

An Analysis of the Impact of Economic Growth, Political Instability and Exchange Rate on Tourism Growth in South Africa

Daniel Francois Meyer

School of Economics, North-West University, Vanderbijlpark, South Africa, Daniel.meyer@nwu.ac.za

ABSTRACT: Globally the tourism sector is one of the main economic sectors in attracting and generating foreign revenue. The sector accounts for seven percent of global foreign revenue as an export industry. In South Africa the low growth environment over the last decade has resulted in the need to find alternative economic sectors in support to traditional sectors such as mining and manufacturing, to drive higher levels of economic growth in the country. The aim of this study was to analyse the relationship between tourism as the dependent variable, and economic growth, exchange rate changes and political stability, as independent variables. The study region selected is South Africa, which is classified as a developing country and is in many cases seen as the proxy for emerging economies. This study followed a quantitative research approach with time series data from 1996 to 2017. The relationships between the variables were analysed by means of the Johansen cointegration, Vector Error Correction and Granger causality econometric models. The results indicated that there are both long and short-run relationships between the variables. A number of policy recommendations that could potentially contribute to the extension of the role of tourism in development include improved political and currency stability in the country as well as the relaxation of visa requirements.

KEYWORDS: Economic growth, political instability, South Africa, tourism

Introduction

Tourism is an important economic sector as it acts as an export sector, it generates income and tax revenue, creates jobs and alleviates poverty (Saha & Yap 2014; Seddighi, Theocharous & Nuttall 2002). The tourism sector is however affected by external factors such as political instability, social unrest and terrorism (Saha & Yap 2014). Over the last two decades, the tourism sector has continued to be the fastest growing sector in the world (Reddy, Basha & Kumar 2014). Tourism is seen as a key driver of economic development and socio-economic progress (UNWTO 2018). The tourism sector as an income generating sector has surpassed industries such as the motor vehicle industry and is ranked third overall behind only the chemicals and fuels industries (UNWTO 2018). International tourist arrivals increased by 7 percent to a total of 1.3 billion people in 2017 (from only 25 million people in 1950), while tourism generated US\$ 1.6 trillion in export earnings. This growth is expected to continue subject to global political stability. The tourism sector is important for global economic growth as it is responsible for 1 in 10 jobs, 10 percent of world GDP and 7 percent of global exports (UNWTO 2018).

Tourism has proven to be an effective sector for economic growth allowing for the diversification of local economies, attracting foreign investment which could lead to the improvement of the balance of payments, regional development, creation of employment and income, as well as the stimulation of domestic household consumption (Steiner 2006; Meyer & Meyer 2015). The Huron Business Development Corporation (2004) listed a number of factors for successful local economic development (LED) with a focus on the tourism sector which include political stability and commitment, investment in infrastructure, effective policies and planning, broad participation by all stakeholders, capacity, building on strengths, promotion of entrepreneurship and partnerships.

The African continent is lagging behind in terms of tourism development. Africa only receives 5 percent of the total international tourists (although it is growing at 9 percent per annum), and only 3 percent of tourism receipts (UNWTO 2018). Table 1 provides a summary of tourism data with a comparison between the world, Africa and South African data for total international tourist arrivals and tourism receipts in 2017. The South African tourism sector has been growing at a significantly lower rate than the rest of Africa due to reasons such as policy uncertainty, crime and strict visa regulations. South Africa only received 0.78 percent of international tourists and contributed only 0.61 percent of tourism receipts in 2017. The latest report by Statistics South Africa (2018) for the period

2017 to 2018 indicates that income in the accommodation industry contracted by 2.3 percent, and foreign travellers to the country decreased by 4.8 percent. For the period from 1996 to 2017, the average annual growth rate in tourism was 4.7 percent and for tourism spending (receipts) the growth rate was 5.8 percent.

Table 1. Global tourism comparison, 2017

Region	International tourist arrivals 2017			International tourism receipts 2017		
	Total number (millions)	Growth from 2016 to 2017	Share of global (%)	US\$ (billion)	Growth from 2016 to 2017	Share of global (%)
World	1 326	7%	100	1 340	5%	100
Africa	62.7	8.6%	4.70	37.3	3%	2.78
South Africa	10.3	2.4%	0.78 of world and 16.4 of Africa	8.18	3%	0.61 of world and 21,9 of Africa

