THE EFFECT OF EXCHANGE RATE VOLATILITY ON THE GROWTH OF TOURISM SECTOR IN KENYA

BY

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DECLARATION

The research project is my own work and has not been submitted for a degree in this or any other university.

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The project has been presented for examinations with my approval as the university supervisor.

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DEDICATION

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LIST OF ABBREVIATION

CPI	Consumer Price Index
GDP	Gross Domestic Product
KES	Kenya Shillings
KNBS	Kenya National Bureau of Statistics
KTB	Kenya tourism board
PPI	Producer Price Index
REER	Real Effective Exchange Rate
STD	Sexually Transmitted Disease
UK	United Kingdom
US Dollar	United States Dollar
USA	United States America
WTO	World Tourism Organisation

ABSTRACT

The research's main aim revolved around describing the impact exerted by exchange rate volatility on Kenya's tourism development. To realize the objective the investigation employed a quantitative research methodology. Secondary information was sourced for the 2009-2019 timeline. Collection of secondary data and specifically international tourism receipts, was sourced from Worldbank website while exchange rates, inflation rates and GDP rates was sourced from Central Bank of Kenya Website. The exchange rate included currencies for China, Europe, United States of America and South Africa. Collected data was analyzed via descriptive statistics and inferential statistics. Data submitted utilized means, standard deviation and percentages. The analytical model applied in this research is regression analysis. The inquiry's outcomes revealed that the model was statistically fit to predict tourism growth rate. This was depicted by the Anova table with the F value of 1.82 with a significance value of 0.000. This significance value is less than p value 0.05. The link amid the exchange rate volatility and tourism growth was positive as shown by correlation coefficient (R) of 0.756. Further findings established that the volatility experienced in other world major currency was due to the instability of the Kenyan shilling. Thus the inquiry recommends that the Central Bank of Kenya (CBK) put in place measures to reduce the fluctuations of the shilling. Thus, such measures would ensure that the shilling is relatively stable. The study also determined that inflation rate had an adverse impact on tourism growth rate. Thus the investigation recommends CBK comes up with policies that would prevent the country form experiencing adverse inflation rate. These measures would thus help improve the turnover in the tourism sector. The study also resolved that GDP had a positive impact on tourism growth rate. Thus the study recommends that the CBK implements further measures to improve economic growth and development. These measures would also further help improve the GDP of the country, which would consequently exert a constructive influence on the tourism industry.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The tourism sector, among other industries, has gained momentum and grown significantly. Since its initial growth stages in 1990, the sector has been able to provide job opportunities to most people in Kenya and across the world. Currently, international tourism in regard to new job opportunities and the basis for exchange income in most states, is considered the primary sector for source of income (Cárdenas-García, Sánchez-Rivero & Pulido-Fernández, 2015). This significant growth of tourism is also contributed by the rapidly expanding telecommunication and information technologies in the 20th century. In addition, tourism growth can also be positively or negatively affected by exchange rate volatility. A stable exchange rate makes operations effective and improves tourism growth while a volatile exchange rates negatively affect tourism growth (Héricourt & Poncet, 2015).

Other factors that affect the tourism growth include economic factors such as recessions, socio-cultural factors such as religion, geopolitical factors such as national security and relationships between states, the state of national health and how countries brand their hospitality market. All these factors revolve around the following components, climate, natural environment, accessibility, ecology, population distribution, affordability, media profile, safety and proximity to other tourist sites.

The following theoretical frameworks support the research: flow oriented model, purchasing power parity theory and foreign exchange theory. The flow oriented model by Dornbusch and Fisher (1980) argue that the exchange rate of a country is influenced by performance of trade and current account. Therefore, this theory explains the behavior of exchange rates. Purchasing power parity theory by Cassel (1918) describes the connection between the rate of currency transactions in a state as well as the movement of the national price level compared to that of another foreign country. Foreign exchange exposure theory by Levi, Amihud and Jordon (1994) holds that any fluctuation in the rates of exchange must affect the value of multinational firms because they are mainly involved in handling foreign sales and foreign assets, which must be denominated based on the domestic currency of the original firm.

The impact of tourism in developing countries (Kenya included) has attracted strategy makers, organizers and academicians. Reason being, tourism plays a significant part in fostering social and economic growth within various states. Vast research on tourism ventures into the advantages and disadvantages of growth of tourism. Thus, studies in tourism have been propounded by economists who were basically looking at the economic benefits of tourism development. Adholla (1982) argued that economic benefits from tourism developments in terms of political, social and cultural implications are more abstract and therefore difficult to quantify. Advocates of Tourism have stressed the growth of foreign exchange from tourist receipts. It is indeed true that tourism is a major foreign exchange earner as compared to other industries.

1.1.1 Exchange Rate Volatility

Rate of exchange frequency volatility denotes to threats associated with unanticipated movements in exchange rate. Basic components of the economy such as rates of inflation and interest coupled with payments that can cause exchange rate volatility (Héricourt & Poncet, 2015). Alagidede and Ibrahim (2017) define the volatility in rates of exchange as the rate at which exchange rate fluctuates. Another definition by Grossmann, Love & Orlov (2014) holds that exchange rate volatility is the extent to which exchange rates are a source of uncertainty and risk.

Various factor that influence exchange rate volatility, this includes aspects like gross domestic product (GDP), consumer price index (CPI), producer price index (PPI), employment information and interest charges. These economic fundamentals used as the determinants of exchange rate volatility also determine the nation's overall economic standing. A country's GDP represents the dollar value for goods and services that the country involved is producing, which accounts for all goods and services produced annually (Serenis & Tsounis, 2012). Any variation in the GDP helps one identify any variation in economic development and can have a direct effect on the relative value of a state's currency. When the GDP records high value, this shows that the country is producing goods and services at a high rate, which indicates that the demands for those produced products and services are high. Increased need for a nation's products and services is an indicator for a high demand for the country's money.

On the contrary, the CPI is used by investors and economists to identify any variations for a selected group of goods and services used at the domestic level. It tracks changes in prices and reflects inflation rates. Increased cost on the CPI indicates a weak purchasing power of the nation' currency (Héricourt & Poncet, 2015). Alternatively, PPI is used to measure changes in the costs for raw materials taken from the perspective of the manufacturer instead the customer. The impact of the PPI is the same as that caused by the CPI. Employment data acts as a measure for exchange rate unpredictability where increased rates for employment indicates increased demand for produced goods and is a sign of a high value for a country's currency (Kiliç & Bayar, 2014). This is because more employees ought to make the production of merchandises and services more effective and meet consumer demand and hence the country issuing many exports to foreign countries. Interest rate on the other hand when greater interest rates are offered by a county's financial institutions, it attracts more investors while a country that offers less interests rate is less appealing to investors.

1.1.2 Growth (Tourism Growth)

According to Yang and Fik (2014) defines tourism growth as the increase in commercial practice of attracting, accommodating, and provision of services like transport and entertainment of people on tour. Another definition for tourism growth is that it is the increase in demand and supply of services demanded by people on tour like transport, accommodation, food, leisure activities that makes visitors feel comfortable and reflect value for their money spent (Jaafar & Rasoolimanesh, 2015). De Vita and Kyaw (2016) tourism growth refers to the rate at which the market value for tourist increase with time

which is indicated by the rate at which tourist travel to a certain country or region for leisure or business.

