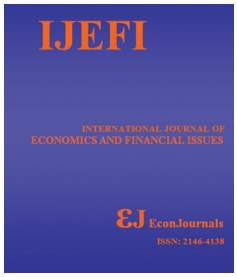

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The Implication of Political Risk and Specific Macroeconomic Variables on Total Revenue in Tourism Industry

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ABSTRACT

Political risk is one factor that influences tourism performance as a tourist is more sensitive to the hosting country's political environment. In addition, to the effect of country risk on the tourism industry, the global economy has recently experienced severe shocks due to high inflation rates, political risk, and currency volatility. This paper aims to investigate the implications of political risk, inflation, and exchange rate volatilities on tourism revenue in South Africa. A sample of 144 monthly data was used to assess both long-run and short-run relationships amongst the study variables using the ARDL cointegration and error correction model approaches to achieve the study objective. Results indicated that political risk, inflation rate, and exchange rate volatility influence long-term revenue changes in the tourism industry. In contrast, real effective exchange rates and inflation significantly impact total revenue in the tourism sector. The findings also indicated that political risk has no short-term effect on tourism revenue. Based on these findings, the study recommends that the country's political stability increase, increasing the number of tourist arrivals and resulting in growing revenue for the tourism industry in S.A. Additionally, the South African reserve bank should revise its exchange-rate pegging, monetary targeting, and inflation targeting to reduce the effects of inflation on tourism revenue.

Keywords: Exchange Rate, Political Risk, Tourism, South Africa
JEL Classifications: C01, G32, Z30

1. INTRODUCTION

According to the World Economic Forum (2017), tourism contributed 10.2% toward global economic growth (GDP), translating to US$7.6 trillion for the global economy in 2016. Tourism has become one of the highest income-generating sectors, ranked the third largest exporter-after fuel, chemical products, and food- and surpasses other industries, such as the motor vehicle industry (United Nations World Tourism Organisation (UNWTO), 2019). In 2015, the tourism sector generated 1.5 trillion US$ in revenue and contributed seven percent to total global exports (UNWTO, 2015). The sector is, therefore, one of the fastest-growing sectors globally, and its growth has continued over the last two decades (Akindoabe and Braimoh, 2015, Aynalem et al., 2016). S.A. has therefore become one of the top attractive places in the world for tourists and investors in the African continent (African Development Bank Group, 2015). According to Habanabakize and Dickerson-Koekemoer (2021) and Saha and Yap (2014), the tourism sector created a minimum of 292 million jobs in 2016 and accounted for 7% of global revenue in 2020 while assisting in poverty alleviation.

Like any other sector, the tourism sector is also vulnerable to risks, and as asserted by Saha and Yap (2014), the sector is influenced by various external and internal factors like economic and political instability, amongst others. From a political view, Muzindutsi and Manaliyo (2016) assert that since the dissolution of the apartheid regime in 1994, political risk in South Africa has been minimized through the country's consolidation of constitutional democracy. However, even though the end of the apartheid era suggested the beginning of political freedom and minimum political risk, according to Habanabakize and Dickason-Koekemoer (2021), this

is not necessarily true, as research has shown that even though S.A. is a post-apartheid area, political risk has reappeared. The political risk in South Africa results from various factors, including a high crime rate, high corruption rate, civil and worker unrest, xenophobia, and hostile policies toward foreign tourists (Standard and Poor's Global, 2016, Manaliyo, 2021).

On the other hand, from a macroeconomic view, S.A. also faces numerous economic challenges, such as consistent exchange rate volatility. For example, in 2016, the rand (ZAR) depreciated to its lowest level, where it depreciated against the U.S. dollar by 180%, from ZAR R3.56 per U.S. dollar to ZAR R10.5 per U.S. dollar (Mukalayi, 2021). This depreciation was also recorded in April 2020, when the rand was recorded at ZAR R18.98 per USD, recording a 6.9% depreciation (Focus Economics, 2020). In addition, inflation has also been on the rise, where inflation was recorded at a 5-year high of 6.5% in May 2022 (Stats S.A., 2022). The tourism sector is, therefore, not immune to any political, financial, or even economic shocks that occur in the country, and such instabilities disrupt tourism revenue and business activities in the country.

The economic and political climate prevalent in South Africa poses a serious threat to the tourism sector's revenue, as a tourist might not want to visit the country because of the high inflation rate, currency volatility, civil unrest, and high crime rates. Moreover, the economic and political climate in South Africa seems to be influencing the tourism sector's revenue, as the revenue of the sector was recorded at a massive high of 451 USD in June 2010, while a record low of tourism revenue was recorded at 3 USD in April 2020 (CEIC, 2022). If the country's macroeconomic challenges and political instability are not controlled, this translates to revenue lost by the country from tourists who decide not to visit South Africa anymore. Additionally, this is further highlighted by the decline in tourist arrivals to South Africa. In 2020 the number of tourist arrivals declined by 71%, from 18.8 million in 2019 to <5 million in 2020 (Stats S.A., 2021).

