# Tourism and Economic Growth in the United Arab Emirates: A **Granger Causality Approach**

Saima Shadab

Department of West Asian and North African Studies, Faculty of International Studies, Aligarh Muslim University, Aligarh, India Corresponding Author: Saima Shadab

Abstract: In the recent years, non-oil GDP growth has become one of the most prominent targets of oil exporting Arab countries, more specifically the Gulf Cooperation Council countries. Non-oil exports, FDI inflows and Tourism are the major source of non-oil income and key strand of economic diversification. The United Arab Emirates is regarded as the most successfully diversified GCC country. However, among the 7 emirates in the UAE, only Dubai has transited itself into a diversified Emirate owing to the existence of increasing FDI inflows and a well-developed international travel and tourism sector. The main objective of this study is to examine the relationship between the travel and tourism sector and economic diversification in the United Arab Emirates. For this purpose, Grangers Causality Test approach has been employed by using data on real GDP per capita growth and travel and tourism contribution to the GDP to test whether it has made a positive impact on the UAE government's efforts toward the diversification of its economy. Focus has been put in line with the currently prevalent core economic issues such as the Dutch disease, rentier state, oil price volatilities, non-oil growth and economic diversification as the need of the hour to understand the rationale behind the UAE government's strategy of transforming the economy from a traditional oil-based (rentier) economy into a major hub for global investments, trade and most importantly tourism. Data has been derived from secondary sources such as online official reports prepared by various international organizations, official websites, academic papers and publications and other internet sources. To sum up, among the major diversification policies, it has been showed that tourism plays a major role in the UAE's structural transformation and economic growth.

Keywords: Economic Growth, Diversification, Tourism, Rentier State

Date of Submission: 26-03-2018

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Date of acceptance: 10-04-2018 

# I. Introduction and Background of study

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The oil exporting economies of the world or more specifically, the Gulf Cooperation Council countries are traditional oil-reliant economies since the past so many years. Oil revenues has been the major source of wealth and each of the 6 GCC states reaped enormous amount of benefits in terms of international capital flows, world trade, private investments, infrastructure development and etc. However, alongside, these economies have, from time and again, suffered greatly at the hands of oil price volatilities such as that of the 1980s and the present oil price volatility since 2013 to up till now. These oil rentier GCC economies have recently put economic diversification as one of the major objectives to achieve sustainable growth and stability from oil price fluctuations. Each GCC economy has followed its own strategic path and policies in successfully diversifying and transforming their economy from oil based traditional economy to a diversified one.

The United Arab Emirates, among the rest of the GCC states, has emerged out to be the most successfully diversified economy in terms of non-oil wealth and stability. This success can be attributed largely to the UAE government's smart strategy in terms of huge investments in non-oil trade, world class infrastructure, a strong and developed international financial market hub and an emerging strong travel and tourism sector. However, among the 7 emirates in the UAE, only Dubai has transited itself into a diversified emirate owing to the existence of increasing FDI inflows, a sound international financial market and an expanding international travel and tourism sector. "The driving force behind economic diversification in the Gulf states has been the fluctuation in global oil prices over the last decade...It is not surprising, therefore, that oil-dependent economies in the region, including Abu Dhabi, have sought to diversify into non-oil industrial and service sectors, with a particular focus on tourism."(Richard Sharpley 2002)

To sum up, among the major diversification policies, tourism plays a major role in UAE's structural transformation in terms of its contribution to UAE's non-oil economic growth. The travel and tourism industry of the UAE is currently playing a pivotal role in the diversification of the UAE economy in terms of obtaining non-oil revenues as a percentage share of the country's GDP. As reported by Khaleej Times, "The UAE's

hospitality market is geared up to record 67 per cent growth in revenue to \$7.5 billion by 2016, up from \$4.5 billion in 2011 as visitor demand gains traction and new hotel supply enhances the existing tourism product, various industry reports suggest." The annual MasterCard Global Destination Cities Index reported Dubai to be the fifth most popular tourism destination in the world. The UAE is considered to be one of the fastest growing GCC countries, and has the largest and strongest Travel and Tourism sector out of which Dubai holds up to 66% share of the UAE's tourism economy, with Abu Dhabi having 16% and Sharjah 10%. Dubai welcomed 10 million tourists in 2013.

