



The Role of Tourism Sector in Economic Growth: An Empirical Evidence From Palestine

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ABSTRACT

This study examines the long-term relationship between economic growth and international tourism receipts (ITRs) in the state of Palestine during the period 1995-2014. To achieve the purpose of the study, gross domestic product (GDP) is used as proxy for economic growth while ITR is used as a proxy for tourism sector. The findings of the study showed that there is a unique long-term relationship between GDP and international tourism receipts. Furthermore, granger causality test affirms a causal relationship from ITR towards economic growth in the state of Palestine. This paper uses an empirical evidence to show the role of tourism sector in economic performance of a country where its economy is highly dependable on foreign aids and donations. So, Palestinian government should develop dynamic policies to promote tourism sector into the country. This in turn leads to generate employment opportunities, poverty alleviation and economic growth.

Keywords: Tourism, Palestine, Economic Growth, Co-integration, Causality

JEL Classifications: C22, O11, L83

1. INTRODUCTION

The United Nations World Tourism Organization defines tourism as: “Social-economic aspects which allows the movement of people to countries or places outside their usual environment for personal, business and professional purposes. These people are called visitors and tourism has to do with their activities, some of which imply tourism expenditure” (Paltrade Report, 2013).

With increasing globalization, tourism has become one of the largest and fastest growing sectors in the world. In 2011, the tourism industry generated an estimated 5% of global gross domestic product (GDP) and between 6% and 7% of the overall number of jobs globally. Demand is expected to be high due to rising household incomes in emerging economies fuelling leisure activities and growing international trade. Given its size, the sector is expected to have a considerable impact for economic growth, diversification, and structural transformation of economies (World Tourism Organization report, 2007).

According to the World Travel and Tourism Council (WTTC), the tourism industry globally generated some US \$ 2056 billion directly

in 2012 and is expected to grow by an annual rate of 4.4% until 2023 (WTTC report, 2012). The forecast growth of the tourism sector globally confirms the importance for the State of Palestine of further developing and diversifying its tourism offer.

Tourism should keep growing worldwide by 3.8% per year on average between 2010 and 2020. For the Middle East region, the direct contribution of tourism to regional GDP in 2012 was estimated at US \$ 377.5 billion, or the equivalent of 4.5% of the region's total GDP. In addition, it is estimated that tourism directly supported 7.9 million jobs at the regional level or the equivalent of 4.8% of total employment. It is forecast that tourism will directly contribute to 5.1% of total regional employment in 2013.

Tourism has recently come to the surface as the largest industry to impact the overall growth of the economy (Lashkarizadeh, et al. 2012). Tourism growth in any economy not only leads to economic development but also leads to advancements in other parts of the host country such as political, cultural and social environment. In many ways, international tourism receipts (ITR) are considered to have impact on the long-term economic growth (Brida, 2010).

2. TOURISM SECTOR IN PALESTINE

Tourism services are growing worldwide. Tourism in the state of Palestine refers to tourism in East Jerusalem, the West Bank and the Gaza Strip. In 2010, 4.6 million people visited the Palestinian territories, compared to 2.6 million in 2009 (Ma'an report, 2011).

Although it is difficult to describe the size of the Palestinian tourism market accurately, estimates by the Ministry of Tourism and Antiquities said that tourism revenues have steadily increased since 2005, with possibly a small decrease of between 1% and 2% in 2011 before growth returned back in 2012.

Out of the 3.5 million tours to Palestinian tourist sites in 2012, a large percentage was made up of Palestinians living in Israel (35%), followed by the Russian Federation (12%), the United States of America (5%), Italy (5%), Poland (5%), Germany (3%) and Indonesia (3%).

The State of Palestine has many tourist assets to offer, including its climate and holy, cultural and natural sites. Significantly, Christian pilgrimage is the main tourism service in the State of Palestine. The number of international tourist's arrivals on West banks and Gaza Strip is growing up from <210,000 to more than 550,000 visitors with percentage of 61.8% as shown in Figure 1.

The tourism sector's direct contribution to GDP is approximately 4% and 2% to total Palestinian employment. There are significant challenges which have both slowed the development of tourism in Palestine, and threaten to impede efforts for the sector to realize more of its potential.

One of the biggest challenges is Palestine's image. Palestine has suffered from the one-dimensional impressions given by some Western media that Palestine is a risky place to visit. The combination of a negative image, plus the physical barriers, closure of borders especially "tight closure of Gaza strip" and restrictions on movements of people in West Bank and East Jerusalem are among many obstacles imposed by Israeli government which in turn directly and indirectly impeding the Palestinian tourism sector.

