# An assessment of the effects of political risk and exchange rate on tourist inflows to South Africa using time series data and the ARDL model

Jean Claude Manaliyo[*]

## Abstract

The tourism industry is a major contributor to the economy in developing and developed countries. The industry generates foreign currency earnings, promotes foreign investment, and promotes infrastructure development. However, the performance of the industry is influenced by political risk and variations in the exchange rate as they influence tourist arrivals. This study investigated the influence of political risk and exchange rate on the arrivals of tourists in South Africa. It used time series secondary data, involving political risk, exchange rate, and tourist arrivals as variables, and the Autoregressive Distribution Lag model was used to analyse data. The findings indicate that tourist arrivals in South Africa declined in the long-run if political risk increased, but an increase in political risk does not affect the arrival of tourists in the short-run. The findings also show that a rise in the exchange rate (implying the depreciation of the South African currency) attracts foreign tourists in the long-run, but not in the short-run. This study supports the findings of previous studies that an increasing political risk level adversely affects tourist arrivals, and an increase in exchange rate lures foreign tourists to a country. Thus, it is recommended

---

[*] School of Tourism Management & TREES, North-West University; jeclam08@gmail.com

that the level of political risk should be kept low for South
Africa to attract more international tourists.

**Keywords:** Exchange rate; political risk; tourist arrivals; ARDL
model, South Africa

## 1. Introduction

The tourism industry has emerged as a major contributor to
economic growth and improved social welfare in many developed
and developing countries, stimulating foreign investment, foreign
currency income, infrastructure development, employment
opportunities, and social interaction between tourists and host
communities (Khan et al., 2020; Polat et al., 2021; Zurub et al., 2015).
The contribution of the tourism industry transcends socio-economic
benefits. Tourism promotes globalisation and international
cooperation between countries and increases environmental
protection awareness (Chen et al., 2022; Jia, 2018; Song et al., 2018).
The performance of tourism depends on the extent to which the
industry is developed. A study has confirmed that countries with
developed tourism experience big economic growth than those with
less-developed tourism (Polat et al., 2021). Tourism requires a
sophisticated transport network and other facilities to ease the
movement of tourists from their home countries to host countries,
and within host countries. Catudan (2016) concludes that physical
infrastructure is an important determinant of tourist arrivals.

Available literature, however, illustrates that tourism is vulnerable
and susceptible to political risk linked to bad governance, crime,
conflicts, political instability, corruption, and terrorism (Biagi &
Detotto, 2014; Chulaphan, 2021; Ekine, 2018; Garidzira, 2021;
Gholipour & Foroughi, 2019; Tiwari et al., 2019). High levels of
political risk impede tourism development because they erode the
ability of the affected country to provide tourism infrastructure and
facilities needed by tourists. Tourism infrastructure and facilities
lubricate tourism operations. Poor tourism infrastructure and
facilities dampen tourist experience, and they deter the inflow of
foreign tourists. One study in Poland indicates that the level of
transport infrastructure development has a significant impact on
inbound tourists (Gołembski & Majewska, 2018).

In addition, a high level of political risk makes countries inaccessible by international tourists as they become expensive, risky to visit, and hostile to business operations within the industry. Political risk may be defined as the probability that a political event or action of a government, government institutions, communities, and other groups of people such as terrorists poses a threat to the operations of businesses in a country. Examples of political risk events and actions include nationalisation of foreign businesses, breach of contracts, community protests, political instabilities, social unrest, discriminatory regulations, terrorist attacks, corruption, crime, and kidnappings (Phillips, 2006; Sottilotta, 2013; Wagner, 2000). In line with this definition, Yende (2019) reports that the increasing political risk factors such as protests, violence, and crime deter foreign tourist arrivals from visiting South Africa. Ghalia et al. (2019) argue that several tourism businesses can suspend their services and activities because of the political turbulence. Tourists are a major source of tourism income; a decline in the number of tourist arrivals means that tourism income is lost. Rasool et al. (2021) confirm that there is a causal relationship between inbound tourists and economic growth, but the relationship is bi-directional.

Alongside political risk, the exchange rate is another factor that determines tourist arrivals in a country. Variations in the exchange rate exert an influence on tourism investment and on tourism demand in host countries. The exchange rate has a direct impact on tourism development (Obi & Ogbeide, 2022). A country may be in high demand by tourists if its currency depreciates against other currencies because tourism products and services in the country become relatively cheap to tourists from countries with strong currency (Munir & Iftikhar, 2021; Sarchami et al., 2021). This affordability of tourism products and services in host countries does not only increase tourist arrivals, but it may also result in increased spending and length of stay by foreign tourists (Čavlek & Wanhill, 2015). The appreciation of a country's currency, on the other hand, makes the country expensive, leading to a decline in tourist arrivals. The influence of exchange rate on tourists' decision to travel to a country depends on the robust trading regimes of tourists' home currencies. In their study, Opstad et al. (2021) report that Swedish and German tourists to Norway responded differently to the variation in Norwegian currency. This paper investigated the effects

of political risk and exchange rate on tourist arrivals in South Africa. There are limited empirical studies related to the influence of the political risk and exchange rate on tourist inflows to South Africa.

The country faces several political risk factors that impede tourist inflows. The prevailing political risk factors include political instability, corruption, high crime rate, community protests for service delivery, strikes of workers, and high unemployment (Dludla, 2022; Ferreira & Perks, 2016; Marudu, 2017; Reinstein, 2015). It was reported that violent protests and crime in South Africa are deterrents to international tourist arrivals (De Villiers, 2017; Yende, 2017). Crime is cited indeed as a serious obstacle to luring international tourists to the country.  Dludla (2022) and Felix (2018) warned that crimes against tourists deter international tourists from visiting South Africa. The perception that South Africa is not safe may motivate foreign tourists to visit alternative countries that are perceived to be safe. Furthermore, the country experiences a high number of violent protests by communities and workers (Burke, 2022; Maromo, 2022; Morudu, 2017), which may affect tourists and tourism businesses.

South Africa's currency (Rand) has gradually been depreciating against strong foreign currencies such as British Pound, Euro, and the US Dollar in the past years (Omarjee, 2020; Reed, 2015; Stoddard, 2022). Some hypothetical views indicate that the depreciation of the South African currency boots the tourism industry (Bizcommunity, 2017; Chronicle, 2015; Cohen, 2016). For example, it was reported that the depreciation of the local currency caused by the political instability in December 2015 led to increased foreign tourist arrivals (Bizcommunity, 2017). The assumption is that South Africa as a tourist destination becomes relatively affordable to tourists from countries with strong currencies when its currency depreciates. Other views suggest that the devaluation of the local currency has devastating effects on the country's tourism industry. The devaluation of the local currency raises the operations of tourism businesses (Birns, 2015; Phillips, 2019), which may also cause an increase in the prices of tourism products and services, making South Africa expensive. The question this paper intends to answer is: to what extent the fluctuation in the exchange rate influences tourists' travel decision to South Africa.

