Impact of Terrorism and instability on the tourism industry in Egypt and Tunisia after Revolution

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Key words

Abstract
This paper aims to investigate tourism industry that has been impacted by revolution in Egypt and Jasmine revolution in Tunisia. Tourism industry plays an important role for economic growth and development .Egypt , Tunisia are countries which attract a huge number of tourists from all world ,so we should try to analyse how crises and revolution , terrorist activities , and instability in each country impact the tourism industry .

The basic objectives of this study is trying to know what the macro are – economic impacts of terrorism and political instability on tourism in these countries.

Introduction

Tourism is considered as a vital sector having a lot of gains such as development in income, employment, foreign exchange, additional in growth. The United Nations world tourism organization had vision related with forecasting with annual tourism expenditure to shock US$ 2 trillion and the number of foreign tourists to reach 1.5 billion by 2020 .The tourism industry is one of the most important industries in the world since it employs more than 250 million people worldwide. This industry which includes transport, lodging and catering is expected to increase $12.119 billion of revenues and 279.346.000 jobs in 2016[1]. The tourism sector is main sector that always generates and add to GDP, also expected to indirectly and directly contribute 10.9% to GDP. Although the tourism industry is an extremely sensitive activity but also it has a negative impact by important events such as terrorism, political insecurity or any crises happening.

This is exactly what happened to Tunisia and Egypt after revolution. By 1997 terrorist Attacks Luxor and Egyptian tourism revenues dropped by 50%. During 2005 bombing in Egypt (Tuba), although of that no negative effects where that Cairo hotel registered 15% increase in tourism. Tunisia, a country that has had been making headway in its tourism recovery process post the 2011 revolution, once again faces uncertainty following a succession of two high-profile terrorist attacks, which resulted in the deaths of international tourists. During 2013 levels of tourists was equal 6,785,100, but in 2014 theses levels fell down to reach to 6,071,000 according to Euro monitor. At the time of going to press, a state of emergency was in place in Tunisia, a move called by the country's president following the shootings in Port El Kantaoui, Sousse, in which 39 travellers were killed on June 26.

The attack, which took place less than four months after a similar incident at the National Museum in Tunis, has not only had an immediate impact on the country's tourism industry, but is expected to cause lasting damage for months to come, especially as numerous foreign offices have advisories warning against anything except essential travel to the country. Tunisia's tourism industries have taken another blow since the 2011 uprisings; however, the hospitality industry has already started to diversify its source markets to counteract the expected decrease in visitors as a result of recent shootings.

Research Objectives

The objective of this research is to investigate the impact of revolution and political instability on tourism industry especially recognize the impact of tourism in Egypt and Tunisia. and also trying to develop recommendation on how the tourism industry in Tunisia and Egypt will recover from revolution.

Review of Literature:
Effective of Terrorism and Revolution on tourism industry

Terrorism affects negative impact on society and various economic sectors, especially the tourism sector where Greenbaum , Hultquist (2006) informed that terrorism in Italy had a an inverse significant impact

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[1]- Asia – Pacific Economic Cooperation , 2006 .

on tourism over the period 1995-1997.Also Kaleasar (2010) investigated the impact of terrorism on the tourism industry of Middle East Region where noted the emergence of new tourism markets in the Middle East.

Terrorism and Instability has an inverse impact that cause several effects on production ,unemployment and all economic growth as(Friedrich Schneider, et al 2010) Study it in his research , Enders and Sandler (2006) show what happen in Libya after the bombing in 1986 .Also Feridun and Sezgin (2008) , Liorca , Vivero (2008) illustrate that main reason of terrorism due to economic underdevelopment.

Many studies have informed that terrorism has negative impact on the tourism sector in overall world as Hazbun, (2006) provides an evidence that tourism sector are generally vulnerable to political violence , tourism patterns in the middle East may call for a sharp revision of our understanding of how any attacks is consider negative effect on tourism receipts across Middle East and North Africa. Also   Enders (1992), Aly , strazicich (2000) estimated the effects of international terrorism on domestic tourism in Austria , Italy and Greece.

Researchers used statistical models to analyze the impact of terrorism and find out what had a positive or negative impact on tourism as (Enders et al 1991) , focused on Spain using regression model of foreign tourist visiting Spain and the number of terrorist incidents taking place , the author found terrorism affected on tourism , Dhariwal (2005) using the annual data of international tourist arrivals that reached to inverse significant effects of terrorism on tourism .Then author reached to growth of real tourism receipts decrease by 8% . Blake , Sinclair (2002) used a Computable General Equilibrium model to estimate the impact of 11 September 2001 attacks in the united states on travel and tourism , the model show that the impact was severe in terms of loss income and employment .

