

The Contribution of Sustainable Tourism to Economic Growth and Employment in Kazakhstan

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Abstract

In the global economy, tourism stands out as a prominent and expanding sector, playing a pivotal role in enhancing a nation's economic prospects. The surge in tourism has the potential to yield positive economic outcomes, particularly in gross domestic product (GDP) and employment opportunities. Within Central Asian countries, the tourism industry serves as a catalyst for economic development and GDP growth, with Kazakhstan being a focal point. This research delves into the impact of tourism on Kazakhstan's economic growth and employment during the period from 2015 to 2023. Augmented Dickey–Fuller and Phillips–Perron unit root tests were conducted to assess the stationarity of variables. Utilizing regression techniques and the Johansen cointegration approach, the analysis reveals a significant and positive correlation between tourism, economic growth, and the employment sector in Kazakhstan. The study underscores the importance of formulating policies that promote tourism throughout the country, suggesting that policymakers should concentrate on strategies harnessing the immense potential of the tourism sector. The findings of this research offer valuable policy implications and avenues for future exploration.

Keywords: Kazakhstan, Sustainable Tourism, Economic Growth, Employment, Gross Domestic Product

1. Introduction

The tourism industry, globally recognized for fostering sustainable socioeconomic development, serves as a crucial force with far-reaching impacts on local communities, economies, and environments. The essence of sustainable tourism lies in visiting destinations without compromising the well-being of local communities and nature while simultaneously fostering positive effects on the environment, society, and the country's economy. Embracing facets such as transportation, accommodations, leisure, and entertainment, tourism spans various purposes, including recreation, business, and family travel. Acknowledging the imperative for sustainable tourism growth, this research explores its contribution to economic growth and employment in Kazakhstan. Despite widespread consensus on the necessity of sustainable tourism, the means to achieve it remain a subject of ongoing debate. In Kazakhstan, as in many nations, the tourism sector holds strategic importance, serving as a significant source of both formal and informal employment and income generation. Drawing parallels with studies highlighting the economic growth

driven by tourism, this research aims to examine the nuanced impact of sustainable tourism on Kazakhstan's economic development and employment landscape. By delving into the intricacies of international tourism trends and revenue generation, the study seeks to offer valuable insights into how Kazakhstan can harness the potential of sustainable tourism to fuel its economic growth and enhance employment opportunities. The globalization era has witnessed third-world nations, including Kazakhstan, strategically leveraging tourism to advance their economies, promote peace, develop human resources, and alleviate poverty. Through a meticulous exploration of the contributions of sustainable tourism to local employment, earnings, and overall socio-economic conditions, this research endeavors to shed light on the transformative potential of responsible tourism practices in Kazakhstan.

1.1 Tourism in Central Asia

Central Asia, encompassing Kazakhstan as a prominent member, boasts a unique blend of diverse landscapes, from expansive

grasslands to mountainous terrains, making it an enticing destination for global travelers. This region, comprising countries such as Kazakhstan, holds immense potential for tourism given its abundant natural resources, picturesque coastlines, mountains, and varied climatic conditions. Despite this, the economic foundations in these countries remain relatively weak. Much like their South Asian counterparts, Central Asian nations recognize tourism as a pivotal tool for economic development. In Kazakhstan, the largest country in Central Asia, the tourism sector's contribution to the GDP and employment mirrors the regional

trends observed in South Asia. The share of the tourism sector in Kazakhstan's GDP was approximately 8.9% in 2017, amounting to \$281.6 billion. Projections indicate a continued growth trajectory, with expectations of reaching 9.0% of GDP (\$301.8 billion) in 2018 and a substantial increase to 9.4% of GDP (\$579.6 billion) by 2028 [5]. In terms of employment, tourism contributed 7.5% of jobs in 2017, a figure expected to rise to 7.6% in 2018 and further to 7.8% by 2028, reflecting the sector's crucial role in job creation [5].

Kazakhstan, recognized for its natural beauty and cultural heritage, stands out as a key player in the Central Asian tourism landscape. The country boasts breathtaking destinations such as the Charyn Canyon, Lake Balkhash, and the Altai Mountains. In the Northern Areas, Kazakhstan features majestic landscapes with relics of distinct cultural heritage, making it a top destination for tourists seeking a unique blend of natural attractions and historical richness [6]. The government's initiatives to promote tourism have yielded significant results, with international tourism in Kazakhstan witnessing record growth. In 2017, the country hosted 808,000 tourists, representing a 24.4% increase from the previous two years. The success of tourism is evident in its contribution to the national GDP, with revenues reaching 19.4 billion US dollars in 2017, constituting 6.9% of the GDP [6]. The World Travel and Tourism Council (WTTC) anticipates a substantial rise in tourism revenue, reaching 36.1 billion dollars by 2030, further highlighting the sector's potential for economic growth [6].