Tourism plays a critical role in achieving a state's various strategic objectives. Some of the advantages of tourism growth in a republic include creation of job opportunities, generation of country's revenue, development of a country's infrastructure and constructive cultural exchange among tourists and locals. The tourism sector creates jobs for both the agricultural, communication, health and educational sectors. Local restaurants, shopping centres and stores reap a lot of benefits from the tourism sector which is a signal that as these sectors face higher demand they require more workers which in turn creates job opportunities and an increase in the living standard of people (Jaafar & Rasoolimanesh, 2015). For a country's revenue, tourists brings more money paid in terms of taxes and most government relying on tourism for income will ensure the development of sound infrastructural structures to make tourism services more efficient. Additionally, tourism plays a critical role in cultural exchange in that locals learn from the tourists about their culture and alternatively, tourists also learn from locals which helps in clearing any cultural misconceptions and build more on diversity and entrepreneurship in that people can produce products and services that go in line with each other's varying cultural standpoints (Khandaker & Islam, 2017).

Indicators for tourism growth are based on how relevant, available, fresh, sensible, reliable, comparable and normal they are, this is criteria the must meet. As such, various factors are used as a measure for tourism growth. They include local satisfaction which is embedded

on the level of tourism and its effect on surrounding social units, ratio of tourist to locals, and the influence of tourism in bringing infrastructure, and number of social services brought about by tourism. Another indicator is the level of tourist satisfaction (De Vita & Kyaw, 2016). Amount of revenue generated as a result of tourism.

1.1.3 Exchange Rate Volatility and Tourism Growth

When commercial activities involving different currencies is involved, foreign currency must be converted to local currency to promote production of convenient reports and effective conduction of operations within a country which is enabled by the exchange rate forex market (Kiliç & Bayar, 2014). However, exchange rates lacks prolonged stability and are prone to many fluctuations causing uncertainty to many organizations and on this case the tourism growth. De Vita and Kyaw (2016) reveal that any variation in the exchange directly affects the rate of international arrivals where a devalued currency at the destination country encourages tourist inflow which improves tourism growth while a devaluation at the origin country reduces the rate of international travel to other countries which negatively affect tourism growth.

Tourist with the awareness of exchange rate volatility base their travel decisions on the cost of travelling internationally and whatever decision they make can positively or negatively affect tourism growth. The fact that accommodation centres for tourists have to host individuals from varying regions and nations, provision of quality products and services is not an exception and therefore these centres depend on revenue inflows to maintain the expected lifestyle for visitors. Therefore, reduced inflow of tourist translates

to less revenue generated by these organization indicating depreciated tourism growth while increased tourist inflows translates to higher revenue generation which indicates enhanced tourism growth.

Various researchers have found varying outcomes with regards to exchange rate volatility and tourism growth. Killic and Bayar (2014) established a constructive lasting association between the actual operational exchange rate (REER) and tourism receipts and expenses. Agiomirgianakis, Serenis and Tsounis (2015) established a negative connection between exchange rates instability and tourist flows.

1.1.4 Tourism Sector in Kenya

World development indicator (2015) defines tourism as receipts and spending by foreign tourists on a recipient country. The costs include external tourists buying goods and services in the host state coupled with receipts for the day's visit. Globally, tourism as an monetary venture is observed as part of the major commercial segment particularly in generation of fortune plus employment formation (Africa Watch, 1993). The sector has a critical function in generating foreign exchange mainly to the unindustrialized states. On top of that, the sector also generates sales and output, (providing explanation behind the high cost of living for grassroots individuals), valuation, assets reserves coupled with increasing the economy's tax revenue (WTO, 2019).

Kenya's tourism sector stands as a sub pillar in the fiscal stake as stipulated in the 2030 vision. The vision performs the role of transforming and bettering the republic (Akama,

2000). Tourism falls under the service category alongside communal services, financial services, private services, insurance, among others. The tourism sector constitutes of safari tourism, coastal tourism and business and conference travel (World Bank Group, 2017) captures by restaurants, hotels and safari industry. The huge grants on attraction sites and natural resources saw the growth of the tourism sector in the 1960s. Human influence that included the government establishing package tours coupled with Kenyans exercising hospitality also contributed to the development of the industry.

However, during the 1970s the industry recorded a drop in the tourist entrance statistics. Some of the suggested reasons behind the decline include economic recession in countries such as United Kingdom and USA (Dieke, 2017). The shutting of the Kenya-Tanzania boundary in 1977 plus the 1982 attempted revolution further worsened the tourism sector. The deterioration continues in the 1990s due to a politically initiated blow that hit the country and resulted in violence between 1991 and 1992. This unrest resulted in Kenya becoming a multi-party state). Inflation of oil prices, international media outlets sharing misleading details about Kenya in relation to security issues and the vast spread of STD (HIV) in the region also contributed towards the fall of the tourism industry (Ikiara et al., 2014). However, since 2010, income started streaming from the tourism sector with an 18.5% gain. The increase continued all through to 2012 with 3.3% lower than 2010 and 2011 (KNBS, 2013). The direct tourism impression in Kenya resulted in Ksh. 167.6 billion (about 9.5% of the GDP) in 2011. The same year had a total effect of a 13.7 % section of GDP and an 8.4% employment creation (created over 31300 jobs). Total job creation effect stood at 11.9% in 2011 (WTTC, 2015).

1.2 Research Problem

For organizations to maintain sustainable competition and firm growth, they must constantly conduct an evaluation of their external components including exchange rate volatility. Inadequate management of exchange frequency unpredictability can cause a substantial negative influence on the entire performance caused by foreign losses and gains (Kiliç, & Bayar, 2014). Exchange rates face a high chance for dynamism and volatility because they constantly fluctuates hence the need to evaluate them from time to time. Despite the fact that the tourism sector has grown significantly beyond its limits, it does not have sound strategies that can cover up for changes in the rates of trade. This is because tourism sector greatly rely on foreign visitors and as such when fluctuations occur in the exchange rates, the performance of the tourism sector is significantly affected. The impression of exchange frequency unpredictability is unevenly distributed within the economy, consequently resulting into some groups reaping benefits while other incur losses from a decreased purchasing power of a currency (De Vita & Kyaw, 2016).

Countries whose currency have a higher value are more likely to benefit while those whose currency is of lower value incur losses including high cost on increased goods, negative effect on interest rates and inflation rates. Negative effect on imported goods can have detrimental effect on countries with a substantial reliance on imports. Exchange rate volatility can also negatively affect investment levels (Lean, Chong & Hooy, 2014). However, this is based on two concepts, first investors may invest in a strong currency country through the stock market, however, a strong currency becomes expensive making it expensive for potential to invest. Less foreign investment relates to decreased economic

performance making it hard for aspiring tourists to afford trips within or outside the country. Implementation of fixed exchange rates leads to high inflation in one country compared to the other which causes exports from the inflated economy to be more costly and hence the balance of trade becomes shaken. An economy with high inflation experiences low purchasing power from various segments of the economy. When people cannot afford to purchase fundamental goods and services, it is difficult for the tourism sector to thrive as it is considered more of commercial services for leisure while basic needs comes before leisure needs.

Comparing the Kenyan currency against the US Dollar, the Kenyan Shilling struggles because the US Dollar is a strong currency. The US Dollar is set to continue escalating because it is embedded on sound monetary policies and rapid economic growth. Depreciation of the shilling revolves around weaknesses in exports, low tourist growth against the dollar strength putting a lot of pressure on the shilling currency (Khandaker & Islam, 2017).

Various studies with regards to exchange rate volatility have been conducted. They include: Kilic and Bayar (2014) utilized a universal autoregressive conditional heteroscedasticity model to ascertain the outcome of real exchange rate impulsiveness on tourism receipts and expenses in Turkey of 1994 to 2013. Agiomirgiakis, Sereni, Tsounis (2015) examined the same concept on tourist entrance from 1998 to 2012 in iceland. Tian and Ma (2015) researched on exchange frequency instability and tourism growth in in Hong Kong. While, Mlambo, et al (2013) survey the relationship between the behavior of South African rand

and tourism growth from all major countries. In Kenya, Barasa (2013) reviewed exchange frequency instability and payments equilibrium within Kenya. Nyongesa and Muchoki (2016) explored exchange rate volatility and performance. Kairu (2016) investigated the impact of exchange frequency instability on the commercial conduct of Kenya's commercial banks. Waiguru (2019) investigated the determinants of exchange rate volatility on operation within Kenya's horticultural exports. These studies reviewed provided us with both conceptual gap and inconsistent finding hence the need to study the impact of exchange frequency instability on tourism growth in Kenya. Therefore, the research question was: what is the influence of exchange frequency unpredictability on Kenya's tourism growth?

