TOURISM AS AN EFFECTIVE TOOL TO STIMULATE ECONOMIC GROWTH: THE CASE OF SRI LANKA

Y. K. N. Kandewatta\textsuperscript{a}, A. N. Fernando\textsuperscript{b}, D.A.C. Silva\textsuperscript{c}

\textsuperscript{a}Assistant Lecturer, Department of Economics, University of Colombo
\textsuperscript{b}Assistant Lecturer, Department of Economics, University of Colombo
\textsuperscript{c}Professor, Department of Economics, University of Colombo

Abstract

Tourism-led growth hypothesis has been a key policy put forward by pro-tourist policy makers. This has no exceptions in the case of Sri Lanka. In the recent past the tourism industry has performed significantly which was reflected in the growth of Foreign Tourist Arrivals and Foreign Earnings from Tourists. On this backdrop this study was undertaken to investigate the existence of the Tourism-led growth hypothesis in the context of Sri Lanka. We used annual data from 1995 to 2016 to model the causal relationship between tourism and economic growth and thereby capture the long-term relationship using cointegration. The results of the study suggest a significant causal relationship from Foreign Tourist Arrivals and Foreign Earnings from Tourists to the Real Gross Domestic Product. This major finding inspired us to appraise the feedback from tourists as per the second objective of the study. The evaluation provided insights to areas that needs contemplation and avenues for advancements. It can be argued that economic policies should be directed to improving the tourism industry to achieve a higher economic growth.

Keywords: Foreign Tourist Arrivals (FTA), Real Gross Domestic Product (Real GDP), Foreign Earnings from Tourism (FET), Co-integration, Sentimental Analysis, Tourism-led growth hypothesis

1. Introduction

Income from International Tourism is the mainstay of the economy for many developing countries but political instability or an environmental disaster can divert the flow of visitors for years. The thus damaged trust is not easy to restore overnight. On the other hand, many smaller nations see tourism as a last resort rather than a development priority, allowing the industry to slip and its potential to boost the economy to remain silent.

The year 2017 marked a notable positive response from the tourism industry worldwide. International tourist arrivals grew by a remarkable 7% in 2017 to reach a total of 1.322 million travelers across the globe according to latest United Nations World Tourism Organization (UNWTO) barometer. Further, it highlighted about 6% growth in tourism arrivals to Asia Pacific region and they anticipate that international travel will continue to grow strongly and presume that tourism sector to be a key driver in economic growth and development.

Tourism led development has been a key strategy in Sri Lanka’s policy planning in the post war era. Despite the change in the ruling regimes the strategy to deploy tourism in the frontline to boost island economy stands. Even the present government’s ambitious policy document “Vision 2025” has also dedicated considerable attention to uplift the industry. On this backdrop the study primarily aims to find out whether there exists a significant relationship between tourism industry and economic growth of the country. Further it focuses on understanding key avenues to improve and cultivate in order to uplift the industry as a whole.
2. Research problem

The tourism industry in the country witnessed a comprehensive growth in number of tourist arrivals and has reached two million by last year. The backward and forward linkages from the industry has registered emergence of a number of employment opportunities and income sources. However, as a prudent policy measure it is essential to identify the weak factors and address them in advance to avoid any future complications.

The tourism-led growth hypothesis is in the forefront of Sri Lankan development agenda with the target of generating income and enhancing the livelihood of people. However, very little has been done to identify the actual relationship between the development in tourism industry and economic growth in the context of Sri Lanka, especially in the post-war period.

Therefore, identification of the actual relationship and finding practical ways and means to develop the industry is of utmost importance rather than fabricating ambiguous policies which can promote little improvement in the foreseeable future.