Source: UNWTO, 2018

In terms of the WEF Travel and Tourism Competitiveness Report 2017 (WEF, 2017), South Africa (53rd) (lost six places since 2016 on the index), Mauritius (55th), Kenya (80th) and Namibia (82nd) are the most competitive travel and tourism destinations in Sub-Saharan Africa. Air connectivity and travel costs remain challenges as well as visa policies and infrastructure. South Africa's tourism competitiveness has deteriorated on two elements, safety and security (120th) and environmental sustainability (117th). According to Statistics South Africa (2016), tourism is an important sector in the South African economy. In 2015 South Africa had a positive tourism trade balance of R 36 048 million, an annual growth of 4.8 percent in domestic tourism expenditure, and tourism contributed 3% to total GDP in 2015 compared to 2.8 percent in 2011. In addition, a total of 711 746 people were employed in the tourism sector in 2015, compared to 622 929 in 2011 (one job in 22 jobs is in tourism). A total of 29 percent of people working in the tourism industry are employed in the transport industry, 20 percent in food and beverage, 19 percent in accommodation and 16 percent in trade.

The primary objective of the study is to assess the impact of economic growth and political stability on the tourism sector. The main research question is what type of relationship exists between tourism and growth as well as what is the impact of ongoing political instability on tourism. These relationships have not been tested using recent data in South Africa, and the implications of these relationships could have an impact on future policy formulation.

Literature review

This section of the study has its focus on the analysis of literature related to the relationship between the tourism sector and economic growth as well as the impact of political instability on tourism. Firstly, the relationship between tourism and economic growth is analysed by means of empirical results from previous studies. A large number of studies have been conducted regarding this relationship. Payne and Merver (2010) argued that the relationship between tourism and economic growth could be uni-directional or bi-directional. Lee and Chang (2008), analysed both OECD and non-OECD countries from 1990-2002 and found that changes in tourism caused economic growth in OECD countries with a coefficient of 0.36, while for non-OECD countries there are bi-directional relationships with a coefficient of 0.50. Chou (2013) analysed 10 transition countries for the period 1988 to 2011 and found that tourism growth causes economic growth in countries such as Cyprus, Latvia and Slovakia, while a reverse relationship was found for the Czech Republic and Poland where economic growth causes tourism growth.

For African countries, Fayissa, Nsiah and Tadasse, (2008) analysed the situation in 42 countries on the continent from 1995 to 2004 and found that tourism causes economic growth with a low coefficient of 0.03, while Durbarry (2004) in Mauritius from 1952 to 1999, found a bi-directional relationship between tourism and economic growth with a coefficient of 0.77. In Kenya, Kumar (2014) found that economic growth causes tourism for the period 1978 to 2010 with also a low coefficient of 0.08. Asian studies also provided some mixed results. Kim, Chen and Jang, (2006)

tested the tourism and economic growth nexus from the period 1971 to 2003 in Taiwan and found bi-directionality with a coefficient of 0.10. In Malaysia, Tang and Tan (2015) found that tourism causes economic growth from 1975 to 2014 with a coefficient of between 0.24 and 0.31. In South American countries the results of previous studies are also not conclusive. In Mexico, it was found that tourism causes economic growth for the period 1980 to 2007 with a relatively high coefficient of 0.69 (Brida, Carrera & Risso, 2008), while Brida and Risso (2009) for the period 1988 to 2008 in Chile found that tourism also causes economic growth with a high coefficient of 0.81 and also for Uruguay a coefficient of 0.42 was estimated.

Secondly, the impact of political instability, which could include terrorism, on tourism is analysed. Tourists are rational consumers, and they will take decisions on a destination by weighing up risks and costs involved. Higher levels of political instability increase the risk and cost of a destination. For this reason, high costs of political instability leads to the substitution of a destination for a more stable destination (Gu & Martin 1992). According to Simon (1982) political instability could flow from aspects such as strikes, protests, boycotts, efforts for nationalization, leadership struggles, low growth and high inflation, bureaucratic politics, border and internal factional conflicts, high levels of debt and corruption, etc. Literature indicates that political instability could impact the tourism sector negatively and some research even indicate that political stability is a requirement for a growing tourism sector (Hall 1994; Santana 2001).

Issa and Altinay (2006) indicate that political unstable countries struggle to have policy certainty with poor planning and implementation, leading to low levels of growth in the economy and tourism. The role and effectiveness of government in coordination of economic activities including tourism determines growth (Balaguer & Cantavella-Jorda 2002). Eilay and Einav (2004) analysed the impact of political risk on tourism growth. They found a relationship between a country's political risk rating and tourism growth and that political risk has a significant impact on growth in tourism. Destination risk has a significant impact on tourism, more than trade in other goods and services. According to Sonmez (1998), even strong growth in tourism can not provide a barrier or shield against the impact of political instability which could include components such as terrorism with examples in the Philippines, Fiji, Egypt, Zimbabwe and Turkey to mention a few.

