoil.

REFERENCES

- Akadiri, S. S., & Akadiri, A. C. (2021). Examining the causal relationship between tourism, exchange rate, and economic growth in tourism island states: Evidence from second-generation panel. *International Journal of Hospitality & Tourism Administration*, 22(3), 235-250.
- Akar, G., & Özcan, M. (2021). Reel döviz kuru ve turizm geliri ilişkisi: Yapısal kırılmalı VAR analizi. *Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 14(2), 413-431.
- Akyol, H. (2020). Turizm faaliyetleri ve ekonomik büyüme ile gelir eşitsizliği arasındaki ilişkinin incelenmesi: gelişmiş ve gelişmekte olan ülkeler örneği. *Journal of Humanities and Tourism Research*, 10 (4), 966-977.
- Alam, M. S., & Paramati, S. R. (2016). The impact of tourism on income inequality in developing economies: Does Kuznets curve hypothesis exist?. *Annals of Tourism Research*, 61, 111-126.
- Alesina, A., & Perotti, R. (1996). Income distribution, political instability, and investment. *European Economic Review*, 40(6), 1203-1228.
- Alhowaish, A. K. (2016). Is tourism development a sustainable economic growth strategy in the long run? *Evidence from GCC Countries. Sustainability*, 8(7), 605.
- Alili, O., Yağmur, Ö., & Erkan, M. (2022). Turizm ve gelir eşitsizliği ilişkisinde Kuznets eğrisi hipotezinin geçerliliği. *Sosyoekonomi*, 30(51), 301-318.
- Arı, A. (2021). Turizmin gelir eşitsizliğine etkisi: Türkiye örneği. *Yönetim ve Ekonomi Dergisi*, 28(4), 681-693.
- Balım, H. & Durgun Kaygısız, A. (2022). Türkiye’de turizm enflasyon ilişkisinin ampirik analizi. *Politik Ekonomik Kuram*, 6(2), 279-303.
- Becken, S., Whittlesea, E., Loehr, J. & Scott, D. (2020). Turizm ve iklim değişikliği: Politika entegrasyonunun kapsamının değerlendirilmesi. *Sürdürülebilir Turizm Dergisi*, 28 (10), 1603-1624.
- Brida, J. G., Gómez, D. M., & Segarra, V. (2020). On the empirical relationship between tourism and economic growth. *Tourism Management*, 81, 104131.
- Calero, C. & Turner, L.W. (2020). Regional economic development and tourism: a literature review to highlight future directions for regional tourism research. *Tourism Economics*, Vol. 26 No. 1, 3-26.
- Chiu, Y. B., & Wang, Z. (2023). Inbound tourism and income inequality: the role of banking sector development. *Journal of Sustainable Tourism*, 31(9), 2080-2099.
- Choi, C. (2006). Does foreign direct investment affect domestic income inequality?. *Applied Economics Letters*, 13(12), 811-814.
- Engle, R. F., & Granger, C. W. (1987). Co-integration and Error Correction: Representation, Estimation, and Testing. *Econometrica: Journal of the Econometric Society*, 55(2), 251-276.
- Fang, J., Gozgor, G., Paramati, S. R., & Wu, W. (2021). The impact of tourism growth on income inequality: Evidence from developing and developed economies. *Tourism Economics*, 27(8), 1669-1691.
- Ghosh, S., & Mitra, S. K. (2021). Tourism and inequality: A relook on the Kuznets curve. *Tourism Management*, 83,

104255.

- Habibi, F., Rahmati, M., & Karimi, A. (2018). Contribution of tourism to economic growth in Iran's Provinces: GDM approach. *Future Business Journal*, 4(2), 261-271.
- Hansen, B. (1995). Rethinking the Univariate Approach to Unit Root Testing. *Econometric Theory*, 11, 1148–1171.
- Huyugüzel Kışla, G. Ş., & Berke, B. (2022). Avro Bölgesi'nde turizm sektörü gelir dağılımını etkiliyor mu?. *Finans Politik & Ekonomik Yorumlar*, 59(662).
- Im, K., & P. Schmidt. (2008). More efficient estimation under non-normality when higher moments do not depend on the regressors, using residual-augmented least squares. *Journal of Econometrics*, 144, 219–233
- Incera, A.C. & Fernandez, M.F. (2015). Tourism and income distribution: Evidence from a developed regional economy. *Tourism Management*, 48(2), 11-20.
- Kadiyali, V., & Kosová, R. (2013). Inter-industry employment spillovers from tourism inflows. *Regional Science and Urban Economics*, 43(2), 272-281.
- Karadağ, H. (2021). Türkiye ekonomisinde turizm gelirlerinin TÜFE'ye etkisinin incelenmesi: MWALD temelli nedensellik analizi. *Journal of Tourism Intelligence and Smartness*, 4(1), 31-42.
- Kırca, M., Canbay, Ş., Türkay, K., Yelman, E. & Piralı, K. (2019). Türkiye'de uluslararası turizm talebi ve iktisadi büyüme arasındaki ilişkiler: 1995-2017 dönemi. *Ekonomi Maliye İşletme Dergisi*, 2(2), 48-68.
- Kinyondo, A., & Pelizzo, R. (2015). Tourism, development and inequality: The case of Tanzania. *Poverty & Public Policy*, 7, 64–79.
- Kumail, T., Sadiq, M., Ali, W., & Sadiq, F. (2023). The impacts of tourism development on income inequality: how does tourism capital investment contribute to income distribution? Tourism Agenda 2030. *Tourism Review*, 78(2), 630-645.
- Kumar, R. R., & Stauvermann, P. J. (2023). Tourism and economic growth in the Pacific region: Evidence from five small island economies. *Journal of the Asia Pacific Economy*, 28(3), 894-921.
- Lee, H., Lee, J., & Im, K. (2015). More Powerful Cointegration Tests with Non-Normal Errors. *Studies in Nonlinear Dynamics & Econometrics*, 19(4), 397-413.
- Li, H., Chen, J. L., Li, G., & Goh, C. (2016). Tourism and regional income inequality: Evidence from China. *Annals of Tourism Research*, 58, 81-99.
- Manzoor, F., Wei, L., Asif, M., Haq, M. Z. U., & Rehman, H. U. (2019). The contribution of sustainable tourism to economic growth and employment in Pakistan. *International Journal of Environmental Research and Public Health*, 16(19), 3785.
- Nguyen, C. P., Schinckus, C., Su, T. D., & Chong, F. H. L. (2021). The influence of tourism on income inequality. *Journal of Travel Research*, 60(7), 1426-1444.
- Oğuz, İ. H. (2022). Turizm ve ulaşım altyapısının gelir dağılımı üzerindeki etkileri: Türkiye İçin Bulgular. *Gaziantep University Journal of Social Sciences*, 21(4), 1904-1916.