Generally Terrorism cause damage in all sectors especially in tourism field , So Drakos , Kutan (2003) Examine the effects of international terrorism in countries as turkey , Greece and Israel and its impact on tourism, they reached to that terrorism has a negative impact on tourism as Fleischer , Buccola (2002) that depend on the market demand –supply model in his study.

Revolution began in Egypt on 25 January 2011 due to lot of conditions such as poverty , economic and social reasons and because of inequality in the distribution of income , Fear of the transfer of authorities to his son .So revolution continued until President Hosni Mubarak stepped down and transferred power to the armies on11 from February 2011 . Revolution impacted negatively on economic growth, where GDP has fallen to 1.8% in 2011 as Compared to 5.1%in 2010.

Regarding to Hisham (2013), illustrate causes of revolution in Egypt, Libya, Tunis and Yemen using descriptive approach. Also Elvin Aghayav (2013), argue causes of war in Libya to analyse Gaddafi government behaviour.

Referring to the importance to reduce terrorism and improve tourism Alfred Anangwe (2004) Explain in his paper positive and Inverse impacts to stop international terrorism between East Africa and trying to build confidence in East Africa where fighting terrorism will improve tourism there .Also Simon Brown (2011), specify the difference between Arab spring revolution in Egypt and Algeria .

There are many studies that have focused their research on the crisis, which impacted negatively on the tourism sector such as Amara (2012), Focused on the study of the importance of security and crises as its important   role in the construction of the tourism sector, especially what happened in the events of 11September 2001. Also Henderson (2007) classify tourism sector which consider main sectors that help economy but always threat by crises.

Due to the importance of tourism sector to increase economic growth over the world, Aleksandra .S.Dragin, et al (2010) Estimate the returns of cruise tourism and its effects on tourism sector. Also Wakuru , Haji (2013)focus on the importance of tourism and also take it upon themselves to develop tourism industry in Bweijuu village to reduce poverty percentage in Tanzania .

Applied Framework

The study assumes some positive effects to tourism receipts in Egypt and Tunisia after two revolution ,25 January 2011in Egypt , Jasmine 2010 in Tunisia . and inverse effects for the tourism industry and its relationship with terrorism and economic growth .

According to this study based on two Statistical models for Egypt and Tunisia assuming the following hypotheses :

The study assumes a strong positive relationship between indicators of the tourism industry and tourism receipts.

There is an inverse relationship between terrorism and the tourism industry represented in tourism receipts .

To achieve the objective study to know the impact of terrorism especially after the revolutions of Egypt and Tunisia on tourism industry will estimate the model using multiple regression equation by depending on the least squares method (OLS) using state program to reach to determine which more variables affected by terrorism and instability.

4-1Nature: This research is quantitative, analytical in nature. It uses both inferential and descriptive statistics to carry out the objectives of the study, and analyse hypothesis.

4-2 Time Coverage: Study will cover time period from 2005-2015 including revolution period .

4-3 Methods Used: The study uses Ordinary Least Squares (OLS) to run multiple regression on time series variables using SPSS Program.

4- 4 Serial Correlation: Durbin Watson (D-W) test

Y : Tourism Receipts

X_1 : Terrorism (Instability)

X_2 : Arrivals Numbers

X_3 : Number of Nights

X_4 : Employee Number

X_5 : GDP

The results of _Egypt's Model_ showed a significant positive correlation between tourism receipts and some economic variables at a significant level less than (.0001) , where R^2 equal 97% , value of (F Test) equal 23.674 at a significant level (0.013). This shows the quality of the multiple regression model as the value of Durbin Watson (2.397).

$$(Y=-4299562.5-9273.7x_1+213x_2+63238.1x_3+23497.2x_4+197950.8x_5+\varepsilon)_{Egypt}$$

The results of _Tunisia's Model_ showed a significant positive correlation between tourism receipts and some economic variables at a significant level less than (.0001) , where R^2 equal 99.9% , value of (F Test) equal 61.459 at a significant level (.097). This shows the quality of the multiple regression model as the value of Durbin Watson (2.936**).**

$$(Y=-7463285.7-307564\ x_1+0.511\ x_2+1.723\ x_3+69.276\ x_4+65854.8\ x_5+\varepsilon)_{Tunisia}$$

Result
Regarding Egypt's Model

There is an inverse relationship between the level of terrorism and tourism revenue at significant level equal 0.05 .