UAE Vision 2021 "focuses on the UAE becoming the economic, **touristic** and commercial capital for more than two billion people by the transitioning to a knowledge-based economy, promoting innovation and research and development, strengthening the regulatory framework for key sectors, and encouraging high value-adding sectors. These will improve the country's business environment and increase its attractiveness to foreign investment."

Therefore, it is pertinent for an economy such as the UAE, to intensively invest in non-oil sectors. The United Nations has designated 2017 the International Year of Sustainable Tourism for Development. As one of the world's largest economic sectors, Travel & Tourism creates jobs, drives exports, and generates prosperity across the world.

The travel and tourism sector of the UAE economy has emerged out to be the most developed and strongest non-oil services sector. The World Travel and Tourism Council's report on Economic Impact 2017 United Arab Emirates stated that the direct contribution of Travel and Tourism to GDP was AED 68.5 billion (USD 18.7 billion) which is around 5.2 per cent of the total GDP. It is estimated to rise by 3.2 per cent in 2017, and to increase by 5.1 per cent per annum from 2017 to 2027 to AED 116.1 billion (USD 31.6 billion) which would be equal to around 5.4 per cent of the total GDP in 2027. The report also shared data on contribution of the travel and tourism sector to different sectors of the UAE economy. In 2016, the travel and tourism sector accounted for AED109.8 billion worth of visitor exports which is equivalent to 8.1% of total exports. Moreover, the AED 26.2 billion of Travel and Tourism investment was done in 2016 (7.0% of total investment). In the same year, 317,500 jobs (5.4% of total employment) were directly supported by the same sector. The report also estimated a rise by 2.3% in 2017 and to 410,000 jobs (5.9 per cent of total employment) in 2027.

The UAE government has shown keen interest and great strategic outlook towards expanding its travel and tourism sector. Table 1 shows some of the major plans laid down by the UAE government to expand the tourism sector.

	IADLE I
PLANS	OBJECTIVES
DUBAI TOURISM STRATEGY 2020	Launched in 2013, It is a strategic roadmap with the key objective of attracting 20 million visitors per year by 2020. The strategy focuses on making Dubai as the 'first choice' for the international leisure and business traveler. This involves broadening Dubai's offering in events, attractions, infrastructure, services and packages and making it appealing to a wider audience. The strategy will focus on three key objectives:
	<ul> <li>Maintaining market share in existing source markets</li> </ul>
	<ul> <li>Increasing market share in markets with high growth potential</li> </ul>
	• Increasing the number of repeat visits.
SHARJAH TOURISM VISION 2021	<ul> <li>Aims to attract more than 10 million tourists by the year 2021. In order to make the Vision come true, Sharjah Commerce and Tourism Development Authority, in collaboration with partners in the tourism sector, will adopt four strategic pillars. They are: <ul> <li>Promoting Sharjah as an ideal family tourism destination by offering distinct packages and offers specially designed for families</li> <li>Adopting an innovative tourism approach to improve the tourist experience through the provision of innovative solutions</li> <li>Enhancing efficiencies in tourism sector through partnership and collaborative action to provide world-class tourism facilities</li> <li>Promoting the cultural and heritage elements among families to build Sharjah as an international cultural hub.</li> </ul> </li> </ul>
AJMAN STRATEGIC PLAN FOR TOURISM 2015-2021	Development and sustainability of its tourism sector in order to become the destination of choice for all types of tourists through effective strategic partnerships and continuous innovation. It will focus on:

TABLE 1

• Improving customer experience and providing value- added services
<ul> <li>Enhancing sustainability and growth</li> </ul>
Operational effectiveness
• Empowered workforce in a creative work environment
• Rational expenditures and optimal investment of financial resources.