1.3 Research Objective

This research objective was to establish the effects of interchange rate volatility on tourism progress within Kenya.

1.4 Study significance

The exploration's findings would significant to the Kenyan government through the arms of government such as the national treasury and the central government in policy development regarding foreign exchange and the tourism industry. This would also help in the development of favorable strategies essential in fostering tourism advancement.

In addition, the research outcomes come in handy in establishing relevance to the administration of Kenya Tourism Board (KTB) who are likely to be key beneficiary of this study owing to the major role that they play in the implementation of government policies and channel of tourism management and development. Tourism is a barometer of the economic health in a country and therefore the findings of the study would enable them to appropriately advise the government on the best policies that would encourage foreign tourists in Kenya. It would in addition help the management to make informed regulatory decisions.

The findings would also help economic practitioners and advisors to understand the concept of exchange rate and tourism development. The practitioners would thus possess the ability to provide well-versed guidance to the government plus other relevant users on the importance of ensuring the exchange rate is stable so that it can foster economic growth.

Finally, the study would be used as reference material in literature review and thus would contribute to the pool of existing knowledge on exchange rate and tourism growth. Researchers and scholars will utilize the results of the inquiry for referencing and use it to establish and fill research gaps that they would come across.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The academic research on which the exploration has been underpinned is covered in this chapter. In particular, the chapter covered in detail the theories upon which the study was anchored. In addition, the study gives a detailed discussion on the empirical works in this area of the study. Lastly, the chapter provided a summary of the literate pointing out the research gaps and the weaknesses of the existing works and how the study sought to fill in the existing knowledge gaps.

2.2 Theoretical Literature Review

Within the enquiry area on portfolio flow effect on the growth of the economy, three key theories are core and majorly discussed. They include: The Flow oriented theory, purchasing power parity and theory of foreign exchange exposure.

2.2.1 Flow Oriented Model

The 1980 approach was established by Dornbusch, & Fisher in 1980. According to the framework, the trade balance performance and a country's current account are the two main features influencing the exchange frequency. In this study context, the model assumed that tourist's movement is usually triggered by the currency transaction rate movements. The model considers the exchange rate as influential on international tourist arrivals, which in turn affect the anticipated tourist expenditure as well as their expected certainty. The fact the study is focused on international tourists' means that the Exchange Frequency Unpredictability positively or negatively affects their expenditure.

Papaioannou (2009) found that a rise in the value of the domestic currency may not be beneficial to foreign tourists as this may lower their expenditure which will ultimately lower their time of stay hence having a spillover effect on the local beneficiaries such as hotels and game reserves. When compared to local tourists, international tourists will tend to spend more than anticipated even though none is protected fully from the exchange frequency precariousness effects. Ma and Kao (1990) carried out a study in developed economies to form the connection amid accommodation charges and exchange rates the survey outcomes were reliable as the other models. The study thus concluded the overall connection between tourists' growth and currency exchange rate depended on whether the state's trade balances.

2.2.2 Purchasing Power Parity Theory

Cassel (1918) developed the purchasing Power Theory. It describes the connection between the rate of currency transactions in a state as well as the movement of the national price level compared to that of another foreign country. The foundation of the theory is the 'law of one price' where similar commodities should be priced equally across different markets with absent variant taxes and transportation costs functional in the two markets. Arbitrage opportunities are created if there are large price differentials between countries which result to purchasing goods at a lower price in the cheapest country. The Purchasing Power Parity theory suggests that their purchasing power proportions determine inconvertible regular balanced exchange frequency amid two bills; hence, the interchange frequency presents a likelihood of conventionalism at the equality point between the currency's PPs (Ebiringa & Anyaogu, 2014). The PPP main component refers to a single

price tenet proposing that in the absence of a competitive market structure, absence of transportation charges, charges, shares and any trade hurdles, coupled with business and arbitrage within produce marketplaces, there is need for the verification of verify identical value (Rehman & Rehman, 2012). The Purchasing Power Parity theory adopts that market of products arbitrage ties universal charges once the product charges become gauged in the alike money.

Purchasing Power Parity works in a symmetry method within the interchange frequency determination theory and in the procedure of interchange level. It is commonly utilized in depicting the link amid comparative amounts with frequency of interchange (Rehman & Rehman, 2012). The PPP states that the imminent spot rate of foreign money exhibits diversity in quantity from the prevailing spot frequency at equipoise by a totality that equalizes an increase difference percentage among external and home state (Zhang & Dou, 2014). The PPP theory, which proposes that alterations in degrees of altercation are prompted by variances in inflation degree, while minimal interest frequency alterations is attributed to predictable rise frequencies variances since the similarity of interest proportions across numerous states (Ebiringa & Anyaogu, 2014). Purchasing Power Parity theory comprised of one of the significant foundational sections in creating the approaches of resolving of Exchange frequencies (Rehman & Rehman, 2012). According to the Purchasing Power Parity approach an instant a state's inflation rate surges in comparison to a different country, amplified importations and reduced exportations inhibit the huge price increases in currency for the deteriorating current and trade account equilibriums. The PPP acts as a standardizing measure for figuring frequency of equipoise interchange

plus assessing if the actual exchange frequency shocks weaken over time (Zhang & Dou, 2014).

The approach applied mostly to neighbouring countries such as Kenya, Uganda, Tanzania and Ethiopia who have the same tourist attractions point of reference the big five. If tourism prices differentials exist, tourists would flock to the cheapest country this would result to price adjustment to countries that have recorded lower numbers of tourists.

2.2.3 Foreign Exchange Exposure Theory

The foreign exchange exposure was created by Levi, Amihud & Jordon in 1994. This theory holds that any fluctuation in the frequency of exchange influence the value of multinational firms because they are mainly involved in handling foreign sales and foreign assets which must be denominated based on the domestic currency of the original firm. Most early empirical literature failed in pointing out the precise impact of exchange frequency unpredictability on stock prices involving multinational firms. However, recent empirical literature using the financial theory speculate that any fluctuation in the exchange can significantly impact the value of sales and assets which is a critical determinant of firm value.

Moreover, foreign exchange risk in most literature particularly focuses on multinational companies in the corporate sector. The high sensitivity of the tourism industry to exchange rates between tourists in their origin nations and their destinations, makes it a critical sector to identify when evaluating the risk of foreign exchange exposure (Alssayah, 2013). The

foreign exchange exposure theory is applicable in the tourism industry in this study in that domestic industries offering tourism services are extremely prone to foreign exchange jeopardies accompanied by price elasticity in demand. Exposure if domestic industries that operate tourism services may be nonlinear, asymmetric and lagged. Exposure to foreign exchange risks may bring along significant financial burdens including losses due fluctuating rates of demand for tourist activities.

2.3 Determinant of Tourism Growth

Exchange rate volatility, economic performance (revenue of the state of origin), inflation rate and comparative price between the country of origin and the host country are considered as the key determinants for tourism growth in this literature.