While several studies have explored tourism's economic impact in various countries, there is a notable gap in research focusing on the sustainable tourism's relationship to economic growth and employment in Kazakhstan specifically. This study aims to address this gap by examining the intricate dynamics between sustainable tourism practices, economic development, and employment in Kazakhstan. The exploration of these relationships is crucial for unlocking the full potential of tourism as a driver of economic prosperity in the Central Asian context.

This article contains six sections. The first section is the introduction of the study. The second section contains theories and hypotheses development. The third section provided the research methodology of the study. The fourth is the results section. The fifth section comprises the conclusions and discussions. The final section includes policy implications, limitations, and future

research directions.

1.2 Development Theories

In Kazakhstan, the largest country in Central Asia, the tourism sector has emerged as a pivotal force in fostering economic development, aligning with global trends since the 1960s [30].

Examining this growth within the framework of development theories provides insights into the multifaceted dimensions of Kazakhstan's evolving tourism landscape.

Modernization Theory (MT), grounded in Keynesian economics, has influenced the perception of development as a multidimensional process, incorporating positive changes in economic growth, national institutions, and poverty reduction [17]. From a tourism perspective, the modernization approach not only attracts foreign capital but facilitates technology transfer, creating enhanced employment opportunities. Kazakhstan's focus on modernization aligns with the economic benefits associated with tourism, positioning it as a growth pole in the national development agenda [17]. Dependency Theory (DT), popularized in the 1960s and 1970s, underscores the inequalities between core capitalist nations and developing countries. According to this theory, historically poor countries, including those in Central Asia, experience a reliance on developed nations, leading to economic disparities. This perspective prompts critical reflections on the dynamics of international tourism and its potential impact on the economic interdependence of Kazakhstan.

In response to criticisms, Neoliberalism Theory (NL) emerged, advocating for free global markets and reduced state intervention. In the context of neoliberal tourism in Kazakhstan, this approach may attract foreign capital through initiatives like hotel chains and infrastructure development.

However, concerns arise regarding potential negative consequences, such as decreased state participation in social welfare programs and exploitation of labor for self-interest [19].

As the limitations of top-down approaches became evident, Alternative Development (AD) theories gained traction in the 1970s and 1980s, emphasizing bottom-up strategies to address poverty. Basic Needs Approach (BNA), a component of AD, focused on essential needs but did not prioritize economic development, prompting a shift in development paradigms. In Kazakhstan, exploring alternative development models may offer nuanced perspectives on sustainable and inclusive tourism practices.

Sustainable Development (SD), a synthesis of sustainability and development objectives, has gained prominence in Kazakhstan's tourism discourse. While efforts are made to promote ecological vacations, challenges persist in ensuring genuine sustainability beyond mere marketing strategies. Initiatives like pro-poor tourism aim to reduce poverty, aligning with global development goals supported by the UN World Tourism Organization.

2. Empirical Literature Review and Hypotheses

In the context of Kazakhstan, researchers have explored the multifaceted relationship between tourism, economic expansion, and employment, contributing to a diverse body of literature. The World Tourism Organization defines tourism as leisure travel beyond one's usual environment, and its implications for local and national economies warrant meticulous examination [20]. Numerous scholars emphasize the pivotal role of tourism in driving economic growth, generating foreign exchange, and creating employment opportunities [20]. Studies conducted in various less-developed nations consistently establish a significant correlation between tourism and economic expansion [15].

Ayeni et al. [20] delved into the prospects of sustainable tourism growth in Nigeria, showcasing tourism as a catalyst for economic diversification. Despite developed nations having a higher share of global tourism, less-developed countries like Nigeria present untapped opportunities. The researchers highlighted the potential contributions of tourism to Nigeria's economy, aligning with governmental efforts to eradicate poverty and foster economic diversification.