### **II.** Literature Review

A significant amount of literature on the relationship between economic growth and tourism in a country can be broadly divided into two main categories: the ones that support the economic growth led tourism hypothesis that economic growth has made a positive impact on travel and tourism of the respective economies and on the other hand those that found tourism leads economic growth i.e., tourism led economic growth hypothesis. Many studies also show a bidirectional relationship between both the variables. In conformity with the results found in section 4 of this paper, the paper mainly focuses on literature that supports economic growth led tourism hypothesis.

Turgut and Yilmaz(2015) analyzed the relationship between tourism and economic growth in Greece over the period 1980-2013 by undertaking Augmented Dickey Fuller and Philips Perron and Akaike Information Criteria. Finally, Granger Causality Test was done on the data on economic growth and expenditure from foreign visitors. The findings revealed a strong unidirectional causality between the tourism sector of Greece and its economic growth and hence supported the tourism led-growth hypothesis.

Caglayan et al. (2011), investigated the causal relationship between tourism revenue and gross domestic product (GDP) using the panel data of 135 countries for the period 1995–2008. For this purpose, Panel Granger causality analysis was applied to 11 groups of countries. Results indicated bidirectional causality in Europe between tourism revenue (TR) and gross domestic product (GDP). Findings revealed that there is a unidirectional causality in America, Latin America & Caribbean and World from GDP to tourism revenue. While in case of East Asia, South Asia and Oceania the reverse direction of causality was found from tourism revenue to GDP. No causal relationship was found in Asia, Middle East and North Africa, Central Asia and Sub Saharan Africa.

Abdulnasser et al. (2014) analyzed the relationship between tourism activity and economic performance for G-7 countries by employing panel causality test on these countries for the period 1995-2012. The results showed that there is a causal relationship between tourism activity and economic growth, with GDP actively causing tourism activity for Canada, Germany, France, Italy and Japan.

A similar study was conducted by Hakan et al. (2015), to observe the relationship between tourism activity and economic growth for Next-11 (N-11) countries. It was found that there is a long run relationship between tourist arrivals and gross domestic product (GDP) and tourism arrivals has positive effect on GDP growth in N-11 countries. The study concluded that a unidirectional causality from economic growth to tourism is valid confirming economic driven tourism growth hypothesis.

Abdulkarim K. A. (2016) investigated the causal relationship between tourism and economic growth in the Gulf Cooperation Council (GCC) countries. The study covered panel data for the period 1995-2012 and employed Panel Granger Causality approach to obtain the results. The findings show a one-way Granger causality from economic growth to tourism growth for the GCC countries as a whole. Kuwait, Saudi Arabia, Qatar and the United Arab Emirates, specifically support the economic driven tourism growth hypothesis. On the other hand, findings for Bahrain reveal that the economy supports tourism-led growth hypothesis, while there is no unidirectional/bidirectional causality between the two sectors in the case of Oman.

A study by Ming Che Chou (2013) was conducted on the relationship between economic growth and tourism development. A panel data analysis for 10 countries for the period 1988-2011 was done by employing causality analysis. The findings supported causality for 3 out of 10 countries. Results show a one-way Granger causality from domestic tourism spending to economic growth in Cyprus, Latvia and Slovakia at the 10% significant level. A reverse relationship from economic growth to tourism spending was found for both the Czech Republic and Poland, and a feedback hypothesis was found for both Estonia and Hungary. However, we find that neutral relationships exist for Bulgaria, Romania and Slovenia.

Another study on causality between tourism and economic growth was undertaken by wang et al. (2012) on the country China. The results indicate a bidirectional causal relationship between both the variables. A similar study conducted by Guellil Mohammed et al. (2014), reported a bidirectional causality relationship between tourism spending and economic growth in 49 countries, using the panel co-integration and panel Granger causality tests.