The UNWTO (2019) asserts that developed countries receive a significant share of tourist arrivals compared to developing countries due to economic, political, and financial factors. As such, the concept of revenue in the tourism sector is therefore essential since the tourism sector is among the vital employment creators in the country. Although many studies have attempted to investigate the tourism sector, many studies have analyzed the impact of economic growth on the tourism sector or the impact of political instability on the tourism sector. Other studies investigated its importance to local economic development or how the exchange rate affects the tourism sector. However, only a handful of studies have investigated the repercussions of changes in specific macroeconomic variables and political risk on the tourism sector's revenue. Therefore, this paper aims to determine the implication of changes in some macroeconomic variables and political risk on tourism revenue in South Africa. Therefore, this study also aims to contribute to the growing body of literature on the importance of effectively managing macroeconomic variable changes and political risks and their impact on the tourism sector's revenue. By so doing, this will assist policymakers in terms of identifying whether political risk affects tourism income, and which macroeconomic economic variables are significant in influencing the income of the sector.

2. LITERATURE REVIEW

One of the significant players in international commerce is the tourism sector, which is simultaneously a key source of revenue for many developing nations, like S.A. (WTTC, 2016). Thanks to its contribution to economic development, tourism is among the most critical sectors in an economy (Akan and Isik, 2009). This is because when foreign tourists spend money in the tourist destination country, this boosts the economy and makes a significant contribution to the domestic sub-sectors in different ways (Dincer et al., 2015). It is, however, worth noting that the economic climate of the tourist destination country is critical for the sector to prosper. The tourism sector is affected by various internal and external factors, including changing macroeconomic variables and political risk, which could affect the sector's income through the number of tourists who visit the country and spend money.

The link between the tourism sector and political risk has been studied throughout the literature, and political risk, as asserted by Scmidt (1986), is therefore regarded as the adaption of policies by host nation governments that restrict foreign investors' business operations. On the other hand, Howell and Chaddick (1994) identify political risk as the probability that various factors like actions, events, and conditions within the host nation, incorporating some factors which could also be considered social factors, will have an impact on the business environment to the extent that investors will face reduced profits if loss of money. The literature has thus shown that one or more risks make a nation's environment unconducive and hostile to tourism-related activities, thus causing a reduction in tourism receipts and arrivals (Poprawe, 2015). Risk is, therefore, an essential factor that tourists consider when they plan to travel to another country (Nugraha et al., 2016; Ferreira et al., 2019).

On the other hand, because the tourism sector is affected by the economic environment within which it operates, it is also quite clear from the literature that the sector can also be affected by adjustments in macroeconomic variables (Samirkas and Samirkas, 2021). For example, Pektas and Unluonen (2019) assert that one of the most significant economic issues is inflation, and according to Kelvin (2010), a consistent increase in the prices of all goods is known as the definition of inflation. Moreover, Purnomo (2017) adds that a consequent decrease in purchasing power of a currency is also a consequent decrease. Therefore, the two points of importance when referring to inflation are purchasing power and price increase. This is because the price increase includes price increases for specific things and services and considers the general increase in the total of various properties and services (Pektas and Unluonen, 2019). Therefore, the reduction in one country's purchasing power creates an atmosphere of uncertainty, which thus results in inflation, making it challenging for countries to choose economic issues (Gündoğdu, 2015). Inflation thus affects price stability, and as asserted by Van der Merwe et al. (2014), price instability causes an insecure environment, causing producers and consumers to think twice

about investing and spending (Gündoğdu, 2015). Additionally, because tourism and tourists provide foreign currency resources at a national and regional level to the destination country, this affects inflation because of the rise in tourist-related products, which are also affected by inflation (Pektas and Unluonen, 2019). It is often found that when the price difference between countries is reduced and people become wealthier, this causes an increase in tourism revenue (Khan and Lin, 2001).

Again, from the macroeconomic point of view, tourism is often regarded as an export item in the most recent theoretical models (Dincer et al., 2015). This is because tourism is among the few sectors that attract foreign currency and are open to international markets. Therefore, the importance of a country's currency policy is reflected in the link between the exchange rate and the tourism sector. This is because currency policy is a significant factor in foreign trade (Dincer et al., 2015). The nominal currency rate between two national currencies is referred to as the currency rate (Dincer et al., 2015). As such, the nominal currency needs to be adjusted according to the external and domestic inflation rates.

Regarding the inflation rate, various measures are taken to ensure a certain level of cohesion between currency rates, which are dependent on the exchange rate regime followed by the respective country (Dincer et al., 2015). Therefore, the central banks of counties implement the necessary measures to ensure that currency volatility is kept as minimum as possible. According to Seyidoğlu (2009), the real effective exchange rate thus refers to the relationship between domestic goods and services, and the price of these goods and services in external markets.