Saha and Yap (2014) analysed the impact of political instability on tourism growth for 139 countries from 1999 to 2009. The results reveal that political instability has a severe and long-run impact on demand for tourism with a coefficient of 0.254. Seddighi, Theocharous and Nuttall (2002) analysed the impact of instability on tourism in Cypress, taking into account the sensitive nature of the industry and ever increasing competition between regions and countries. The main conclusions from the research include that instability is multi-dimensional and could have a spill-over effect where instability in one country or region could lead to instability in a neighbouring region. In this regard, tourism and economic planners need to understand the impact of instability on the sector and must, through policy try to reduce the negative impacts. Floyd, Gibson, Pennington-Gray and Thapa (2004) analysed the impact of the September 11, 2001 attack in New York looking at perceived risks on travel and found that issues for consumers included safety concerns, social risks, travel experience and costs (income) were significant predictors for future travel intentions.

Brown (1999) analysed political risk and the impact on tourism development in Africa. The results from the study are that regional instability has a larger impact on tourism development than globalised risks. Political risk has an impact on investment and tourism investment could include investment in accommodation, food and beverage facilities, transport infrastructure and services. The main barriers for tourism development in Africa were identified as crime and safety issues; political issues; service related issues; economic risks; health risks; infrastructure problems; cultural differences and image and marketing. In conclusion, it is apparent that a positive relationship exists between tourism and economic growth, but the direction of causality differs from region to region. The impact of political instability on tourism has also been proven in literature and empirical results.

Methodology

A quantitative research methodology was utilized in this study from a functionalist paradigm (Teddlie & Tashakkori 2009). Time series data were used to analyse the impact of economic growth, changes in exchange rate and political stability on tourism growth in South Africa from 1996 to 2017. The study period was selected to exclude the time frame of separate development in the country. To ensure variation is reduced within the data sets, all data were transformed to natural logarithms. In conducting the analysis, the statistical econometric software package, Eviews 9 was used. The variables included in the study are:

- **Tourism Index:** This variable is used as the dependent variable. This is a composite index variable consisting of equal weight of Tourism expenditure (receipts) and number to international tourists. Data set was obtained from Global Insight, (2018) and Statistics South Africa (2018). The variable is listed as LTI.

- **GDP per capita:** GDP per capita at constant prices is used as the proxy for economic growth. Data was obtained from the South African Reserve Bank (SARB), (2018). The variable is listed as LGDPC.

- **Exchange rate:** The specific exchange rate variable used in the study is the South African currency, the Rand, and its exchange rate to the US\$. Data was obtained from the South African Reserve Bank (SARB), (2018). An increase in this variable means the depreciation of the local currency while a decrease in the variable means an appreciation of the local currency. The variable is listed as LEXCH.

- **Political Stability Index:** Political Stability Index measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism in a specific country. The data set for political stability was obtained from the World Bank Worldwide Governance Indicators, (2018). The data set is an estimate of governance (ranges from approximately -2.5 (weak) to +2.5 (strong) governance performance). The variable is listed as LPOLSTAB.

The study investigates the relationship between the variables using the following model:

$$LTI = f(LGDPC, LEXCH, LPOLSTAB, e) \quad 1)$$

Where: LTI is the log of the tourism index; LGDPC is the log of Gross Domestic Product per capita; LEXCH is the log of the Exchange rate; LPOLSTAB is the log of the political stability index and e is the error term. The objective of the study is therefore an analysis to provide estimates of the relationships between the variables with the Tourism Index as the dependent variable. Due to the nature of time series data, the study will have to test whether or not the data series are stationary or non-stationary (Thayaparan, 2014). This is because time series data more often than not, is faced with a problem where the independent variables can appear to be significant than it actually is, if it has the same underlying trend as the dependent variable (Achen, 2001). Consequently, this results in a situation where the non-stationary series appear to be correlated even if they are not. For that reason, it is essential to test for stationarity conditions of variables in order to avoid spurious results.

The study employs the Augmented Dickey Fuller (ADF) (1981) unit root test for all the variables to test whether the variables are stationary at either levels $I(0)$ or first difference $I(1)$. This permits testing for cointegration amongst the variables using the Johansen's (1991) cointegration test. The Johansen's cointegration test is then estimated to assess the long-run relationship between the study variables. It should be noted that the Johansen's cointegration test involves two test statistics, namely; the Max-Eigenvalue and the Trace statistic. If the output of the model indicates the existence of a cointegrating equation or long-run relationship among the study variables, the next step will be to estimate the VECM to capture the short-run dynamics of the study variables. The Granger causality test is then estimated to determine the causality among the study variables and to also confirm whether the change in any series is uni-directional or bi-directional. Lastly, model diagnostic and stability tests are conducted to test for the stability of the model.