2.3.1 Exchange Rate Volatility

Policy makers and economists regard exchange rate as a basic variable in macroeconomic (Agiomirgianakis, Serenis & Tsounis, 2015). Holds that appreciated exchange rate at a tourist place of interest leads to reduced inflow of tourists to that destination. According to Khandaker and Islam (2017), the influence of exchange proportion instability on the inflow of tourist founded upon the personality of tourist in terms of risk-averse or risk lovers. When risk-averse tourists are involved, exchange rate volatility will negatively affect their decision to travel and thus resulting into decreased tourist arrivals. However, when it risk-lovers tourists are involved, exchange rate volatility will positively influence their decision to other places resulting into increased tourists arrivals.

Moreover, Khandaker and Islam (2017) affirms that the anticipation is that risk-averse tourist are substantially larger in number compared to risk-seekers. Risk-averse tourist may make a choice to cancel, delay or change the location of their travel destination when the exchange rate volatility becomes significantly high at their initial destination of interest. This can also be contributed by the fact that package tourism dominates tourist inflows and tour operates will switch locations to mitigate the impacts that comes with exchange volatility. Dincer, Dincer and Ustaoglu (2015) exchange rate volatility may be a reflection of political instability or social unrest within the place of interest which deters tourists from visiting such places for their personal safety.

Tsui and Balli, (2017) evaluated whether exchange frequency impulsiveness leads to increased uncertainty in tourist influxes in Australia, based on their findings he concluded that exchange frequency impulsiveness generates spillover aspects on tourist entrances within Australia. However, the two authors also affirms that these impacts may have differing perspectives from the strongest to the weakest which is entirely dependent on the state of origin.

2.3.2 Economic Performance

Economic performance is among the key elements that influence the demand for tourism especially national income or disposable income from the states that the tourists reside in. Developed countries have been identified to have higher rates of disposable income compared to developing states. Gross Domestic Product (GDP) is the fundamental component used in the measurement of a country's economic performance. Fiscal progress is weighed through proliferation of quantity of goods and services a particular economy

can generate over and should be higher compared to the previous year. When a government accelerates its economic performance, its citizens are able to live in enhance standards. Usually, economists determine the rate of economic growth by identifying the increase rate of national income in a country on an annual basis. When a country has a high rate of economic growth, it reflects various benefits including high rate of consumption of goods and services including the tourism sector. As such, increased income is recorded and the economic continues to thrive (Tsui & Balli, 2017).

Disposable income is affected by various factors including rates of net savings and inadequacy. GDP is a more reliable variable in determining a country's economic standing, however, De Vita and Kyaw (2016) states that GDP cannot entirely reflect aspects regarding the distribution of income within a society because it is incapable of apprehending loopholes involved in income distribution. Secondly, when the time-lag involving generation of revenue and spending for tourism is huge, it might be difficult or impossible to capture all the details. Additionally, consumers' expectations for income may be based on optimism and pessimism, more often, how they react in either cases could not be reliable (De Vita & Kyaw, 2016). Income elasticity contributes significantly to tourism demand which holds that a relative variation in tourism arrivals is directly proportional to a relative variation in income. The fact that income and demand are elastic in nature correlates to their direct impact on tourism. However, Alhowaish, (2016) states that some elements of tourism are not elastic to income.

2.3.3 Inflation Rate

Provided that there is ambiguity, foreign investors will claim high values as a measure of safeguarding themselves from inflation risks hence reducing the long run magnitude of capital outlay. A steady rate of inflation is a key factor in attracting foreign investment (Nwankwo, 2016). According to Kadongo (2011) the inability of macroeconomic policies to meet their intended purpose has contributed to the fall in the number of tourists into Africa.

Instability of Macro economic variables as evidenced by persistent increase in prices and severe shortfalls in budgets reduces the amount of Tourism growth received by a given country (Kadongo, 2011). Highly volatile inflation escalates the transaction prices which in turn have adverse consequences on the long□term intentions of investors; this decreases the current and impending gains (Muema, 2013). The less volatile inflation is, the more investors it attracts (Gastanaga et al., 1998). Low inflation is anticipated to have a positive relationship with tourists flows (Madura & Fox, 2011).

2.3.4 Relative Price

After income, the cost of living (price) at the destination of interest significantly influences tourism growth. The measurement of precise relative price is difficult because tourist are likely to purchase various of products and amenities while travelling. The relative price for tourism can be segmented into two parts: transportation cost and the cost of living at the place of interest. De Vita & Kyaw, (2016) affirms that any expense incurred on local travel is accounted as part of the cost of living at the place of tourism. Lean, Chong & Hooy,

(2014) further divides tourism cost into substitute expenses and other expenses like travel insurance and opportunity cost of travel period. Additionally, Sokhanvar, (2019) identifies the cost of international transport as an element that significantly influences the relative price of the entire tourism experience and demand. When travelling internationally, many restrictions apply including the need for verification documents that may be costly and exchange rates as well. More often, when a tourist has to travel outside country, he/she must pay in advance for the transportation services.

In most cases, various formulas including using the CPI are used to determine the charge of staying in the host country comparative to the home country. However, CPI fail to be consistent in capturing every detail regarding coverage and weights between nations because it only captures variations in price such that there lacks provision of information on the extent of the actual price. Use of other methods like hotel price indices and service price index have been suggested, however, they require extensive collection of data as well as processing which makes the process cumbersome. Therefore, CPI continues to be the measure for relative price between countries despite its inconsistency. The relative price at the host country can be caused by various factors such as inflation. When the relative price at the destination of interest are higher, tourists are likely to evaluate substitute price which refers to the cost of tourism to almost similar destination. The decision to select a particular place as an alternative destination is more likely to be based on how similar the two destinations are in terms of culture and geographical features in regard to the preferences of the tourist. Sokhanvar (2019) identifies Mainland China, South Korea, Singapore, Thailand and Taiwan as the alternative destinations for Hong Kong.

2.4 Empirical Literature Review

The section reviewed latest experimental inquiries by other intellectuals in the same research item and the consequential results.

Killic and Bayar (2014) sought to establish the how tourism receipts and expenditures relates to real effective exchange rate volatility. This study was conducted in Turkey. Quantitative investigation strategy will be adopted to determine the link amid the variables. The data collected covered a period between 1994 to 2013 and was analysed through Johansen co-integration test, causality analysis and Vector Error Correction Model. Findings of the study revealed that a progressive lasting association between the real effective exchange rate (REER) and tourism receipts and costs.

Agiomirgianakis, Serenis and Tsounis (2015) explored the link between modifications in exchange frequencies and tourists flows in The United Kingdom (UK) and Sweden. Quantitative research methodology was adopted to institute the connection between the variables. The long-term relationship was determined by co-integration. The outcome of the analysis show that tourist were discouraged from visiting Sweden and UK when the volatility of exchange rate was high than when it was low. The study therefore, concluded that there exists a destructive affiliation between interchange rates precariousness and tourist flows.

Harb (2019) examined how exchange frequency impulsiveness influence the performance of stock prices in Egyptian Exchange in Egypt. The study sought to realize the following goals: (i) to establish the relationship between exchange frequency impulsiveness influence

the behavior of stock prices, (ii) to determine the effect of exchange frequency volatility on tourism stock prices. Data gathered was analyzed through granger causality test and ARCH/GARCH models. The outcome of this analysis revealed a unidirectional causal relationship between exchange rate to tourism stock price. GARCH model analysis show that exchange rate accelerates the stock price return variance.

Sharma and Pal (2020) researched on how exchange frequency impulsiveness influences tourism need in India. Foreign tourist visits and incomes from external tourist arrival in India embodied tourism demand. A non-linear autoregressive distributed lag model was adopted as the methodological research design. Data collected by the study exchange rates, and earnings from foreign tourists covered the period 2006 to 2018. The study found out that India's tourism demand responds asymmetrically to real and nominal exchange rates. In addition, short-run effects of exchange rates uncertainty is less damaging than it long-run.