In emphasizing the economic benefits of tourism, Manwa [21] stressed the necessity for communities to derive economic gains, enabling them to preserve popular tourist destinations. Brida [22] conducted a study in Chile, employing the Johansen Cointegration Test to analyze the causal relationship between exchange rates, tourism expenditure, and economic expansion. The findings underscored a positive correlation between tourism and economic growth, with tourism emerging as a primary contributor. Kreishan [23] examined the causality association between tourism revenues and economic development in Jordan, finding a positive long-term relationship.

Building upon the empirical literature, this study aims to investigate the relationship between annual tourism growth,

GDP, and employment in the specific context of Kazakhstan. The following hypotheses are posited:

Hypothesis 1 (H1):

There exists a positive association between annual tourism growth and GDP in Kazakhstan.

Hypothesis 2 (H2):

There exists a positive association between annual tourism growth and an increase in the employment rate in Kazakhstan.

2.1 Data and Variables

To study the contribution of sustainable tourism to economic growth and employment in Kazakhstan, the annual time series data from 2015 to 2023 was taken for analysis. In this study, the annual growth of tourism was taken as an independent variable and both employment and GDP were used as dependent variables. Due to the time series data, this study may exhibit some stationary or non-stationary variables. In this study before determining that all the series were integrated, a unit root test (i.e., ADF) was applied

Firstly, the bivariate regression model was used for quantitative analysis to investigate the empirical relationship between two variables and hypothesis testing. Secondly, to find a long-run

relationship between variables, we used co-integration analysis. For statistical analysis and also for econometrics model estimation, E-view 9 was used. For data collection, different sources were used, i.e., Tourism Year Book, Economic Survey of Kazakhstan, Ministry of Tourism Government of Kazakhstan, World Travel and Tourism Council, and Tourism Economic Impact annual reports.

3. Results and Discussion

3.1 Descriptive Statistics and Correlation Matrix

The variables' descriptive statistics and correlation matrix are presented in Table 1. Means, standard deviation, and correlations are revealed in the table. These results of the correlation matrix aligned with the previous study.

Table 1: Variable descriptive statistics and correlation matrix.

Variab	Mean	Std.	Min	Max	1	2	3
EMP	6.345	0.879	4.4	7.56	1		
GDP	9.565	3.695	2.4	13.8	0.292	1	
Tour_g	11.38	0.999	10	13.9	0.332	0.677	1

Note: EMP: Employment rate; GDP: Gross Domestic Product; Tour_g: Tourism growth Table 2 Root test results of sequence level values.

Variable	ADF Level	PP Level
GDP	-2.8035	-2.86839
EMP	-4.3485	-4.93498
Tour_g	-3.8458	-3.25437

ADF: augmented Dickey-Fuller test; PP: Phillips-Perron test.

Table 3 Root test results of the sequence first-order difference.

Variable	ADF Level	PP Level
ΔGDP	-5.88406 (0.0004)	-5.904893 (0.0004)
ΔEMP	-10.3886 (0.000)	-14.01308 (0.000)
ΔTour_g	-9485900 (0.000)	-9.273480 (0.000)

Note: null hypothesis rejected at 5% significance level.

3.2. Unit Root Test Results

Testing for a unit root of the variables was necessary in order to rule out the possibility of non-stationarity of the data. Therefore, the commonly accepted ADF and Dickey and Fuller unit root test was adopted to check the stationarity of the GDP, employment, and annual tourism growth (Tour_g) series. The test was based on an estimate of the following regression: In Table 2, the results show that the level value of all three sequences was non-stationary and further tested signposted that GDP, EMP, and Tour_g were stationary at the first-order difference. The first-order difference was made on three sequences to reduce fluctuations of the data. Then three new series, ΔGDP, ΔEMP, and ΔTour_g, were obtained and their unit root test results are shown in Table 3. In Table 2 and Table 3 the results of ADF and PP both indicated that GDP, employment, and annual tourism growth were not stationary in their level form but stationary at first level. Thus, both test variables were integrated of the same order 1 (1).

3.3. Regression Analysis Technique

To examine the contribution of tourism to economic growth and employment, a regression analysis technique was used and the same technique was employed as in [24].

The model can be expressed as:

$$Y_i = \beta_0 + \beta_i x_i + \varepsilon \quad (2)$$

where Y_i = dependent variable, X_i = independent variable, β_0 = intercept, β_i = coefficient to be estimated. The proposed modified regression model is represented by the following equation: Model Specification

$$\Delta GDP = \beta_0 + \beta_1 \Delta Tou_g + \varepsilon \quad (3)$$

$\Delta Emp = \beta_0 + \beta_1 \Delta Tou_g + \varepsilon \quad (4)$ *where Δ = first difference, GDP = gross domestic product, Emp = employment rate, Tou_g = annual tourism growth, β_0 = intercept, β_S = coefficient to be estimated, and ε = error term.

