DETERMINANTS OF DOMESTIC TOURISM EXPENDITURE IN KENYA

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X50/86991/2016

A RESEARCH PAPER SUBMITTED TO THE SCHOOL OF ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF ARTS IN ECONOMICS AT THE UNIVERSITY OF NAIROBI

NOVEMBER 2019

DECLARATION

This research project is my original work and has not been presented for a degree in any other University. No part of this research project may be reproduced without the prior written permission of the author and/or University of Nairobi.

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DEDICATION

I wish to dedicate this work to my family. I dedicate it to my Aunt Alice Okello and Brother Elvis Odeny. Thank you for the emotional support and encouragement that you have given me throughout this journey.

ACKNOWLEDGEMENT

I acknowledge and thank the almighty God for the guidance, protection and direction throughout the study period. I would like to express my sincere gratitude to my supervisor, Dr. Kennedy Osoro, for his invaluable time, patience and prudent guidance in the formulation of this work.

Special thanks to my fiancé, Zach for guiding, supporting and encouraging me throughout this journey. I appreciate Mr. Joseph Abuga for his guidance in the development of this paper and well thought-out statistical input. I would also like to appreciate my family, friends and colleagues for the support provided during my study. Nonetheless, I take full responsibility for any errors and shortcomings that may be in

this work.

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# ABBREVIATIONS AND ACRONYMS

AIDS Almost Ideal Demand Systems (AIDS)

**KIHBS** Kenya Integrated HouseholdBudget Survey

**KNBS** Kenya National Bureauof Statistics

**KSH** Kenya Shillings

**LPM** Linear Probability Model

**OLS** Ordinary Least Squares

**UN** United Nations

**UNCTD** United Nations Conference on Trade and Development

**UNWTO** United Nations World Tourism Organization

**USA** United States of America

#### **ABSTRACT**

This study was meant to establish the determinants of domestic tourism expenditure in Kenya using cross-sectional dataset obtained from Kenya Integrated Household Budget Survey 2015/16. Tobit regression model was used in carrying out the empirical estimation and significance test at all levels. From estimation of the model, the study revealed that age of the respondents, gender of household head, marital status, individuals with primary and secondary education levels, place of residence, household size, employment status, source of sponsorship and advertisement had a statistically significant effect on domestic tourism expenditure in Kenya. Based on these findings, the study suggests for establishment and support of more centers to create awareness to local population on the best local destinations. These centers could as well focus or target the older population including the retirees as well as male headed households not forgetting urban population which is characterized as workaholic to promote consumption of local tourism.

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#### CHAPTER ONE: INTRODUCTION

# 1.1 Background

Local tourism has developed into an increasingly vital contributor to the development of economies of many nations in the world (Eruotor, 2014). Local tourism has come out to be an alternative driver of development (Fayissa, Nsiah, & Tadasse, 2007). Within the globalized world economy, tourism has generally been established as the biggest and the fastest viable sector. Local and global institutions support tourism because it does a lot to maintain world peace, help in eradication of poverty and amalgamation of people and culture (UNWTO2010). The expanding growth of tourist destinations and expenditure in tourism development has exalted tourism to the forefront of socioeconomic progress. This has been achieved by way of jobs creation and enterprise development; development of infrastructure; and the spending of revenues earned (Fayissa, Nsiah, & Tadasse, 2007).

Domestic tourism refers to activities of residents of a country travelling to other places outside their usual place of residence for at least a periodof not more than oneyear for either leisure businesses or other purposes. (KIHBS Basic report 2015-2016). Domestic tourism has been existence for longer than international tourism which arose due to improvement in international transport. Despite being the oldest form of tourism, local tourism industry has existed spontaneously without proper management. The focus on domestic tourism was improved by the United Nations (UN) declaration in Manila 1981 which recognized tourism as a potential booster of growth of an economy. Indeed, in advanced countries such as Australia domestic tourists take credit for over 75 percent of tourism activity.

The tourism value chain is a complex connection between different stakeholders, tourism activities and policy measures towards tourism. The value chain includes services and activities that take place where the tourists come from and where their destination is. At the source, activities concentrate on the demand for tourism products while at the destination, activities may focus on the supply of tourism products (Athanasopoulou, 2013). With improvements in technology, there is almost direct communication between suppliers of tourism and the consumers. This has improved decision making by both the suppliers and the consumers due to access to real time information. This has also enabled the close matching between the needs of the tourists and the products supplied (Michelle, Karina, Ghada, & Gary, 2011).

The growth of tourism sector in a country is, therefore, closely related to the decisions of the local tourists in a country. When the state establishes national tourism policies and strategies, they are achieved by the firms that supply tourism products. According to the key strategies focus on prices of tourism products, the seasonality of tourism, the income level of customers and how the sellers of tourism services advertise the product to attract local tourists affect the consumption of tourism products. (Brida, González, & Lanzilotta, 2017).