## 2. Literature review

2.1 The relationship between political risk and tourist arrivals

Political risk is a determinant of demand for a country as a tourist destination. Empirical studies indicate that political risk factors such as corruption, political unrest, conflicts, terrorism, crime, and weak institutions influence tourists' choice of destinations (Chulaphan, 2021, Ekine, 2018; Ghalia et al., 2019; Gholipour & Foroughi, 2019; Lee et al., 2020). The increasing political risk factors in many parts of the world threaten the security and safety of tourists and their belongings. This galvanises tourists to consider the level of political risk when making a travel decision, selecting a destination, and determining travel time and duration (Brown, 2015). Haddad et al. (2015) found that countries that experience high political risk receive a small number of tourist arrivals compared to those that experience low political risk.

Tourists want to travel to destinations where they are safe and their belongings are protected. Studies indicate that there is a negative relationship between crime rates and tourist arrivals. Tourist arrivals plummet when crime rates go up, and tourist arrivals increase when crime declines (Garidzirai, 2021; Parida et al., 2018). Specifically, a study conducted in India reported that an increase of 1% in crime causes a decrease of 0.311% in tourist arrivals, but the effects happen in the short term (Parida et al. , 2018). Similar findings were reported in a study conducted in the Western Cape Province, South Africa, showing that tourist arrivals in the province contract by 1.18% when car hijacking goes up by 1%, and tourist arrivals plummet by 0.8631% if robberies increase by 1% (Garidzirai, 2021).

Matakovic and Matakovic (2019) reported interesting results demonstrating that experienced travellers are least affected by crime because of their previous travel experiences. The authors also disclose that female tourists are more likely to fall victim to crime compared to male tourists. Chugh (2015) found that crime deters repeat visits among female tourists. In implementing fighting and preventing crime policies to ensure the safety and security of tourists, the Taiwanese government, for example, commits itself to crack down on serious crime to ensure that tourists feel safe and secure (Lee et al., 2018). Recher and Rubil (2020) suggest that countries may

take a step further to inform tourists about the most prevalent crime at destinations and advise them on how to avoid being crime victims. However, there are instances where an increase in tourist arrivals leads to increased crime at a specific destination (Biagi & Detotto, 2014; Lee et al., 2018; Mawby & Vakhitova, 2022). A study conducted in Taiwan found that tourist arrivals and crime rate are positively correlated (Lee et al., 2018), suggesting the crime rate goes up when the number of tourists in the country increases. Mawby and Vakhitova (2022) also found that the presence of tourists was the cause of criminal activities and disorder in resort areas, and tourists are the main targets. Similarly, Biagi and Detotto (2014) posit that an increasing number of tourists at destinations creates an opportunity for criminal activities; a 1% rise in tourist arrivals heightens pick-pocketing crimes by 0.2%. However, Biagi and Detotto's results illustrate that the impact of tourism on crime is higher in cities than in other destinations.

Tourist arrivals are hindered by countries' internal or external conflicts. Amid conflicts, tourists avoid the affected country and choose alternative countries that offer similar tourism products and services. For example, Tomczewska-Popowycz and Quirini-Popławsk, (2021) found that tourist arrivals in Ukraine declined because of political conflicts in the eastern parts of the country. The longstanding political conflict between Pakistan and India over the Kashmir region also reduced the inflow of tourists in the Kashmir Valley between 1989 and 2002 (Shah & Wani, 2014). A study carried out in Africa and the Middle East also reported that tourist arrivals reduced in countries that experience intense conflicts. The reduction in tourist arrivals is not only due to fear among tourists that they may be killed or get injured, but because tourism facilities are destroyed in the conflagration (Karimi et al., 2021). In conflicts, tourism facilities are destroyed and looted. Numerous cultural and archaeological heritage sites were looted and destroyed in war-torn countries including Iraq, Libya, Syria, and Yemen (Kadi, 2018). Conflicts and violence do not only affect inbound tourists, they also adversely affect outbound tourists. Tekin (2015) found that Russian tourists to European Union countries declined, following sanctions imposed by European Union countries on Russia, indicating that Russian outbound tourism was affected.

Studies show that the tourism industry reacts negatively to terrorism (Ali et., 2018; Rauf et al., 2020; Seabraa et al., 2020). Terrorist attacks destroy tourism facilities and kill tourists and tourism employees (Rauf et al., 2020). A terrorist attack on a concert hall in Manchester that happened on 22 May 2017, for example, killed 22 people (Dory, 2021). In Turkey, terrorist attacks conducted by Islamic State on 1 January 2016 killed 39 people in a nightclub in Istanbul and 41 people at Istanbul Airport in June of the same year (Hayden, 2016). Terrorist attacks compel travellers to refrain from traveling to the affected countries, implying that countries hit by terror attacks experience reduced tourist arrivals. Rauf et al. (2020) confirms that the number of tourists who visit Pakistan reduces by 0.0154% if terrorist activities in the country increase by 1%. A study conducted in the United Kingdom also revealed similar results. The number of foreign tourists that visit the country plummeted by 975,126 when the country experienced a terror attack (Mao, 2019).

The effects of terrorism activities carried out in one country sometimes spill over to its neighbouring countries. Neumayer and Plümper (2016) posit that terrorist attacks that happened in one Islamic country targeting tourists from a Western country have ripple effects on tourism in other Islamic countries because tourists from all Western countries construe it that they are still targets in other Islamic countries. Consequently, tourists from Western countries end up shunning Islamic countries. Conversely, Mao (2019) found different results on the effects of terror attacks on tourism facilities in the United Kingdom, which indicated that terror attacks that occurred in any other European country have positive spill-over effects on tourism in the United Kingdom. This means that the country becomes an alternative destination when any European country is hit by terrorists.

There are instances where terrorist attacks have no major negative effects on tourism demand in the affected country, or the effects are only felt in the short-run. Koyuncu (2020) found that the repercussions of terror attacks in Turkey did not last long; tourism in the country recovered swiftly. Tourist inflows in countries that are attractive or offer unique tourism products that are not easily substituted are likely to remain uninterrupted by terrorist attacks

(Santa-Gallego et al., 2016). Measures taken by governments to respond to terrorism are also equally important in preventing a significant decline in tourist arrivals. The United Kingdom faced numerous terrorist attacks in the past years such as in 2008 and 2009, but foreign tourist arrivals consistently increased because the government reduced difficulties in visa application (Mao, 2019).

Corruption also features the list of determinants of the arrival of foreign tourists in a country (Chulaphan, 2021; Domareski-Ruiz et al., 2020; Ekine, 2018; Gholipour & Foroughi, 2019), but one portion of studies on the effect of corruption on tourist arrivals show contradicting findings. Some studies show that corruption and tourist arrivals have an inverse relationship, meaning that an increase in corruption has negative effects on tourist arrivals. Put differently, less corrupt countries receive an increased number of visitors whilst high corrupt countries experience a low number of visitors. For example, Ekine (2018) found that tourist arrivals swell by 18.8% if the level of corruption goes down by one point. A study that used data for the period of 16 years from more than 100 countries also verifies that the arrivals go up between 2 and 7% when corruption declines by one point (Poprawe, 2015).

