The impact of tourism in the kingdom of Saudi Arabia on GDP, (2005 – 2017: An analytical approach)

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Abstract: Objectives: This study aims to highlight the spending of foreign and domestic tourism in KSA, and to investigate and analyze factors affecting Saudi's tourism sector, and its impact on the GDP.Methods/Statistical analysis: Three different regression models were specified and estimated in order to reflect the relationships between the dependent variable and independent variables in order the draw appropriate results and findings. The usage of regression method is straight forward to tackle such problem. The model of the study consists of the dependent variable which is the Gross Domestic Product (GDP) of Saudi Arabia of billions Saudi riyals and the independent variables which are: foreign spending of foreign tourists in millions Saudi riyals, local spending of domestic tourists in millions Saudi riyals, findings the results showed that the spending of foreign tourists – as expected – had positive impact on the GDP during the period of the study. Nevertheless, the domestic tourists had a negative impact on the GDP, which is unexpected due to the lower cost. For example, domestic tourists who travel to the destination using a car and have friends and family in the destination tend to spend less which brings a question about the effectiveness of comparing the average spending of the domestic and foreign tourists together Application. Entering tourists affect the GDP negatively while leaving tourists affect GDP positively. Finally, this study can help the policy makers in designing accurate plan which help in increasing the national income the development of KSA, beside enhancing the Saudi library by precise information about tourism.

Keywords: Tourism; Domestic tourism; Foreign tourism; GDP; Regression analysis; Saudi Arabia.

1. Introduction:

GDP is important factor in measuring the economic activity, beside its crucial effects and role with internal and external tourism in KSA. This is an interesting area of study to discuss in Saudi Arabia since the tourism industry has been taking a huge force from the authority of Saudi Arabia. However, is it important to keep in mind that many tourism experts in Saudi Arabia including the director of General Authority for Tourism and National Heritage, Prince Sultan bin Salman, indicates that "The Kingdom of Saudi Arabia does not consider the pilgrimage and Umrah as a part of the tourism activities, and refused to use the religious tourism term when spreading information and statistic related to pilgrimage and Umrah" (Hatem .El-Gohary-2016). Moreover, the Kingdom of Saudi Arabia did not include the pilgrimage and Umrah under the responsibilities of General Authority for Tourism and National Heritage, and there was a separate ministry taking care of all the religious activities, pilgrimage and Umrah, named Ministry of Umrah and Hajj (Md, alsumairir (2017). According movement of globalization the tourism it seems to has very important role in the development and future progress of economic activity. Particularly 2020 vision of KSA which aims to reduce the dependency on petroleum sector by enlarging the productivity of the rest sectors from which the tourism is expected to play very important role. Significant part of Gross Domestic Product (GDP) is utilization, which is driven by interest for merchandise and enterprises. One impact of the travel industry on GDP is that travel industry influences the economy through the arrangement of work (Serag. Y. Abed-2001). The principal impact of the travel industry on GDP is the way that travel industry helps the interest for products and ventures. The increment in the utilization level expands the action available and thusly, builds the GDP level. Not all impacts of the travel industry are positive however, as it can likewise prompt spillages, particularly in more modest regions. (Juan.Ignaciu-2016-). Any territory that has a significant degree of traveler related exercises makes a great deal of business openings for the nearby populace. Inns, event congregations, vacation spots and other such

places need individuals to offer the vital types of assistance. Since increments and diminishes in work influence GDP levels by affecting the ways of managing money of individuals, the business gave through the travel industry positively affects GDP. Individuals who are utilized have the pay to spend and an expanded degree of utilization is an outcome of the travel industry on GDP. (Lee, C. and C. Chang 2008)

2. The Problem

The tourism sector is one of the non-oil sectors, which are highly reliable in diversifying the structure of Saudi economy. This study investigates the factors affecting the tourism sector and its impact on GDP. Thus, the following questions could be asked:
1. To what extend spending on domestic and foreign tourism in Saudi Arabia affect GDP?
2. To what extend the entering tourists spending affect Saudi Arabia GDP?
3. To what extend the leaving tourists spending affect Saudi Arabia GDP?

3. Hypotheses

The main hypothesis of the study is the non-contribution of domestic, and foreign tourism to increase the GDP of the Saudi Arabia.

The following sub-hypotheses are derived from the main hypothesis:
1. Domestic, and foreign tourism in Saudi Arabia did not contribute to the increase in GDP.
2. Entering tourists spending affect the Saudi Arabia GDP.
3. Leaving tourists spending affect the Saudi Arabia GDP.

