Assessment of Contribution of Tourism Industry for Economic Development in Sri Lanka

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ABSTRACT

Tourism is a fast growing economic activity in many countries around the world, and plays an important role in the economic growth performance. In Sri Lanka, tourism activities play a significant role in the generation of income/foreign exchange and provision of employment opportunities. This paper aims to analyze the significance of tourism in the Sri Lankan economy from 1970 to 2014. The relationship analyzed empirically using time series analysis. The study endeavors to estimate the relationship between economic development and tourism revenue subject to variables such as tourism arrivals, trade volume, government intervention, and political stability. With respect to policy implications, the results revealed that tourism industry is a determinant of economic development in Sri Lanka and tourism sector is sensitive for political stability in the country. The study recommends that government should develop infrastructures while doing structural changes covering all sections of the economy to get the maximum benefits from industry.

KEY WORDS: Economic Development, Political Stability, Tourism Industry

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1. INTRODUCTION

Tourism is one of the major foreign exchange earners and main growth sector for many countries especially the small islands, which are rich with required natural and cultural resources. The world tourism has given contribution to GDP was USD6, 630.4bn (9.3% of GDP) in 2012, and is forecast to rise by 3.2% in 2013. According to WTTC (World Travel and Tourism Council 2012) Travel and Tourism activity was hit hard by the global slump. Even so, the sector worldwide still provided over 261 million jobs last year.

Sri Lanka entered the international tourism market in 1960s. Since then, this industry has been growing rapidly as one of a major sector for the economic development. International tourists’ arrivals to Sri Lanka have increased from 46,247 in 1970 to 1,527,153 in 2014 (WTTC, 2015). In particular, the contribution of travel and tourism to gross domestic product was 11.1 percent in 2014 in Sri Lankan economy. Tourism sector has become third largest foreign exchange earner in the country, succumbing only to workers remittances and income from garment exports. The travel and tourism to employment was 356,911 jobs in 2014. The tourism sector demands inputs such as foods and services from other sectors of the economy such as tourism sector generates employment opportunities especially for lower skilled groups. It is inter-linkage with other sectors and makes an important contribution to rural development and it plays an important socio economic role in Sri Lankan Economy.

With the past two decades, the nature of tourism has principally changed. As social and technological changes made tourism more affordable and accessible for millions of people. Shift in tourism from relaxation to self-discovery is reflected in the explosion of niche market destinations within the tourism industry. This involves adventure tourism, religious tourism, ecotourism, sustainable tourism and educational tourism.

Though Sri Lanka shares 0.13 percent of total tourist arrivals and 0.2 percent of the total earnings of the world travel and tourism direct and total contribution to both GDP and employment of Sri Lanka is comparatively lower than regional competitors such as Maldives, Colombia, Thailand and Malaysia (WTTC, 2015). Analyzing its economic contribution over
40 years and understanding the economic significance of tourism sector is therefore important for policy purpose. The paper focuses on analyzing significance of tourism industry to the Sri Lankan economy and to identify the future potentials of tourism industry in Sri Lanka.

The paper consists of introduction to the study, relevant literature on tourism and economic contribution, model and the methodology of study, descriptive analysis to discuss the performance of tourism industry and the empirical model and recommendations and policy implications.

2. REVIEW OF LITERATURE

Tourism has been a major source of foreign exchange earnings. This has been vital for such countries given their prevailing economic conditions. McCatty and Serju(2006) has shown impact on GDP and employment of the anticipated growth in Jamaica according to findings the industry provides an important impetus to growth and other sectors such as agriculture, transportation, retailing and manufacturing and in relation to employment are the primary benefit of tourism industry.

Hazari and Sgro (1995) developed a growth model in which they modeled tourism as an added component to the domestic aggregate demand. Furthermore, they modeled the foreign supply of capital and the growth in export as dependent on tourism growth. Wanhill, Stephen R (1983) investigated co-integration and causality between tourism and economic growth in Mauritius and found that tourism has contributed to economic growth. Moreover, he claimed that tourism has a significant positive impact on Mauritian economic development.