Foreign tourists avoid corrupt countries because they are concerned for their safety and that of their belongings. Furthermore, it is argued that corruption abates a country's ability to compete with tourism in other countries. Domareski-Ruiz et al. (2020) argue that a country with a corruption level has strong tourism competitiveness in relation to a country with a high corruption level. The introduction of policies that aim at lowering the level of corruption, therefore, may improve a country's tourism competitiveness, leading to increased tourist arrivals. This argument is consistent with a study that found that foreign tourist arrivals in Turkey grow when the country lessens the corruption level (Demir & Gozgor, 2017).

Surprisingly, another portion of studies reported a positive correlation between tourist arrivals and corruption, suggesting that an increase in corruption lures tourists to corrupt countries (Santa-Gallego et al., 2016; Yap & Saha, 2013). The increase in tourist arrivals in corrupt countries may be attributed to the fact that tourists easily get visas and other travel documents in highly corrupt countries by paying bribes. For example, tourist arrivals increased in Uganda

during a period of ten years (1999 - 2009) amid a high corruption level in the country (Yap & Saha, 2013). However, corruption has a positive impact on tourist arrivals in developing countries (Santa-Gallego et al., 2016). Ekine (2018) also reported similar results which illustrate that the impact of corruption on arrivals is limited in non-democratic countries. This implies that corruption causes greater damage to tourism in democratic countries in comparison with non-democratic countries.

The magnitude of corruption on tourist arrivals is influenced by the distance between tourists' home country and the host country. Chulaphan (2021) found that corruption has more effects on tourist arrivals in Thailand if tourists' origin countries are far from Thailand. Corruption does not only trigger inbound tourists; it also influences outbound travel. A study that used data for the period of ten years (2007 - 2016) from 62 countries, disclosed that a high corruption level in a country promotes outbound business travel (Gholipour & Foroughi, 2019). The probable explanation for the increase in outbound business travellers in corrupt countries is that business travellers have money to pay a bribe for travel documents and to conduct illegal or unethical business activities. Business tourists are also more likely to travel to corrupt countries. Chulaphan (2021) posits that tourists from the least corrupt countries avoid traveling to countries that have a high corruption level.

## 2.2 The effect of exchange rate on tourist arrivals

The exchange rate plays a major role in influencing tourists to choose a country to visit. Studies in different parts of the world have shown that tourists consider the exchange rate between their home country and host countries when making travel plans (Gao et al., 2018; Khanalizadeh et al., 2019; Lee et al., 2018; Meyer, 2021; Özer & Küçüksakarya, 2021). Some tourists are sensitive to any change in the exchange rate to the extent that they cancel or alter their travel plans if the exchange rate change leads to increased travel costs. Tourists often react positively to an increase in the exchange rate (implying the depreciation of a host country's currency). Tourists from European countries (France, Italy, Spain, Sweden, and the United Kingdom) with intentions to visit the United States of America, for example, respond positively when their home currencies gain value against the US Dollar (Ongan et al., 2017). This

suggests that tourists are more likely to travel to countries whose currencies are weaker compared with their home currencies. The depreciation of local currency makes local tourism products and services relatively more affordable to countries with strong currencies (Opstad et al., 2021). Lee et al. (2018) disclosed that the depreciation of the Taiwanese currency (NTD) increases tourism in the country. Opstad et al. (2021) also found similar findings, which show that German tourists to Norway increase by 0.82% when the Norwegian currency depreciates by 1%.

The effects of the exchange rate on international tourist arrivals may be in the short-run, long-run, or both short- and long-run. The exchange rate in Malaysia, for example, exerts an impact on tourism in the long-run, tourism grew by 0.86% in the long-run when the exchange rate increased by 1% (Meyer, 2021). In Indonesia, the exchange rate has only short-run effects on arrivals (Millia et al., 2020). The short- and long-run effects of exchange rates on tourist arrivals were reported in Sri Lanka, but the effect was greater in the long-run than in the short-run (Rathnayake, 2018). There are instances where changes in the exchange rate do not influence tourist arrivals, meaning that foreign visitors do not react to the depreciation or appreciation of a host country's currency. For example, a large proportion (78%) of tourists who travel to Bali, India was not influenced by the fluctuation in the exchange rate, whereas 67.44% of tourists reported that their decision to travel to other countries is not influenced by the exchange rate (Nugroho et al., 2017). This is more likely to happen in countries that offer unique tourism products that are not easily substituted.

It was also found that tourists from different countries do not respond to exchange rates in the same way. Tourists from some countries react to the exchange rate whereas tourists from other countries are not influenced. For example, tourists from the United States of America and Germany to Egypt are less influenced by the depreciation or appreciation of the Egyptian currency whilst the inflow of Chinese, Indian, and Russian tourists to Egypt is determined by the depreciation or appreciation of the Egyptian currency (Anter & Nagy, 2018). The fact that China, India, and Russia are emerging economies, tourists from these countries are

likely to travel to relatively cheaper countries compared to tourists from advanced economies.

## 3. Methodology

3.1 Sampling and data description

The study used 180 monthly observations, for the sample period starting from January 2004 to December 2018. This sample was influenced by the availability of data, which is a secondary time series. The data is made of three variables: political risk (PR) for South Africa, average exchange rate (EXR) of the South African Rand against the US Dollar, and tourist arrivals (TA) in South Africa. Political risk and average exchange rate are independent variables whereas tourist arrivals are the dependent variable. The political risk index was requested from the International Country Risk Guide (ICRG), tourist arrivals were requested from Statistics South Africa (STATS SA), and the exchange rate was accessed from the website of the South African Revenue Service (SARS, 2022).

The political risk variable is based on the political risk index prepared and published by the Political Risk Services (PRS) Group (PRS Group, 2021). The index is calculated using twelve components, and each component is assigned scores as displayed in Table 1 below. The total scores of the twelve components are 100. The political risk level of a country is determined by its score on the political risk index. A country has a high political risk level if it has a high political risk index whereas a country has a low political risk level if its political risk index is low (PRS Group, 2021).

Table 1: Political risk components and their points

| Sequence | Component | Points (max) |
|----------|-----------|--------------|
| A | Government Stability | 12 |
| B | Socioeconomic Conditions | 12 |
| C | Investment Profile | 12 |
| D | Internal Conflict | 12 |

| Sequence | Component | Points (max) |
|----------|-----------|--------------|
| E | External Conflict | 12 |
| F | Corruption | 6 |
| G | Military in Politics | 6 |
| H | Religious Tensions | 6 |
| I | Law and Order | 6 |
| J | Ethnic Tensions | 6 |
| K | Democratic Accountability | 6 |
| L | Bureaucracy Quality | 4 |
| **Total** | | **100** |