# 1.1.1 Global View of Local Tourism

Many countries in the world are turning to the promotion of local tourism to drive economic development. This is due to the realization that local populations are untapped opportunities in the tourism industry. In Malaysia, for instance, there is a realization that tourism has a great duty in boosting social, environmental and economic levels as an alternative driver of development. Tourism, generally, has become a significant contributor to income in Malaysia. In 2011, over 24.7 million local and foreign tourists were served Malaysia generating receipts worth over Malaysian Ringgit (RM) 58.3 billion (Bhuiyan, Siwar, & Ismail, 2013). To achieve these records, the Malaysian government put in place legal and institutional strategies to address sustainable local and foreign tourism. The strategies stimulated an increased activity in tourism that recorded 26.8 million tourists in 2016, that was 87.9% of the targeted 30.5 million tourist arrivals targeted for the year. Despite missing the target, the number of tourists grew by 4.0% (Tourism Malaysia, 2016).

In the United Statesof America (USA), tourism is a key contributor to the economy. Domestic travel in the USA increased by 1.9 % in 2017 to above 2.25 billion persontrips. Local travel grew by 2 % in 2017 to about 1.8 billion persontrips. Tourism for Leisure accounted for 79.4 percent of local travel in 2017. The tourism sector generated US\$1,036 billion which created nearly 8.8 million jobs directly as well as in payroll income, it produced \$259 billion. The government realized US\$165 billion in tax revenues. Generally, expenditure on local tourism and travel changed from 1,963.7 million trips generating US\$ 1,997.5 billion in 2010 to a higher number of 2,248.8 million trips that generated a lower US\$ 1,035.6billons as a result of price adjustments (World Travel & Tourism Council, 2017).

In Italy, tourism isone of the highest economic industry and is a longstanding driver of progress. Tourism is a critical export booster representing about 40% of the exports of services. Though the Italian tourism industry is greatly internationalized, the local market is dominating with an average market share of 57%. In 2009 direct tourism expenditure added up to 5% of

GDP while indirect impacts reached 10%. Compared with the rest of Europe Italy possess one of the highest number of employees in tourism. While foreign tourism earnings hit EURO 31 billion, local revenues from holidays only hit EURO 33 billion. The performance of domestic tourism sector is hugely reliant on its competitiveness. In terms of price, Italy has some main tourism products that are more favorable than those of Italy's main competitors. However, some negative perception of Italy's tourism products affects the competitiveness of the industry.

# 1.1.2 Regional View of Local Tourism

On the African scene, local tourism is coming in strongly as an alternative development driver. African countries are turning to the large but idle local market to fuel tourism industry to complement foreign tourism. Following United Nations Conferenceon Trade and Development the escalation of events concerning hostilities and terrorism in African countries such as Egypt, Kenya, Southern Sudan and Nigeria is a wakeup call for African nations to reduce dependency on tourists from other continents (UNCTD, 2016). Countries in Africa have to look for ways to stimulate local consumption of tourism products while maintaining visitors from the rest of the world. The continued dependency on tourists from western countries threatens the development agenda of African countries given the significant contribution of tourism to development in Africa.

South Africa, which is a major destination for tourists in the world has taken sharp focus on internal tourism. Policy makers realized the strong potential the country has if local tourism was well developed. In the evaluation of the ministry of tourism, the growth of local tourism in South Africa was hindered by its invisibility and economic insignificance. However, with improving local tourism, mechanisms are being put in place to motivate citizens in South Africa to be significant participants in the tourism industry.

# 1.1.3 Kenyan View of Local Tourism

Kenya's tourism industry is majorly reliant on touristsfrom Europe, theAmericas and Asia (UNCTD, 2016). Though growing gradually, Kenya's local tourism is not very well developed. Kenya has done massive investments to advance the promotion of inbound tourism while for a long time ignoring local tourism. This has been in a bid tosubstitute agricultural exports with tourism given the falling prices of agricultural products internationally. The fall in prices of agricultural exports has dented revenues from global trade. However, with escalation in terrorism activities since 1998 when the first terror attack was conducted in Kenya, challenges

of insecurity increased leading to shocks in inbound tourism. One way for addressing the shocks in the inbound tourism flow is concentrating on local tourism (UNCTD, 2016).

The domestic tourism industry is overshadowed by inbound foreign tourism. For a long time, strategies regarding tourism have focused on improving products for attracting and satisfying tourists from abroad. Consequently, most hospitality services providers, touristdestinations and producers of other tourist products have targeted foreign tourists. Most of the tourists visit Kenya's a coastal (beach) and wildlife safari destinations. Other commondestinations include Lake Victoria, Western Region for cultural shows suchas bull fighting; North Rift for sports; Central Kenya for Mt. Kenya; Eastern for attractions such as Kitui Nzambani rock. Strategies are being put in place to diversify tourism into new productsin the areas of eco-tourism, sports and traditional tourism, conference tourism as well as shopping tourism (Odunga, Belsoy, Nthinga, & Maingi, 2011).

