

---

**THE IMPACT OF TOURISM ON ECONOMIC GROWTH: EVIDENCE FROM CAPE VERDE**

**Ladson Pires Andrade**

Hunan University, Changsha, Hunan Province, China.

Post Code:410079

**ABSTRACT**

As the leading worldwide job-creating economic sector tourism is regarded as an engine of growth. It generates 10.4% of global GDP and generates millions of jobs annually. This paper investigates the influence of the tourism industry on the economic growth of Cape Verde between the years 1990 until 2017. The ARDL approach has been applied to check the long-term association among the variables in the study. The results of the study prove that tourism exerts considerable influence on Cape Verde's growth over the past three decades. This can also be understood as a long-term association between GDP, political stability, inflation, and the expenditure of intercontinental travelers. In contrast, the exchange rate is seen as a negative influence on the growth of the state.

**KEYWORDS:** Tourism receipts, ARDL approach, growth, Cape Verde.

**1. INTRODUCTION**

Tourism generates affluence by encouraging the exportation of goods and creating jobs making a leading sector globally. The tourism activity accounts for nearly 10.4% of GDP, and create 300 million jobs, roughly 10% of the total employment in 2017. Between the years 1997 to 2001, the number of visitors rose from 45,000 to 115,000 (Sánchez Cañizares, et al., 2016). This meant an increase from 2 % in 1997 to 6.8% by 2001. By 2017, 716,000 travelers were arriving in Cape Verde. Most of the visitors are from Europe's richest nations who are attracted to the nation's climatic condition and extraordinary peak scenery. Windsurfing, trekking, seafaring, and diving are among several activities that attract travelers to the state.

In 2016 17% of the GDP came from industry and construction, 7% from fishing and agriculture with the service sector accounting for 76% (Lobban, 2018). Therefore, the economic prosperity of Cape Verde is primarily propelled by the services sector with, tourism contributing up to 45% of the overall GDP (Christie, 2014).

**2. LITERATURE REVIEW**

Research conducted by Soukiazis & Proença (2008), using panel data from Portuguese regions shows that tourism was crucial for the growth of the Portuguese economy. Therefore, it could be an alternative source for stimulating higher regional growth. Many authors, however, are divided about the long-term impact on economic growth to tourism with some considering its effect as insignificant.

As noted by Lee and Chang (2008), tourism has a higher effect on GDP in non- OECD nations than in OECD nations. Tourism has had the highest result in the Sub Sahara African nations despite the effects of the exchange rate on GDP.

Research into the relationship between growth in tourism and residents' quality life was researched by Carneiro, Eusébio, and Caldeira (2018), in which they highlight the positive impact on residents' social interaction though this varied depending on what aspect of social life researched. Satisfaction in local-tourist interactions was seen to influence the overall quality of life. This has led authors to conclude that the effect on tourism on locals and the economy is positive.

An example of the positive effect of the leisure industry on the economy was found by Mohammad Sharif Karimi (2018) in his study of Malaysia. He found a significant long-term effect on variables such as the exchange rate, trade, and inflation, which were important for Malaysian growth. Karimi concludes that tourism can stimulate growth, however, for it to have an effect the policymaker needs to promote inbound tourism effectively.

A cross-sectional study of 88 nations over the year 1995 to 2005 conducted by Po and Huang (2008), that looked at the nonlinear association between the expansion of tourism and GDP, divided all the data collected into three regimes for its analysis. The outcome of the threshold regression when ( $q_i$ ) is below 4.048% (regime 1, 57 nations) or above 4.73% (regime 2, 23 nations), there is an optimistic relation among tourism growth and GDP.

The effect of vacation industry enlargement on GDP was done by Tzu-Kuang (2016), who used a quantile analysis in analyzing the influence of the travel expansion on GDP at the end of the distribution (0.3 to 0.9 quantiles) of progress in Taiwan. Conversely, tourism expansion has an insignificant effect on GDP at the low-end distribution (0.1 to 0.2 quantiles) of enlargement. Therefore, the researcher argued that tourism will affect GDP, depending on the provisional division of growth. Andrew Phiri (2015) researched the effect of the leisure industry on GDP in South Africa. Phiri argued that the most direct effect came from tourist expenses rather than the number of travelers that arrived in the country.