**Source:** PRS Group (2021)

## 3.2 Model specification

The Autoregressive Distribution Lag (ARDL) model was used to determine the effects of political risk and exchange rate on tourist arrivals. The model was developed by Pesaran and Shin (1995) and modified by Pesaran et al. (2001). The decision to use the ARDL model is based on the results of both the Augmented Dickey-Fuller (ADF) unit root test and the Kwiatkowski-Phillips Schmidt-Shin (KPSS) stationary test. The ADF unit test was conducted to detect whether the study variables are stationary at levels $I(0)$, or are stationary at the first difference $I(1)$, or a mixture of both $I(0)$ and $I(1)$. The KPSS stationarity test, on the other hand, was conducted to find out when there is no variable that is found to be stationary at $I(2)$. These two tests are preconditions for the deployment of the ARDL model. The principle is that study variables must be stationary at levels $I(0)$, or at $I(1)$. Study variables may also be a mixture of $I(0)$ and $I(1)$, meaning that a portion of variables may be stationary at $I(0)$ and another portion may be stationary at $I(1)$. A study should not have any variable stationarity at $I(2)$ (Pesaran et al., 2001). The effects of political risk and exchange rate on tourist arrivals were tested using the following equation:

$$\Delta TA_t = \alpha_0 + \Sigma_{j=1}^{k}\beta_j \Delta TA_{t-j} + \Sigma_{j=1}^{k}\gamma_j \Delta PR_{t-j} + \Sigma_{j=1}^{k}\delta_j \Delta EXR_{t-j} + \varphi_1 TA_{t-1} +$$
$$\varphi_2 PR_{t-1} + \varphi_3 EXR_{t-1} + e_t \qquad\qquad (1)$$

Where $\Delta TA_t$ symbolises the change in the value of tourist arrivals at time t, $\Delta PR_{t-j}$ represents the change in political risk at time t, and $\Delta EXR_{t-j}$ stands for the change in the average exchange rate at time $t$. The short-run relationship on the other hand is denoted by the coefficients $\beta_j$, $\gamma_j$, and $\delta_j$ whereas the long-run relationship is denoted by coefficients $\varphi_1$, $\varphi_2$, and $\varphi_3$. The error correction term is represented by $e_t$.

The long-run relationship was tested under the following hypotheses:

$H_{0:}$ $\varphi_1 = \varphi_2 = \varphi_3$ (there is not a long-run relationship among the variables).

$H_{1:}$ $\varphi_1 \neq \varphi_2 \neq \varphi_3$ (there is a long-run relationship among the variables).

The above hypotheses were tested using the F- Bounds co-integration test, where the computed F-statistic was compared with the critical values within the lower bound I(0) and upper bound I(1). According to Pesaran et al. (2001), $H_0$ is rejected when the value of the computed F-statistic is above the critical values of the upper bounds, and $H_1$ is not rejected when the value of the computed F-statistic is below the lower bounds. In case the F-statistic is between the upper and lower bounds, it may not be concluded whether the variables have a long-run relationship or not. When a long-run relationship between variables exists, the Error Correction Model (ECM) has to be established to determine the adjustment of the equilibrium in the long-run. Thus, the ECM equation used to establish the adjustment was derived from the above ARDL model, and it is as follows:

$$\Delta TA_t = \alpha_0 + \Sigma_{j=1}^{K}\beta_j{}_\Delta \Delta TA_{t-1} + \Sigma_{j=1}^{K}y_j \Delta PR_{t-1} + \Sigma_{j=1}^{K}\delta_j \Delta EXR_{t-1} + ECT_{t-1} + e_t \quad (2)$$

Where $ECT_{t-1}$ symbolises the Error Correction Term. Furthermore, residual diagnostic tests such as serial correlation, normality, and heteroscedasticity were carried out to determine whether the required assumptions of the ARDL model are met.

## 4. Empirical results and discussion

4.1 ADF unit root and KPSS stationarity tests

The ADF unit root and KPSS stationarity tests were carried out to check if there are no variables that are stationary at the second difference, I(2). As aforementioned, the ARDL model is applied when a study variables are stationary at I(0), or at first difference, or are a mixture of both I(0) and I(1). The results generated by the tests illustrate that all the study variables (political risk, exchange rate, and tourist arrivals) are stationary at first difference. There were no variables stationary at second difference (Table 2). Hence, the results confirm the suitability of the ARDL model in this study.

**Table 2:** ADF unit root and KPSS stationarity test results

| Variable | ADF (t-values) | | KPSS (LM-Stat.) | | Order of integration |
|---|---|---|---|---|---|
| | I(0) | I(1) | I(0) | I(1) | |
| EXR | -0.684408 | -10.00972 | 1.460626 | 0.103294 | I(1) |
| TA | -2.283487 | -3.304275 | 1.081818 | 0.009226 | I(1) |
| PR | -1.541631 | -12.68868 | 1.499059 | 0.072764 | I(1) |

**Source:** Author

4.2 F-Bounds co-integration test

The F-statistics for Wald statistics is 5.017912, which is above the upper critical values (3.15; 3.67; and 4.78) at 5%, 2.5%, and 1% level of significance respectively (Table 3). These results lead to the rejection of the null hypothesis that there is no long-run relationship between the study variables. Consequently, a long-run relationship analysis was conducted, and the results are depicted in Table 4 below.

**Table 3:** F-Bounds co-integration test results

| F-Bounds Test | | Null Hypothesis: there is no relationship | | |
|---|---|---|---|---|
| | | Significance | | |
| Test Statistic | Value | . | I(0) | I(1) |

| F-value | 5.017912 | 5%   | 1.36 | 3.15 |
|---------|----------|------|------|------|
| k       | 2        | 2.5% | 2.1  | 3.67 |
|         |          | 1%   | 3.75 | 4.78 |

**Source:** author

### 4.3 Coefficients of the long-run relationship

The coefficients depicted in Table 4 indicate that the political risk and the exchange rate have effects on tourist arrivals in the long-run. For example, the coefficient (9570.323) of the exchange rate suggests that tourist arrivals increase by around 9571 foreign tourists in the long-run if the exchange rate goes up (the South African Rand depreciates) by an average of one unit (implying one Rand). This result suggests that foreign tourists respond positively to the depreciation of the South African currency. Studies conducted in other countries also show that an increase in exchange rates contributes to increased tourist arrivals in the long-run (Meyer, 2021; Rathnayake, 2018). However, the current result contradicts the findings of the study conducted in India, which showed that a big share (78%) of foreign tourists who travel to Bali is not influenced by changes in the exchange rate (Nugroho et al., 2017). This variation in findings of studies may be attributed to the strength of tourists' home currencies and the attractiveness of country destinations. Tourists from countries with strong currencies may still travel even if the currency of a country's destination appreciates. This is more likely to happen if the potential country destination is very attractive. However, the appreciation of destinations' currencies may reach a certain point where foreign tourists may not refrain from visiting the destinations, because the destinations become unaffordable. This argument is substantiated by a study in India whose findings revealed that some tourists (48.5%) would cancel their travel plan to Bali if the travel cost increases by 50% (Nugroho et al., 2017).

**Table 4:** Estimated long-run coefficients

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| EXR      | 9570.323    | 10262.76   | 0.932529    | 0.3524 |
| PR       | -12010.41   | 10808.20   | -1.111231   | 0.2681 |

| C | 1451397. | 799855.0 | 1.814575 | 0.0714 |
|---|----------|----------|----------|--------|

<div align="center">**Source:** Author</div>

Unlike the exchange rate, the coefficient (-12010.41) of the political risk has a negative sign, implying that foreign tourist arrivals in South Africa declined by about 12011 tourists if the level of political risk moves up by one unit. This result confirms the results of other studies, which established that an increasing level of political risk is a deterrent to tourist arrivals in countries (Garidzirai, 2021; Mataković & Mataković, 2019; Parida et al., 2018).