Dwyer and Forsyth (1993) stated that concise analysis of the economic impact of tourism for a developing country is important to guide the policy intended to develop tourism and augment its benefit on the economy. Thus, the government is focusing more on the development of the tourism. They are implementing more policies and plans for increasing the positive impact of tourism in the economy. Tourism impacts an economy through tourists’ expenditure on different (mostly non-traded) goods and services (Hazari and Sgro, 1995)
Gokovali and Bahar (2006) empirically investigated whether the tourism led-growth hypothesis holds for the Mediterranean countries for the period of 1987-2002. A panel data approach is utilized and coefficient estimates are obtained by using fixed effect and random effect models. As a result, the hypothesis that tourism is conducive to economic growth is verified based on the regression results. On the whole, the empirical findings revealed that traditional factors (capital and labor) as well as a tourism related factor contribute to economic growth for the Mediterranean countries.

Prathapan and Zakkariya (2015) analyzed from the literatures the contributions of tourism for the economic growth. Here, the economic growth is measured in terms of employment generation, impact on GDP, tourism receipt and capital investment. This paper also depicts the impact of Private Public Partnership (PPP), which has made a tremendous increase in the growth of tourism. The result of the research points out that the tourism development is an important factor for the economic development to address the needs of future generations. The study revealed that Kerala has built on its strengths; it has created partnerships to achieve a quantum growth in the tourism sector.

3. OBJECTIVES

The main objective of this research paper is to identify the significance of tourism sector in the context of Sri Lankan economic development. In addition, this study assesses the significance of world GDP, exchange rate and political stability of the country for the development of tourism sector.

4. METHODOLOGY

In order to accomplish the objectives of this research, two analytical approaches were used. The first part is descriptive statistics which focuses the contribution of tourism sector to Sri Lankan economy. The second part is econometrics analysis using OLS method to derive
two regression equations for economic growth and contribution of tourism for it. The
second regression tests determinants of tourism development in Sri Lanka.

4.1 ECONOMETRIC MODEL

Model: 1

The following model was developed using an econometric approach to measure the impact of
tourism on real gross domestic product (RGDP) in Sri Lanka.

\[ RGDP = \beta_0 + \beta_1 RGDP(-1) + \beta_2 TARIVALS + \beta_3 TRADE + \beta_4 GOVERN + \beta_5 D + u \]

\[ \text{RGDP} \quad = \quad \text{Real Gross Domestic Product} \]
\[ \text{TARIVALS} \quad = \quad \text{Tourism Arrivals} \]
\[ \text{TRADE} \quad = \quad \text{Trade Volume} \]
\[ \text{GOVERN} \quad = \quad \text{Government Intervention} \]
\[ D \quad = \quad \text{Dummy Variable for political stability} \]

During 1983 to 2009 the civil war in Sri Lanka made significant impact on overall economic
development and the tourism industry in country. therefore, the second model is used to
measure the impact of political stability on tourism sector.

Model: 2

\[ TINC = \beta_0 + \beta_1 WGDP + \beta_2 ER + \beta_3 D + u \]

\[ TINC \quad = \quad \text{Tourism income} \]
\[ WGDP \quad = \quad \text{World Gross Domestic Product} \]
\[ ER \quad = \quad \text{Exchange Rate} \]
\[ D \quad = \quad \text{Dummy Variable for political stability} \]

5 DATA ANALYSIS

The descriptive analysis used to describe the contribution of tourism. The following figure
illustrates the tourist arrivals from 1970 to 2014.
5.1 Tourist Arrivals
Following graph illustrates three phrases of tourist arrivals. First is from 1970 to 1983. In this phrase, tourist arrivals has increased gradually at slower rate in 1977 Sri Lanka introduced open economic policy with liberalization of trade. Second phrase goes from 1984 to 2009 with fluctuations of arrivals. This fluctuation may occur due to political instability, terrorist attacks, especially social unrest of youths. Government signed ceasefire agreement with LTTE in 2001. During the ceasefire period, there is a significant improvement in arrivals, and Tsunami disaster adversely affects this industry which shows a drastic slowdown in later 2004. After 2009 the number of arrival is high. This is the third phrase of this graph. Tourist arrivals gradually start to recover after 2009. In comparison to other phrases third phrase of the graph highlighted that political stability after the battle, which was held more than twenty years in Sri Lanka.