Barasa (2013) reviewed interchange frequency impulsiveness and payments balance of Kenya. The intention of the investigation was to ascertain the association between interchange frequency impulsiveness and balance of payment. The research model employed was quantitative research plan. The study established a bi-directional relationship between interchange frequency impulsiveness and Balance of payments (BOP). This is attributed to the fact that there are other factors that moderate the impact of exchange frequencies on BOP.

Nyongesa & Muchoki (2016) explored exchange rate volatility and enactment. The objectives of the inquiry revolved around finding out the trend and association exchange rate and NSE 20 share Index. To achieve this objective, an exploratory and correlational research design was used. Data collected ranged from 1996 to 2011 was analyzed through correlation analysis, augmented Dickey Fuller Test. The results indicated a noteworthy feeble correlation between the interchange frequency impulsiveness and NSE 20 share index.

Kairu (2016) explored the impact of the interchange frequency impulsiveness on the economic performance of profitable banks in Kenya. Descriptive research design was adopted achieve the goal. Secondary data was adopted from the combined financial reports in addition to Central Bank of Kenya Website. The exploration's outcomes proved the presence of a weak direct association among the variables. During the period under study, KES/USD was high volatile thus negatively affecting banks performance.

Waiguru (2019) sought to define the determinants of interchange frequency impulsiveness on performance of Kenya's horticultural exports. The precise goals of the investigation included examining the effects of price rises rates, public debt and interest rates on performance of Horticultural exports in Kenya. Study design adopted was descriptive research design and quantitative research design. Data collected was of secondary nature sources from Kenya NATIONAL Bureau of statistics and Central Bank of Kenya the ranged from 2004 to 2014. These data was then examined using descriptive statistics and

multiple regression analysis. The analysis outcome was revealed a negative link between overseas interchange volatility coupled with operation of Kenya's horticultural exports.

2.5 Conceptual Framework

In the inquiry, the dependent variable is tourism growth, while the independent variables are the exchange rate volatility factors whereas the moderating variables are macroeconomic variables including inflation rates and GDP rate.

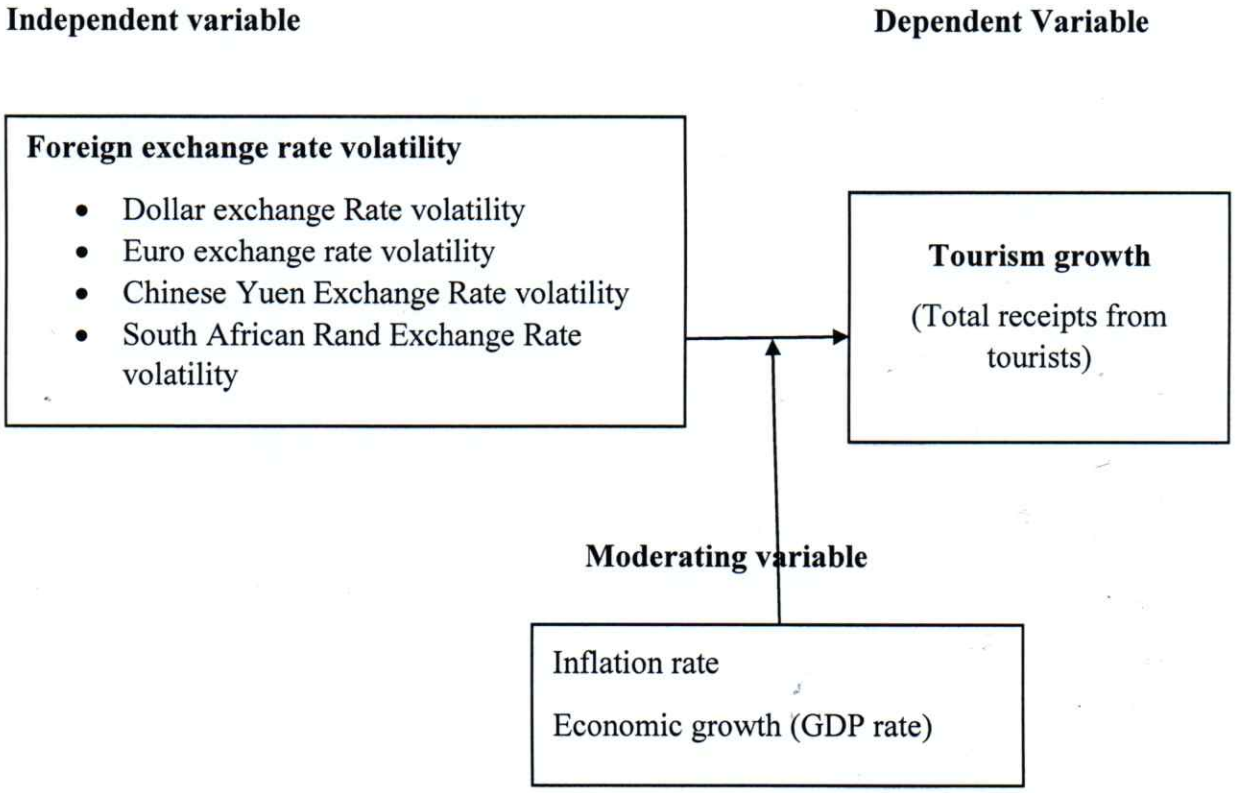


Figure 2.1: Conceptual framework

2.6 Summary of Literature and Research Gap

A larger percentage of the theoretical and empirical literature review backs the presence of a constructive and major impact of exchange rate on international tourism receipts. While some studies such as have found a positive impact of exchange rate on transnational tourism receipts, others have warned of a possible negative influence due to fear of insecurity and because of tourism accomplishments. For causation between the two variables, knowledge exhibits a unidirectional causality. Hence, the investigation aimed at filling this exploration gap caused by inconsistent results by researching on the influence of interchange frequency impulsiveness on Kenya's tourism advancement.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The method adopted to accomplish the investigation's objectives was presented in this chapter. This chapter specifically outlined the inquiry model adopted, study information sources and the information scrutiny, which encompasses various pre-regression, regression estimation method and post regression diagnostic experiments.

3.2 Research Design

The exploration utilized a quantitative design in its attempt to achieve the proposed objective. Quantitative research design is the practice of numerically representing and manipulating observations purposely to describe and explain the phenomenon reflected in the observations (Creswell & Creswell, 2017). The basic aim in quantitative research design is to define the co-rellation between an independent variable and a dependent variable in a sample population. Variables gets measured on a specific population like humans or animals and the identified relationship between the variables gets expressed in term of effect statistics such as correlations, mean and frequencies.

Quantitative research plan is deemed suitable for this investigation since it put the researcher at a position to identify the correlation between exchange rate volatility and tourism growth and as such making it easier to determine the effect of exchange frequency instability on tourism progression. Quantitative research design makes it possible for the researcher to measure reactions from a large population based on few questions, which

facilitates comparison and statistical accumulation of statistics (Hoe & Hoare, 2012). As such, it is possible to generalize a broad set of findings in a succinct and parsimonious way and therefore the researcher could avoid bias because he/she has clearly defined research questions where objective answers must be given. As such, quantitative research design is set to come up with repeatable, generalizable, relatable, more structured and consistent results.

3.3 Data Collection

The research depend on on information gathered from 2009-2019. Collection of secondary data and specifically international tourism receipts, was sourced from Worldbank website while exchange rates, inflation rates and GDP rates was sourced from Central Bank of Kenya Website. Exchange rate included currencies for China, Europe, United States of America and South Africa.