While trying to diversify, thosein the tourism business have to handle the current problems facing the industry. For example, tourism revenues have for along time been created from limited tourism products, such as wildlife and national parks with few species making the focus of attraction. Other challenges include poor political stability and poor governance. Poor infrastructural development, poor service delivery and insufficient human capital contribute to the challenging environment. UNCTD (2016) strongly recommended the diversification of tourism into the local markets by putting in place mechanisms to stimulate local tourism.

To diversify the market for tourism into the local population, there is need to tailor products to meet the needs of the local population. Ali and Noman (2013) asserted for services to be competitive and attractive to the consumer, then theseller of the services has to concentrate on pricing and marketing strategies. While positioning the products for the customer, the seller may also consider the income of the targeted consumers and other market factors such as seasonality. However, different customers use various factors when making buying decisions. The providers of tourism for the local market have to put in more effort if they hope to improve utilization of tourism products by the Kenyan population. If the trend continues as it is, the benefits reaped from tourism in Kenya may go on dwindling and becoming a serious threat to Kenya's development programs (Okello & Novelli, 2014).

#### 1.2 Statement of the Problem

Making local tourism a key contributor to the national income of countries in the world has become an important development agenda of countries since it was highlighted as a possible development avenue by the United Nations (UN) declaration in Manila in 1981 (Cooper & Hall, 2005). To make local tourism important, countries, especially developing ones had to come up with strategies to make local tourism products attractive to its citizens. For this to happen, it is important for the developing countries to understand factors that attract people to travel within their counties in order to utilize tourism products and services consequently contributing to economic growth.

In Kenya, foreign tourism has been the lifeline of the tourism sector. The available statistics have been emphasizing on the international arrivals and the resultant revenues generated perpetuating the perception that Kenya is devoid of vibrant local tourism. Available statistics indicate that in 2017, tourist arrivals as well as revenue increased to 1.45 million and Ksh.119.9 billion from 1.34 million and Kshs 99.7 billion respectively. On the other hand, domestic tourism, grew by 29.5 percent from 2.7 million bed nights in 2013 to 3.65 million in 2017 (Economic Survey, 2018; 2019). However, comparing the annual growth rates of inbound tourism for the last three years has been higher than domestic tourism. Statistics from the third Medium Term Plan (MTP III) show that visitors arrivals annual growth rates were 13.5%, 8.1% and 14% in the years 2016, 2017 and 2018 respectively whereas annual growth rates of bed nights by Kenyans were 10.8%, 4.3% and 10.5% in the same period respectively (MTP III 2018-2022) of hotel bed occupancy by Kenyans at 5.5million (Economic survey 2019)

Further, the tourism administration in Kenya has mainly centered on what Kenya has to present to foreign tourists in terms of products and attractions as well as untapped potentials. The role of domestic tourism in Kenya remains secondary to international travel, as evident by the limited writings on the subject by the tourism scholars. It is also evident that tourism commodities and services are not well utilized by the local population and therefore it is necessary for the researcher to carry out this study in order to know the factors responsible for the residents' low participation in tourism.

#### 1.3. Research Questions

The following are the study questions:

- i. What are the patterns of price of tourism and price of non-tourism goods in Kenya?
- ii. What are the specific determinants of domestic tourism expenditure in Kenya?
- iii. What suitable policy measures should be adapted to increase the consumption of domestic tourism in Kenya?

# 1.4 Objectives

# 1.4.1 Main Objective

The aim of the study is to establish the determinants of domestic tourism expenditure, as an alternative to foreign tourism, for the sole purpose of ensuring sustained growth of the tourism sector in Kenya.

# 1.4.2Specific Objectives

The specific objectives include:

- i. To determine the patterns of price of tourism and price of non-tourism goods in Kenya.
- To establish the specific determinants of domestic tourism expenditure in Kenya.
- iii. To suggest policy measures that can be taken to increase consumption of domestic tourism in Kenya.

# 1.5. Significance of the study

Despite data indicating that domestic tourism has been resilient in the face of shocks as compared to foreign tourism, very few studies have been done to identify the specific determinants that influence its expenditure. Owing to this reality, it is unclear as to what policies are necessary to nudge Kenyans to increase consumption of domestic tourism as a substitute channel for generation of revenue.

Mayaka & Prasad (2012) hold a similar opinion that domestic tourism has been neglected despite showing signs of resiliency during times of shocks and thus a reliable channel for sustained growth. The findings of this study will contribute to public policy debate on how to improve local tourism through determination of expenditure determinants.