Results and Discussion

This section includes the results from the estimations and discussions of results compared to empirical findings from previous research. Figure 1 indicates the raw data for the four variables which were

logged and differenced. The impact of the financial crises are clearly visible on all four sub-graphs for the period 2007 to 2009, with recovery during 2009 towards 2010. The tourism index has shown negative growth since the boost of the Soccer World Cup in 2010 with slight recovery in 2015. The GDP per capita has steadily increased from 1996 to 2008, with a slight recovery in 2010 after the financial crises. Since 2011 however, the GDP per capita trend is negative due to low growth, steady population increases and migration. The Rand/US\$ exchange rate has shown a steadily depreciating and volatile local currency. Regarding political stability, the trend is also volatile with strong periods of political stability such as in 1998 and 1999, in 2004, 2006 to 2008. But overall political stability has shown negative trends overall, especially from 2016 onwards.

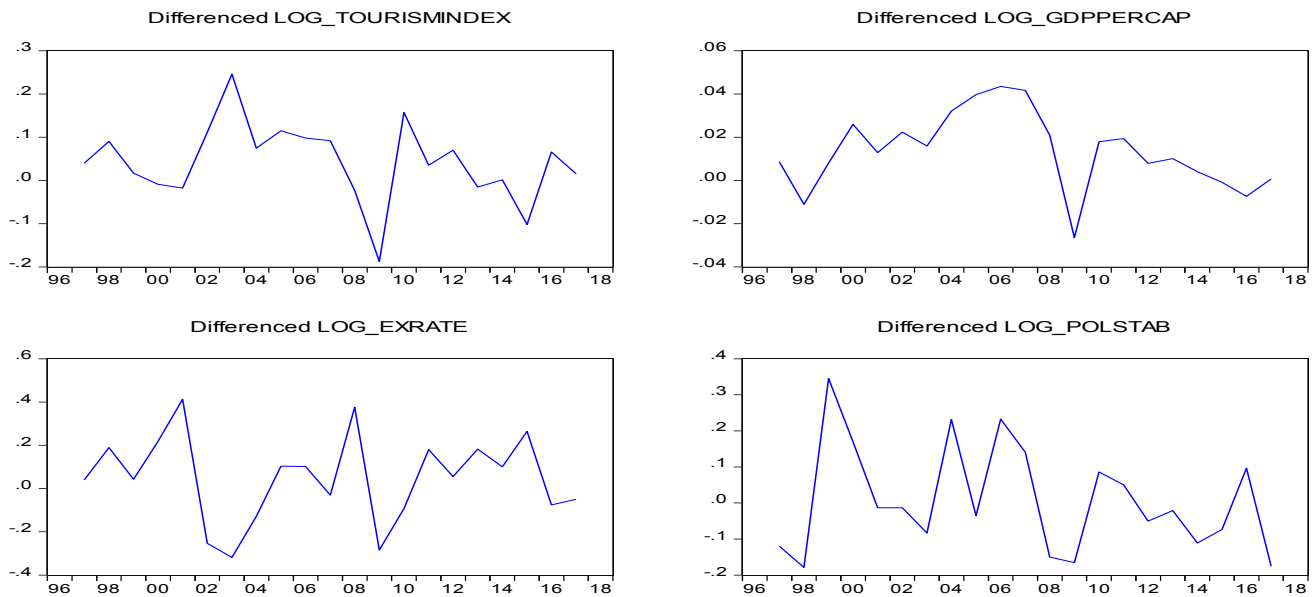


Figure 1. Trends analysis

Table 2 provides a summary of the correlation analysis with coefficients and significance values. The correlation between all variables are positive, and significant at the 1% significance level, except for the correlation between the exchange rate and political stability index. In terms of these results the correlation coefficient between the Tourism Index and GDP per capita is the highest at 0.96, followed by the coefficient between Tourism Index and political stability index.

Table 2. Correlation analysis

Variables	Tourism index (LTI)	GDP per capita (LGDPC)	Exchange rate (LEXCH)	Political stability index (LPOLSTAB)
Tourism index (LTI)	----			
GDP per capita (LGDPC)	0.9689 (0.0011)*	----		
Exchange rate (LEXCH)	0.5380 (0.0098)*	0.6485 (0.0011)*	----	
Political stability index (LPOLSTAB)	0.7725 (0.0025)*	0.7368 (0.0001)*	0.3173 (0.1500)	----

Note: The P-value is listed in (), and a 1% significance indicated as *.