![Tourist Arrivals 1970 - 2014](image)

**FIGURE: 1** Total Tourist Arrivals

Tourism arrivals have increased gradually in the first phrase without any functions. The third phrase was the strongest period after weaker growth of second phrase. This reflects the
recovery from slowdown in the growth. This trend is shown in the following Graph. With comparison to other phrases third phrase of the graph highlighted that political stability and development potentials of tourism industry. The global economic slowdown began in European countries in 2009, this situation may affect tourist arrivals from western countries to decline arrivals.

![Growth rate of Arrivals 1970 - 2014](image)

**FIGURE:** 2 Growth rate of Tourist arrivals

**5.2 Top Ten Tourist Markets**

Following graph shows the top ten source market ranks for tourism to Sri Lanka within the years 2015 and 2014. The figure of markets reflects that the India exists as the leading country. China come to the position as the second major tourist producer to the country with a share of 9 per cent. The highest tourist producers namely India and UK claimed almost one fourth of the total tourist traffic to the country. Further China has become third major source of tourism to the country and top ten markets accounted almost 65 per cent of the total tourist traffic to the country.
FIGURE:3 Top-Ten Tourist Markets

Tourist markets such as the USA, Japan, UK and other European countries relaxed their advisory against travel to Sri Lanka after mid-2009. This may be the reason for start to visit Sri Lanka by European Countries.

5.3 Purpose of Visit

Majority of tourists are for the purpose of pleasure holidays. It accounts 69 percent of total visitors. While 28 percent to see friends and relatives and proportion for business purpose is below one percent. In the category of pleasure and holidays, the highest proportion of visitors from India

5.4 Economic Contribution of Tourism Industry

The total contribution of travel and tourism to employment is 276845 in 2014. Majority of those employees are in technical clerical and supervisory. This sector claimed a share of more than half of the employment recording. The rest of the share constituted of manual and operational grades 33% and 15% for management grades. While indirect employment amount 170100 in 2014. This emphasizes the significance of tourism related sectors specially creating employment for unskilled people young people, who are suffering from unemployment.
FIGURE: 4 Purpose of Visit

TABLE: 1 Contribution of Tourism industry

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contribution of Travel and Tourism to GDP (US $ Million)</td>
<td>2015</td>
<td>2058</td>
<td>2132</td>
<td>2210</td>
<td>2285</td>
<td>2365</td>
</tr>
<tr>
<td>Total Contribution of Travel and Tourism to Employment</td>
<td>257735</td>
<td>254477</td>
<td>259996</td>
<td>265169</td>
<td>270723</td>
<td>276845</td>
</tr>
<tr>
<td>Tourist Nights ‘000</td>
<td>40133</td>
<td>65018</td>
<td>91926</td>
<td>132427</td>
<td>221147.1</td>
<td>317501.7</td>
</tr>
<tr>
<td>Receipt per tourist per day (US $)</td>
<td>81.8</td>
<td>88</td>
<td>98</td>
<td>103</td>
<td>156.5</td>
<td>160.8</td>
</tr>
<tr>
<td>Average duration nights</td>
<td>9.1</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>8.6</td>
<td>9.9</td>
</tr>
<tr>
<td>Accommodation Capacity (Rooms)</td>
<td>14461</td>
<td>14714</td>
<td>14653</td>
<td>15510</td>
<td>16223</td>
<td>18078</td>
</tr>
</tbody>
</table>

Source: WTTC 2015

The above table illustrates the trends in tourism sector in Sri Lankan economy from 2009 to 2014. The direct contribution of travel and tourism and total contribution of travel and
tourism to employment have increased over the years. Despite the receipt per tourist per day having growing over the years, the average duration of nights has stagnated to around 10 guest night over the years. The main reason for this is lesser number of activities available for tourists in Sri Lanka.