In the tourism sector, however, foreign tourist spending in the host nations' domestic market is thus considered. This is because goods and services are sold in the domestic market. They are subject to the domestic market's competition standards. The tourism sector is thus investigated on the bases of the reliance of the sector on international trade theory (Webster et al., 2007). The analysis is thus based on applying a quantitative technique to understand international trade theory and its link to tourism flows. Their study thus found a link between international trade theory and tourism flows. Therefore, numerous countries are involved in importing and exporting tourism services in the tourism sector. The exchange rate, therefore, influences the tourism sector in various ways. Firstly, the exchange rate has an impact on the total amount of tourists that visit a country, and secondly, the exchange rate has an impact on the total amount of money that tourists will end up spending (Dincer et al., 2015). This then links to the amount of spending within the sector and, thus, the amount of revenue generated. Therefore, according to Wang et al. (2008), tourists are then prone to travel to countries whose exchange rate favors them. According to Crouch (1994), the exchange rate can thus have a positive or negative impact on tourism. He further postulates that the exchange rate can thus also be used to determine the demand for tourism in a particular nation. The literature has also shown that many tourists consider the host nations when choosing the destinations which they would like to visit. Thus a low exchange rate regime encourages growth in tourism (Sinclair and Stabler, 1997)

Numerous empirical studies have been conducted concerning the above mentioned macroeconomic indicators and political risk in the tourism sector. According to Manaliyo (2021), the tourism sector battles to cope with political instability in the country. Various scholars (Gozgor et al., 2017; Buigut, 2018 and Khan et al., 2020; Dwi Haryanto et al., 2022; Omar et al., 2022; Arslan et al., 2023; Kocourková et al., 2024) assert that the tourism sector is affected negatively by political risk and acts of violence, corruption, crime, terrorism, and military participation in politics and political instability. This is because these factors play an essential role in the number of tourists coming into the country and hinders tourism activities in the destination country concerned. Therefore, when a country is associated with having high political risk, this causes reduced tourism arrivals and a reduction in tourism revenue (Muzindutsi et al., 2021). On the other hand, Santana-Gallego and Fourie (2020) show that the inflow of tourists in African countries is deterred by crime and terrorism. Therefore, political risk not only affects tourism arrival but also influences the sector's revenue.

Additionally, political issues like political instability, public unrest, and the lack of security cause a decrease in tourism inflow (Khalid et al., 2019). This was also supported by Lanouar and Goaied (2019), who found that Tunisian tourism activities were reduced because of terrorist attacks and political violence between 2000 and 2016. Moreover, Yap and Saha (2013) also indicate that although tourism arrival is an essential determinant of tourism revenue, they assert that an asymmetric relationship exists between tourism and political risk. Moreover, Muzindutsi and Manaliyo (2016) used data from January 2007 to December 2015 and investigated political risk shocks on tourism revenue in S.A. by using the ARDL methodology. The study found a long-run association between political risk and tourism revenue, which was not evident in the short run.

The European demand for tourism was modeled in Greece by Dritsakis and Gialetaki (2004), who used monthly data until the euro's switch, and their study found that the appreciation in the Greek drachma increased tourism revenue. Eilat and Einav (2004) further assert that the exchange rate matters for tourism revenue. On the other hand, Thompson and Thompson (2010) used data from 1974 to 2006 and investigated the exchange rate, euro switch, and tourism revenue in Greece. Their findings reveal that an appreciation of the currency leads to increased tourism revenue. Moreover, the study by Dincer et al., 2015 analyzed volatility in the real exchange rate and its impact on the tourism sector in Turkey from 2003-2014. The study revealed no evidence of a long-run relationship between a real effective exchange rate and tourism revenue, and no causality was found. Additionally, in their study, Dogru et al. (2019) used the ADRL method and found that exchange rate depreciation and appreciation affect the tourism trade balance between Canada, the United States, Mexico, and United Kingdom.

The consensus is that the tourism sector's performance can be characterized by numerous components consisting of conventional economic factors like inflation rate, money supply, and the exchange rate, and other non-economic factors like a financial crisis, security/

insecurity, and terrorism (Irani et al., 2021). Thus, in their study Kaya and Çömlekçi (2013) investigated exchange rate volatility and tourism revenue with monthly data from 2002 and 2011 and found a negative association between exchange rate volatility and tourism revenue. Moreover, Alalaya (2010) investigated the variables affecting tourism revenue, and the findings of the study revealed a long-run relationship between tourism revenue, inflation, and exchange rate. Furthermore, Meyer (2019) investigated the Malaysian tourism sector using time series data from 1996 to 2017. The study confirmed a long-run association between the tourism sector and a few macroeconomic variables like political instability, economic growth, and the exchange rate and further confirmed that political stability granger causes changes in tourism.

Finally, Muzinditsi et al. (2021) investigated the impact of economic, financial, and political risk on tourism performance in S.A. from 2004 to 2018. The findings revealed an asymmetric association between the long-run effects of country risk on tourism arrivals and revenue. Furthermore, the study also asserted that political risks significantly impact the tourism sector compared to financial and economic risks. Based on the existing studies related to tourism income, political risk, and macroeconomic variables, it is fair to conclude that a limited number of studies are investigating this relationship. Even though there is theoretical evidence on the repercussions of political risk and various macroeconomic variables on tourism sector revenue, the existing literature is however not in consensus. Therefore, the subsequent section thus provides an overview of the methodology followed in the study.