There is a strong positive relationship between Number of arrivals to Egypt and the Numbers of employees that working in tourism sector at 0.028 significant level, Which indicates the tourism industry is able to absorb much of the unemployment in Egypt.

There is a strong positive relationship between Numbers of arrivals to Egypt and annual tourism receipts at 0.000 significant level.

There is a strong positive relationship between annual tourism receipts and Numbers of nights at 0.000 significant level.

There is a positive relationship between Number of nights that Spent by tourists and Number of arrivals, and Numbers of employees that serving tourist at .001 significant level.

What we can say now the model explicate influenced all tourist variables and their relationship with tourist receipts. All variables have a positive relations expect Terrorism and instability have an inverse relationship on tourism receipts.

Regarding Tunisia's model

There is a strong negative relationship between terrorism (instability) and Arrivals Number to Tunisia at 0.006 significant level.

 There is an inverse relationship between terrorism (instability) and GDP at 0.02 significant level.

Models Explain the negative relationship between tourism receipts and Terrorism where Terrorism negatively affect the tourism receipts at .007 significant level.

Also there is positive relationship between Arrivals Number to Tunisia and the amount of tourism receipts at .002 significant level.

Conclusion

This study tried to investigate the effects of Terrorism and instability on the tourism industry in Egypt and Tunisia. Where there is an inverse relationship between terrorism and tourism industry, where is the obstacle to increase tourism receipts especially after revolution there? Regarding Previous studies so many authors were exposed to study the effects of the revolutions that happened in Libya, Tunisia, Egypt and also Yemen. Tourism is the main sector that is affected by terrorism, given that tourism revenues contribute by a large margin in the balance of payments, it is a sensitive sector because tourists are trying to spend their vacations in safe countries but Terrorism leads to unwillingness to visit countries.

In conclusion, this study showed that Egypt is one of the most countries that have been affected by terrorism, which affected the national income and economic development where tourism represents 6.5% of GDP. Economic effects of terrorism vary depending on the ability of economic institutions and political to Eliminate terrorism and reduce its negative effects .The negative effects of terrorism are as follows:-

Leading to reduce a large labour working in the tourism sector as a result of reduce of tourists numbers.

Decline in tourism income , rise in unemployment , rise inflation rate and the rising dollar exchange rate in front of the Egyptian pound .

Egypt was affected by terrorism, like Tunisia, however, the stability of the political situation, the election of President Abdel Fattah al-Size, the return of political stability and security, cooperation of the people and the Egyptian army and police against terrorism.

Recommendation:

There is no doubt that tourism promotion is one of the main strategies that lead to increase motivation tourism sector ,contribute to economic growth , community development and poverty reduction in developing countries .Therefore I suggest that governments in overall world should establish a regional fund for cooperation among countries to fight terrorism , exchange of information and cross border investigations.

Regarding the increase or return of confidence to tourism industry not only Tunisia but also Egypt should appear positive image to its revolutions and work with media to highlight positive effects to attract tourists.

In fact Egyptian army should stop any attack to Egypt especially after real revolution of 30 June 2013, the failure of the rule of the Muslim Brotherhood .Egypt is exposed to many terrorist attacks. So we should need more security to serve the tourism industry. Addition necessity to combat terrorism through international conferences and seminars held in order to prove to everyone that there are safety.

References:

Alfred Ananke(2004), International terrorism and East African sub-Regionalism Developing a sub –Regional Tourism Industry in the face of war , African Journal of International Affairs , Vol(7) , No 1&2 PP81-97

Aleksandra S. Dargin, Dobrich Jovicic , Desimir Boskovic(2010), Economic Impact of cruise tourism along the PANEUROPEAN Corridor VII www.researchgate.net pp127-141.

Amara, J. (2012). Implications of military stabilization efforts on economic development and security: The case of Iraq. Journal of Development Economics, 99(2), 244-254. http://dx.doi.org

Blake, A. and Sinclair, M.T. (2002) 'Tourism Crisis Management: Responding to September 11', Working Paper,Christel DeHaan Tourism and Travel Research Institute, Nottingham, University Business School, UK.

Dhariwal, R. (2005) ,Tourist arrivals in India: How important are domestic disorders?, Tourism Economics: The Business and Finance of Tourism and Recreation, Vol. 11, pp.185–205.