3.4 Diagnostic Tests

This research relied diagnostic tests to determine the reliability of the study outcomes. Multicollinearity, Heteroscadasticity, Linearity test and Normality tests was diagnosed. Multicollinearity Test ensured that data collected is not biased and also ensured that one variable data does not relate to another variable data. Different variable data can be related when closely exact or exact linear link exists between two or more independent variables. Multicollinearity is verified using variance inflation factor. When the values of variance inflation factor is between one and ten, multicollinearity in those variables it is high, however, when the values of variance inflation factor are less than one or greater than ten,

then multicollinearity is low in that data set. Failure of the multicollinearity to determine the nature of the data set, the researcher could apply standardization method on the regression dialog box. For instance, he/she can select the variable centering approach.

On the other hand, the Heteroscedasticity test determined how consistent variance is across the observation. When heteroscedasticity occurs, it implies that variance across the observation is varying which may cause biasness in estimation. A normality test determines whether a set of data is well modelled on the basis of normal distribution and also computes the possibility of the random variable in the set of data can be distributed normally. The study utilized Shapiro-Wilk test to normality. The test is most proper for example 50 or below. Data distribution is normal as per Shapiro-Wilk test if its value is greater than the P-Value at 0.05.

3.5 Data Analysis

This sections mentions methods that was applied in scrutinizing data. The study used descriptive statistics and inferential statistics for data analysis. Data was shown through means, standard deviation and percentages. The analytical model applied in this research is regression analysis.

3.5.1 Analytical Model

The multiple regression models establishes the association between exchange rate volatility and tourism growth is adopted. Below is the inquiry's model:

$$Y=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \varepsilon$$

Where: Y = Dependent variable ((Tourism growth rate was measured as total international tourism receipts). Tourism growth rate was established by

$$= \frac{(Current\ tourism\ growth - previous\ yr\ growth)}{Current\ tourism\ growth} * 100$$

X_1, X_2, X_3, and X_4 = Independent variables

Percentage change in exchange rates was established by

$$= \frac{(Current\ exchange\ rate - previous\ exchange\ rate)}{Current\ exchange\ rate} * 100$$

X_1 = was the dollar exchange rate volatility

X_2 = was the Euro exchange rate volatility

X_3= was the Chinese Yuen exchange rate volatility

X_4= was the South African Rand exchange rate volatility

X_5= was the Inflation rate

X_6= was the GDP rate : α = Constant, ϵ = error term

$\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$ = Regression coefficients or change included in Y by each X value

3.5.2 Tests of Significance

This exploration study performed important testing through Analysis of variance (ANOVA). ANOVA measures differences between variables. Correlation coefficient (R) measure the bearing and strength of linear correlation among variables. Coefficient of determination (R^2) gave the amount by which Exchange rate volatility (x) predicts tourism growth (y). (R^2) is such that $0 \leq r^2 \leq 1$, and signifies the strength of the linear link between *x* and *y*.

The greater the (R^2), the greater the point line percentage that passes across when the line as well as data points are designed. A regression line of 80% occur where there is a 0,80 coefficient points. Values of 1 or 0 would show the regression line characterizes entirely or none of the data, correspondingly. The study employ T statistic since the population is at 95% confidence level.

CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction

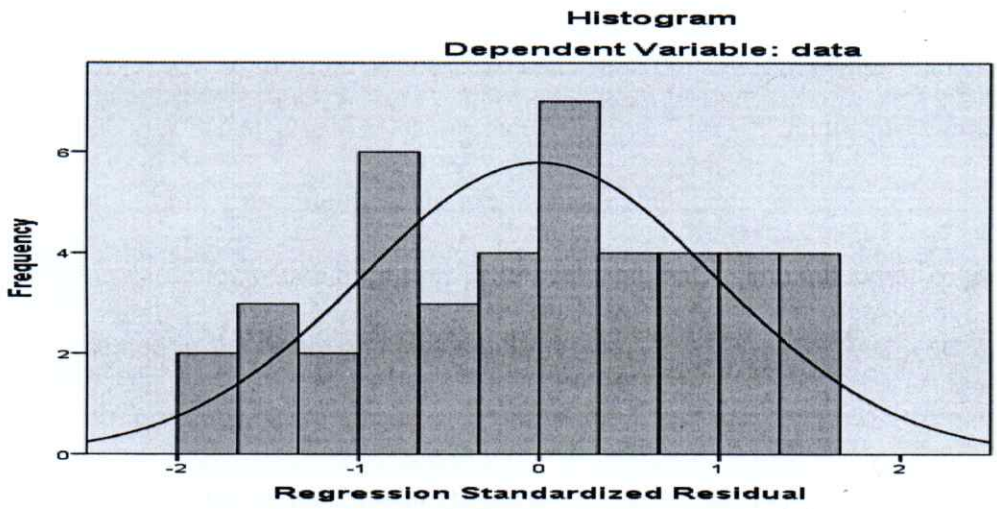
This purpose of this exploration lies in underpinning the effects of interchange frequency unpredictability on tourism advancement within Kenya. The investigation focused specific attention to how dollar interchange frequency instability, Euro exchange rate unpredictability, Chinese Yuan exchange rate volatility, Rand exchange rate volatility, inflation frequency and GDP had an impact on tourism growth rate. Chapter 4 concentrates on digressing data, interpreting and presenting of diagnostic tests findings, descriptive statistics, correlation analysis, regression analysis and a discussion of outcomes.

4.2 Diagnostic Tests

The study conducted various diagnostic assessments to access the nature of the distribution from which the data was a part of. Among the diagnostic test that were carried out include heteroscedasticity, normality and multicollinearity tests. Heteroscedasticity accesses the consistency of variances across variances. When heteroscedasticity occurs, it implies that variance across the observation is varying which may cause biasness in estimation and also signifies a data set departure from a normal distribution. Normality tests are also used to access if a data set is ordinarily spread. The study utilized Shapiro-Wilk experiment to normality. The Shapiro Wilk test inspects the variances of the data points to see if the data set comes from a ordinary circulation. Data is assumed to be ordinarily circulated if the p value of the test is greater than 0.05, the data is normal. Multicollinearity test examines the level of interconnectedness between variance.

Multicollinearity is tested using the variance inflation. The VIF factor has values between 1 and 10 any number outside these bounds indicate that there is great interconnectedness between the variables which might prove to be problematic. The outcomes of these tests are as presented in the figure and tables below.

4.2.1 Heteroscedasticity



Source: (Secondary Data, 2020)

Figure 4.1 Histogram

From figure 4.1 it can be shown that the relationship between the predictor and the residual is approximately normal. Thus, it can be inferred that the data set used for the study came for an approximate normal distribution.

4.2.2 Shapiro Wilk Test

Table 4.1 Shapiro Wilk Test

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Dollar ERV	.143	9	.116	.898	9	.209
Euro ERV	.124	9	.200	.893	9	.100
Chinese Yuan ERV	.169	9	.094	.916	9	.830
Rand ERV	.164	9	.085	.929	9	.971
Inflation Rate	.208	9	.285	.879	9	.334
GDP	.116	9	.379	.948	9	.457
Tourism growth Rate	.192	9	.077	.965	9	.218

a. Lilliefors Significance Correction

Source: (Primary Data, 2020)

From the Shapiro Wilk tests for normality it shows that respective p values of all the variables are above 0.05. Since this p values are greater that the level of significance 0.05 it shows that the data sets for the variables are normally distributed.

Table 4.2 Multicollinearity

Collinearity Statistics		
	Tolerance	VIF
Dollar exchange rate volatility	0.956	1.046
Euro exchange rate volatility	0.998	1.002
Chinese Yuan interchange level volatility	0.8178	1.2228
South African Rand exchange frequency volatility	0.7758	1.2889
Inflation rate	0.615	1.62601
GDP	0.695	1.4388
Tourism growth rate	0.114	8.7719

Source: (Primary Data, 2020)

From the collinearity statistics it can be shown that VIF for all the variables under investigation in the study fell between 1 and 10. This was an indication that multi-collinearity was absent and non-problematic between the variables.