3. Objectives

The primary objective of the study is to identify the underline hypothesis of tourism-led growth. Further, the study incorporates a secondary objective to identify the existent issues in the industry from a tourist point of view. By doing so it is expected to get a clear understanding on areas that needed to be enhanced to ensure sustainable progress of the tourism industry in the country while optimizing its contribution to the Sri Lankan economy. The following research question is thus the basis for the study; “whether there exists a long-run relationship between tourism and Economic Growth where tourism can effectively stimulate Sri Lanka’s economic growth?"

4. Methodology

The study is based on secondary data compiled from the World Bank database and Tourism development authority. All information points were collected on annual-basis and converted to natural logarithms to avoid any heteroscedasticity problems. The Augmented Dickey-Fuller Unit Roots Tests were conducted to check the stationarity of the variables. To capture the existence of a long-run relationship that would facilitate the tourism-led growth hypothesis the study performed the Johansen’s Co-integration test, where data on Real GDP, Number of Foreign Tourist Arrivals (FTA) as proxy for tourism sector expansion and Foreign Earnings from Tourism (FET) from 1995 to 2016 were used. Finally, granger causality test was conducted to identify the direction of the causality.

However, our study was not limited to a statistical analysis as we needed to identify avenues for further improvements to boost the industry considering the views and feedback of tourists who visited Sri Lanka. In addition to statistical evidence we undertook a Sentiment Analysis based on foreign tourist blog commentaries on their visits to Sri Lanka. The non-probability: snowball sampling technique was used to select the sample for this section. The thus collected data were analyzed using descriptive statistical measures to identify the loopholes and areas that need attention.

5. Results and Findings

This section of the paper comprehends the major findings of the econometric derivations from conducting the Johansen Co-integration analysis followed by a discourse of inferences obtained
from the Sentiment Analysis. Initially the discussion of the study integrates descriptive statistical measures to recognize general features of the interest variables. Finally, policy recommendations are being offered.

Sri Lanka is said to have entered the international tourism market in the 1960s. (Wickremasinghe & Ihalanayake, 2006) Since then, the governments’ involvement has been a key factor in tourism development in Sri Lanka. The sector has been instrumental in generating foreign exchange, employment opportunities and household income for many Sri Lankans. It has been growing significantly, contributing remarkably to GDP. (Sri Lanka Tourism Development Authority, 2018) For example, international tourist arrivals to Sri Lanka increased from 403,000 in 1995 to 2,051,000 in 2016. (World Bank, 2018) We should acknowledge that there were several set-backs during few decades prior to the end of the civil war in the tourism development process. Thus, the hike in tourist arrivals from 2009 onwards is remarkable. This highlights the background to our study on investigating if the tourism-led growth hypothesis exists in Sri Lanka.

Graph 1: Tourist Arrivals 1995-2016

Initially, it is mandatory to recognize the preliminary relationship between the identified variables; real GDP, tourist arrivals and foreign exchange earnings. For this purpose, the correlation coefficient between real GDP and Foreign Tourist Arrivals in Sri Lanka and between real GDP and Foreign Exchange Earnings from tourism have been calculated over the sample period. The value of Pearson’s correlation coefficient (r) between real GDP and FTAs is 0.90. Similarly, the correlation coefficient between real GDP and FEEs is 0.95. Table 1 shows that these three variables are positively related over the sample period in Sri Lanka and that a very high degree of correlation is evident between them.

Table 1: Results of Pearson’s correlation coefficient

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>ARRIVALS</th>
<th>INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.00</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td>ARRIVALS</td>
<td>0.90</td>
<td>1.00</td>
<td>0.98</td>
</tr>
<tr>
<td>INCOME</td>
<td>0.95</td>
<td>0.98</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Next, it is essential to ascertain the nature of the series of the variables. The test results reported in table 2 from the Augmented Dickey-Fuller Unit Root Tests confirmations that all three variables; real GDP, Foreign Tourist arrivals and income from foreign tourist were all stationary at their first difference. Thus, as all the variables are integrated at the same level, i.e. \( I(1) \), we have conducted the Johansen Co-integration.