4. Objectives

The objectives of this study were:
1. To highlight the spending of domestic and foreign tourism in the Kingdom of Saudi Arabia.
2. To investigate and analyze factors affecting tourism sector and its impact on GDP.
3. To propose some recommendations regarding domestic and foreign tourism in Saudi Arabia.

5. Importance of the Study

Tourism in Saudi Arabia is one of the most developed sectors that has formed a major development and attention in recent years. It is receiving increasing support from the

government as the sector is expected to witness a major boom in the coming period. Within the National Vision 2030, the Kingdom of Saudi Arabia decided to invest in the tourism sector and make it one of the most important pillars of the vision to overcome obstacles and develop the economy away from oil. Domestic and foreign tourism spending is an important condition for determining the economic impact of the tourism sector.

6. Methodology

The nature of this study and the scope of its application imposes on the researcher from the methodological point of view to rely on the quantitative analytical method using econometrics models to measure the impact of the variables of the study.

Tourism in Saudi Arabia:

In addition to the historical and heritage treasure and the natural and cultural diversity Saudi Arabia is the birthplace of Islamic religion, making it a tourist attraction. According to Global Islamic Tourism Index2019, Saudi Arabia is the first Arab destination favored by Muslim tourists, and the fourth destination, world-wide, for Muslim tourists (. ALGAMDI, A.A. (1996) Saudi Arabia is counting on increasing the contribution of the tourism sector in GDP, where the head of General Authority for Tourism and National Heritage announced that attraction of investment worth SR115 billion, expected to receive 100 million visits annually by 2030, making Saudi Arabia among the top five countries receiving tourists. The Kingdom is working to increase the capacity of its airports to 150 million passengers per year, and is developing new tourist destinations such as the future city " Neum " and the cultural city of Al-Quadya near Riyadh, in addition to a number of tourism and entertainment projects in the vicinity of the Red Sea.

Tourism has received increasing support from the Saudi Arabia government, which is currently working on the implementation of comprehensive development of the tourism system including a number of major projects, modernization of infrastructure, rehabilitation of tourism and heritage sites, upgrading the accommodation sector and travel agencies and tourism services, the development of activities and events in tourist sites, as well as on development of tourism human resources(ATURKISTANI, H. (1998).. The Tourism Authority seeks to complete its mission towards transforming tourism into an economic sector that contributes more effectively to the GDP, and support the national economy with revenues of 10%, and create up to 1.6 million jobs in 2030.

7. Previous Studies

- **Al Yousif, et al. (2017):** Interest in the travel industry area is a promising answer for two fundamental Saudi financial issues; less differentiated economy and higher rate of joblessness. To appraise the impact of the travel industry area on yield, pay, and business, Leontief's information yield examination (I-O) is conveyed out. This paper found that expanding interest in the Saudi the travel industry area can impact tackling these two issues. The travel industry can have positive immediate and roundabout monetary impacts. The direct impact generally comes from the travel industry exercises. Different areas of creation such as administrations, development, and assembling achieve the roundabout financial impact. In whole, expanding interest in the travel industry area as a way to deal with upgrading Saudi monetary broadening is completely in accordance with the Vision 2030 targets.

- **E. Çağlayan, et al. (2012):** This study explored the causal connection between the travel industry income and gross homegrown item (GDP) utilizing the board information of 135 nations for the time frame 1995–2008. For this reason, Board Granger causality investigation was applied to 11 gatherings of nations. This arrangement was made as America (30 nations), Asia (34 nations), Europe (37 nations), East Asia (13 nations), South Asia (6 nations), Central Asia (5 nations), Latin America and Caribbean (28 nations), Oceania (7 nations), Middle East and North Africa (11 nations), Sub Saharan Africa (24 nations) and the world (135 nations). Results demonstrated bidirectional causality in Europe between the travel industry income (TR) and (GDP). Discoveries indicated that there is a unidirectional causality in America, Latin America and Caribbean and World from GDP to the travel industry income. While in the event of East Asia, South Asia and Oceania the converse heading of causality was found from the travel industry income to GDP. No causal relationship was found in Asia, Middle East and North Africa, Central Asia and Sub-Saharan Africa

- **Bashar alhaj (2017):** Sustainable Tourism in Saudi Arabia: Factors Affecting Tourism Awareness of Saudi Citizens This study covered Tourism awareness is considered as backbone of tourism development in world destinations. The main objective of this study is to identify the main factors influencing tourism awareness among Saudi citizens. Sustainable tourism focuses on achieving the balance between the needs of the tourists, the environment, local people, and business. To achieve the objective of this study a questionnaire was designed and administered to 389 respondents from Saudi citizens. Data reveled that there were four factors affected the Saudi tourism awareness: economics, activities program, information and media, entertainment and local, results also showed that there is relationship between awareness factors and socio-demographic characteristics

8. The Model

First: Model variables:
- **The dependent variable:** It is the Gross Domestic Product (GDP) of Saudi Arabia of billions Saudi riyals.
- **The independent variables which are:**
  - Foreign: spending of foreign tourists in millions Saudi riyals.
  - Local: spending of domestic tourists in millions Saudi riyals.
  - Entering: spending of entering tourists in millions Saudi riyals.
  - Leaving: spending of those leaving Saudi Arabia for tourism abroad.