The findings will also enrich existing literature on the determinants that impact domestic tourism expenditure and the appropriate policy measures to boost its expansion as an alternative channel for sustained growth in the sector.

# 1.6. Organization of the study

Chapter one is the introduction where the background information is given. It also includes the objectives, research questions, the problem statement as well as significance of the study. Chapter two provides a review of literature that is both theoretical as well as empirical aspects. Chapter three explains themethodology and the model to be estimated, data sources and description of the variables. Chapter four presents result from the model estimated. Chapter five gives summary, conclusions, recommendations and areas for further study.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

This chapter presents literature review which focuses on three areas. The areas are: review of theories guiding the study, empirical review and overview of literature. The empirical review reviews past studies regarding the determinants of tourism in various contexts. The overview of literature comprises of personal observations based on both theoretical and empirical literatures.

#### 2.2 Theoretical Literature

# 2.2.1 Consumer Theory

Tourism expenditure is theoretically supported by the demand function. The product emanating from tourism demand is the total sum of the individual's want to travel locally over a given period of time. According to Song and Witt (2000) tourism demand is defined as the amount of a set of tourist products that the consumers are willing to purchase during a given period of time and under some given circumstances which are determined by the predictor factors employed in the demand equation 2.1. The consumer theory provides a theoretical framework governing the motivation behind the decisions made by consumers (Lancaster, 1966). The theory postulates that consumers are rational economic agents who seek to maximize utility derived from consumption of a bundle of goods and services, say  $X_1$  and  $X_2$ , which may represent tourism and non-tourism consumer goods.

The consumer therefore, while making decisions pertaining how much of goods and services to consume, are guided by the motivation to maximize the utility derived from utilization of those goods as well as services subject to a given budget constraint. The demand equation is thus mathematical representation of the link between the amount of a goods required and those factors that impact the willingness as well as the ability of a consumer to purchase the good as outlined below. The study models quantity of tourism goods and services demanded as a function of price of tourism,  $P_1$ , price of non-tourism goods,  $P_2$ , and income, Y as shown.

$$\mathbf{Q_d} = f(P_1, P_2, Y)$$
 (2.1)

Where,

Q_d is the quantity of a tourism demanded;

 $P_1$  is the cost of tourism;

P₂ is the cost of non-tourism goods and services;

Y is income;

# 2.2.2 Central Place Theory

Considering the proponents of this theory, they asserted that there are three different patterns that exist in central places based on three principles which are advertising standard, transportation standards as well as theadministrative minimums (Christaller, 1963). The marketing strategy postulates that there is hierarchical positioning of the central places considering the rank of the services provided. First order centers offers order services. Where the second offerssecond order services while 3rd ordercenters provide thirdorder services. The core of this theory isconcerned with how important the economic activities as well as the related infrastructure in a place are to the area and the neighboring areas. The theory provides the rationale for why tourist destinations of different importance exist and the kind of services they provide. For a tourist market to exist there must first be a minimum threshold amount of demand for the particular tourism good or service. This threshold is the point that tourism products must achieve to enable them offer required good or service and subsequently maintain their business. Regarding the range, the importance of products determines the largest distance acustomer is willing totravel to obtain a specific tourism good or service (Dennis, et al., 2002). The rangeis very sensitive to the exclusivity and attractiveness of tourism products and the economic forces determining the demand for the products. This theory is appropriate for this study because centrality of tourist centers may be a key determinant of the number of visits made to a tourist destination and the subsequent expenditure on domestic tourism.

# 2.3 Empirical Literature

Sirvan et al. (2014) did a research to model the behavior of consumers in the tourism industry. The research employed a crosssectional data collected in 2009 among domestic tourists in Turkey. The study findings indicate that there are various factors that determine and influence expenditure on tourism. The determinants include a consumer's tastes and preferences that emanate from desire to maximize utility, income, and specific prices paid to gain entrance to specific tourist destinations. The study found out that a consumer's tastes and preferences play an important role in influencing expenditure on tourism.

According to Cohen et al. (2014), there exists different factors that influence the total sum of money consumers spend on tourism. The researchers undertook to review the existing literature on the factors that determine and influence consumer behavior and expenditure patterns. The study observes that tastes and preferences of consumers on the perceived optimal level of utility are important in determining influencing the amount of money that is spend tourism. They also note that factors like motivation, source of sponsorship expectations from visiting tourism sites, technology and the income of consumers also play an important role in influencing how a consumer spends on tourism-related consumption compared to what is spend on non-tourism consumption. The study therefore is in agreement with the research done by Sirvan et al. (2014) that among other factors that determine expenditure on tourism, the tastes and preferences of a consumer, level of income and expected levels of utility from visiting certain tourist destination play are leading role in influencing expenditure on tourism services.