### 4.4 Coefficients of the short-run relationship and ECM

The results in Table 5 confirm that the coefficient (11090.72) of the exchange rate has a positive sign, but it is not statistically significant at a 5% significance level. The implication of this result is that the depreciation of Rand by the average of one Rand against the US Dollar does not have any effect on the arrival of foreign tourists in the short-run. This result is unexpected given that several studies affirm that an increase in exchange rates is linked to increased tourist arrivals in the short-run (Jena and Dash, 2020; Sharma et al., 2019). The exchange rate, however, influences tourist arrivals in lag three, but the influence is negative. The arrival of international tourists in South Africa declined by approximately 49469 tourists in the current period because of one unit increase (depreciation) in the exchange rate occurred in the third lag, implying the previous three months. This result is not surprising given that the depreciation of South Africa is often caused by political risk factors such as political instability and civil unrest, which may frighten potential tourists to the country. A typical example is the depreciation of rand in December 2015, South Africa's former president Jacob Zuma changed three finance ministers within the period of one week (Bizcommunity, 2017; Letsoalo, 2015).

<div align="center">Table 5: Estimated short-run coefficients and ECM</div>

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|----------|-------------|------------|-------------|--------|
| TA(-1) | 0.389723 | 0.073746 | 5.284680 | 0.0000 |
| TA(-2) | 0.041503 | 0.079535 | 0.521818 | 0.6025 |
| TA(-3) | 0.218038 | 0.073060 | 2.984357 | 0.0033 |

| | | | | |
|---|---|---|---|---|
| EXR | 11090.72 | 16846.50 | 0.658340 | 0.5112 |
| EXR(-1) | -5111.353 | 27386.64 | -0.186637 | 0.8522 |
| EXR(-2) | 46845.86 | 27549.35 | 1.700434 | 0.0909 |
| EXR(-3) | -49468.56 | 16929.69 | -2.922000 | 0.0040 |
| PR | -4212.494 | 3933.235 | -1.071000 | 0.2857 |
| C | 509058.4 | 304906.8 | 1.669554 | 0.0969 |
| CointEq(-1)* | -0.350737 | 0.077597 | -4.519964 | 0.0000 |

Source: Author

Furthermore, the findings indicate that political risk does not have any effect on tourist arrivals in the short-run at a 5% significance level (Table 5). The implication of the results is that South Africa continues to receive foreign tourists irrespective of the increasing political risk level in the country. Political risk also has no effect on tourist arrivals when the variable is lagged. Probably, the country as a tourist destination is very attractive, or some of its attractions are hardly substituted. Consequently, foreign tourists decide to go ahead with travel plans to South Africa amid the increasing political risk. These results are not congruent with other studies whose results show that political risk negatively influences tourist arrivals in the short-run (Khan & Rasheed, 2016; Tomczewska-Popowycz & Quirini-Popławski, 2021). Interestingly, the results indicate that tourist arrivals influence themselves in the first and third lag. The coefficient (0.389723) of tourist arrivals in the first lag suggests that tourist arrivals in the current month increase by 0.39 if tourist arrivals go up by one unit in the previous month. This could be because of word of mouth marketing done by tourists who visited in the previous month. It could also be the bookings of tourist accommodation, which are longer than one month.

The fact that there is a long-run relationship between the study variables, there is disequilibrium that needs to be corrected each month. Thus, the ECM was evaluated to establish the time needed for the examined variables to correct the disequilibrium in the long-run. The ECM analysis shows that the coefficient (-0.350737) of the Error Correction Term (ECT) has a negative sign as required in the ECM. The coefficient is also statistically significant at a 5% level of

significance (Table 5). The interpretation of this coefficient is that 35.07% of shocks in the ECM is adjusted each month. Therefore, 2.801 (1/0.3507) months are needed for the model to correct the short-run disequilibrium and be at the equilibrium point in the long-run.

## 4.5 Results of diagnostic tests

Autocorrelation and heteroscedasticity tests were also carried out to confirm the validity of the results of this study. The test results disclose that the ARDL model does not have autocorrelation and is homoscedastic (Table 6). This means that both null hypotheses that the ARDL model is serially correlated, and that the model is heteroscedastic were not rejected at a 5% significance level, leading to the conclusion that the current findings are valid and accurate. The results of the CUSUM stability test show that the ARDL model was stable because the CUSUM fluctuated within the boundaries at a 5% level of significance (Figure 1).

**Table 6:** Diagnostics tests

### Autocorrelation test

| | | | |
|---|---|---|---|
| F-statistic | 0.629437 | Prob. F(2,166) | 0.5342 |
| Obs*R-squared | 1.332190 | Prob. Chi-Square(2) | 0.5137 |

### Heteroscedasticity Test

| | | | |
|---|---|---|---|
| F-statistic | 0.495267 | Prob. F(1,174) | 0.4825 |
| Obs*R-squared | 0.499538 | Prob. Chi-Square(1) | 0.4797 |

**Source:** Author

**Figure 1:** CUSUM test results
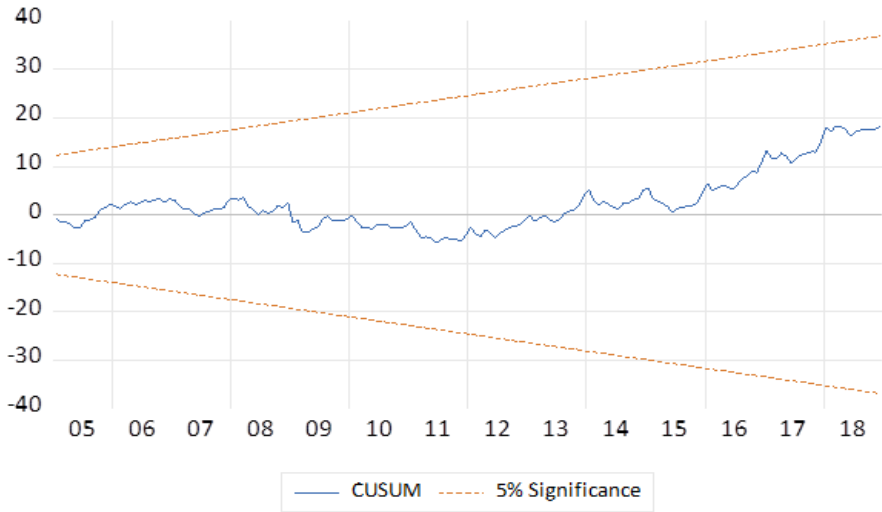


© **Source:** Author

## 5. Conclusion

Existing literature shows that political risk and exchange rate are determinants of tourist arrivals to countries. Countries with a high political risk level receive a low number of tourist arrivals, unless the countries are very attractive or offer tourism products that are not easily substituted. Tourists avoid countries with high political risk and visit alternative countries that are perceived to be safe and offer the same tourism products. On the other hand, countries with a low level of political risk receive a high number of tourists. Tourists want to visit countries where they feel safe and protected. High political risk does not create a risky environment only for tourists, it also erodes the ability of governments and tourism businesses to operate competitively. Thus, the tourism industry in politically stricken countries becomes unattractive and inaccessible to tourists.