5.5 Economic Growth Equation

Model 1

\[
RGDP = 632.1569 + 0.757100 RGDP_{t-1} + 0.000983 TARIVALS + 0.272516 TRADE + 0.001012 GOVERN - 350.6310 D
\]

\[
(0.1325) \quad (0.0000) \quad (0.0241) \quad (0.0118) \quad (0.0900) \quad (0.0123)
\]

\[R^2 = 0.9988\]
\[Prob > F = 0.0000\]

According to the above estimated results (Appendix 1), the model is overall significant at 1% level as the P value equals 0.0000. The coefficient of determination (\(R^2 = 0.9980\)) all the independent variables jointly explain the 99% of total variation of real GDP. Therefore this model is statistically appropriate to measure the relationship between economic growth and factors which affect it. All independent variables are statistically significant. When we consider about the coefficients trade volume places a major role in Sri Lankan Economy. Especially one unit change in Trade leads to 0.27 units change in real gross domestic production and the relationship is statistically significant at 5% level of significant. Similarly, tourist arrivals causes to change in real gross domestic production as results shows, the tourist arrivals change real gross domestic production and it is significant at 5% level. Tourist arrivals bring income from other countries and it will lead to increase foreign assets in Sri Lanka cause to maintain macroeconomic stability (balance of payment stability). Government expenditure causes to change in real gross domestic product equivalent to 0.001012. When we consider about the dummy variable which is used to represent the political stability of the country to measure the impact of war on macroeconomic performance. The negative coefficient (-350)
indicates that the real GDP in war period is low relatively non-war period. The real GDP for non-war period is 632 million and war period is 281.

**Model 2**

The Second OLS regression model is used to check whether there is a war influence in Sri Lankan tourism industry

\[
TINC = 47282.02 + 0.003823 \text{WGDP} - 963.4809 \text{ER} + 62029.04 D
\]

\[
(0.0556) \quad (0.0014) \quad (0.1090) \quad (0.0115)
\]

\[R^2 = 0.7497 \]

Prob > F = 0.000001

Tourism income (TINC) depends on many factors. World GDP (WGDP) and exchange rate (ER) have been taken as determinant of tourism income in this model. According to the model (Appendix 2) which has been used to evaluate above relationship is statistically significant at 10% level of significant. According to \(R^2\) value explanatory variables jointly explained approximately 75 % of total variation of receipts from tourism. To measure the impact of political instability in tourism sector, dummy variable has been included. According to the results changes in exchange rate by one percent causes to change the receipts from tourism by 963.4809 million while change in world GDP by one billion causes to change tourism income by 0.003823 billion. World GDP is a better proxy to represent world living condition and it is positively related with the Sri Lankan tourism industry. Coefficient of exchange rate significant at 10% level of significant. There is a significant war influence on Sri Lankan tourism industry. In fact tourist arrivals have been limited during war period.

6 CONCLUSION

The paper has in the main, address the significance of tourism industry for economic performance. According to the both descriptive and econometric analysis, the tourism sector has implied most important foreign exchange source and it stimulates the growth and
development of Sri Lanka. Employment generation, revenue for the government, utilization of country side resources, export earnings for favorable balance of payments are the major benefits of tourism. Agriculture, transport, communication, construction are indirect benefits of tourism.

The success of tourism is greatly depends on the security and safety of a country. According to descriptive statistics, tourist arrivals have been limited during the period of war with the end of war, the expected boom in the industry has come at present. Sri Lanka is among the few tourist destinations left in the world without any threats of terrorism. It is highly recommended to ensure the stable political situation in order to achieve the benefit from industry.