Zhang (2009) undertook a research to explore the determinants that influence expenditure on inbound tourism in China. Using panel data from 1989-2005 and OLS regression model the study found that, factors like the level of development in a country, availability of tourism resources and facilities, openness of a country's tourism sector, and the way in domestic tourism is organized have a positive effect on local tourism visits and the total costs incurred otherwise referred to as expenditure on tourism consumption.

Juan and Wiston (2009) carried out a research to explore numerous factors that determine demand for tourism services in Italy. The study used dynamic panel to model the shortterm and long-term demandfor tourism in the region. Per capita income data spanning from 1987 to 2007, the number of tourists in each of the 116 destinations in Tyrol, relative prices prevailing in the countryand the price of crude oil, which was used as a proxy for traveling costs, were utilized in the analysis as factors thought to influence demand and spending on tourism. The findings of the research indicated that travel costs, comparative prices of non-tourism consumer goods as well as services and loyalty of tourists to certain destinations have a significant effect in explaining expenditure on tourism.

Yehuda and Jeffrey (2010) did a research to find out the different determinants of coastal tourism in Florida, United States. The research used country level data on tourism ranging between 1970 and 2000. The research revealed that the choice of tourist destinations and the resultant spending on the same are highly influenced by the weather patterns experienced within differentgeographical locations in a nation as well as the perception that probable tourism consumers have regarding certain tourism destinations.

Rogerson and Rogerson (2014) carried out a research to investigate the various factors of urban local tourism demand and expenditure in South Africa. They note that urban tourism has been growing between 2001-2012, thus motivating the need to do a research to determine the different determinants that influence demand and spending for tourism. Using OLS estimation, they revealed that three factors are important in generating demand for urban tourism. These factors are the incomelevels of consumers, tastes and preferences and seasonal eventssuch as the World Cup that was held in the nation in 2010 (Rogerson & Rogerson, 2014). The results of the research are in congruence with those of Sirvan et al. (2014) and Cohen et al. (2014), in that levels of income and the tastes and preferences of consumers contribute in impacting spending on tourism. The only unique factor that the research unravels is seasonality of events like the 2010 World Cup held in the country.

Okello et al. (2012) did a cross-sectional study to determine the factors that influence demand spending on domestic tourism within Nairobi National Park in Kenya. Specifically, the research aimed at finding out the factors that influenced demand and expenditure on tourismactivities within the Nairobi National Park by urban and semi-urban residents. It was revealed that factors like education level, presence of time, tastes and preferences on tourism, perceptions on who should visit national parks, disposable income, the cost of tourism (price proxied by transport costs) and non-tourism goods and services and marketing campaigns influence demand and expenditure on domestic tourism at the country's national park. The factors acknowledged by the research are similar to those identified by Sirvan et al. (2014) on the multiplicity of factors that determine expenditure on tourism.

Chabari (2014) undertook a study to investigate the factors determining inbound tourism in Kenya using time series data obtained from Kenya Tourism Board. Using OLS, it is revealed that relative prices, population of the sending country as well as costs incurred to do promotional campaigns have statistically significant effect on inbound tourism. The findings concur to those arrived at by Okello et al. (2012) in that advertisement is a significant factor that influences expenditure on domestic tourism.

Omare (2016) undertook to investigate the factors that impact domestic tourism in Mombasa, Nairobi and Nakuru with a view to improving local tourism in Kenya. The study made use of survey data comprising of 600 respondents to do quantitative analysis. The results showed that the education levels, price of domestic tourism, place of residence, familial commitments and perception on the affordability of domestic tourism were key determinants of expenditure on domestic tourism in the country. Policy recommendations geared towards price reductions to

make domestic tourism affordable, advertisement to create awareness of various domestic tourism destinations as well as investment in infrastructural improvement to make tourism destinations accessible were suggested. Despite the fact that the technique of analysis using proportions differs from estimation models used in the other studies, there is similarity in identification of the factors that influence expenditure on domestic tourism in Kenya.

Brida and Scuderi (2012) conducted a research to examine the determinants of tourism spending: A review of microeconomic model using classical regression techniques (OLS, quantile, Tobit and two steps logistic model). The study used income, socio-demographic factors and trip related activities as the explanatory variables. The results confirmed that income, employmentstatus, size of the household, status of health, education, marital status place of residence and education had a significant effect on tourism expenditure.

Jesyca et al. (2018) undertook a research to investigate the determinants of attendees' tourism spending at skillful basketball matches during the 2012/2013 season using survey data. The main method of analysis used in the research was the linear quantileregression. The technique considered the effect of specific sports event factors. The study results confirmed that the determinants of expenditure have a different influence depending on the spending level. Individual spending on tourism is mainly affected by the origin of the attendees as well as by other factors like the timewhen the match takes place, the admission price, and the sporting level of the rival team.