3. METHODOLOGY

The study's main objective is to determine the repercussions of changes in some macroeconomic economic variables such as inflation, real effective exchange rate, and political risk on tourism revenue in S.A. It is important to note that the consumer price index (CPI) was employed as a proxy for inflation. All the analyzed monthly time series data were collected from Quantec-Easy data. The sample period starts in January 2007 and ends in December 2019. The selection of the sample was motivated by the availability of data. Additionally, the study employed various tests such as unit root, bounds, and diagnostic tests. The estimation of short-run and long-run relationships was established using the ARDL model. All variables were transformed into a natural logarithm to avoid multicollinearity among variables and to ease result interpretation. The subsequent is the study model specification:

$$lnTREV_t = \propto_0 + \beta_1 lnTREV_t = \beta_2 lnCPI_t + \beta_3 lnPR_t + \beta_4 lnRER_t + E_t \quad (1)$$

lnTREV: Denotes the Log of total revenue for the tourism sector
lnCPI: Denotes the Log of the consumer price index (inflation)
lnPR: Denotes the Log of political risk
lnRER: Denotes the Log of real effective interest rate

3.1. Unit Root Test

Owing to the role played by the unit root test in time series analysis, this test must be conducted to establish the integration order of each variable. Although the literature represents a set of tests for unit root tests, the current study selected the Augmented Dickey-Fuller (ADF). Each variable or series must be estimated at levels and the first difference. The following is the estimated ADF equation for the unit root test:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta X_{t-1} + \alpha \sum_{i=1}^{p} \Delta X_{t-1} + u_t \quad (2)$$

In Equation 2, X represents the estimated variable, t represents the trend, p represents the lag term and u represents the error term or white noise. Parameters represent the set of (α_1, α_2, β_1,…β_m). Based on Equation 2, the hollowing hypotheses must be set up to determine whether a variable has a unit root or not:

H_0: δ=0: Estimated variable has a unit root (not stationary)
H_1:$\delta \neq 0$: Estimated variable has no unit root (is stationary)

The null hypothesis is rejected if the estimated variable has no unit root or is stationary at a level. Failure to reject the null hypothesis suggests that the variable has a unit root and therefore, it must be estimated at the first difference.

3.2. The Autoregressive Distributed Lad (ARDL) Model

The relationship between the dependent variable (total tourism revenue) and explanatory variable (inflation, real effective exchange rate, and political risk) was estimated using the error correction approach built on the ARDL model. The ARDL model originated from Pesaran and Shin (1998) and was improved by Pesaran et al. (2001). The model has many advantages, such as being efficient on a small sample, accommodating a mixture of I (0) and I (1) variables, and simultaneously estimating long-run and short-run results. The estimation of the ARDL model follows two significant steps, and the first one is to establish a cointegration among variables. The subsequent is the established ARDL cointegrating equation.

$$\Delta lnTREV_t = \propto_0 + \sum_{i=1}^{k} \beta_i \Delta lnTREV_{t-i} + \sum_{i=0}^{m} \delta_i \Delta lnCPI_{t-i} + \sum_{i=0}^{p} \eta_i \Delta lnRER_{t-i} + \sum_{i=1}^{q} \psi_i lnPR_{t-i} + \lambda_1 lnTREV + \lambda_2 lnCPI_t + \lambda_3 lnRER_t + \lambda_4 lnPR_t + e_t \quad (3)$$

Where Δ is the first differential operator while *k, m, p, and q* are the optimum number of lags? Following Equations 1 and 3, the

Table 1: Descriptive statistics

Central tendency measure	lnTREV	lnCPI	lnPR	lnRER
Mean	8.097090	4.196781	4.184184	4.705931
SD	0.267203	0.205077	0.031907	0.112947
Skewness	−0.242257	−0.135458	−0.175389	−0.080338
Kurtosis	2.141726	1.894361	2.223768	2.607383
Jarque-Bera	6.314024	8.422910	4.716278	1.169771
Probability	0.042553	0.014825	0.094596	0.557170
Observations	156	156	156	156

Table 2: Augmented Dickey-Fuller unit root results

Variable	At level		At first difference		Status
	Intercept	Intercept & Trend	Intercept	Intercept & Trend	
lnCPI	0.9987	0.9315	0.0000***	-------	I (1)
lnRER	0.0284**	-------	-------	-------	I (0)
lnPR	0.2413	0.3345	0.0000***	-------	I (1)
lnTREV	0.0351**	-------	-------	-------	I (0)

and * significant at 5% and 1% revel respectively

next hypotheses were set to establish the presence of a long-run relationship amongst variables.