Tourism is an important sector for the Palestinian economy, and it is possible to expand it further. It is very much clear that tourism

is very impactful to Palestinian economy in terms of generating employment opportunities and enhancing GDP. The relationship between tourism sector and economic growth is not empirically examined in Palestine. So, this paper tries to test the relationship between the variables empirically and derive policies that can help policy makers of government of state of Palestine to work on it. The main questions of this study: Does tourism industry contribute to economic growth in Palestine? And what is the nature of the relationship between tourism sector and economic growth in Palestine?

The paper is organized as follows: Section one provides an introduction, section two covers the literature review, section three explains research methodology, section four shows the results and analysis of the study and conclusion is given in section 5.

3. LITERATURE REVIEW

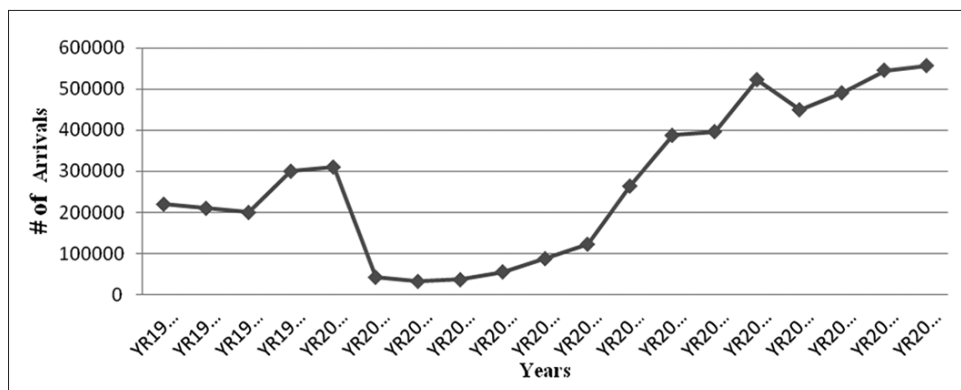
There are many studies documented the relationship between the impact of tourism sector on economic growth of any host country but there is a limited literature examining whether the impact is significant or not and who cause the other, like economic growth causes tourism sector or tourism sector causes economic growth, particularly in the context of the state of Palestine.

Many research works suggest the view that tourism sector not only helps to create household income but also generating employment and foreign exchange respectively. Therefore, (Lee and Kwon, 1995; Lim, 1997) affirmed that the developed tourism sector in any country has been considered a positive contribution to economic growth. Durbarry (2002) in his study, confirmed that the tourism sector leads economic growth in Mauritius. He utilized co-integration and causality tests for the analysis.

After that, Eugenio and Scarpa (2004) tested the kind of the relationship between economic growth and tourism for Latin American countries from 1985 to 1998. His results showed that the tourism sector can foster economic growth for low and medium income countries but not for high income countries.

Kim et al. (2006) tested the relationship between tourism sector and economic growth for Taiwan. He proved that there is a bidirectional causal relationship between tourism and economic

Figure 1: International tourism, number of arrivals



Source: World Statistics Data (2016)

growth in Taiwan. After 1 year, Khalil and Kakar (2007) examined the short- and long-term causality between economic expansion and tourism receipts in Pakistan. He concluded that there is a long-term association between the development of tourism sector and the economic growth of Pakistan. At the same year, Fayissa et al. (2007) investigated the relationship between tourism sector and economic growth using a panel data of forty two countries from Africa. Her results assured that tourism receipts had a significant impact on economic growth in Sub-Saharan African countries. Followed by Lee and Chang (2008) study, he examined the direction of relationship between tourism sector and growth of the economy. The result affirmed a unidirectional relationship between tourism and growth for OECD countries.

Huang et al. (2008) investigated the relationship between tourism sector and economic growth. He used annual time series data covering the period 1995-2005 in 88 countries and used non-linear model to determine the relationship between variables. His results concluded positive relationship between tourism receipts and growth of the economies for the countries under the study. After 1 year, Fayissa et al. (2009) again examined the impact of tourism on economic development of seventeen Latin American countries using panel data for 1995 to 2004. The results revealed that there is a positive relationship between the tourism receipts and GDP. Ozturk and Acaravci (2009) show that there is no unique long-term or equilibrium relationship between the real GDP and international tourism for Turkey.