Drakos, K. and Kutan, A.M. (2003) 'Regional effects of terrorism on tourism: evidence from three Mediterranean countries', Journal of Conflict Resolution, Vol. 47, pp.621–641.

Elivn Aghayav , (2013) , Analysis and background of the "Arab Spring "in Libya , European Researcher , Vol(39) , N01-2.

Enders, W. and T. Sandler (2006). The political economy of terrorism. Cambridge, Cambridge University Press.

Enders, Walter and Todd Sandler (1996). "Terrorism and Foreign Direct Investment in Spain and Greece." Kyklos 49 (3), 331–352.

Feridun, M. and S. Sezgin (2008). "Regional Underdevelopment and Terrorism: The Case of South Eastern Turkey." Defence and Peace Economics 19(3): 225-233.

Greenbaum, R.T. and Hultquist, A. (2006) 'The economic impact of terrorist incidents on the Italian hospitality industry',Urban Affairs Review, Vol. 42, pp.113–130.

Hazbun, Waleed (2006) 'Explaining the Arab Middle East Tourism Paradox', The Arab World Geographer/LeGéographe du monde arabe Vol 9, No. 3, pp. 206–218

Henderson, J. (2007). Managing Tourism Crises: Causes, Consequences and Management (The Management of Hospitality and Tourism Enterprises). Oxford: Butterworth-Heinemann.

Hisham H. Abdelbaki (2013) , The Arab spring : do we need a new theory , www.scrip .org PP187-196.

Kaushik Basu, (2010) , Impact of Political Instability and terrorism In the tourism Industry of three Middle East countries : An economic exploration , www.IJBTS. journal.com

Llorca-Vivero, R. (2008) 'Terrorism and international tourism: new evidence', Defence and Peace Economics, Vol. 19, pp.169–188.

Simon Brown (2011) , Reform and Revolution the Arab spring at one year , University Library System , Vol8 No(1) .

Wakuru Magigi, Haji Ramadhani (2013) , Enhancing Tourism Industry through Community Participation: A Strategy for Poverty Reduction in Zanzibar, Tanzania , Journal of Environmental Protection, Vol 4, 1108-1122 www.scirp.org/journal

Appendix
Egypt's Data

years	Terrorism	No of arrivals	No of nights	No of employee	GDP	tourism receipts
2005	1	-	85.2	102.2	4.5	-
2006	0	8646000	89.3	107.1	6.8	7417850
2007	1	10610000	111.5	129.9	7.1	9091330
2008	0	12296000	129.2	126.7	7.2	10734600
2009	1	11914000	126.5	128.3	4.7	10510300
2010	1	14051000	147.4	137.9	5.1	12282600
2011	0	9497000	114.2	131.5	1.8	8462040
2012	0	11196000	137.8	105.4	2.2	9695140
2013	0	9174000	94.9	97.7	2.1	5804570
2014	0	9628300	97.3	95.9	2.2	6918540
2015	0	10471200	84.1	-	4	7161660

Tunisia's Data

years	Terrorism	No of arrivals	No of nights	No of employee	GDP	tourism receipts
2005	1	-	33085.2	91000.9	6.2	-
2006	1	6550000	33717.6	92000.7	3.5	2254600
2007	1	6762000	34495.7	94000.3	5.2	2555200
2008	0	7050000	34942.9	95000.4	6.7	2931100
2009	1	6901000	34623.5	96000	4.2	2751000
2010	1	6903000	11866.6	96000.6	3	2623500
2011	0	4785000	17207.6	96000.6	3.5	1894300
2012	0	5950000	25915	96000.8	-1.9	2203800
2013	0	6290000	-	96000	3.7	2166600
2014	0	6069000	-	-	2.3	2333910
2015	0	4816210	-	-	2.3	2144280

Analysis Data (Egypt), (Tunsia)

Model Summary(Egypt)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.988[a]	.975	.934	528437.197	2.397

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.305E13	5	6.611E12	23.674	.013[a]
Residual	8.377E11	5	2.792E11		
Total	3.389E13	5			

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	-4299562.556	2006265.612		-2.143	.122
Terrorism	-9273.773	578683.678	-.002	-.016	.988
Arrival No	.213	.358	.182	.597	.593
No of Nights	63238.096	30126.200	.622	2.099	.127
Employees No	23497.204	19823.329	.184	1.185	.321
GDP	197950.868	109608.335	.223	1.806	.169