The vacation industry is the dynamic driving force of growth in Cape Verde. It accounted for about 30% of the overall GDP and 90% of whole exports, (Lobban - 2018). In Cape Verde, the holiday business is claimed to be the primary driver for economic success or growth as it has effectively tapped into various natural possessions such as environment, biodiversity landscape. It is essential to understand that the islands are not only tourist destinations but also the global leader in renewable energy. Cape Verdean central leaders are working on ensuring that the place generates at least 50% of

the power draws from various renewable fonts such as wind, solar, etc. These are all aspects that are meant to have an indispensable input towards the growth.

### 2.1. An overview of tourism in Cape Verde

Although tourists who visit Cape Verde have mainly come from the richest percentile of the population their concentration on the state is striking (Lobban, 2018). Due to this Cape Verde is witnessing a building boon driven by foreign investors creating tourist accommodation. It's estimated that 95% of foreign direct investment are from vacation industry investments (Dos Santos and Campo (2014).

The vacation industry is thus becoming a productive industry for the overall economy. This service sector is not mass tourism and the diversity the states enjoy guarantees that there is something of interest for every visitor.

Most travelers who visit the state comes from the United Kingdom. There were about 4.5 million overnight stays in 2017. The UK tourist is said to stay the longest. Travelers from Belgium and the Netherlands spend an average of 7 nights (Lyon, 2012).

**Table 1: Top 5 tourists by country of residence in the year 2015 in Cape Verde.**

Rank	country	numbers
1	United Kingdom	126,680
2	Germany	76,450
3	Portugal	61,970
4	Netherlands	60,470
5	France	56,480

The cultural connections linking the tourist and locals for the duration of travelers are prevalent and they usually give rise vary in the living standard of the citizens by touching relationships. Families, and values systems, terms of creativity, behavioral patterns and attitudes, Sánchez Cañizares et al (2016). Two particular elements affect the state citizen's quality of life: the expansion of the vacation industry and tourist-resident relations. (Dos Santos & Campo, 2014). For the vacation industry to progress in a specific geographical location it is first vital to gain the collaboration of stallholders such as traveler promoters both in inland and coastal areas, civic agencies, endpoint societies (Meng & Siriwardana, 2017). It is of particular importance to consider the attitudes and perceptions of locals while designing any travel expansion project.

Thanks to the leisure industry, the republic at present receives more than half a million travelers annually who are drawn to its seashores, crystal clear waters, and endless sunlight (Fayisa, Nsiah and Tadesse, 2008). The republic has succeeded as it develops its status as a leisure industry hotspot. This

has led to a substantial influence on the Cape Verde economy (Correia, Oliveira and Butler, 2008).

Tourism has grown annually since 1990 and it's estimated that in 2000 it, directly and indirectly, contributed about 18% of Cape Verde's GDP (Irwin, Wilson & Cozens, 2011). This means that approximately \$ 318 million entered the Cape Verdean economy (Ryan, 2003). Their impact of tourism on the economy comes in the form of job creation, construction of new hotels, and security services in the resorts (Sánchez Cañizares et al, 2016). Christie (2014) despite the positive impact that tourism has brought to Cape Verde, however, it has also had some negative consequences. For example, there has been an increase in the price of property to buy in the area (Neto, 2003). Tourism is also said to cause social problems such as alcoholism, prostitution, and drug addiction, especially amongst residents (International Monetary Fund, 2009). In most instances, tourists are usually given priority over residents causing resentment (Melian-Gonzalez, A., & García- Falcón, 2003). Another adverse effect is westernization, which is seen as a threat to the traditional culture of the country. For example, Cape Verdean has started embrace certain aspects of western culture such as styles of dress and beliefs (Franklin, 2003).