In another study of Asia, Salleh et al. (2011) examined the relationship between tourism sector, trade and growth in ASEAN countries. Their results concluded a long-term correlation among foreign tourist arrival, economic growth and trade. In another study, Oriqat and Saymeh (2015) investigated the effects of growing tourism sector on the Jordanian economy. They tested Jordan tourism and its economic impact on economic growth. Their results revealed that tourism has an important role in economic growth of Jordanian economy.

It is clear from the above mentioned literature that tourism sector contribute to economic growth particularly for developing countries. However, the direction of relationship between tourism receipts industry and economic growth is still unclear in case of state of Palestine. There is no research work examined the relationship between the ITR and economic growth has been taken place. This paper tries to investigate the relationship between economic tourism sector and economic growth in case of state of Palestine.

4. RESEARCH METHODOLOGY

4.1. Data and Variables

A time series data from 1995 to 2014 is used in this study. Two variables - GDP measured in U.S \$ millions, represents the economic growth sector, and IRT, represents the tourism sector, measured in U.S \$ millions, are selected to achieve the purpose of the study. The data has been fetched from the World Databank, World Development Indicators. All analysis is done

using Eviews. The flow chart for econometric analysis is shown in Figure 2.

4.2. Unit Root Test

The first step of the study is to examine whether the time series are stationary or not. It is worthy to convert the data into stationary form since a non-stationary data may lead to misleading results containing problem of spurious regression with high R2 and t-statistics that appears to be significant, but the results do not have any economic meaning (Enders and Sandler, 2008). Therefore, for accuracy of results and correct model evaluation, time series data should be separated from all effects, and the series should be stationary. Thus, logarithms of time series were taken. Augmented Dickey-Fuller (ADF) and Phillip-Perron (PP) tests are used. The approach of ADF test takes into account higher-order correlation by adding lagged difference terms of the dependent variable to the right-hand side of the regression. The ADF test states series are whether stationary or not, can be defined as follows;

$$\Delta y_t = \mu + \beta t + \phi y_{t-1} + \sum_{i=1}^k \phi_i y_{t-i} + \epsilon_t \quad (1)$$

$$\Delta y_t = y_t - y_{t-1}$$

Where y_t : Dependent variable

Δy_t : The first difference operator

μ : Constant term

t: Trend variable

ϵ_t : Stochastic disturbance term.

There are hypothesis to test series:

H_0 : $\phi = 0$ (y_t is non-stationary)

H_1 : $\phi \neq 0$ (y_t is stationary).

If calculated t-value of variable is greater than ADF critical t-value then H_0 is rejected, thus the data is stationary (Dickey and Fuller, 1981). PP test is used to adjust with higher-order serial correlation in a given time series. Phillips and Perron (1988) adopted a non-parametric method. The test regression for the PP test is the autoregressive (1) process (Phillips, 1988).

4.3. Johansen Co-integration Test

Johansen co-integration test determines whether the long-term relationship occurs between variables or not. After the variables became stationary at the difference, the second step is to test for co-integration using the Johansen and Juselius co-integration tests. Johansen and Juselius (1990) have developed two test statistics - the trace test and the maximal eigenvalue test - to determine the number of the co-integrating vectors. In the other words, if $y_t \sim I(1)$ and $x_t \sim I(1)$ then $\epsilon_t \sim I(0)$, so y_t and x_t are co-integrated.