All the data used were from 2005 to 2017.

Second: The statistical models used in the study:
First Model: In this model, the researcher adopted the multiple regression model using the Ordinary Least Squares method (OLSM). The model is:

$$GDP = \beta 0 + \beta 1 Foreign + \beta 2 Local$$

Table 1 below shows the results of this model.

Table (1): Statistical Results of Model 1

Dependent Variable: GDP
Method: Least Squares
Date: 02/22/19   Time: 13:01
Sample: 2005 2017
Included observations: 13
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 3.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FOREIGN	22982.83	5472.073	4.200022	0.0018
LOCAL	-33779.4	7492.063	-4.50869	0.0011
C	2329213	208295	11.18228	0
R-squared	0.587769	Mean dependent var		2161600
Adjusted R-squared	0.505322	S.D. dependent var		566045.7
S.E. of regression	398118.8	Akaike info criterion		28.82606

Sum squared resid	1.58E+12	Schwarz criterion	28.95644
Log likelihood	-184.369	Hannan-Quinn criter.	28.79927
F-statistic	7.129108	Durbin-Watson stat	1.197263
Prob(F-statistic)	0.011904	Wald F-statistic	11.35479
Prob (Wald F-statistic)	0.002671		

The results of the estimated model showed that the impact of foreign tourists was positive - as expected - on the GDP during the period 2005 - 2017, with a very high significance level. This could be attributed to the improvement in the payment balance as a result of the increase in the number of foreign tourists. Nevertheless, domestic tourism has a negative impact on GDP which is unexpected. This negative impact could be a result of the weak spending of domestic tourists compared to GDP due to the government's neglect of domestic tourism at that time. The coefficient of determination was 57%, indicating that all explanatory variables were explained GDP by this ratio. It worth mentioning that the Durban Watson statistic for this model was not centered on the number (2). Therefore, there is a possibility of auto-correlation between the components of random error and, thus, undermine of the integrity of the estimated parameters.

Second Model: The researcher adopted also the multiple regression model using the OLSM. The model is:

$$GDP = \beta_0 + \beta_1 Entering + \beta_2 Leaving$$

Table 2 below gives the results of this model.

Table (2): Statistical Results of Model 2

Dependent Variable: GDP
Method: Least Squares
Date: 02/22/19   Time: 13:09
Sample: 2005 2017
Included observations: 13
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 3.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ENTERING	-2788.07	4647.776	-0.59987	0.5619
LEAVING	18657.53	5079.365	3.673201	0.0043
C	1429769	226649.8	6.308274	0.0001
R-squared	0.767552	Mean dependent var		2161600
Adjusted R-squared	0.721063	S.D. dependent var		566045.7
S.E. of regression	298954.2	Akaike info criterion		28.25314
Sum squared resid	8.94E+11	Schwarz criterion		28.38352
Log likelihood	-180.645	Hannan-Quinn criter.		28.22634
F-statistic	16.51023	Durbin-Watson stat		1.622191
Prob(F-statistic)	0.000679	Wald F-statistic		17.92507
Prob (Wald F-statistic)	0.000494			

As seen from the table, the spending of the entering tourists had negative impact on the GDP, but the coefficient was insignificant. This unexpected impact could be mainly due to the low number of entering tourists at that time. On the other hand, the leaving tourists spending contributed positively to the GDP, and the coefficient is significant. Furthermore, the constant term is positive and significant. The positive constant term indicates that the GDP automatically increases in response to internal factors other than that factors included in the model.

9. Conclusion and Recommendations:

First: Study Results:
- Foreign tourists spending positively affects the GDP of the Kingdom of Saudi Arabia.
- The spending of domestic tourists negatively affects the GDP of Saudi Arabia. This is an unexpected result. It might be due to the low amount of the spending of the domestic tourists.

Second: The Recommendations of the Study:
The researcher believes that the concerned authorities take the following recommendations into consideration.
- Attention to the tourism sector through attention to infrastructure, provision of procedural facilities, promotion locally, regionally, and internationally, ...etc.
- Increasing investment in tourism sector.

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