**Table 2: Summary of Tourism Impact on Economy in Cape Verde**

<b>Positive impacts</b>	<b>Negative impacts</b>
Creation of new jobs	Increase the price of property and land
Improved financial infrastructure	Social problems such as prostitution, drugs, etc
Promote recreational and leisure activities	Employment of non-residents in Cape Verde
Improve road networks	Congestion of tourism attraction
Promotion of the local business	westernization
Business opportunities for residents	Tourist enjoy more privilege as compared to residents
An increase in the overall GDP	Increase in the cost of living

### 3. DATA AND METHODOLOGY

The long-run association between travel receipts and GDP has been researched and analyses by using the autoregressive lag distributed ARDL approach. This has been done base on annual data from the period of 1990 to 2017. The variables analyzed in the study, are GDP, tourism receipts, exchange rate, inflation, and political stability. GDP is used to represent long-term growth as the explanatory variable. Other aspects that are considered are exchange rate, inflation, and political stability, which show the macro and social stability representing the state competitiveness power in comparison to other nations. All data are transformed into the natural log to avoid possible changing variance and auto- correlation

partially, and the series has been analyzed in this way.

### 3.1. Model specification

The theoretical model used aim to analyze the long-term association among tourism receipts and GDP has been identified below regarding studies made by (Gunduz & Hatemi-J, -2005) where they argued that multicollinearity issue appears when tourism receipts are used. The authors suggest that the exchange rate should be used in the study of overseas tourism to deal with the possible omitted variable problems

Hence, inflation and political stability were added to the study to test out whether there was causality between the variables and the long-term association of these variables by using the ARDL technique.

$$GDP = f(TR, EXR, INF, PSTAB) \quad (1)$$

In the above equation GDP denotes to the gross domestic product, TR represents travel receipts; EXR refers to exchange rate; INF represents inflation rate and PSTAB refers to political stability; to study the long-term association and better analyzes the findings we use the logarithm form of the variables, as shown below in the equation 2.

$$\ln GDP_t = \beta_0 + \beta_1 \ln TR_t + \beta_2 \ln EXR_t + \beta_3 \ln PSTAB_t + \beta_4 \ln INF_t + \varepsilon_t \quad (2)$$

Where, (t= represents years 1990-2017);  $\beta_0$  means a constant  $\beta_1, \dots, \beta_4$  are the coefficient of the parameters; and  $\varepsilon_t$  means error term representing the factors which are not included in the deterministic part it is predictable that travel receipts add to GDP or in other word, the coefficient of travel receipt is significantly positive. The impact of the coefficient exchange rate, inflation, and political stability on economic growth are uncertain before the empirical analysis is done.

### 3.2. Augmented Dickey-Fuller Test

To analyze the long-term series involved along with the variables, it's necessary to examine whether series got unit root or not. The Augmented Dickey-Fuller (ADF) unit root test is one of the most commonly used tests in the time series. thus, it employed in our study as follows:

$$\Delta Y_t = \alpha + \beta_t + \rho Y_{t-1} + \sum_{i=1}^p \zeta_i \Delta Y_{t-1} + \mu_t \quad (3)$$

Lagged difference is a key component of this test to oppose the serial correlation. Therefore, we apply it as an approach to analyze the co-integration approach.

### 3.3. ARDL Bound test

ARDL technique is applicable when the variables got unit root at the mixed level, which means that some are stationary at level and others are stationary at first difference. Therefore, due to this problem we have applied autoregressive distributed lag (ARDL) bound test co-integration which we can see the co-integration association amid the variables. To check the long-term co-integration association in the variables the Error Correction Term must be positive. If it's positive and statistically significant it can show the long-run association. Other tests such as Bruesch Pagan Godfrey Test for auto-correlation and granger causality tests have been applied.

**4. RESULTS AND DISCUSSION**

Table 1 shows the lag length of each variable. The result of F-statistic exposed the co- integration association among GDP, tourism receipts, exchange rate, political stability, and inflation.