Traditionally, the national beauty, good climate, historical and cultural heritage and religious diversity are considered as areas of growth potentials in the tourism industry in Sri Lanka. At present there is a high potential exists in niche sub sectors of tourism such as adventure tourism, health tourism, agro tourism, marine tourism, recreational tourism, village and urban tourism in Sri Lanka.

Maximizing the potential contribution of tourism will involve the diversification of the product given its maturity, in order to increase visitor spending and expanding the capacity of the domestic support services to satisfy the demand of tourism sector. In order to achieve this potential of niche market in tourism sector, infrastructure development projects and structural changes covering all sections of the economy are needed while protecting the national identity, cultural heritage and natural environment.
REFERENCES


WTTC (2015).” The Economic Impact of Travel and Tourism”. London

### ANNEXURES

**ANNEXURE 1: E-Views Regression Output for Empirical Model 1**

**Dependent Variable:** RGDP  
**Method:** Least Squares  
**Date:** 07/13/16  **Time:** 11:31  
**Sample (adjusted):** 1990-2014  
**Included observations:** 21 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>632.1569</td>
<td>397.3266</td>
<td>1.591026</td>
<td>0.1325</td>
</tr>
<tr>
<td>RGDP(-1)</td>
<td>0.757160</td>
<td>0.105966</td>
<td>7.145324</td>
<td>0.0000</td>
</tr>
<tr>
<td>ARRIVALS</td>
<td>0.000983</td>
<td>0.000392</td>
<td>2.508313</td>
<td>0.0241</td>
</tr>
<tr>
<td>TRADE</td>
<td>0.272516</td>
<td>0.095071</td>
<td>2.866432</td>
<td>0.0118</td>
</tr>
<tr>
<td>GOVERN</td>
<td>0.001012</td>
<td>0.000558</td>
<td>1.812499</td>
<td>0.0900</td>
</tr>
<tr>
<td>D</td>
<td>-350.6310</td>
<td>269.1297</td>
<td>-1.302833</td>
<td>0.0123</td>
</tr>
</tbody>
</table>

| R-squared | 0.998917 | Mean dependent var | 12230.57 |
| Adjusted R-squared | 0.998556 | S.D. dependent var | 4936.012 |
| S.E. of regression | 187.5551 | Akaike info criterion | 13.54098 |
| Sum squared resid | 527653.5 | Schwarz criterion | 13.83941 |
| Log likelihood | -136.1803 | Hannan-Quinn criter. | 13.60575 |
| F-statistic | 2767.479 | Durbin-Watson stat | 1.931669 |
| Prob(F-statistic) | 0.000000 | |

**ANNEXURE 2: E-Views Regression Output for Empirical Model 1**

**Dependent Variable:** TINC  
**Method:** Least Squares  
**Date:** 07/13/16  **Time:** 21:55  
**Sample (adjusted):** 1988-2013  
**Included observations:** 26 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-47282.02</td>
<td>23391.80</td>
<td>-2.021307</td>
<td>0.0556</td>
</tr>
<tr>
<td>WGDP</td>
<td>0.003823</td>
<td>0.001043</td>
<td>3.664311</td>
<td>0.0014</td>
</tr>
<tr>
<td>ER</td>
<td>-963.8409</td>
<td>611.0796</td>
<td>-1.577276</td>
<td>0.1090</td>
</tr>
<tr>
<td>WAR</td>
<td>62029.04</td>
<td>22500.84</td>
<td>2.756743</td>
<td>0.0115</td>
</tr>
</tbody>
</table>

| R-squared | 0.749700 | Mean dependent var | 48784.65 |
| Adjusted R-squared | 0.715568 | S.D. dependent var | 72508.37 |
| S.E. of regression | 38670.27 | Akaike info criterion | 24.10417 |
| Sum squared resid | 3.29E+10 | Schwarz criterion | 24.29772 |
| Log likelihood | -309.3542 | Hannan-Quinn criter. | 24.15990 |
| F-statistic | 21.96485 | Durbin-Watson stat | 0.902920 |
| Prob(F-statistic) | 0.000001 | |