4.3 Descriptive Statistics

Descriptive statistics are useful data points as they help summaries the data on a meaningful way. Descriptive statistics are important in that they help explore the various characteristics of the data. The study explored descriptive statistics like minimum, maximum, mean and standard deviation. The minimum indicates the lowest point in the data set while the maximum indicates the largest point in the data set. The mean shows the average point of the data set while standard deviation indicates how spread out the data points are away from the mean. The table below presents findings of the descriptive statistics.

Table 4.3 Descriptive Statistics

	Minimum	Maximum	Mean	Standard Deviation
Dollar exchange rate volatility	26.33	27.84	25.06	0.29
Euro exchange rate volatility	16.55	19.12	18.63	0.26
Chinese Yuan exchange rate volatility	33.32	34.35	33.98	0.43
South African Rand exchange rate volatility	-37.34	43.87	17.88	0.30
Inflation rate	6.52	7.3	6.35	0.85
GDP	1.37	6.9	4.72	0.34
Tourism growth rate	4.17	8.38	6.19	0.02

Source: (Primary Data, 2020)

Table 4.3 it was established that dollar exchange rate volatility produced 25.0667 mean and 0.2863 standard deviation. Euro exchange rate instability showed an 18.635 mean and 0.261 standard deviation. Chinese Yuan exchange rate unpredictability displayed a33.9863 mean and 0.432 standard deviation. The South African Rand exchange rate volatility depicted a 17.8853 mean and standard deviation of 0.304. The mean of Inflation frequency stood at 6.349 and the standard deviation at 0.857, GDP mean was 4.72 and standard deviation, 0.342. Tourism growth rate mean was at 6.19 and standard deviation at 0.024.

4.4 Correlation Analysis

The study employed the use of correlation analysis in exploring the linear relationship between variables. Correlation is usually measured by correlation coefficient r. The values of r range from -1 to 1. r value is between 0 and 0.5 indicate that two variables have a weak positive relationship. r value is between 0.5 and 1 express the presence of a that there is a resilient affirmative correlation. r is between 0 and -0.5 indicate a weak negative relationship and r values between -0.5 and 1 then there is a strong negative relationship. Generally, positive r values imply that an increase in one variable signals an increase in the other variable and vice versa.

Table 4.4 Correlation Analysis

Pearson Correlation (r)		**Dollar ERV**	**Euro ERV**	**Chinese Yuan ERV**	**Rand ERV**	**Inflation Rate**	**GDP**	**Tourism Growth**
Dollar ERV		1						
Euro ERV	r	0.231	1					
	Sig.	0.531						
Chinese Yuan ERV	R	0.037	0.105	1				
	Sig.	0.02	0.352					
Rand ERV	r	0.002	0.013	0.15	1			
	Sig.	0.00	0.131	0.00				
Inflation Rate	r	-0.07	-0.027	-0.26	-0.29	1		
	Sig.	0.02	0.172	0.003	0.002			
GDP	r	0.169	0.136	0.25	0.136	-0.14	1	
	Sig.	0.00	0.177	0.003	0.01	0.00		
Tourism growth rate	r	0.271	0.248	0.13	0.094	-0.16	0.12	1
	Sig.	0.012	0.144	0.106	0.140	0.161	0.031	

Source: (Primary Data, 2020)

The correlation analysis table revealed that all variables other were positively correlated with each other with the exception of inflation rate which was negatively correlated with all variables. In particular, tourism growth rate increase was signaled by the increase in dollar ERV, Euro ERV, Chinese Yuan ERV, South African Rand ERV, and GDP as indicated by the r values of 0.271, 0.248, 0.13, 0.094 and 0.12 respectively. Tourism growth rate and inflation rate were negatively correlated as shown by the r value of -0.16.

The following correlation was found to have an insignificant ($\alpha>0.05$), Euro ERV had an insignificant relationship with Chinese Yuen (0.352), Rand ERV (0.131), inflation rate (0.172), GDP (0.177), Tourism growth rate (0.144). Tourism growth rate had an insignificant relationship with Euro ERV (0.144), Chinese ERV (0.106), Rand ERV (0.14) Inflation rate (0.161). An insignificant relationship shows that there is no effect between the two variables.

Significant relationship ($\alpha<0.05$), was evidence between Rand and Chinese Yuan ERV (0.02); Rand ERV and Dollar ERV (0.00); Rand ERV and Chinese Yuan ERV (0.00); Inflation Rate and Dollar ERV (0.02); Inflation Rate and Chinese Yuan ERV (0.003); and Inflation Rate and Rand ERV (0.00). A significant relationship shows that there is an effect between the two variables.

4.5 Regression Analysis

Regression analysis works best in assessing the link between the outcome variable and the independent variables. The exploration employed the use of regression analysis to quantify

the relationship between Dollar exchange rate volatility, Euro exchange rate volatility, Chinese Yuan exchange rate volatility, Rand exchange rate volatility, inflation rate and GDP and their effect on tourism growth rate. The results of this analysis are presented in the model summary, Anova table and the coefficients table. The model summary indicates how much variation in the dependent variable is explainable through the model fitted with the independent variables. The Anova table accesses if the model fit is statistically significant in predicting the dependent variable based on the independent variables. The coefficient table quantifies how much the independent variables influence the dependent variable. The research findings are as shown in the tables below.

Table 4.5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.756[a]	0.571	0.4936	3.8869

Source: (Primary Data, 2020)

The model summary reveals that R Square is 0.571. This implies 57.1% of the variation in tourism growth rate is due to a model fitted Dollar exchange frequency volatility, Euro exchange rate volatility, Chinese Yuan exchange frequency volatility, Rand exchange frequency volatility, inflation rate and GDP as variables. This also means that 42.9% of the variation in tourism growth rate was either due to other factors or affected by errors.

Table 4.6 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	670.943	6	111.824	1.361	.000[b]
Residual	246.446	3	82.15		
Total	917.389	9			

Source: (Primary Data, 2020)

The Anova table shows that the F value was 1.361 with a significance value of 0.000. This significance value is less than p value 0.05. The implication is that the approach was statistically fit to predict tourism growth rate.

Table 4.7 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.503	0.41		0.682	0
Dollar ERV	0.257	0.61	0.186	0.347	0
Euro ERV	0.264	0.62	0.219	0.487	0
Rand ERV	0.181	0.54	0.701	0.093	0
Chinese Yuan ERV	0.179	0.09	0.982	0.227	0
Inflation Rate	-0.13	0.07	-0.16	-0.55	0
GDP	0.119	0.14	0.443	0.602	0

Source: (Primary Data, 2020)

The coefficient table deduces that the model fit for predicting tourism growth rate is;

$Y=0.503+0.257X_1+0.264X_2+0.181X_3 + 0.179X_4 -0.13X_5 + 0.119X_6$

Where;

Y= Tourism Growth Rate

X_1 = Dollar exchange rate volatility

X_2 = Euro exchange rate volatility

X_3= South African Rand exchange rate volatility

X_4= Chinese Yuen exchange rate volatility

X_5= Inflation rate

X_6= GDP rate

4.6 Discussion of the Findings

Findings from the correlation analysis showed that with the exemption of inflation rate all other variables had a positive correlation between them. This implied that Dollar ERV, Euro ERV, Chinese Yuan ERV, South African Rand ERV, GDP and tourism growth rate had a positive influence on each other. On the other hand, inflation rate had a negative influence on all the other variables.