Correlation

	Terrorism	Arrival No	No of Nights	Employees No	GDP	Tourism Receipts
Terrorism	1	.269 / .424	.249 / .460	.448 / .194	.381 / .248	.620 / .248
Arrival No	.269 / .424	1	.856** / .001	.689* / .028	.245 / .467	910** / .000
No of Nights	.249 / .460	.856** / 001	1	.669* / .034	.075 / .827	.911** / .000
Employees No	.448 / .194	.689* / .028	.669* / .034	1	.416 / .231	.788* / .012
GDP	.381 / .248	.245 / .467	.075 / .827	.416 / .231	1	.403 / .248
Tourism Receipts	.620 / .056	.910** / .000	.911** / .000	.788* / .012	.403 / .248	1

Model Summary (Tunsia)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.998a	.997	.981	49984.011	2.936

ANOVAb

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	7.678E11	5	1.536E11	61.459	.097a
Residual	2.498E9	1	2.498E9		
Total	7.702E11	6			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-7463285.744	1908251.587		-3.911	.159
	Terrorism	-307564.532	192562.965	-.419	-1.597	.356
	Arrivals No	.511	.095	1.148	5.402	.117
	No of Nights	1.723	3.519	.046	.490	.710
	Employee No	69.276	22.720	.295	3.049	.202
	GDP	65854.864	17358.430	.438	3.794	.164

Correlation

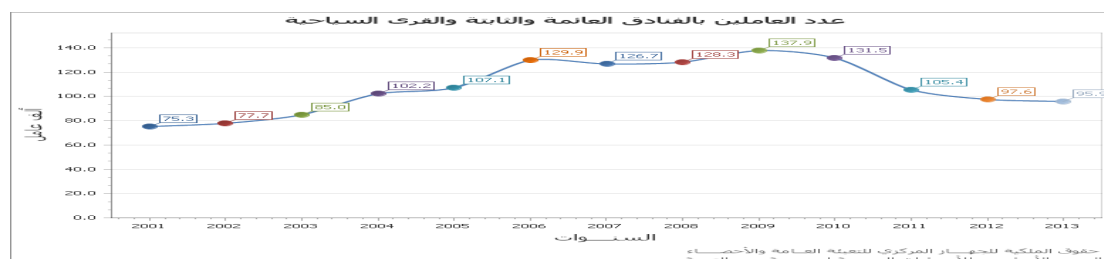|	Terrorism	Arrival No	No of Nights	Employees No	GDP	Tourism Receipts
Terrorism	1	.798**	.455	-.516	.662*	.784**
		.006	.257	.155	.027	.007
Arrival No	.798**	1	.463	-.260	.459	.841**
	.00		.296	.534	.182	.002
No of Nights	.455	.463	1	-.517	.451	.421
	.257	.296		.190	.262	.347
Employees No	-.516	-.260	-.517	1	-.445	-.029
	.155	.534	.190		.230	.946
GDP	.662*	.459	.451	-.445	1	.569
	.02	.182	.262	.230		.086
Tourism Receipts	.784**	.841**	.421	-.029	.569	1
	.007	.002	.347	.946	.086	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Charts illustrate Tourism receipts (US$ thousand)
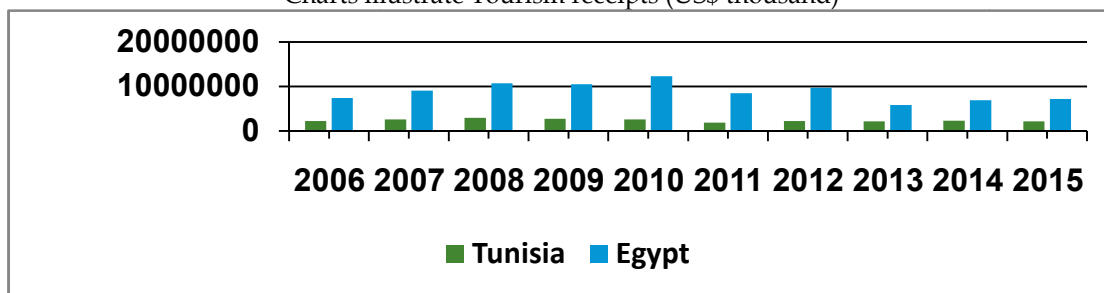
Numbers of Employess in tourism sector

Numbers of Nights (Egypt)