Jeyapraba S. and Samithamby S. (2014) examined the casual relationship between economic growth and tourism earning in Sri Lanka during 1977-2012 by using Granger Causality tests using annual time series

data. The results demonstrate that there is unidirectional causality between economic growth and tourism earning, where economic growth only causes to tourism earnings, not the other way round.

Bouzahzah and Menyari(2013) conducted a similar study for Morocco and Tunisia for the period 1980-2010. The study confirmed that there is a unidirectional causality relationship from economic growth to international tourism receipts and hence the results support the economic growth-led tourism hypothesis.

Lee and Chang (2008) undertook a study of relationship between tourism development and economic growth for OECD and non OECD countries for the period 1990-2002. New heterogeneous panel cointegration technique and panel causality test were applied on the data. The final outcome was a unidirectional causality relationship from tourism development to economic growth in OECD countries and a bidirectional relationship between the two was observed in non OECD countries. Hence, the study supported tourism led-growth hypothesis.

#### **III.** Methodology

To test the relationship between economic growth and the travel and tourism sector for the United Arab Emirates, VAR Granger Causality/Block Exogeneity Wald Test was employed on the data. Data covering the period 1995-2014 was extracted online from World Development Indicators.

Gross Domestic Product (GDP) at Current USD was taken as the dependent variable and used as an economic growth indicator. International Tourism Receipts (ITR) at Current USD (expressed in billions of USD) was taken as the independent variable to measure tourism development. Natural logarithms of both the variables were used to undertake the empirical tests.

#### **HYPOTHESIS**

1. NULL HYPOTHESIS: LNITR DOES NOT GRANGER CAUSE LNGDP

2. ALTERNATE HYPOTHESIS: LNITR DOES GRANGER CAUSE LNGDP

Therefore, in conformity with both the above stated hypothesis, the basic estimation model can be presented as follows:

LNGDPt=LNITRt+µt (eq.1) LNITRt=LNGDP+µt (eq.2)

### **IV. Empirical Results**

<u>Unit Root Test</u>: Keeping in view one of the major requirements of the empirical analysis, the Unit Root test was conducted to check the stationarity or non stationarity of the time series variables i.e. GDP and International Tourism Receipts. In this study, Augmented Dicky Fuller test has been employed to test the null hypothesis that the series does contain a unit root (i.e. it is non-stationary). Natural logarithms were taken for data of both the variables. Table 2 shows the results that were obtained after the ADF test on both the series. Both the variables were not stationary at level. The proxy variable for economic growth, that is, the GDP with intercept was stationary at first difference. However, the series for International Tourism Receipts were not integrated at order 1. Therefore, both the series were integrated together at order 2 and were found stationary at second difference as shown in table 1.

AUGMENTED DICKT-FULLER UNIT ROOT TEST					
VARIABLES WITH INTERCEPT	LEVEL	FIRST	SECOND DIFFERENCE		
		DIFFERENCE			
GDP	t-statistic: 0.448063	t-statistic:	t-statistic:		
	p-value: 0.9796	-4.433734	-5.042066		
	Test critical values:	p value: 0.0031	p value: 0.0012		
	1% level:	Test critical values:	Test critical values:		
	-3.831511	1% level: -3.857386	1% level: -3.920350		
	2% level:	2% level: -3.040391	2% level: -3.065585		
	-3.029970	3% level: -2.660551	3% level: -2.673459		
	3% level:				
	-2.655194				
INTERNATIONAL TOURISM	t-statistic: 3.617734	t-statistic:	t-statistic:		
RECEIPTS	p-value: 1.0000	-1.817425	-5.992048		
	Test critical values:	p value: 0.3607	p value: 0.0002		
	1% level:	Test critical values:	Test critical values:		
	-3.831511	1% level: -3.857386	1% level: -3.886751		
	2% level:	2% level: -3.029970	2% level: -3.052169		
	-3.029970	3% level: -2.655194	3% level: -2.666593		
	3% level:				
	-2.655194				