Wynen (2019) undertook to investigate factors affecting spending behaviors for same-day tourist visits. The main objective of the research was to investigate the impacts of a wider range of socio-demographic and same-day visit related variables on the volumes and probabilities of same-day visit expenditures. Using dataset on same-day visits in Belgium, the model findings showed that the duration as asme-day visit, age category, information, education as well as motivation are key determinants of same-day tourism visit expenditures. The current study similarly considers age, gender of the head of household, access to information, education level, and motivation in the regression model that is estimated.

Natalia and Galina (2018) undertook a research to find out factors affecting tourist's level of satisfaction within the environment of the resort destinations in Russia using cross-sectional data. The results indicated that domestic tourists were not completely satisfied with the visit to the resort destinations. The lowest levels of satisfaction were observed over attributes such as healthservices, city transport and shops. The results indicated that factors like purpose of travel,

source of payment for travel, choice of housing, holiday organizationmode, and tourist's spending affected satisfaction of tourist. The research used OLS model to undertake regression analysis. Similarly, this current study uses the OLS model to undertake the analysis and factors variables like source of payment for travel and tastes and preferences as some of the determinants of domestic tourism expenditure.

#### 2.4 Overview of Literature

The review oftheoretical as well as empirical literature reveals supportive evidence for the topic under study. The theory of consumer-behavior, central place, as well as demand equation provides a theoretical framework governing the making of decisions by consumers as well as the incentives behind those decisions.

The past studies reviewed similarly provides evidence regarding factors that previous researchers have identified as key determinants of demand and spending on domestic tourism in various nations. These studies have used popular analytical models in estimating expenditure models. The most used models are the Ordinary Least Squares (OLS), Linear Probability Model (LPM) for binary dependent variables as well as probit models.

The studies identify factors like a consumer's level of income, tastes and preferences, technology and advertising channels, weather, seasonal events, specific price of tourism, distance, age, gender of the household head, and place of residence factors that determine how much consumers allocate towards tourism expenditure, but never estimated the extent to which these factors influence domestic tourism expenditure in Kenya. Therefore, the current study bridges the gap by identifying these factors and how they affect domestic tourism expenditure in a case of developing country like Kenya. Most of the previous studies on the subject (Chabari, 2014) focused more on the inbound tourism except a few on domestic tourism, others were either done abroad or locally at a small scale for example in a national park or an urban environment (Okello, 2012). The current study establishes factors of domestic tourism spending in domestic tourism industry in Kenya. The study borrows from most of thereviewed empirical studies that usedcross-sectional data and use the KIHBS dataset which is cross-sectional in nature.

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¹ Variables on domestic tourism are majorly found in cross-sectional dataset whose data are collected through surveys. In cross-sectional datasets, the focus is not on the number of time periods for which data for analysis is available, but on the number of observations per variable since the data is collected at one particular point in time.

#### CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter documents the approach used in carrying out the analysis. It comprises of theoretical framework, the estimable model, data and variables, as well as diagnostic tests that were undertaken.

#### 3.2 Theoretical Framework

A tourist is a utility maximizing economic agent. The goal of a tourist is to maximize utility derived from either leisure or wage-earning activities subject to income and timeconstraint. The assumption in this study is that participating in domestic tourism activities provides utility to the tourist and thus his objective is to maximize utility from engaging in tourism as a leisure activity.

The framework used in this research emerges from the Almost Ideal Demand Systems (AIDS) advanced by Deatonand Muellbauer (1980). The theoretical framework is supported by duality theory in consumer theory as postulated by Darrough and Southey (1977). The consumer theory postulates that consumers are rational economic agents who seek to maximize utility derived from utilization of goods as well as services subject to spending constraint. Consumers decide to spend their income in those alternatives that yield the highest possible utility based on the principle oftransitivity, non-satiation and completeness. Using the duality concept (Darrough & Southey, 1977), the objective of a consumer could be stated to mean that a consumer, being a rationaleconomic agent, endeavors to minimize spending on goods and services subject to a certain desirable level of utility. Based on this understanding, the study considers a tourist as a consumer who seeks to minimize expenditure on tourism as well as non-tourism goods and services, say  $X_1$  and  $X_2$ , respectively, subject to a certain desirable level of utility, say  $\bar{U}$ . The objective of the tourist is mathematically being presented as shown:

Min E= 
$$(P, \bar{U}) = P^1 X^1 + P^2 X^2$$
. (3.1)  
Subject to:  
 $\bar{U} = X1X2$  (3.2)

Where:  $P_1$ , and  $P_2$  are prices of tourism as well as non-tourism goods or services;  $X_1$  and  $X_2$  are quantities of tourism and non-tourism goods or services that minimize expenditure given a certain desirable level of utility,  $\bar{U}$ .