Table 3 represents the Augmented Dicky-Fuller (ADF) unit root test results. Results reveal that all variables at levels have p-values above 0.05 significance level, suggesting that the variables are non-stationary at levels (I(0)). For that reason, based on the assumption of no stationarity, the null hypothesis is accepted. Accordingly, variables were tested at first difference, all variables have p-values below 0.05 significance level making them stationary. The null hypothesis of no stationarity is rejected at first difference or I(1). Therefore, the next step involves the use of the Johansen cointegration model to test

for long-run relationships or cointegrating vectors in order to establish whether the variable are integrated in the long-run.

Table 3. Augmented Dickey-Fuller (ADF) Unity Root Test

Variables	Level: I(0)		First difference: I(1)		Order of integration result
	t-stat	P-value	t-stat	P-value	
LTI	-1.5183	0.5050	-3.8460	0.0092*	I(1)
LGDP	-1.1490	0.6759	-1.9586	0.0490**	I(1)
LEXCH	-1.5406	0.4940	-4.1532	0.0048*	I(1)
LPOLSTAB	-1.7132	0.4105	-4.2709	0.0037*	I(1)

Note: * denotes P-value at 1% level of significance and ** at 5% significance.

A lag order selection criteria tests were conducted to obtain the optimal lag length for the Johansen cointegration examination and the VECM. Having determined that the variables are all integrated at first differences or I(1) order of integration, the study used four selection criterions, namely; HQ, AIC, FPE, and LR to determine the optimal lag to be used in the model. Therefore, one (1) lag was suggested as the optimal lag length. For that reason, one lag is used in Johansen cointegration test as well as VECM. Having established that variables are integrated at first difference and the optimal lag length, it is necessary to establish whether there exists a non-spurious and stable relationship with at least a single linear combination between the regressors. Therefore, the Johansen cointegration test was conducted based on the Trace statistic and Max-Eigenvalue statistics as reported in Table 4. Results indicate one cointegrating equation ($r \leq 1$) in Trace test statistic results as well as the Max-Eigenvalue revealed one co-integrating equation at 0.05 level of significance. Therefore, the null hypothesis of no cointegrating equation ($r=0$) is rejected. Henceforth, variables are cointegrated, simply implying that there exists a long-run relationship within the series.

Table 4. Johansen co-integration test results

Ho: No of CE(s)	Trace Test			Maximum Eigen-value		
	Trace Statistic	T-critical value	P-values*	Max-Eigen Statistic	T-critical value	P-values*
None*	58.1162	47.8561	0.0041*	37.7398	27.5843	0.0018*
At most 1*	20.3763	29.7970	0.3976	14.0358	21.1316	0.3621
At most 2	6.3404	15.4947	0.6553	5.6059	14.2646	0.6641

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

The presence of a cointegrating relationship between the variables indicates that the long-run equilibrium in LTI can be explained by LGDPC, LEXCH and LPOLSTAB. Results of the Johansen cointegration test sufficed the requirements of at least one single linear combination between the variables, the aforementioned is thus expressed in Equation (2) below:

$$LTI = 33.28815 + 0.5620(LGDPC) + 0.1316(LEXCH) + 0.4203(LPOLSTAB) \quad (2)$$

Equation (2) reveals that the long-run exhibits a positive impact by all independent variables on LTI. This implies that any increase in LGDPC, LEXCH and LPOLSTAB, leads to an increase in the tourism index (LTI). Accordingly, a one percent increase in LGDPC leads to a 0.56 percent increase in the tourism index. This result is similar as found by Lee and Chang (2008) in non-OECD countries with a similar coefficient of 0.5; also by Durbarry for Mauritius with a coefficient of 0.77. Interesting to note that in most African countries, very low coefficients have been reported by for example Fayissa, Nsiah and Tadasse (2008) with a coefficient of 0.03 and Kumar (2014) with a coefficient of 0.08. Additionally a percentage increase in the exchange rate (LEXCH) (depreciating currency), leads to a 0.13 percent increase in tourism (LTI). Also, a one percent increase in improved political stability (LPOLSTAB) leads to a 0.42 percent increase in tourism (LTI). Similar results were also found by

Hall (1994); Saha and Yap (2014). Provided that a long-run relationship exists between the variables, the VECM is used to assess short-run disequilibrium adjustments towards reaching the long-run equilibrium or cointegration between the variables as indicated in equation (2) (Meyer & McCamel, 2017). Additionally, the error correction term (ECT) is further used to convey the speed of short-run dynamic adjustments towards long-run equilibrium (Blecker, 2013). Therefore, it follows that conditions for explaining short-run adjustments towards reaching equilibrium in the long-run requires a significant t-value and a negative adjustment coefficient or ECT (Mukhtar & Rasheed, 2010). Results of the ECT are presented in Table 5. All variables expect for LEXCH have equations which meet the adjustment requirements towards long-run equilibrium with negative coefficients. Further suggesting that the series LTI, LGDPC and LPOLSTAB present evidence of error correction in the cointegrating equation.