H_0: $\lambda_1=\lambda_2=\lambda_3=\lambda_4=0$ (variables cointegrate)
H_1: $\lambda_1\neq\lambda_2\neq\lambda_3\neq\lambda_4\neq0$ (variables do not cointegrate)

The conclusion on hypotheses is made based on the comparison between the critical bounds value and the value of the F-statistic. Variables cointegrate if the F-statistic value exceeds the upper-bounds critical values. If the F-statistic value is smaller than the lower bounds critical, the conclusion is that variables do not cointegrate, and therefore there is no long-run relationship among variables. If the F-statistic value falls between upper and lower bounds of the critical values, results are inconclusive. The presence of cointegration requires the second step of the ARDL model which is the estimation of the Error Correction Model (ECM). The ECM was estimated using the following equation:

$$\Delta lnTREV_t = \propto_0 + \sum_{i=1}^{k} \beta_i \Delta lnTREV_{t-1} + \sum_{i=0}^{m} \delta_i \Delta lnCPI_{t-1} + \sum_{i=0}^{p} \eta_i \Delta lnRER_{t-1} + \sum_{i=1}^{q} \psi_i lnPR_{t-1} + \lambda ECT_{t-1} \quad (4)$$

Where the ECT represents the error correction term and its coefficient λ denotes the speed of adjustment towards the long-run equilibrium. Before the presentation and discussion of results, stability and diagnostic tests were conducted to ensure that valid results are presented.

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics

The summarized values of the primary measures of central tendencies of employed data are shown in Table 1. The mean value of *lnTREV*, *lnCPI*, *lnPR*, and *lnRER* is 8.097, 4.197, 4.184, and 4.706 respectively. The *lnTREV* is of the highest discrepancy or asymmetry as indicated by its standard deviation result. This implies that tourism revenue is more volatile and unpredictable. On the other hand, political risk has the lowest volatility level compared to other study variables. The result of skewness as a measure of the discrepancy rate of the variables indicates that all variables have left tails real effective exchange rate having the longest. The kurtosis for all variables is leptokurtic relative to their normal distribution as they are all <3. The Jarque-Bera statistics, if far from zero, suggest rejecting the null hypothesis of normal distribution. This concludes that the sample data is not normally distributed.

4.2. Unit Root Results

As mentioned before, the unit root test is important when analysing time series data. For the current study, the unit root test was conducted using that ADF test, and the results are reported in Table 2. Two variables, namely real effective exchange rate and tourism total revenue, are stationary at a level while the other two, a consumer price index and political risk, are stationary after the first difference. Given that variables are a mixture of I(0) and I(1) integration order, the ARDL model is the appropriate approach to analyze their relationships.

Table 3: F-bounds test

Test statistic	Value	Null hypothesis: No levels of relationship		
		Signif.	I (0)	I (1)
F-statistic	10.83639	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

Table 4: Long run coefficient of ARDL (4, 3, 1, 0)

Variable	Coefficient	SE	t-statistic	Prob.
lnCPI	1.028894	0.070294	14.637008	0.0000***
lnPR	−0.623813	0.474708	−1.314099	0.0191**
lnRER	−0.346453	0.104893	−3.302912	0.0012***
C	8.041653	2.029188	3.962990	0.0001***

and * significant at 5% and 1% revel respectively

Table 5: Error correction model and short-run dynamics results

Variable	Coefficient	SE	t-statistic	Prob.
D (lnTREV(-1))	0.208819	0.102617	2.034943	0.0437**
D (lnTREV(-2))	0.148608	0.096170	1.545272	0.1245
D (lnTREV(-3))	0.188184	0.083692	2.248533	0.0261**
D (lnCPI)	1.100902	2.075099	0.530530	0.5966
D (lnCPI(-1))	7.373333	3.143924	2.345264	0.0204**
D (lnCPI(-2))	−5.512702	1.918481	−2.873472	0.0047***
D (lnPR)	0.836129	0.785778	1.064078	0.2891
D (lnRER)	−0.250651	0.079398	−3.156904	0.0020***

*, **and *** significant at 5% and 1% revel respectively

4.3. Bound Test for Cointegration

The obtained results from bound testing for cointegration are displayed in Table 3. These results indicate that the value of the F-statistic is 10.83639 and is far away greater than the upper bound critical value at a 0.01 significant level. Consequently, it can be inferred that the study variables cointegrate in the long run.

4.4. Long-run Estimation Results

Table 4 displays the coefficients of a long-run relationship between dependent and explanatory variables. The selected ARDL model was based on Akaike Information Criterion (AIC) and indicates that all independent variables are statistically significant to influence

Table 6: Summary of diagnostics tests

Test	Null hypothesis (H_0)	P-values, P values and Chi-square	Decision
White (No Cross Terms)	Homoskedasticity	0.2896 0.3293 (Chi-Square)	H_0not rejected
Breusch-Godfrey Serial Correlation LM Test	No serial correlation	0.8729 0.8638 (Chi-Square)	H_0 not rejected
Jarque-Bera (J.B.)	There is normality	0.0944	H_0 not rejected
Durbin-Watson stat	residuals are uncorrelated	2.135803 (Stat)	H_0 not rejected
Jarque-Bera (J.B.)	There is normality		H_0 not rejected
Ramsey RESET Test	The model is well specified	0.8083	H_0 not rejected

long-term changes in the dependent variable. Two variables, namely political risk (lnPR) and real effective exchange rate (lnRER), have an adverse long-run impact on tourism total revenue (lnTREV). A one percent increase in political risk leads to approximately a 0.624 percent decline in tourism revenue, while a one percent increase in real effective exchange rate results in approximately 0.346 decrease in total revenue from the tourism sector. Contrary to political risk and exchange rate, inflation has a positive relationship with total revenue in the tourism sector. In other words, a one percent increase in consumer price index or inflation leads to a nearly 1.0289 increase in tourism revenue. This implies that, on the one hand, when the market price of other things increases, the tourism industry also increases its prices and rates. On the other hand, the reduction in the value of the domestic currency stimulates more international tourists to visit South Africa. However, it is essential to note that high inflation implies the loss of purchasing power of a given currency. Therefore, might not be a real increase as figures of income received by the industry might have increased while the value of revenue received is equal to or lower than the one received before high inflation.