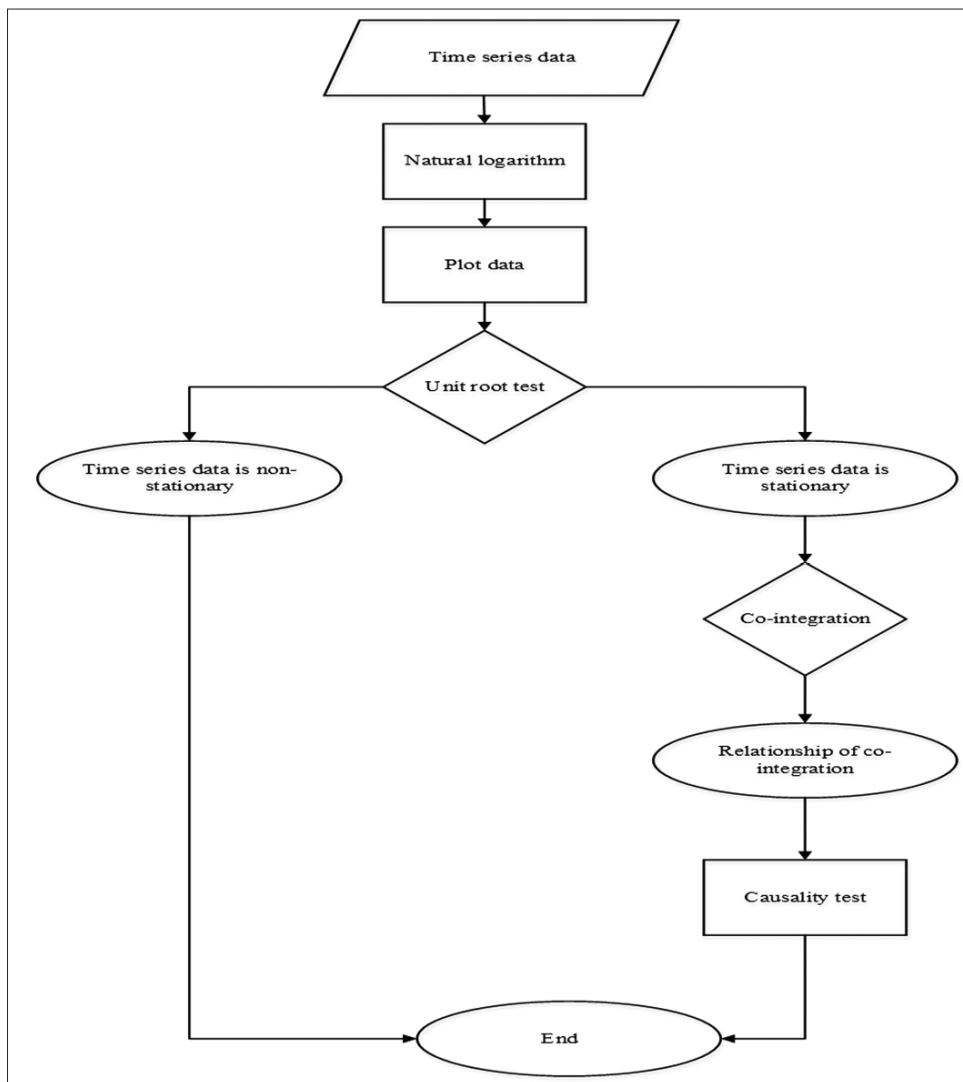
Then the hypothesis will be as,

H_0 : $\beta = 0$ (there is no co-integration between the series)

H_1 : $\beta \neq 0$ (there is co-integration between the series).

If variables statistical value is greater than critical value, the null hypothesis should be rejected. This means there is a co-integration

Figure 2: The flow chart of the econometric analysis



between series moving together in the long-term. To test it, maximum eigen and trace statistics are used.

4.4. Granger Causality Test

The spirit of Granger (1987) found in the idea that if the two variables are co-integrated, then dynamic relationships is existing among them. Granger causality test is used to determine the direction of causality. It has been developed to check whether or not the inclusions of past values of a variable x do or do not help in the prediction of the present values of variable y. The equations for granger causality test can be written as shown in equations 2 and 3. Granger causality test, which depends on time series data, is made by the estimation of the equations as shown below with least squares method.

$$X_t = \alpha + \sum \beta_j X_{t-j} + \sum \phi_i Y_{t-i} + u_t \tag{2}$$

$$Y_t = \alpha + \sum \beta_j Y_{t-j} + \sum \phi_j X_{t-j} + u_t \tag{3}$$

Where it is assumed that the disturbances u^{1t} and u^{2t} are uncorrelated.

Table 1: Summary Statistics (U.S \$ Million)

Statistics	GDP	ITR
Mean	6199.850	257.9500
Median	4580.500	240.5000
Maximum	12,716.00	615.0000
Minimum	3283.000	25.00000
Observations	20	20

5. RESULTS AND DISCUSSION

5.1. Descriptive Statistics

It is clear from Table 1 that the maximum amount of GDP in Palestine is reaching 12,716 U.S \$ million and this is achieved in 2014. The same thing is applied to ITR. It reaches U.S \$615 millions in 2014 from 25 million in 1995 with growth rate equals to 95.93%. The median for the two variables is less than the mean which means that the data are positively skewed.