Table 2: Results of Augmented Dickey-Fuller Unit Root Test

<table>
<thead>
<tr>
<th>Variables in their respective Differences with intercept</th>
<th>ADF Statistic</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNGDP**</td>
<td>-3.68</td>
<td>Reject Null hypothesis of no unit root</td>
</tr>
<tr>
<td>LNFTA**</td>
<td>-3.65</td>
<td>Reject Null hypothesis of no unit root</td>
</tr>
<tr>
<td>LNFE**</td>
<td>-4.39</td>
<td>Reject Null hypothesis of no unit root</td>
</tr>
</tbody>
</table>

Note: Level of significance: *at 1% (-3.81), **at 5% (-3.02) and ***at 10% (-2.65)

The Johansen’s Co-integration test has been performed to investigate whether a long-run equilibrium relationship holds between the research variables. The Co-integration between the stationary variables has been tested by the Johansen’s Trace and Maximum Eigenvalue tests. The trace test indicates the existence of one Co-integrating relationship at 5% level of significance. And, the maximum eigenvalue test confirms these results. Thus, there is sufficient evidence that there exists a long-run equilibrium relationship between any of the three variables, Real GDP, Number of foreign tourist arrivals and Earnings from tourism.

Table 3: Results of Johansen’s Co-integration Test

<table>
<thead>
<tr>
<th>Hypothesized Number of Cointegrating Equations</th>
<th>Eigen Value</th>
<th>Trace Statistics</th>
<th>Critical Value at 5% (p-value)</th>
<th>Maximum Eigen statistics</th>
<th>Critical Value at 5% (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None*</td>
<td>0.71</td>
<td>35.31</td>
<td>35.19 (0.48)</td>
<td>22.59</td>
<td>22.29 (0.04)</td>
</tr>
<tr>
<td>At Most 1</td>
<td>0.39</td>
<td>12.71</td>
<td>20.26 (0.38)</td>
<td>9.14</td>
<td>15.89 (0.41)</td>
</tr>
<tr>
<td>At Most 2</td>
<td>0.18</td>
<td>3.58</td>
<td>9.16 (0.48)</td>
<td>3.58</td>
<td>9.16 (0.47)</td>
</tr>
</tbody>
</table>

Note: * denotes rejection of the hypothesis at 0.05 level of significance.

Furthermore, the existence of cointegration implies the existence of Granger causality at least in one direction (Mishra, 2011). This can be clearly identified upon the application of the Granger causality framework which confirms the existence of a long-run causality between the identified variables. Accordingly, there is sufficient evidence that Foreign Tourist Arrivals granger causes Real GDP growth while, Foreign Earnings from Tourists granger causes growth of Real GDP during the period of study at 5% level of significance.

These finding provide sound foundations for policy makers to enhance the focus on the industry in order to boost both economic conditions as well as the tourism sector of Sri Lanka. Utilizing the comparative advantage, the country holds with respect to its strategic location and inbuilt natural resources, there is much more the sector can offer in years to come.

This segment of the out discussion conducts a sentimental analysis to comportment the reviews and feedback of guests to the country to facilitate the growing demands and needs for better quality enhancement in the industry. Although it is not a common method deployed in research, in this nature we believe that it could provide more insightful information on the tourism industry. Target groups have emerged based on post-civil war arrivals and all information points from social media platforms are used in the comprehensive analysis to identify and
acknowledge the flaws and improve. Compared to other methods such as interviews and focus group discussions, the tourist can find it more convenient in terms of the time and more freedom to give his or her own view about the industry as they express their views in online own platforms.