4.5. ECM and Short-run Analysis

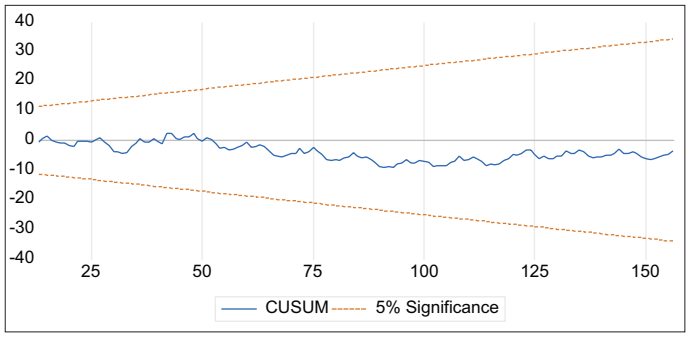
A long-run relationship suggests determining the speed of adjustment of short-run shocks towards the long-run equilibrium. This is done through the estimation of the error correction term. The result in Table 5 shows the value of the error correction term 0.723479 negative and statistically significant. This value suggests that nearly 72 percent of the model's short-term fluctuation is corrected in the long run. Consequently, it will take approximately 1 month (1/0.723479) to revert to long-run equilibrium.

The result presented in Table 5 also indicates that the current total revenue in the tourism industry is influenced by income from the previous month as the lagged value of lnTREV is statistically significant. Additionally, the inflation rate and exchange rate determine short-run income in the tourism industry. Thus, positive changes in the exchange rate and inflation rate causes positive changes in tourism revenue. The result, nonetheless, suggests that short-term changes in political risk have no significant effect on total revenue in the tourism industry in the short term.

4.6. Diagnostic and Stability Tests

The research conducted diagnostic and stability tests to assess whether the estimated ARDL (4, 3, 1, 0) met the required econometric assumptions. Table 6 displays the result of performed tests. As indicated in Table 6, the ARDL (4, 3, 1, 0) model passed all the estimated tests. In other words, no serial correlation, no heteroscedasticity, residuals are normally distributed, and the model is well specified. In addition to the results in Table 6, Figure 1 indicate that the CUSUM graph remained within its boundaries during the sample period. This suggests the consistency of the study's variables' relationship desiring the analyzed period. In other words, significant changes in explanatory variables did not alter their relationship with total income in the tourism industry.

Figure 1: CUSUM for Stability diagnostic test



5. CONCLUSION

South Africa has been experiencing fuel price increases and inflation rates with growing political risks ranging from political disputes, high corruption levels, workers' strikes, and civil unrest. All these factors impede the country's economy and place the country among risky countries. Besides harming the country's various economic industries, including tourism, these factors also impede the county's image and thereafter, reduce tourists' arrivals and tourism revenue. The core objective of this study was to assess the effect of inflation, real effective exchange rate and political risk on total revenue within the South African Tourism industry. The result from the unit root indicated that the selected variables were a combination of level and first-order integration.

Consequently, the ARDL model was selected as an adequate approach to estimate relationships among variables. The ARDL results indicated an inverse relationship between real effective exchange rate, political risk, and tourism total revenue. On the contrary, changes in the inflation rate were found to have a positive relationship with the total revenue in the tourism industry. The estimation of the short-run relationship indicated that only real effective exchange rate and inflation have a significant effect to influence changes in short-term income. Political risk was found to have no significant effect on tourism total revenue. Based on these findings, the study recommends the country's political stability

increase so that the number of tourist arrivals increases which results in industry revenue growth.

Additionally, the South African reserve bank should revise its exchange-rate pegging, monetary targeting, and inflation targeting to reduce the effects of inflation on tourism revenue. Furthermore, increasing fuel reserves and introducing new forms of energy would assist in reducing the burden of fuel prices on South African businesses. Despite the study's contribution, the study faces limitations such as focusing only on the domestic tourism industry. Therefore, future studies may consider broadening the scope and analysing the impact of employed explanatory variables on global tourism total revenue.

REFERENCES

Africa Development Bank Group. (2015), Unlocking Africa's tourism potential. African Tourism Monitor, 3(1), 1-53.

Akan, Y., Işık, C. (2009), The Impact of Foreign Visitor Spending on Economic Growth (1970-2007). Anatolia: Turizm Araştırmaları Dergisi. p197-203.