Table 5. Vector Error Correction Model

Error Correction	D(LTI)	D(LGDPC)	D(LEXCH)	D(LPOLSTAB)
CoinEq1	-0.4896 [-2.0560]*	-0.07830 [-1.9652]*	-0.9027 [-1.0646]	-0.4900 [-2.1524]*
D(LTI(-1))	-0.1529 [-0.5295]	0.0100 [0.2159]	0.1324 [0.1886]	0.6534 [1.2201]
D(LGDPC(-1))	3.0236 [1.9657]*	-0.0439 [-0.1242]	3.5373 [0.6668]	-5.1373 [-1.2699]
D(LEXCH(-1))	-0.3002 [-2.5679]*	-0.0277 [-1.4674]	-0.0019 [-0.0067]	0.1089 [0.5022]
D(LPOLSTAB(-1))	0.0292 [0.1754]	0.0310 [1.1519]	0.6520 [1.6109]	0.0160 [0.0519]

Note: T-value in [], * indicates significance at 5% level.

Granger causality tests results are indicated in Table 6 indicating possible direction of causation on the short-run. The results indicates limited causality between variables. The results suggest a uni-directional causal relationship from tourism (LTI) to GDP per capita (LGDPC). This implies that short-run changes in South Africa's tourism sector cause changes in economic growth. Research by Payne and Merver (2010) and Lee and Chang (2008) also found that tourism causes economic growth and not vice versa. In addition, short-run changes in political stability (LPOLSTAB) leads to changes in GDP per capita (LGDPC), which indicates that if the political environment improves it could have a positive impact on economic growth and also leading to improved tourism conditions. Similar results were also found by Saha and Yap (2014) and Seddighi, Theocharous and Nuttall (2002).

Table 6. Pairwise Granger Causality

Null Hypothesis	F-stat	Prob.
Tourism index does not Granger cause GDP per Cap	12.8830	0.0021*
GDP per cap does not Granger cause Tourism index	6.8E-05	0.9935
Tourism index does not Granger cause Exchange rate	1.4918	0.2377
Exchange rate does not Granger cause Tourism Index	0.0182	0.8941
Tourism index does not Granger cause Political stability	1.1808	0.2915
Political stability does not Granger cause Tourism Index	3.1589	0.0465*
Exchange rate does not Granger cause Political stability	0.2858	0.5994
Political stability does not Granger cause Exchange rate	0.8255	0.3756
Political stability does not Granger cause GDP per cap	5.6376	0.0289*
GDP per cap does not Granger cause Political stability	0.0057	0.9403
GDP per cap does not Granger cause Exchange rate	1.6615	0.2137
Exchange rate does not Granger cause GDP per capita	2.02923	0.1714

Note: * indicates the rejection of the null hypothesis of no Granger causality at 5% significance.

In order to test the robustness of results, underscored in the study are diagnostic tests as indicated in Table 7. Results showed that the model successfully passed the test for heteroscedasticity, serial correlation and normality. Therefore, the null hypothesis are not rejected.

Table 7. Diagnostic test results

<i>Test</i>	<i>H0</i>	<i>Probability</i>	<i>Decision</i>
LM Test	No serial correlation	0.6671	With a P-value above 5%, do not reject the H0. Therefore, there is no serial correlation in the model.
White (CT)	No heteroscedasticity	0.2261	With a P-value above 5%, do not reject the H0. Therefore, there is no heteroscedasticity in the model.
Jarque-Bera	Residuals are normally distributed	0.5132	With a P-value above 5%, do not reject the H0. Therefore, there is no heteroscedasticity in the model.

Finally, stability testing using the AR root may be conducted to further assess the stability of the model as indicated in Figure 2. Figure 2 reveals that all AR roots are contained within the unit circle, meaning that the model is stable and robust.