Results from the model summary revealed that 57.1 percent of the variation in tourism growth rate is due to the fitted model. The Anova table showed that the model fit was statistically significant to predict tourism growth rate. From the coefficients table it was shown that the constant value is 0.503. This meant that if all the variables were held constant then the value of tourism growth rate would be 0.503. The beta value for dollar ERV was 0.257. This means that a gain in dollar ERV results in a 0.257 gain in tourism growth rate. The beta value for euro ERV was 0.264. This means that an surge in euro ERV results in a 0.264 upsurge in tourism growth rate. The beta value for rand ERV is 0.181. This means that an increase in rand ERV results in a gain in tourism development rate by a value of 0.181. Chinese ERV has a beta value of 0.179. Hence, an upsurge in Chinese Yuan would result in tourism advancement rate by a value of 0.179. Inflation rate had a

beta value of -0.13. The implication is that a unit gain in inflation rate decreases tourism growth rate by a value of -0.13. GDP had a beta value of 0.119. This implies that increasing GDP leads to a gain in tourism growth rate by a value of 0.119.

Findings from the study concur with that Ali (2017) who explored the effect of exchange rate impulsiveness on tourism industry in Zambia with a specific focus on the hospitality sector. Findings from his study concluded that GDP positively influenced the hospitality growing proportion while inflation negatively affected the tourism development frequency of the country.

Findings from this study also agree with those of with those of Wanjiku (2016) who explored the impact of variability in foreign currency exchange frequency on financial performance of five star hotels within Nairobi. In her findings she reveals that exchange rate fluctuations as well as GDP exerted a constructive impression on the financial conduction of the hotels whereas inflation had a negative influence on the operations of the hotels.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The part presented the inquiry's summary stems from the research aims tailored towards assessing the effects of exchange frequency volatility on tourism growth in Kenya. The section additionally presents conclusions, recommendations, limitations of the study and proposals for future investigations.

5.2 Summary of the Findings

Findings of the various diagnostic tests reveal that the data utilized from the study was derived from data sets that were approximately normally distributed. From the descriptive statistics it was shown that on average dollar ERV had an average of 25.0667 and Std. of 0.2863, Euro exchange rate volatility had an of 18.635 and Std. of 0.261, Chinese Yuan exchange rate volatility had an average of 33.9863 and Std. of 0.432, the South African Rand exchange rate volatility had an average of 17.8853 and Std. of 0.304, Inflation rate had an average of 6.349 and Std of 0.857, GDP had an average of 4.72 and Std. of 0.342 and tourism growth rate had an of 6.19 and Std of 0.024.

The correlation analysis shows that all variables exhibited a linear connection with each other as shown by the various r values. Explicitly, Dollar ERV, Euro ERV, Chinese Yuan ERV, South African Rand ERV, GDP and tourism growth rate had positive r values among themselves implying that these variables influenced each other in a positive manner. Inflation rate was however, negatively correlated with all the other variables as shown by

the negative r values which meant that an inflation frequency upsurge resulted in a reduction in all other variables.

From the model summary it was shown that 57.1% of the variation in tourism growth rate was due to Dollar exchange rate volatility, Euro exchange frequency volatility, Chinese Yuan exchange frequency volatility, Rand exchange frequency volatility, inflation frequency and GDP. From the Anova table it was also shown that the model fitted with Dollar exchange frequency volatility, Euro exchange frequency volatility, Chinese Yuan exchange rate volatility, Rand exchange rate volatility, inflation ratio and GDP as variables was statistically significant to predict tourism growth rate. From the coefficient tables the beta values revealed that Dollar ERV, Euro ERV, Chinese Yuan ERV, South African Rand ERV and GDP had a positive impact on tourism growth rate. From the coefficient table it was also shown that inflation rate had a negative impact on tourism growth rate.

5.3 Conclusions

From the exploration's results, it was revealed that the fluctuations rate did exist in the years through which the exchange rate of the various currencies was investigated thus explaining the volatility. Thus the study concludes that between 2009 and 2019 the Kenya shillings has been quite unstable which could be attributed to a number of factors such as economic performance and political uncertainty in the country.

The study further concluded that the change volatility of the various currencies under investigation had a progressive impact on the tourism growth rate. This implied that the

Kenya shilling exchange rate performance against the other currencies has over the years lead to a surge in the tourism development frequency.

The investigation also concluded that inflation exerted a negative effect on the tourism development frequency. The implication is that a surge in the inflation frequency was affecting the tourism sector unfavorably. The study further concluded that GDP positively influenced the tourism growth rate. Therefore, steady growth of the country gross domestic product led to an increase in tourism in the country.

5.4 Recommendations

From the inquiry, it was recognized that the volatility experienced in other world major currency was due to the instability of the Kenyan shilling. Thus the research recommends that the Central Bank of Kenya (CBK) put in place measures to reduce the fluctuations of the shilling. Thus, such measures would ensure that the shilling is relatively stable.

The study also determined that inflation rate had an adverse impact on tourism growth rate. Thus the study recommends that CBK comes up with policies that would prevent the country form experiencing adverse inflation rate. These measures would thus help improve the turnover in the tourism sector.

The study also resolved that GDP had a positive impact on tourism growth rate. Thus the study recommends that the CBK implements further measures to improve economic

growth and development. These measures would also further help improve the GDP of the country which would in turn have a affirmative impression on the tourism sector.

5.5 Limitations of the Study

The research was conducted with using secondary data sourced from various tourism receipts, world bank website and the CBK websites. The study thus had to rely of on the information as presented. Hence, the researcher cannot accurately establish the validity of the data utilized by the study.

The exploration exhibited limitations on period studied. The study explicitly looked into the exchange rate volatility between the years 2009-2019. Thus the results of this study cannot be inferred to other time period beyond these years as the results may not hold to be true.

The study was also limited to the tourism sector. Thus, the effect of exchange frequency unpredictability can only be inferred to this sector of the economy only.

5.6 Suggestions for Further Research

The exploration found out that 57.1% of the variation in tourism growth rate was due to the investigated factors. Thus it is paramount for other researchers to look into what other factors influence the change in tourism growth rate. Thus with this knowledge to tourism sector will conclusive have knowledge of how to model the factors that influence its growth to its favor.

The study was limited to the tourism sector only. Thus it is important for other researchers to look into other sectors of the economy as well. This will help establish general knowledge of how exchange rate volatility has an effect on various sectors of the economy. The study was also limited to a ten-year period between 2009-2019. Thus it is important for other researchers to look into other time periods other than the one investigated. This will help establishes if exchange volatility has the same trend throughout the years.

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APPENDICES

APPENDIX I: Data Collection Form

	2019	2018	2017	…..	2010	2009
dollar exchange rate						
Euro exchange rate						
Chinese Yuen exchange rate						
South African Rand exchange rate						
Inflation rate						
GDP rate						

APPENDIX II: Data Collected

Year/Currency	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Dollar exchange rate volatility	26.4	26.3	26.9	27.4	27.8	25.7	26.1	27.1	25.4	26.1	25.6
Euro exchange rate volatility	18.8	19.2	18.7	18.4	18.3	16.6	17.7	17.9	19.1	17.2	17.5
Chinese Yuan exchange rate volatility	33.5	33.5	34.2	34.1	34.1	33.7	33.3	33.9	34.4	34.1	33.8
South African Rand exchange rate volatility	-37.3	25.2	-2.1	-11.3	9.9	43.8	41.6	-17.6	-20.3	42.9	-14.7
Inflation rate	10.6	4.31	14.02	9.38	5.72	6.88	6.58	6.32	7.99	4.69	5.2
GDP (%)	3.3	8.5	6.1	4.6	5.9	5.4	5.7	5.9	4.8	6.3	5.4
Tourism growth rate	5.7	7.1	4.9	4.2	4.3	8.4	5.5	7.2	4.1	6.5	7.0