Alalaya, M.M. (2010), Short and long terms through co integration and GARCH models applied to Jordan tourism income: (1976-2008). European Journal of Economics, Finance, and Administrative Sciences, 19, 134-145.

Arslan, A., Qayyum, A., Tabash, M.I., Nair, K., AsadUllah, M., Nalini Daniel, L. (2023), The impact of economic complexity, usage of energy, tourism, and economic growth on carbon emissions: Empirical evidence of 102 Countries. International Journal of Energy Economics and Policy, 13(5), 315-324.

Aynalem, S., Birhanu, K., Tesefay, S. (2016), Employment opportunities and challenges in tourism and hospitality sectors. Journal of Tourism and Hospitality, 5(6), 1-5.

Buigut, S. (2018), Effect of terrorism on demand for tourism in Kenya: A comparative analysis. Tourism and Hospitality Research, 18(1), 28-37.

CEIC. (2022), South African Tourism Revenue. Available from: https://www.ceicdata.com/en/indicator/south-africa/tourism-revenue [Last accessed on 2022 Aug 02].

Crouch, G.I. (1994), The study of international tourism demand: A review of findings. Journal of Travel Research, 33(1), 12-23.

Dincer, M.Z., Dincer, F.I., Ustaoglu, M. (2015), Reel effective exchange rate volatilities impact on tourism sector in Turkey: An empirical analysis of 2003-2014. Procedia Economics and Finance, 23, 1000-1008.

Dogru, T., Isik, C., Sirakaya-Turk, E. (2019), The balance of trade and exchange rates: Theory and contemporary evidence from tourism. Tourism Management, 74, 12-23.

Dritsakis, N. (2004), Tourism as long-run economic growth factors: An empirical investigation for Greece using causality analysis. Tourism Economics, 10, 305-316.

Dwi Haryanto, R., Rahmawati, Y., Altamirano, O.G.R., Ahsani, S.F., Hudang, A.K., Haryanto, T. (2022), An empirical investigation between FDI, tourism, and trade on CO_2 emission in Asia: Testing environmental Kuznet curve and pollution haven hypothesis. International Journal of Energy Economics and Policy, 12(4), 385-393.

Eilat, Y., Einav, L. (2004), Determinants of international tourism: A three-dimensional panel data analysis. Applied Economics, 36, 1315-1327.

Ferreira, F.A., Castro, C., Carvalho, V. (2019), Tourism, terrorism, perceived risk and media. AIP Conference Proceedings, 2116(1), 110002.

Gozgor, G., Demir, E., Bilgin, M.H. (2017), The effects of the military in politics on the inbound tourism: Evidence from Turkey. Asia Pacific Journal of Tourism Research, 22(8), 885-893.

Gündoğdu, A. (2015), Analysis of inflation targeting while global finance crisis is still going on. International Journal of Economic and Administrative Studies, 8(15), 207-220.

Habanabakize, T., Dickason-Koekemoer, Z. (2021), The nexus between the tourism industry and country risk in South Africa. Hong Kong Journal of Social Science, 58, 275-284.

Howell, L.D., Chaddick, B. (1994), Models of political risk for foreign investment and trade: An assessment of three approaches. The Columbian of World Business, 9(3), 70-91.

Irani, F., Athari, S.A., Hadood, A.A.A. (2021), The impacts of country risk, global economic policy uncertainty, and macroeconomic factors on the Turkish Tourism Industry. International Journal of Hospitality and Tourism Administration, 2021, 1-24.

Kaya, V., Çömlekçiler, S.Ç. (2013), The effects of exchange rate volatility to tourism sector: The case of Turkey. Journal of Travel Hospitality Management, 10(2), 82-89.

Kelvin, L. (2010), Measuring economic activity In: Samuelson, P., Nordhaus, W.D., editors. Economics. New York: The McGraw-Hill Companies, Inc. p386-407.

Khalid, U., Okafor, L.E., Shafiullah, M. (2019), The effects of economic and financial crises on international tourist flows: A cross-country analysis. Journal of Travel Research, 59(2), 315-334.

Khan, H., Lin, C.C. (2001), International Trade and Tourism: Evidence from Co-Integration and Causality Test by Using Singapore Data. USA: TTRA.

Khan, M.A., Popp, J., Talib, M.N.A., Lakner, Z., Khan, M.A., Oláh, J. (2020), Asymmetric impact of institutional quality on tourism inflows among selected Asian Pacific countries. Sustainability, 12(13), 1223.

Kocourková, M., Kuziboev, B., Matniyozov, M. (2024), European tourism sector development in the context of energy uncertainty. International Journal of Energy Economics and Policy, 14(2), 410-418.

Lanouar, C., Goaied, M. (2019), Tourism, terrorism and political violence in Tunisia: Evidence from Markov-switching models. Tourism Management, 70, 404-418.

Manaliyo, J.C. (2021), The relationship between political risk an employment in tourism: A case of South Africa. Eurasian Journal of Social Sciences, 9(2), 78-88.

Meyer, D.F. (2019), The tourism sector in Malaysia: An analysis of the impact of Economic growth, polictial instability and the exchange rate. International Journal of Innovation, Creativity and Change, 5(2), 658-678.