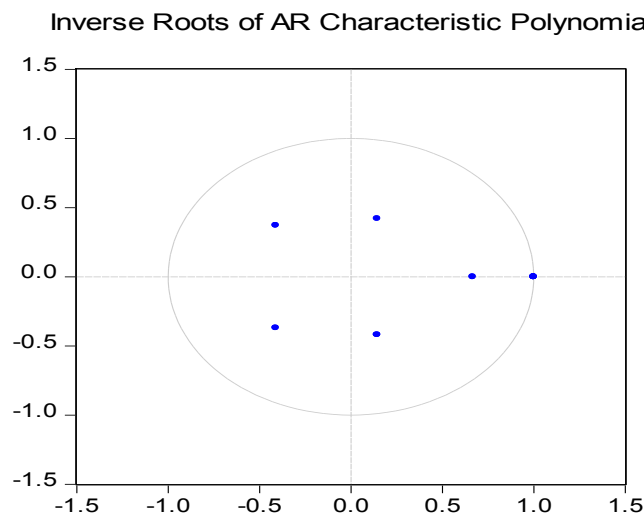


Figure 2. AR Root test

Conclusions and recommendations

Globally the tourism sector has shown continuous high levels of growth and is a main contributor to economic growth in both developed and developing countries. The main objective of the study was to determine the impact of economic growth and political instability on the tourism sector in a developing country. South Africa was used as a proxy for developing countries. The results of the study indicated that economic growth and political instability have a long-run impact on tourism in South Africa in terms of a Johansen cointegration model. Both long-run coefficients of economic growth and political instability are significant at 0.56 and 0.42 respectively. Globally these coefficients vary between from as low as 0.03 to up to 0.8. Significant short-run impacts were also identified between variables by means of the VECM. In addition, the Granger causality tests also confirms short-run relationships with tourism causing economic growth, and political stability also causes both growth in tourism and the economy.

Limitations to the study are that the global political instability index is only annual based data and only from 1996. Future studies could include more similar variables such as the effectiveness and government and even the size of government. The use of non-economic variables in conjunction with economic variables could provide interesting results for improved policy formulation. The results

from the study are interesting in that it not only confirms some of the findings from other empirical results, but the relatively high long-run coefficients indicate the relative importance of tourism for economic growth in developing countries and specifically for South Africa with its current low growth trap, and that the exchange rate changes has only limited impact on the tourism sector with a coefficient of 0.13. Also it was clearly established that political stability is a requirement on both the long and short-run for growth in tourism and the economy as a whole.

From this analysis and from the literature review, a number of recommendations are listed: the tourism sector is an important growth sector for both developed and developing countries and the sector should be the focus of any growth strategy; the tourism sector allows and support economic diversification with linkages to other sectors; the tourism sector can assist in the creation of jobs where limited skills exist; political stability is a requirement for tourism and economic growth with good governance and policy certainty; and political stability includes a save environment as a quality tourism destination.

References

- Achen, C. 2001. "Why lagged dependent variables can suppress the explanatory power of independent variables." Paper presented at the annual meeting of the political methodology section of the *American Political Science Association*, UCLA, 20-22 July 2000.
- Balaguer, J. & Cantavella-Jorda, M. 2002. "Tourism as a long-run economic growth factor: the Spanish case." *Applied Economics* 34(7): 877-884.
- Blecker, R.A. 2013. "Long-run growth in open economies." *The Oxford Handbook of Post-Keynesian Economics*, Volume 2: Critiques and Methodology, 390.
- Brida, J.G., Carrera, E.S. & Risso, W.A. 2008. "Tourism's impact on long-run Mexican economic growth." *Economics Bulletin* 23(21): 1-8.
- Brida, J.G. & Risso, W.A. 2009. "Tourism as a factor of long-run economic growth: An empirical analysis for Chile." *European Journal of Tourism Research* 2(2): 178-185.
- Brown, D.O. 2000. "Political risk and other barriers to tourism promotion in Africa: Perceptions of US-based travel intermediaries." *Journal of Vacation Marketing* 6(3): 197-210.
- Chou, M.C. 2013. "Does tourism development promote economic growth in transition countries? A panel data analysis." *Economic Modelling* 33: 226-232.
- Dickey, D.A. & Fuller, W.A. 1981. "Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica* (49): 1057-1072.
- Durbarray, R. 2004. "Tourism and economic growth: The case of Mauritius." *Tourism Economics* 10(3): 389-401.
- Eilat, Y. & Einav, L. 2004. "Determinants of international tourism: a three-dimensional panel data analysis." *Applied Economics* 36(12): 1315-1327.
- Fayissa, B., Nsiah, C. & Tadasse, B. 2008. "Impact of tourism on economic growth and development in Africa." *Tourism Economics* 14(4): 807-818.
- Floyd, M.F., Gibson, H., Pennington-Gray, L. & Thapa, B. 2004. "The effect of risk perceptions on intentions to travel in the aftermath of September 11, 2001." *Journal of Travel & Tourism Marketing* 15(2-3): 19-38.
- Gu, Z. & Martin, T.L. 1992. "Terrorism, Seasonality, and International Air Tourist Arrivals in Central Florida: An Empirical Analysis." *Journal of Travel and Tourism Marketing* 1(1992): 3-15.
- Hall, C.M. 1994. *Tourism and Politics: Policy, Power and Place*. Chichester: John Wiley and Sons. .
- Huron Business Development Corporation. 2004. *Best Practice in Rural and Small Town Economic Development*. Huron County, Canada.
- IHS Markit. 2018. *Global Insight Regional Explorer*. Johannesburg: IHS Markit.
- Issa, I.A. & Altinay, L. 2006. "Impacts of Political Instability on Tourism Planning and Development: The Case of Lebanon." *Tourism Economic*, 12 (3): 361-81.
- Johansen, S. 1991. "Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian vector autoregressive models." *Econometrica* 59(6): 1551-1580.
- Kim, H.J., Chen, M.H. & Jang, S.C. 2006. "Tourism expansion and economic development: the case of Taiwan." *Tourism Management* 27(2006): 925-933.
- Kumar, R.R. 2014. "Exploring the nexus between tourism, remittances and growth in Kenya." *Quality & Quantity* 48(3): 1573-1588.
- Lee, C.C. & Chang, C.P. 2008. "Tourism development and economic growth: A closer look at panels." *Tourism Management* 29(1): 180-192.
- Meyer, D.F. & McCamel, R.T. 2017. "A Time Series Analysis of the Relationship between Manufacturing, Economic Growth and Employment in South Africa." *Journal of Advanced Research in Law and Economics* 4(26): 1206-1218.
- Meyer, D.F. & Meyer, N. 2015. "The role and impact of tourism on local economic development: a comparative study: tourism and leisure." *African Journal for Physical Health Education, Recreation and Dance* 21(1.1): 197-214.