TABLE 2					
AUGMENTED DICKY-FULLER UNIT	ROOT TEST				

(AUTHOR'S OWN COMPUTATIONS)

**Causality Test:** As evident from Table 3, it follows that there is no causal relationship from LNITR to LNGDP. There is strong evidence that there is a causal relationship from LNGDP to LNITR. This implies that LNGDP does Granger cause LNITR (at 5 per cent level). Therefore, it can finally be observed from the obtained results that there is a unidirectional causal relationship from economic growth to tourism in the United Arab Emirates. In other words, GDP has a strong impact on tourism in the UAE.

One of the plausible explanations for the direction of causality, from economic growth to tourism development, in most GCC countries may lie in the history of their tourism industry structure. It is worth noticing that nations (such as GCC oil-rich countries) with no long history of tourism development initiatives rely on their endowments to maintain tourist inflows, and that economic growth is the only way to invest in tourism and sustain tourist inflows in such countries. In absence of economic growth, the tourism industry shrinks. Another explanation may lie in the economic structure and the contribution of the tourism industry to the GDP of these countries. If this industry contributes only a small portion of the national GDP, their relationship is more likely to support an economy-driven tourism growth. The direct contribution of the tourism industry to the GDP of these countries is very small, ranging from 1.5% for Kuwait to about 4.1% for UAE in 2015 (Abdulkarim K. Alhowaish).

TABLE 3				
VAR GRANGER	CAUSALITY/BLOCK EXOGENEITY WALD TEST			

Dependent variable: LNGDP					
Excluded	Chi-sq	df	Prob.		
LNITR	1.064329	2	0.5873		
All	1.064329	2	0.5873		
Dependent variable: LNITR					
Excluded	Chi-sq	df	Prob.		
LNGDP	8.086551	2	0.0175		
All	8.086551	2	0.0175		

(Author's own computations)

These studies indicate that better tourism destinations make their respective governments to have heavy investment on tourism sector. This implies tourism has not still well equipped and established. Therefore, the tourism sector needs more attention considerably for its development. This result is not surprising for the countries like Sri Lanka, where potential tourism destinations initially demand for additional investment from the established economic growth to transform the direction of tourism to enhance economic development thereafter (Jeyapraba and Samithamby,2013). Therefore, the results of this paper are also consistent with the findings of Jeyapraba and Samithamby and therefore support our results of growth led-tourism hypothesis in the UAE.

# V. Conclusion

In this paper, an attempt was made to analyze the causal relationship between economic growth and the travel and tourism sector of the United Arab Emirates. A unidirectional relationship from economic growth to tourism was found after employing the VAR Granger Causality test. For this purpose, annual time series data of GDP and International Tourism Receipts covering the period 1995-2014 was used.

The United Arab Emirates is successfully moving towards the path of economic diversification. This is clearly evident from its world position in terms of trade, FDI, financial and banking system and the travel and tourism sector. However, like the other oil-exporting GCC economies, the economy of the UAE is yet heavily reliant on oil revenues. Major infrastructure projects, investments, and most importantly investments in the tourism sector are generated from the oil revenues. Therefore, the pace of the development of such non-oil related projects highly depends on the oil wealth of the UAE. This dependency might be a reason behind the slow progress of the UAE economy in becoming self-reliant from oil revenues and oil price volatilities. Therefore, the paper sheds light on the UAE government's need to channel and direct oil revenues strategically

into non-oil investments and sectors such as the tourism sector of the UAE economy that are prospective sectors which may contribute largely in the non-oil GDP of the UAE in future.

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IOSR Journal of Business and Management (IOSR-JBM) is UGC approved Journal with Sl. No. 4481, Journal no. 46879.

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Saima Shadab, "Tourism and Economic Growth in the United Arab Emirates: A Granger Causality Approach." IOSR Journal of Business and Management (IOSR-JBM) 20.4 (2018):

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DOI: 10.9790/487X-2004030106

01-06.