On the other hand, the exchange rate plays a pivotal role in influencing tourists' travel decisions. The depreciation of a country's currency attracts tourists from countries with strong currencies. This is because countries with weak currencies become relatively cheaper. In contrast, the appreciation of the currency of a host country makes the country relatively expensive. Thus, the number of tourist arrivals to the country plummets. The aim of this paper was to investigate

the effects of political risk and exchange rate in South Africa, a country which experiences a relatively high level of political risk linked to multiple political risk factors. These factors include corruption, crime, high unemployment, political instability, and protests of communities for service delivery, and strikes of workers for improved working conditions and salaries. In addition, the country's currency has gradually been declining in the past years. It was therefore imperative to investigate the effects of these challenges on tourism activities in the country.

The findings of this study revealed that both political risk and exchange rate have no effects on tourist arrivals in the short-run, implying that tourist arrivals in South Africa remain uninterrupted when its currency fluctuates, and when political risk events and actions intensify. However, international tourist arrivals decline in the long-run when the level of political risk in the country goes up. This implies that foreign tourists cancel their trips to South Africa and opt for alternative countries that offer similar tourism products. Similarly, the exchange rate has a long-run effect on tourist arrivals. The number of international tourist arrivals increases in the long-run when South Africa's rand depreciates against the US Dollar. It was also found that tourist arrivals have positive lagged effects on themselves, suggesting that tourists book hotels one month or more before arriving in South Africa. Another plausible justification of the lagged effects is the use of word of mouth marketing done by tourists who visit South Africa. The findings of this study support findings of some previous studies and contract findings of other studies.

The policy implications of the current findings are that the South African government has to ensure that the level of political risk remains low. This may be achieved by implementing policies that are friendly and conducive to tourism businesses and tourists. These policies may include fighting and preventing crime, strengthening institutions that fight corruption, and promoting the culture of quality service delivery. Equally important, political instability and squabbles within the ruling political party (ANC) and between political parties should be avoided or minimised as they create political and economic uncertainty, which also leads to the depreciation of the local currency and political unrest. The

government should also stabilise its exchange rate because the depreciation of its currency may make the importation of foreign goods and services expensive, and this may adversely affect tourism and other industries in the country. Furthermore, the government may focus on the promotion of domestic tourism since it is hardly affected by political risk and exchange rate. However, a study on the effects of political risk and exchange rate on domestic tourism is needed since the current study is limited to inbound tourism.

## References

Ali, Y., Shah, Z. A., & Khan, A. U. (2018). Post-terrorism image recovery of tourist destination: A qualitative approach using Fuzzy-VIKOR. *Journal of Tourism Analysis: Revista de Análisis Turístico* 25(2), 129-153. https://doi.org/10.1108/JTA-05-2018-0016.

Anter, M., & Nagy, S. A. E. (2018). The effect of the Egyptian Pound exchange rate change on the international tourist demand to Egypt. *International Journal of Heritage, Tourism and Hospitality* 12(2/2), 160-181.

Biagi, B., & Detotto, C. (2014). Crime as tourism externality. *Regional Studies,* 48(4), 693-709.

Birns, H. (2015). *Weak rand hurts SA tourism.* https://www.tourismupdate.co.za/article/weak-rand-hurts-sa-tourism (Accessed 10 December 2022).

Bizcommunity. (2017). *Managing the catch-22 of the depreciating rand and its impact on SA tourism.* Available at https://www.bizcommunity.com/Article/196/373/166605.html# (Accessed 10 December 2022).

Brown, C. B. (2015). Tourism, crime and risk perception: An examination of broadcast media's framing of negative Aruban sentiment in the Natalee Holloway case and its impact on tourism demand. *Tourism Management Perspectives,* 16, 266-277.

Burke, J. (2022). A crisis of faith in South Africa: 'People have given up on the state'. The *Guardian,* 04 January. Available at https://www.theguardian.com/world/2022/jan/04/a-crisis-of-

faith-in-south-africa-people-have-given-up-on-the-state (Accessed 10 December 2022).

Catudan, J. M. J. (2016). The impact of tourist arrivals, physical infrastructures, employment, on regional output growth. *Procedia - Social and Behavioural Sciences* 219, 175 – 184.

Čavlek, N., & Wanhill, S. (2015). Foreign exchange, tourism. In: Jafari, J., Xiao, H. (eds) Encyclopaedia of Tourism. Springer, Cham. https://doi.org/10.1007/978-3-319-01669-6_557-1

Chen, Y., Zhang, D., & Ji, Q. (2022). Impacts of regional cooperation agreements on international tourism: Evidence from a quasi-natural experiment. *International Review of Economics and Finance,* 82, 663–676.

Chronicle. (2015). *Weak rand impact finally lifting SA tourism*. Available at https://www.chronicle.co.zw/weak-rand-impact-finally-lifting-sa-tourism/ (Accessed 10 December 2022).

Chugh, S. (2015). Risk perceptions of international women tourists in India. In: S. Kumar, M.C. Dhiman, and A. Dahiya, eds. *International tourism and hospitality in the digital age.* Hershey, PA: IGI Global, pp. 220-234,

Chulaphan, W. (2021). Tourism demand and corruption: Are the impacts of relative corruption on international tourist arrivals in Thailand relevant*? Southeast Asian Journal of Economics,* 9(2), 101-121.

Cohen, M. (2016). Weak rand bolsters tourism. *IOL*, 21 January. Available at https://www.iol.co.za/business-report/markets/currencies/weak-rand-bolsters-tourism-1973907 (Accessed 10 December 2022).

De Villiers, J. (2017). South African tourism: Negative effects of marches and protests. *CNBCAfrica*, 12 April. Available at https://www.cnbcafrica.com/2017/negative-effects-marches/ (Accessed 06 December 2022).

Demir, E., & Gozgor, G. (2017). What about relative corruption? The impact of the relative corruption on the inbound tourism to Turkey. *International Journal of Tourism Research,* 19, 358–366.

Dludla, S. (2022). Crime hinders tourism industry following fatal attack on German tourist. *IOL*, 04 October. Available at https://www.iol.co.za/business-report/economy/crime-hinders-

tourism-industry-following-fatal-attack-on-german-tourist-771b5249-623d-4607-a552-8f46962a08e8 (Accessed 06 December 2022).

Domareski-Ruiz, T. C., Chim-Miki, A. F., Anana, E. & dos Anjos, F. (2020). Impacts of mega-events on destination competitiveness and corruption perception in South American countries. *Tourism & Management Studies,* 16(2),7-15. https://doi.org/10.18089/tms.2020.160201.

Dory, D. (2021). Tourism and international terrorism: A cartographic approach. *Tourism Review*, 16. https://doi.org/10.4000/viatourism.7243.

Ekine, S. (2018). Corruption and Tourism: Evidence from democracies and non-democracies. *Issues in Political Economy,* 27(1), 47-59.

Felix, J. (2018). Crime affecting SA tourism profits. *IOL*, 16 April. Available at https://www.iol.co.za/capeargus/news/crime-affecting-sa-tourism-profits-14467088 (Accessed 06 December 2022).

Ferreira, D. & Perks, S. (2016). The influence of the political climate on South Africa's tourism industry. The 2016 International Academic Research Conference in London -Zurich 263.