- Mukhtar, T. & Rasheed, S. 2010. "Testing long run relationship between exports and imports: Evidence from Pakistan." *Journal of Economic Cooperation and Development* 31(1): 41-58.
- Payne, J.E. & Merver, A. 2010. "The tourism-growth nexus in Croatia." *Tourism Economics* 16(4): 1089-1094.
- Reddy, P.C., Basha, A.M.M. & Kumar, M.V. 2014. "A study on tourism and poverty reduction." *International Journal of Trade and Global Business Perception* 5(1): 754-758.
- Saha, S. & Yap, G. 2014. "The moderation effects of political instability and terrorism on tourism development: A cross-country panel analysis." *Journal of Travel Research* 53(4): 509-521.
- Santana, G. 2001. "Globalisation, safety and national security." In Wahab, S. & Cooper, C., *Tourism in the Age of Globalisation*. London: Routledge. .
- Seddighi, H.R., Theocharous, A.L. & Nuttall, M.W. 2002. "Political instability and tourism: an empirical study with special reference to the microstate of Cyprus." *International Journal of Hospitality & Tourism Administration* 3(1): 61-84.
- Simon, J.D. 1982. "Political Risk Assessment: Past Trends and Future Prospects." *Columbia Journal of World Business*, Fall, 62-71.
- Sönmez, S.F. 1998. "Tourism, terrorism, and political instability." *Annals of Tourism Research* 25(2): 416-456.
- South African Reserve Bank. 2018. "Economic and financial data for South Africa." Accessed September 23, 2018. <http://www.resbank.co.za/webindicators/EconFinDataForSA.aspx>.
- Statistics South Africa. 2016. "Tourism National Accounts." Pretoria, Government Printer.
- Statistics South Africa. 2018b. "Tourism and migration." Pretoria, Government Printer.
- Steiner, C. 2006. "Tourism, poverty reduction and the political economy: Egyptian perspectives on tourism's economic benefits in a semi-rentier state." *Tourism Hospitality Planning and Development* 3(3): 161-177.
- Tang, C.F. & Tan, E.C. 2015. "Does tourism effectively stimulate Malaysia's economic growth?" *Tourism Management* 46: 158-163.
- Teddlie, C. & Tashakkori, A. 2009. *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Washington DC: Sage.
- Thayaparan, A. 2014. Impact of inflation and economic growth on unemployment in Sri Lanka: a study of time series analysis. *Global Journal of Management and Business Research* 14(5): 44-54.
- World Bank. 2018. Worldwide Governance Indicators. Accessed October 3, 2018. <http://info.worldbank.org/governance/wgi/#home>.
- World Economic Forum (WEF). 2017. *World Travel and Tourism Competitiveness Report 2017*. Accessed September 5, 2018. http://www3.weforum.org/docs/WEF_TTCR_2017_web_0401.pdf.
- World Tourism Organization (UNWTO). 2018. Why tourism? Accessed September 15, 2018. <http://www2.unwto.org/content/why-tourism>.
- World Tourism Organization (UNWTO). 2018. *UNWTO Tourism highlights, 2018 edition*, UNWTO. Madrid.