Mukalayi, N. (2021), Does Exchange Rate Volatility Reduce South African Domestic Consumption? SA-TIED Woking Paper, 160. Available from: https://sa-tied.wider.unu.edu/sites/default/files/sa-tied-wp160.pdf

Muzindutsi, P.F., Dube, F., Manaliyo, J.C. (2021), Impact of economic, financial and political risks on tourism performance: A case of South Africa. GeoJournal of Tourism and Geosites, 38(4), 1309-1319.

Muzindutsi, P.F., Manaliyo, J.C. (2016), Effect of political risk shocks on tourism revenue in South Africa: Time series analysis. International Journal of Business and Management Studies, 8(2), 169-186.

Nugraha, A., Hamin, H., Elliot, G. (2016), Tourism destination decisions: The impact of risk aversion and prior experience. Asia Pacific Journal of Tourism Research, 21(12), 1274-1284.

Omar, J., Al Fahmawee, E.A.D., Al-Rawashdeh, O.M., Alrowwad, A., Alrjoub, A. (2022), Green energy products and the relationship of the customer's consideration for the environment and perceived risk involved with the mediating position of customer purchasing intentions. International Journal of Energy Economics and Policy, 12(4), 334-341.

Pektas, S.Y., Unluonen, K. (2019), The evaluation of tourism in turkey in terms of inflation. Journal of Tourismology, 6(1), 111-132.

Pesaran, M.H., Shin, Y. (1998), An Autoregressive Distributed Lag

Modelling Approach to Cointegration Analysis. In: Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium. Cambridge, UK: Cambridge University Press. p371-413.

Pesaran, M.H., Shin, Y., Smith, R.J. (2001), Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16(1), 289-326.

Poprawe, M. (2015), A panel data analysis of the effect of corruption on tourism. Applied Economics, 47(23), 2399-2412.

Purnomo, A. (2017), The effect of inflation on the currency exchange rate seen in the Islamic finance. Jurnal Muqtasid, 8(1), 42-53.

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.

Samirkas, M., Samirkas, M.C. (2021), The Impact of Exchange Rate on Tourism Industry: The Case of Turkey. Available from: https://www.researchgate.net/publication/297767167_the_impact_of_exchange_rate_on_tourism_industry_the_case_of_turkey [Last accessed on 2022 Aug 03].

Santana-Gallego, M., Fourie, J. (2020), Tourism falls apart: How insecurity affects African tourism. Tourism Economics, 20(10), 1-14.

Seyidoğlu, H. (2009), International Economics: Theory, Policy and Practice. Istanbul: Gizem Publications.

Sinclair, M.T., Stabler, M. (1997), The Economics of Tourism. London, UK: Routledge.

Standard and Poor's GLOBAL. (2016), S&P: Political Risks May Derail S.A.'S Economy. Available from: https://ewn.co.za/2016/06/07/s-and-p-political-risksmay-derail-saseconomy [Last accessed on 2022 Jul 28].

Statistics South Africa (Stats S.A.). (2021), S.A. Tourism Struggles Amidst Covid-19 Pandemic. Available from: https://www.statssa.gov.za/?p=14281 [Last accessed on 2022 Aug 02].

Statistics South Africa (Stats S.A.). (2022), Consumer Inflation Jumps to a 5-Year High. Available from: https://www.statssa.gov.za/?p=15463 [Last accessed on 2022 Aug 02].

Thompson, A., Thompson, H. (2010), Research note: The exchange rate, euro switch and tourism revenue in Greece. Tourism Economic, 16(3), 773-780.

United Nations World Tourism Organisation. (2019), International tourist arrivals reach two years ahead of forecasts. World Tourism Barometer, 17(1), 1-13.

United Nations World Tourism Organization (UNWTO). (2015), Over 1.1 Billion Tourists Travelled Abroad in 2014. Tourism Press Release No 15006. Available from: https://media.unwto.org/press-release

Van Der Merwe, E., Mollentze, S., Leshoro, T.L., Rossouw, T.L., Vermulen, C. (2014), Monetary Economics. 2nd ed. Cape Town: Oxford University Southern Africa.

Wang, H., Chen, N., Lu, C. (2008), Tourism demand and exchange rates in Asian countries: New evidence from copulas approach. Third International Conference on Convergence and Hybrid Information Technology, 2, 1188-1193.

Webster, A., Feltcher, J., Hardwick, P., Morakabati, Y. (2007), Tourism and empirical applications of international trade theory: A multi-country analysis. Tourism Economics, 13, 657-674.

World Economic Forum (WEF). (2017), Travel and Tourism Competitiveness Report 2017. Geneva, Switzerland.

World Travel and Tourism Council (WTTC). (2016), Travel and Tourism: Economic Impact 2016. London, United Kingdom: World Travel and Tourism Council.

Yap, G., Saha, S. (2013), Do political instability, terrorism, and corruption have deterring effects on tourism development even in the presence of UNESCO heritage? A cross-country panel estimate. Tourism Analysis, 18, 587-599.