**Table3: Results of ARDL Bounds F-tests**

Variables	Lag length	F-statistic	Critical Value 1%		Critical Value 5%	
			I(0)	I(1)	I(0)	I(1)
LGDP  LTR, LEXR, LINF,LPSTAB	(2,1,3,0,3)	38.33298	3.74	5.06	2.86	4.01

Source: Author's computation

The table below contains the result of the short-term and long-term ARDL estimation. The short-term outcome of ARDL is significant for tourism receipts at lag (-1), at a 1% level of significance, exchange rate and inflation are also important at a 1% level, though political stability is irrelevant for the short-term. The negative and significantly (- 0.935858) error correction term (ECT) demonstrates the reversion for the long-term is at an adjustment speed of 93%. In other words, it explains the long-term relation amid the variables with a 1% level.

For the long-term, travel receipts, inflation, and political stability have a positive influence on GDP. The travel coefficient shows that a 1% rise in the vacation industry leads to a 62% rise in GDP at 1% at the level. In the same way, the coefficient of inflation says that a 1% change in price rises causes a 9.4% to enlarge in GDP at 5% level. Equally, the political stability indicates that a 1% variation adds up 3.7% on GDP at 5% level of significance. Furthermore, the coefficient of exchange rate that is not positive and insignificant shows no long-term effect on GDP. The outcome showed that the travel industry exerts a great influence on the Cape Verde economic progress.

**Table 4: ARDL Co-integration results**

Variables	Short- run Estimation	Long-run Estimation
-----------	-----------------------	---------------------

	Coefficient	Prob.	Coefficient	Prob.
LGDP (-2)	0.191386	0.0390		
LTR	0.140125	0.1276	0.620756	0.0000
LTR(-1)	0.440815	0.0026		
LEXR	-0.305463	0.0125	-0.087692	0.1973
LEXR (-3)	-0.192732	0.0374		
LINF	0.088390	0.0164	0.094448	0.0261
LPSTAB	-0.001535	0.9109	0.037684	0.0410
LPSTAB(-3)	0.018901	0.1556		
Constant	8.479438	0.0000	9.060608	0.0000
CointEq(-1)*	-0.935858	0.0000		
R-squared	0.9982			

Source: Author's computation

The next table gives us the results of residual and stability diagnostics. We have applied the auto-correlation test to check the residual; it's clear on the table with the intention of no auto-correlation. For hetero we applied the Breusch Pagan Godfrey test, the H0 hypothesis of (no hetero) is accepted as the probability is greater than 0.10%. An extra test is applied to confirm the practical form of the model such as Ramsey reset test.

**Table 5: Results of residual and stability diagnostic**

Tests	F-statistics	P-values
Heteroskedasticity test: Bruesch -Pegan-Godfrey	0.353093	0.9611
Bruesch - Gogfrey Serial correlation LM test	0.909332	0.4783
Jarque-Berra test	3.787682	0.150493
Ramsey Reset test	1.500985	0.2486

Source: Author's computation

## 5. CONCLUSION

From this research, it's evident that the leisure industry has had a substantial influence on the overall economic growth of Cape Verde. This results in job creation and taxes from the tourist activity, which adds to the total revenue of the state as well as, enhancing the financial structure and boosting the standards of living of national residents. These positive forces have led to an enhanced and more prosperous future of this state. Our findings showed the long-term positive influence of tourism, political stability, and



inflation on the state's economic expansion. Dissimilarity, the exchange rate shows an adverse influence on the growth of the state.

Based on the investigation conclusions we would suggest, firstly, that the government should implement a new strategy of growth based on the tourism industry. Second, public infrastructure between islands and improving their connectivity should be executed. Lastly, more social security policies should be introduced, which would improve the nation's reputation amongst its regional competitors.