5.2. Unit Root Test

The results of unit root test are shown in Table 2 and it is clear from the results that the null hypothesis of no unit roots for all

Table 2: Unit root test

Variable with Intercept	ADF test			Phillip-Person test		
	Level 1	First difference	Second difference	Level 1	First difference	Second difference
	t-statistic	t-statistic	t-statistic	t-statistic	t-statistic	t-statistic
	P value	P value	P value	P value	P value	P value
GDP	1.072155	-2.570371	-5.206831**	0.833407	-2.570371	-5.686277**
	0.9955	0.1169	0.0007	0.9918	0.1169	0.0003
ITR	-1.554464	-4.221769**	-4.541486**	-1.527696	-4.003905**	-8.991037**
	0.4853	0.0052	0.0034	0.4984	0.0047	0.000000

*Significant at p value <0.01; **Significant at p value <0.05; ***Significant at p value <0.1 (Cumming, 2012). ADF: Augmented Dickey–Fuller, GDP: Gross domestic product, ITR: International tourism receipts

the time series are rejected at their second differences as the ADF and PP tests statistic values are less than the critical values at 1%, 5% and 10% level of significance. The first row in Table 2 for GDP shows that the $P = 0.0007$ is $< \alpha = 0.05$ in ADF test. Similarly, for ITR, the result from the second row shows that the $P = 0.0000$ is $< \alpha = 0.05$ in PP test. Since, all the variables are stationary and integrated of same order, i.e., $I(2)$. We can proceed for co-integration analysis.

5.3. Johansen Co-integration Test

Tables 3 and 4 summarize the results of Johansson test for the long relationship between ITR and economic growth of Palestine. Both trace test and maximum eigen value confirmed that the variables are integrating at 1%, 5% and 10% level of significance. The first row of Table 3 shows that the trace statistics (18.67446) exceeds the critical value of (15.41) at 95% confidence level for GDP and the trace statistics (17.98336) exceeds the critical value of (14.07) at 95% confidence level.

It suggests that the null hypothesis of no co-integrating relationship is rejected. The results prove that there is a cointegrating relationship among the variables. Further, the existence of co-integration leads to the existence of Granger causality at least in one direction (Granger, 1988).

5.4. Granger Causality Test

F statistics and probability values constructed under the null hypothesis of non-causality are reported in Table 5. Results reveal that there is a causal relationship between ITR and GDP.

Furthermore, the results show there is a unidirectional causality between GDP and tourism receipts since it is significant at 5% level, as (0.01683) is < 0.05 . This leads us to affirm that ITR granger causes the economic growth in the state of Palestine and in a unidirectional way.

6. CONCLUSION

This study examined the relationship between tourism sector and economic growth of Palestine. It revealed that there is a significant and long-term association between the tourism sector and growth of the Palestinian economy. Further, the results conclude that there is a unidirectional relationship between ITR and the growth of the economy of Palestine. These results are encouraging us to advice Palestinian government to pay attention to the tourism sector as it is a vital for Palestinian economy in variety of ways

Table 3: Johansen’s test (trace statistic)

No. of cointegration equation(s)	Trace statistics	Critical values (%)	
		5	1
GDP			
Null hypothesis	$H_0: r=0$	18.67446**	15.41 20.04
Alternative hypothesis	$H_1: r \geq 1$	0.691102	3.76 6.65

**Significant at 5% level. GDP: Gross domestic product

Table 4: Johansen’s test (max-eigenvalue statistic)

No. of cointegration equation(s)	Max-eigenvalue	Critical values (%)	
		5	1
GDP			
Null hypothesis	$H_0: r=0$	17.98336**	14.07 18.63
Alternative hypothesis	$H_1: r=1$	0.691102	3.76 6.65

**Significant at 5% level. GDP: Gross domestic product

Table 5: Pair wise granger causality tests

Null hypothesis	F statistics	Probability
ITR does not granger cause GDP	5.68535	0.01683**
GDP does not granger cause ITR	1.58398	0.24231

Significant at p value <0.05; *Significant at p value <0.1 (Cumming, 2012). GDP: Gross domestic product, ITR: International tourism receipts

such as generating employments opportunities, household’s income and reducing the whole dependence on the international donations and gifts. Based on the findings of this study, many policy implications can be adapted by Palestinian government to foster the growth of the tourism sector. First, The Palestinian government should work in enhancing the Palestinian image as a destination of peace and love. Secondly, the infrastructure sector should be developed particularly in building hotels and leisure places. Thirdly, free movements and access to all places should be guaranteed to all tourists. This can be done by full coordination with Israeli government as agreed on by Oslo Accord 1993. Finally, Coordination between public and private sectors is very important to train human capital and provide better services to all tourists such as offers, information, electronic communications and other support services.

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