Table 4. Regression analysis of tourism growth and GDP.

Dependent Variable: ΔGDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-21.3959	6.129758	-3.84806	0.0015
ΔTour_g	2.85930	0.48485	5.19486	0.0000
R-squared	0.54969	Durbin Watson	1.330163	
F-statistic	26.8946	Prob (F-statistic)		0.000056

From Table 4 the results show that the p-value was 0.000, which is less than 0.05 ($p < 0.05$), which indicates that there was a significant contribution to the annual growth of tourism to the GDP. Moreover, the values of t-statistics were also above the cutoff value of 1.96. The R-squared value meant that there was

a 5% variation in GDP due to annual tourism growth. There was also a significant and positive relationship between explanatory variables and the predicted variables because the T-values were greater than 1.96.

Table 5. Regression analysis of tourism growth and employment.

Dependent Variable: ΔEMP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.28234	2.0385	1.93495	0.3001
ΔTour_g	0.38493	0.29959	2.9538	0.0445
R-squared	0.19585	Durbin Watson	0.40385	
F-statistic	4.88593	Prob (F-statistic)		0.047912

Table 5 shows that the dependent variable was employment rate and annual tourism growth was the independent variable. According to the analysis, the p-value (0.04) was less than 0.05. The findings demonstrate that annual tourism growth contributed significantly to the employment rate. The R2value implies that 15 percent variation in employment rate was due to tourism growth. The beta coefficient was positive, which entailed that annual tourism growth and employment rate had a significant and positive relationship; consequently, we accepted the alternative hypothesis and rejected the null. Richardson [25] confirmed the same patterns results in his study.

Discussion

Tourism stands out as a dynamic force in driving economic growth and generating employment opportunities, playing a pivotal role in the development of both developed and developing economies. Kazakhstan, being a significant country in Central Asia, has witnessed the growing influence of the tourism sector on its economic landscape. However, the specific dynamics and implications in Kazakhstan require a closer examination. In our study focused on Kazakhstan, we aimed to explore the intricate relationship between tourism, employment, and economic development. Drawing parallels with the findings in Pakistan and other South Asian countries, our goal was to understand how tourism growth contributes to both employment rates and GDP in the Kazakh context.

Positive Correlation between Tourism Growth, Employment, and GDP:

Similar to the research conducted by Kim et al. [26] in Taiwan, our findings for Kazakhstan indicate a positive association between tourism growth and economic expansion. The long-term equilibrium association observed suggests that, over time, the growth in tourism can become a sustainable driver of economic development. This aligns with the general trend observed globally, where tourism serves as a catalyst for economic growth.

Impact on Economic Deficit and Positive Economic Expansion:

Contrary to concerns about tourism expenses causing economic deficits, as discussed by Sanchez et al. [27], our study in Kazakhstan reveals a positive and significant economic impact on overall economic expansion. This indicates that, despite potential initial costs, the economic benefits derived from tourism activities outweigh and contribute positively to the country's economic development.

3.43 Employment Opportunities and Economic Impact:

The empirical studies emphasizing the impact of tourism demand on employment, such as those pointed out by Archer [28] and Mathieson [29], are consistent with our findings in Kazakhstan. The tourism sector in Kazakhstan has demonstrated the creation of both direct and indirect employment opportunities, aligning with the broader global pattern observed in tourism-driven economies.

Encouraging Domestic Services and Goods:

Our study in Kazakhstan indicates that, similar to global trends, encouraging the tourism sector to acquire domestic services and goods contributes to a healthier economic impact. This aligns with the notion that promoting local services and products within the tourism sector enhances the total economic benefits and strengthens the connection between tourism and various domestic industries.

Conclusions

The primary objective of this research is to investigate the correlation between tourism, employment, and economic development in Kazakhstan. Utilizing time series data spanning from 2015 to 2023, we employed the annual growth of tourism as an explanatory variable, while considering both employment and GDP as the outcome variables. The analytical methods employed include bivariate regression and the Johansen cointegration technique.

Our focus is on exploring the affirmative relationship between the annual growth of tourism, employment, and overall economic growth. The study's outcomes reveal the significant role played by tourism growth in contributing to the economic development of the country.

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