One of the key findings from the Sentiment Analysis is, despite having number of tourist attractions in the country; majority of tourists who visited the country has been to few places such as Sigiriya, Yala National Park and beaches in the Galle and surrounding areas. Tourist attractions in Trincomalee and Hill Country seems to have comparatively lower popularity among foreign tourists. This may be subject to vary with the season that they are visiting the country. However, this characteristic is not that positive as far as the future of the tourism industry in the country is considered. The high concentration of tourists in some areas would act as a burden to the sustainability of the industry as it may negatively affect the animals and the nature. On the other hand, if the tourists are to revisit the country in the future, it is critical to understand that majority of these tourists will not come just to have the same experience. Therefore, it is of timely importance to promote alternative tourist destinations in the country and enhance the awareness among tourists about these alternative options in order to deviate these extensive concentrations to certain locations. Further, in terms of transportation facilities available in the country almost every visitor was not happy about the time that they had to spend on roads and the quality of the transport. Not only improvement of infrastructure but also to increase access to information about available facilities such as pre-booking of tickets in trains and busses should be readily established.

In contrast, some admirable actions towards the promotion of the tourism industry has been taken in the recent past such as relaxing the price controls on hotels prices and improvement of the infrastructure facilities. In addition to that easy payment mechanism such as cashless payment facility would make it easy for tourists to deal with their spending more conveniently because in some rural parts of the country internationally recognized cards payments are not possible.

One of the eye openers from this study was the failure to meet tourists’ expectations could easily lead to shift tour plans to other regional destinations. Some blog writers had rescheduled their tours to countries like Philippines having been failed to get the expected experience from the country. This shows that Sri Lanka’s tourism industry needs to be equipped to cater a wider range of tourists rather than limiting itself to a few segments. Also, attention should be needed, because despite having done much activities to promote tourism in the country it may not deliver expected outcomes rather it would increase tourist arrivals to other peer countries at the expense of Sri Lanka.

6. Conclusion

In this paper, the relationship between real GDP, foreign tourist arrivals and foreign exchange earnings for a small open economy like Sri Lanka has been investigated using time series data. It is clear from the data that after the end of the war tourism figures have hiked dramatically. Though the country has failed to meet the set targets for tourist arrivals the numbers are impressive and are growing each year. However, the country needs to be cautious about the sustainability of this growth figures.

The findings of this study support the hypothesis of tourism-led growth for developing countries. The positive relationship between number of tourists arrived and GDP growth implies further improvement in tourism activities in the country to positively affect to GDP. The expansion of tourism industry does not extensively limit to the income generated from foreign exchange, rather it has a number of positive spillover effects as it would create many
employment opportunities for the backward linkages emerging around the tourism related service sector.

The findings of the sentimental analysis, suggests that Sri Lankan tourism industry is extensively depending on five segments such as nature, historical tourism where as there is a high potential to develop the industry in areas such as adventure tourism, mass tourism, eco-tourism and sustainable responsible tourism. Despite the fact that most of the blog writers who visited Sri Lanka had positive views about the industry some fundamental issues such as poor public transportation, unavailability of facilities in rural part of the country has led to redirect the tourists to countries like Philippines.

Despite the shift in the ruling parties in the country the significance of the tourism industry in economic policies has not shifted. Therefore, actions towards sustainable tourism is needed to be implemented to obtain the optimal contribution from the industry to the country. Nevertheless, it is mandatory to understand that the government’s involvement should be to facilitate the industry rather than becoming a sole protector of the industry.

References

Deler, J. (2018). Sri Lanka is My New Favorite Place! Available at: https://www.youtube.com/watch?v=Xm08-J7auxc

Fallis, B. (2018). Sri Lanka - Safari Yala National Park. Available at: https://www.youtube.com/watch?v=ExKs9aoJXg

Hielkema, A. (2017). Sri Lanka round trip. Available at: https://www.youtube.com/watch?v=V2kHPgAxSqk


Nguyen, K. (2018). Sri Lanka 2018 | Travel Video. Available at: https://www.youtube.com/watch?v=6iKPg6uVx6M


Yesenia A. (2016). *Trincomalee and Arugam bay*. Available at: https://www.youtube.com/watch?v=kglKPK_UjEg