- Paramati, S. R., & Nguyen, T. P. T. (2023). The effects of national and international tourism on income inequality: evidence from Asia-Pacific economies. *Equality, Diversity and Inclusion: An International Journal*.
- Pata, U. K. (2020). Turizm, finansal gelişme, ticari açıklık ve sermaye stokunun ekonomik büyüme üzerindeki etkileri: türkiye örneği. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 29(4), 151-167.
- Piketty, T., & Saez, E. (2003). Income inequality in the United States, 1913–1998. *The Quarterly Journal of Economics*, 118(1), 1-41.
- Rasool, H., Maqbool, S., & Tarique, M. (2021). The relationship between tourism and economic growth among BRICS countries: a panel cointegration analysis. *Future Business Journal*, 7(1), 1-11.
- Raza, S. A., & Shah, N. (2017). Tourism growth and income inequality: does Kuznets Curve hypothesis exist in top tourist arrival countries. *Asia Pacific Journal of Tourism Research*, 22(8), 874-884.
- Scott, D., & Gössling, S. (2022). A review of research into tourism and climate change-Launching the annals of tourism research curated collection on tourism and climate change. *Annals of Tourism Research*, 95, 103409.
- Seetanah, B., Gopy-Ramdhaney, N., & Bhattu-Babajee, R. (2023). Can tourism curb income inequality? *Tourism Agenda*, 2030. *Tourism Review*, 78(2), 646-664.
- Shaari, M. S., Ahmad, T. S. T. & Razali, R. (2018). Tourism led-inflation: A case of Malaysia. *MATEC Web of Conferences*, 150, 1-6.
- Shahbaz, M., Solarin, S. A., Azam, M., & Tiwari, A. K. (2019). Tourism-induced income distribution in Malaysia: A practical experience of a truly asian economy. *Current Issues in Tourism*.
- Shakouri, B., Yazdi, S. K., & Ghorchebigi, E. (2017). Does tourism development promote CO2 emissions? *Anatolia*, 28, 444–452.
- Sharma, C., & Pal, D. (2020). Exchange rate volatility and tourism demand in India: Unraveling the asymmetric relationship. *Journal of Travel Research*, 59(7), 1282-1297.
- Shin, I. (2012). Income inequality and economic growth. *Economic Modelling*, 29(5), 2049-2057.
- Subramaniam, Y., Masron, T. A., & Loganathan, N. (2022). Tourism and income inequality. *Journal of Business and Socio-economic Development*, 2(2), 181-194.
- Tsaurai, K. (2022). Influence of tourism on income inequality in transitional economies: Does Foreign Direct Investment Matter?. *Euro Economica*, 41(1), 76-89.
- Uzar, U., & Eyuboglu, K. (2019). Can tourism be a key sector in reducing income inequality? An empirical investigation for Turkey. *Asia Pacific Journal of Tourism Research*, 24(8), 822-838.
- Wang, Y., & Tziamalis, A. (2023). International tourism and income inequality: The role of economic and financial development. *Tourism Economics*, 13548166231177106.
- Wolf, F., Moncada, S., Surroop, D., Shah, K. U., Raghoo, P., Scherle, N., ... & Nguyen, L. (2022). Gelişmekte olan küçük ada devletleri, turizm ve iklim değişikliği. *Sürdürülebilir Turizm Dergisi*, 1-19.
- Yılancı, V., & Aydın, M. (2018). Türkiye’de kadın okullaşmasının ekonomik büyüme üzerindeki etkisi: RALS-EG

eşbütünleşme testi yaklaşımı. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, 101-112.

Zhang, J. & Cheng, L. (2019). Threshold effect of tourism development on economic growth following a disaster shock: Evidence from the wenchuan earthquake, P.R. China. *Sustainability*, 11(2), 371-393.

Zhang, J. (2021). The effects of tourism on income inequality: A meta-analysis of econometrics studies. *Journal of Hospitality and Tourism Management*, 48, 312-321.