## REFERENCES

- [1] Carneiro, M. J., Eusébio, C., & Caldeira, A. (2018). The influence of social contact in residents' perceptions of the tourism impact on their quality of life: a structural equation model. *Journal of Quality Assurance in Hospitality & Tourism*, 19(1), 1-30.
- [2] Christie, I., Fernandes, E., Messerli, H., & Twining-Ward, L. (2014). *Tourism in Africa: Harnessing tourism for growth and improved livelihoods*. The World Bank.
- [3] Correia, A., Oliveira, N., & Butler, R. (2008). First-time and repeat visitors to Cape Verde: the overall image. *Tourism Economics*, 14(1), 185-203.
- [4] Dos Santos, E. R. M., & Campo, M. L. R. (2014). Destination branding: A reflective analysis of Brand Cape Verde. *Place Branding and Public Diplomacy*, 10(1), 87-102.
- [5] Fayissa, B., Nsiah, C., & Tadasse, B. (2008). Impact of tourism on economic growth and development in Africa. *Tourism Economics*, 14(4), 807-818.
- [6] Franklin, A. (2003). *Tourism: an introduction*. Sage.
- [7] Fund, I. M., & International Monetary Fund. (2008). *Cape Verde*. Washington, International Monetary Fund.
- [8] Gunduz\*, L., & Hatemi-J, A. (2005). Is the tourism-led growth hypothesis valid for Turkey?. *Applied Economics Letters*, 12(8), 499-504.
- [9] Irwin, A., & Wilson, C. (2011). *Cape Verde*. Bradt Travel Guides.
- [10] Karimi, M. S. (2018). The Linkage Between Tourism Development and Economic Growth in Malaysia: A Nonlinear Approach. *International Economic Journal*, 32(1), 53- 65.
- [11] Kuang, T., & Tsai PhD, Y. F. (2016). The effect of tourism growth on economic growth: A quantile regression analysis.
- [12] Lee, C. C., & Chang, C. P. (2008). Tourism development and economic growth: A closer look at panels. *Tourism management*, 29(1), 180-192.
- [13] Lobban, R. A. (2018). *Cape Verde: Crioulo colony to independent nation*. Routledge.
- [14] López-Guzmán, T., Borges, O., & Castillo-Canalejo, A. M. (2011). Community-based tourism in Cape Verde-a case study. *Tourism and Hospitality Management*, 17(1), 35-44.
- [15] Lyon, S. M., & Wells, E. C. (Eds.). (2012). *Global tourism: cultural heritage and economic*



encounters. RowmanAltamira. <http://public.eblib.com/choice/publicfullrecord.aspx?p=878279>

[16] Melian-Gonzalez, A., & García-Falcón, J. M. (2003). Competitive potential of tourism in destinations. *Annals of Tourism Research*, 30(3), 720-740.

[17] Meng, S., & Siriwardana, M. (2016). Assessing the Economic Impact of Tourism: A Computable General Equilibrium Modelling Approach. <http://dx.doi.org/10.100/978-3-319-40328->

[18] Neto, F. (2003, August). A new approach to sustainable tourism development: Moving beyond environmental protection. In *Natural resources forum* (Vol. 27, No. 3, pp. 212-222). Oxford, UK: Blackwell Publishing Ltd.

[19] Po, W. C., & Huang, B. N. (2008). Tourism development and economic growth—a nonlinear approach. *Physica A: Statistical Mechanics and its Applications*, 387(22), 5535-5542.

[20] Rakić, T., & Lester, J. A. (2016). *Travel, tourism and art*. Routledge.

[21] Ryan, C. (2003). *Recreational tourism: Demand and impacts* (Vol. 11). Channel View Publications.

[22] Sánchez Cañizares, S. M., Castillo Canalejo, A. M., & Núñez Tabales, J. M. (2016). Stakeholders' perceptions of tourism development in Cape Verde, Africa. *Current Issues in Tourism*, 19(10), 966-980.

[23] Soukiazis, E., & Proença, S. (2008). Tourism as an alternative source of regional growth in Portugal: a panel data analysis at NUTS II and III levels. *Portuguese Economic Journal*, 7(1), 43-61.