Forming the Lagrangian equation and obtaining the First Order Conditions with respect to  $X_1$ , which is the amount of tourism that minimizes expenditure, one obtains:

$$L=P1X1+P2X2+\lambda(\bar{U}-X1X2)$$
 (3.3)

$$\frac{dL}{dx_1} = P_1 - \lambda X_2 = 0 \tag{3.4}$$

$$\frac{dL}{dx^2} = P2 - \lambda X 1 = 0 \tag{3.5}$$

From equations (3.4) and (3.5), the optimal levels of  $X_1$  and  $X_2$  that minimize expenditure on tourism and non-tourism consumption given a certain desirable level of utility are:

$$X_1^* = \frac{p2x2}{p1} \tag{3.6}$$

$$X2^* = \frac{p_1x_1}{p_2} \tag{3.7}$$

The optimal levels of  $X_1^*$  and  $X_2^*$  are associated with optimal levels of  $P_1^*$  and  $P_2^*$  which are then plugged into the expenditure function that contains other determinants of tourism expenditure as shown in equation 8 which is estimated using an economic model;

$$Exp=(P_1^*, P_2^*, \bar{U}, Y, X_1, X_2, X_3, X_4, X_5, X_6, X_7)$$
 (3.8)

Where;

 $P_1^*$ =Tourism price,  $P_2^*$ =Non-tourism price, Y=Income,  $X_1$ =Sponsor,  $X_2$ =Tastes and Preferences,  $X_3$ =Advertising,  $X_4$ =Education,  $X_5$ =Age,  $X_6$ =Area of residence.

#### 3.3 Economic Model

According to Darby (1975), a consumer's expenditure is a function of price, desired utility, tastes and preferences, income, advertising and any other factor that may affect a consumer's choice on expenditure such as advertisement. The functional form of the expenditure function was subjected to empirical model. The general economic model was therefore;

$$Y = (X, W, Z)$$
 (3.9)

Where Y is tourism expenditure, X is demographic factors, W is socioeconomic factors and Z is other determinants that may have impact on domestic tourism expenditure. Note that the study relies other determinants as reviewed in the literature and presented in theoretical framework which was considered in the empirical analysis.

# 3.4 Model Specification

Considering Chabari (2014) as well as Rogerson and Rogerson (2014), the general model in equation 3.9, was specified and represented as follows;

$$Log Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \epsilon$$
(3.10)

Where LogY=Natural logarithm of domestic tourism expenditure,  $X_1$ =age,  $X_2$ =gender of household head,  $X_3$ =maritalstatus,  $X_4$ =Level of education,  $X_5$ =Place of residence,  $X_6$ = size of household,  $X_7$ =employment status,  $X_8$ =sponsorship,  $X_9$ =Advertising.

Note that in the first objective, the study analyzed descriptively the patterns of price and no price tourism expenditures in Kenya. Price of tourism: This objective was achieved through computation of total tourism expenditures incurred by households. This could also be measured as a share of income spent on tourism to total income earned by the household. On the other hand, price of non-tourism goods was obtained through measuring the total amount that was spend on consumption of non-tourism goods. It could also be measured a ratio of non-tourism expenditures to total income.

# 3.5 Estimation Technique

A Multiple linear regression model was employed in the secondobjective which was meant to establish the specific determinants of domestic tourism expenditure in Kenya. Tobit regression model was used to regress the natural logarithm of domestic tourism expenditure against determinants of tourism expenditure which include; age, gender of the household head, marital status, the educational levels, household size, employment, sponsorship and advertisement. The dependent variable was domestic tourism expenditure. The model was considered appropriate as the dependent variable was characterized with many zero observations.

Data analysis was carried out using STATA version 14.0. The analysis involved generation of descriptive statistics like computation of mean, standarddeviation, lowest and highest values of both dependent and independent variables and the marginal effect. In estimation, the analysis also tested whether the assumptions of cross sectional data are satisfied. In cross-sectional datasets, specific model tests are not required. However, it is important to note that R² in cross-sectional datasets is normally low and emphasis may not be put on generating a high R² as it would be the case if the data used was time-series (Liliana & Antonija, 2005).

The fitness of the model was nevertheless determined using the overall p-value associated with the F-statistic for goodness of the fitted model. The effect of the parameter coefficients estimated on expenditure on domestic tourism was then interpreted at the 5% level of significance. The study presented summary statistics in tables and generate graphical trends of variables in the study.