Gao, X., Chang, H., & Su, C. (2018). Does exchange rate always affect the number of inbound tourists significantly in China? *Theoretical and Applied Economics,* 1(614), 55-72.

Garidzirai, R. (2021). An autoregressive distributive lag analysis of crime & tourism in the Western Cape province, South Africa. *GeoJournal of Tourism and Geosites,* 35(2), 304-308.

Ghalia, T., Fidrmuc, J., Samargandihi, N., & Sohagi, K. (2019). 'Institutional quality, political risk and tourism. *Tourism Management Perspectives* 32(10057), 1-10.

Gholipour, H. F., & Foroughi, B. (2019). Corruption and outbound business travels. *Tourism Economics,* 26(7), 1266–1281. https://doi.org/10.1177/1354816619872884.

Gołembski, G., & Majewska, J. (2018). The impact of transport infrastructure on international inbound tourism – A gravity model for Poland. *International Journal of Contemporary Management*, 17(4), 133–152. doi:10.4467/24498939IJCM.18.040.10026

Haddad, C., Nasr, A., Ghida, E., & Ibrahim, H. A. (2015). *How to re-emerge as a tourism destination after a period of political instability*. World Economic Forum. Available at http://reports.weforum.org/travel-and-tourism-competitiveness-report-2015/chapter-1-3-how-to-re-emerge-as-a-tourism-destination-after-a-period-of-political-instability/ (Accessed 23 April 2022).

Hayden, M. E. (2016). Turkey's Tourism Industry Suffers After Recent Terror Attacks. *ABCNews*, 08 January. Available at https://abcnews.go.com/International/turkeys-tourism-industry-takes-hit-recent-terror-attacks/story?id=44514344 (Accessed at 21 April 2022).

Jena, S. K., & Dash, A. K., 2022. Does exchange rate volatility affect tourist arrival in India: A quintile regression approach. *Regional and Sectoral Economic Studies,* 20(2), 65-84.

Jia, X. (2018). Conservation of the role of tourism environmental protection on the sustainable development of tourism. *Advances in Engineering Research*, 163, 1642-1646.

Kadi, S., 2018. World heritage in Syria and Libya agonising under the world's idle eyes. *The Arab Weekly*, 08 April. Available at https://thearabweekly.com/world-heritage-syria-and-libya-agonising-under-worlds-idle-eyes (Accessed at 19 April 2022).

Karimi, M. S., Khezri, M., & Razzaghi, S. (2021). Impacts of regional conflicts on tourism in Africa and the Middle East: a spatial panel data approach. *Current Issues in Tourism,* 25(10), 1649–1665.

Khanalizadeh, B., Ranjandish, N., & Khanalizadeh, B. (2019). Exploring the effects of hotel development, economic growth and exchange rate on tourism industry: Evidence for Iran. *Review of Innovation and Competitiveness,* 5(1), 81-96.

Khan, A., Bibi, S., Lorenzo, A., Lyu, J., & Babar, Z. U. (2020). Tourism and development in developing economies: a policy implication perspective. *Sustainability*, 12(1618), 1-19.

Khan, R. E. A., & Rasheed, M. K. (2016). Political economy of tourism in Pakistan: the role of terrorism and infrastructure development. *Asian Development Policy Review,* 4(2), 42-50. https://doi.org/10.18488/journal.107/2016.4.2/107.2.42.50.

Koyuncu, O. (2020). Effects of terrorism and political instability on tourist behaviour: 2016 conflicts in Turkey. *The Central European Review of Economics and Management* (CEREM), 4(2), 21-40. https://doi.org/10.29015/cerem.866.

Lee, C., Olasehinde-Williams, G., & Akadiri, S. S. (2020). Geopolitical risk and tourism: Evidence from dynamic heterogeneous panel models. *International Journal of Tourism Research*, 1–13. https://doi.org/10.1002/jtr.2389.

Lee, J., Lee, Y., & Huang, S. (2018). Dynamic relationships among tourist arrivals, crime rate, and macroeconomic variables in Taiwan. *Asia Pacific Journal of Tourism Research*, 23(9), 896-906. https://doi.org/10.1080/10941665.2018.1500380.

Letsoalo, M. (2015). Nhlanhla Nene removed as finance minister. *Mail & Guardian*, 09 December. Available at http://mg.co.za/article/2015-12-09-nhlanhla-nene-removed-as-finance-minister (Accessed 11 December 2022).

Mao, L. (2019). Impacts of terrorism in the United Kingdom and Europe on tourism in the United Kingdom. *Advances in Applied Sociology*, 9(9), 491-504.

Maromo, J. (2022). National shutdown: Irmsa warns that protests will hurt weak economy. *IOL*, 23 August. Available at https://www.iol.co.za/news/politics/national-shutdown-irmsa-warns-that-protests-will-hurt-weak-economy-21c76442-a2bb-49cb-8c83-75da7ade970e (Accessed 10 December 2022).

Marudu, H. D. (2017). Service delivery protests in South African municipalities: An exploration using principal component regression and 2013 data. *Cogent Social Science*s, 3(1). https://doi.org/10.1080/23311886.2017.1329106

Mataković, H., & Mataković, I. C. (2019). The impact of crime on security in tourism. *Security & Defence Quarterly*, 27, 1-20.

Mawby, R. I., & Vakhitova, Z. I (2022). Researching the relationship between tourism, crime and security: The tourism industry and the disenfranchised citizens. In: M. Gill, ed. *The handbook of security*. 3rd ed. London: Palgrave, pp.1-25.

Meyer, D. F. (2021). The tourism sector in Malaysia: an analysis of the impact of economic growth, political instability and the exchange rate. *Internal Journal of Innovation and Change,* 5(2), 658-678.

Millia, H., Adam, P., Saenong, Z., Balaka, M.., Pasrun, Y.P., Saidi, L. O., & Rumbia, W. A. (2020). The influence of crude oil prices volatility, the internet and exchange rate on the number of foreign tourist arrivals in Indonesia. *International Journal of Energy Economics and Policy,* 10(6), 280-287.

Munir, K., & Iftikhar, M. (2021). Asymmetric impact of FDI and exchange rate on tourism: Evidence from panel linear and nonlinear ARDL model. https://doi.org/10.1177/215824402110465

Neumayer, E., & Plümper, T. (2016). Spatial spill-over from terrorism on tourism: Western victims in Islamic destination countries. *Public Choice,* 169(3), 195-206.

Nugroho, I. A., Gunawan, S., Awirya, A. A., & Nurman, P. (2017). The effect of exchange rate fluctuations on Bali tourism sector. *Jurnal Ekonomi dan Pembangunan,* 25(1), 15-26.

Obi, P., & Ogbeide, G. (2022). The mediating effects of implied volatility and exchange rate on the U.S. tourism-growth nexus. *Journal of Risk Financial Management,* 15(112), 1-16. https://doi.org/10.3390/jrfm15030112.

Omajee, L. (2020). Explainer: Why you should care about the rand-dollar exchange rate. *News24,* 04 April. Available at https://www.news24.com/fin24/economy/explainer-why-you-should-care-about-the-rand-dollar-exchange-rate-20200404 (Accessed 11 December 2022).

Ongan, S., Sik, C. I., & Özdemir, D. (2017). The effects of real exchange rates and income on international tourism demand for the USA from some European Union countries. *Economies* 5(51), 1-11. https://doi.org/10.3390/economies5040051.

Opstad, L., Hammervold, R., & Idsø, J. (2021). The influence of income and currency changes on tourist inflow to Norwegian Campsites: The case of Swedish and German visitors. *Economies*, 9(104), 1-13. https://doi.org/10.3390/economies9030104.

Özer, M., & Küçüksakarya, S. (2021). The relationship between economic activity, tourism expenditures and real exchange rate in 9 most visited OECD countries. *Journal of Yasar University*, 16/63, 1535-1550.

Parida, Y., Bhardwaj, P., & Chowdhury, J. R. (2018). Effects of economic development and crime on tourism in India. *Anatolia,* 29(1), 63-73. https://doi.org/10.1080/13032917.2017.1384742.

Pesaran, M. H. Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics,* 16(3), 289-326.

Pesaran, M. H., & Shin, Y. (1995). An Autoregressive Distributed Lag modelling approach to cointegration analysis. *DAE Working Paper*, No. 9514, [online] Department of Applied Economics, University of Cambridge. Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.153.3246&rep=rep1&type=pdf (Accessed 25 March 2022).

Phillips, L. (2006). *Assessing governance: How can political risk analysis help?* Overseas Development Institute (Odi). Available at https://cdn.odi.org/media/documents/766.pdf (Accessed 05 December 2022).

Phillips, M. (2019). *Falling rand a double-edged sword for South Africa tourism industry*. Available at https://www.lonelyplanet.com/news/falling-rand-a-double-edged-sword-for-south-africa-tourism-industry (Accessed 10 December 2022).

Polat, M., Alptürk, Y., & Gürsoy, S. (2021). Impact of geopolitical risk on BIST tourism index and tourist arrivals in Turkey. *Journal of Tourism Theory and Research*, 7(2), 77-84. https://doi.org/10.24288/jttr.926617

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

PRS Group. (2021). *The ICRG Methodology.* PRS Group. Retrieved from https://www.prsgroup.com/wp-content/uploads/2021/10/ICRG-Method-2021.pdf, date: 04.03.2020.

Rathnayake, G. I. (2018). Effect of exchange rate volatility on Sri Lanka's inbound tourist flow. *Central Bank of Sri Lanka – Staff Studies,* 48(11), 41-81.

Rasool, H., Maqbool, S., & Tarique, M. (2021). The relationship between tourism and economic growth among BRICS countries: A panel cointegration analysis. *Future Business Journal,* 7(1), 1-11. https://doi.org/10.1186/s43093-020-00048-3

Rauf, A., Siddique, H. M. A., Saleem, Q., & Sidra, S. (2020). Terrorism and international tourism nexus: Evidence from Pakistan. *International Journal of Economics and Financial Issues,* 10(5), 387-393. https://doi.org/10.32479/ijefi.10674.

Recher, V., & Rubil, I. (2020). More tourism, more crime: evidence from Croatia. *Social Indicators Research,* 147, 651-675.

Reed, T. (2015). *Bid to protect SA Tourism's budget from rand depreciation.* Tourism Update. Available at https://www.tourismupdate.co.za/article/bid-protect-sa-tourisms-budget-rand-depreciation?page=21 (Accessed 11 December 2022).

Reinstein, D. (2015). *Roadside corruption – a major threat to tourism.* https://www.tourismupdate.co.za/article/roadside-corruption-major-threat-tourism (Accessed 06 December 2022).

Santa-Gallego, M., Rosello-Nadal, J., & Fourie, J. (2016). The effects of terrorism, crime and corruption on tourist arrivals. *ERSA Research Brief.* Available at https://www.econrsa.org/system/files/publications/research_briefs/research_brief_78.pdf (Accessed 20 March 2022).

Sarchami, A., Zayandehrodi, M., & Jalaee, S. A. (2021). Impacts of exchange rate and economic, political, cultural, infrastructural, and environmental indicators on tourism in Iran. *REGET,* 25(11). DOI: 10.5902/2236117063797

Seabraa, C., Reisb, P., & Abrantes, J. L. (2020). The influence of terrorism in tourism arrivals: A longitudinal approach in a Mediterranean country. *Annals of Tourism Research,* 80 (102811), 1-13. https://doi.org/10.1016/j.annals.2019.102811

Shah, S. A., & Wani, M. A. (2014). Impact of conflict on tourist flow and spatial distribution of tourists in Kashmir Valley. *World Applied Sciences Journal,* 31(6), 1160-1167.

Sharma, A., Vashishat, T., & Rishad, A. (2019). The consequences of exchange rate trends on international tourism demand: Evidence from India. *Journal of Social and Economic Development,* 21, 270–287. https://doi.org/10.1007/s40847-019-00080-2.

Song, H., Li, G., & Cao, Z. (2018). Tourism and economic globalization: An emerging research agenda. *Journal of Travel Research,* 57(8), 999–1011.

Sottilotta, C. E. (2-13*). Political risk: concepts, definitions, challenges*. LUISS School of Government. https://sog.luiss.it/sites/sog.luiss.it/files/SOG%20Working%20Papers%20Sottilotta%20ISSN_0.pdf (Accessed 06 December 2022).

South African Revenue Service (SARS). 2022. *Average exchange rates for a year of assessment.* Available at https://www.sars.gov.za/wp-content/uploads/Legal/Rates/LAPD-Pub-AER-2012-02-Average-Exchange-Rates-Table-A.pdf (Accessed 07 April 2022).

Stoddard, E. (2022). Rolling blackouts and US rate hikes light way to rand's demise versus the dollar. *Daily Maverick*, 20 September. https://www.dailymaverick.co.za/article/2022-09-20-rolling-blackouts-and-us-rate-hikes-light-way-to-rands-demise-versus-the-dollar/ (Accessed 11 December 2022).

Tekin, E. (2015). The impact of political and economic uncertainties on the tourism industry in Turkey. *Mediterranean Journal of Social Sciences,* 6(2), 265-272.

Tiwari, A. K., Das, D., & Dutta, A. (2019). Geopolitical risk, economic policy uncertainty and tourist arrivals: Evidence from a developing country. *Tourism Management,* 75, 323-327. https://doi.org/10.1016/j.tourman.2019.06.002.

Tomczewska-Popowycz, N., & Quirini-Popławski, L. (2021). Political Instability Equals the Collapse of Tourism in Ukraine? *Sustainability,* 13(4126). https://doi.org/10.3390/su13084126.

Wagner, D. (2006). *Defining "political risk"*. IRMI. Available at https://www.irmi.com/articles/expert-commentary/defining-political-risk (Accessed 05 December 2022).

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. DOI: http://dx.doi.org/10.3727/108354213X13782245307911

Yende, S. S. (2019). Protests and crime are driving away tourists. *City Press*, 20 August. Available at https://www.news24.com/citypress/business/protests-and-crime-are-driving-away-tourists-20190820 (Accessed 25 March 2022).

Zurub, H., Ionescu, A., & Constantin, V. D. (2015). Measuring the economic impact of tourism in European emerging markets. *Procedia Economics and Finance*, 32,95-102. https://doi.org/10.1016/S2212-5671(15)01369-6