# **3.6 Description of Variables and Measurement**

**Table 3.1: Variable Description and Measurement** 

Variable	Measurement	<b>Expected Sign</b>	Source
Expenditure on domestic tourism	This is the dependent variable. It is continuous variable measured using logarithm of total expenditure on domestic tourism in Ksh.		KIHBS 2015/2016
Age	This was categorical variable measured in age groups complete years	Positive (+)	KIHBS 2015/2016
Gender of the head of household	This is a dummy variable measured as 1 if male, 0 if female	Positive (+)	KIHBS 2015/2016
Marital status	Married=1, Not Married=0	Indeterminate	KIHBS 2015/2016
Level of education	This is categorical variable.  Measured as 0 = no education (reference category) and 1=Primary 2=Secondary 3= Post-Secondary	Positive (+)	KIHBS 2015/2016
Area of residence	Is a dummy variable, measured as: $1 = \text{Urban area}$ $0 = \text{Rural area}$	Positive (+)	KIHBS 2015/2016
Household size	Is a continuous variables measured as the number of household members who usually live and eat there including children in boarding school	Negative (-)	KIHBS 2015/2016
Employment	Is a dummy variable measured as 1 if employed and 0 if otherwise	Positive (+)	KIHBS 2015/2016
Source of sponsorship	This is dummy variable measured as 1=self, 0=employer or others	Indeterminate	KIHBS 2015/2016
Advertising	This is a binary variable.  Measured as 1=Access to news sources like TV and the internet, 0 otherwise	Positive (+)	KIHBS 2015/2016

# 3.7 Diagnostic Tests

# 3.7.1 Homoscedasticity Test

One of the assumptions of the multiple regression is that the disturbance term has a constantvariance. Cross-sectional data is prone to change of the error term. The assumptions of the classicallinear regression model is that there is homoscedasticity. Heteroscedasticity affects inference by making standarderrors that are used in conducting hypothesis testing to be biased. The scatter plots were adopted in establishing the presence of heteroscedasticity. If the test for heteroscedasticity indicates that the variance of the error term is nonconstant, the robust standard errors are used in estimation.

# 3.7.2 Multi-collinearity Test

Multi-collinearity is a situation where the correlation among the independent variables is strong. It inflates the standard errors of the coefficient thus making the coefficients for some independent variables to be statistically insignificant while in real sense the variable could be significant. It was tested using correlation matrix. Multicollinearity is said to exist when there is perfect linear association between the variables concerned. If the pair has a correlation coefficient of less than 0.7, then multi-collinearity is not a serious issue (Orayo, 2014).

### 3.8 Data Type and Source

The study utilized cross-sectional data obtained from the 2015/2016 Kenya Integrated HouseholdBudget Survey (KIHBS) which is the latest dataset. It is collected after every 10 years. It is the most recent and it is expected to be better in capturing the different determinants of tourism expenditure in Kenya. This survey collected information on domestic tourism as well as information on demographic and socioeconomic factors.

#### CHAPTER FOUR: RESULTS AND DISCUSSIONS

#### 4.1 Introduction

This chapter provides the study findings and discussion of results. The general goal of the research was to establish the determinants of domestic tourism expenditure, as an alternative to foreign tourism, for the sole purpose of ensuring sustained growth of the tourism sector in Kenya. Respective sub-objectives were; to establish the patterns of price of tourism and price of non-tourism goods in Kenya; establish the specific determinants of domestic tourism expenditure in Kenya.

# 4.2 Descriptive Statistics

This section presents descriptive characteristics of the respondents sampled across the country to determine their wellbeing. The variables under study include; education levels, marital status, household size, employment and gender of the household size. There were a total of 92, 846 household sampled and interviewed during the 2015/2016 KIHBS Survey. As shown in table 4.1, the study found that tourism expenditure in Kenya4, 656.72 Kenya shilling son average. Some respondents never spent anything on tourism implying they never participated whereas those who participated in tourism spend the maximum of Kshs 580, 000.

**Table 4.1: Summary Statistics** 

Variable	Observations	Mean	Std. Dev.	Min	Max
Tourism expenditure	9,668	4656.724	15759.96	0	580,000
Age	54,308	38.03572	17.05921	18	115
Gender of the household head	92,846	0.4944532	0.4999719	0	1
Marital Status	66,018	0.4326093	0.4954414	0	1
No Education	69,432	0.005689	0.0752113	0	1
Primary education	69,432	0.6988132	0.458777	0	1
Secondary education	69,432	0.2222318	0.4157491	0	1
Tertiary education	69,432	0.0732659	0.2605744	0	1
Place of Residence	92,846	0.343612	0.474916	0	1
Household size	92,846	5.76195	2.626597	1	28
Employment status	80,039	0.1595722	0.3662111	0	1
Sponsorship	9,584	0.7041945	0.4564278	0	1
Advertising	85,127	0.7610159	0.4264655	0	1

Source: Author's Calculation

The study revealed that on average, the age of the respondents was 38 years with the youngest being 18 years and oldest 115 years. It was shown that about 49 percent of the head of the households were male whereas majority (51 percent) were offemale gender. Considering the marital status, it can be observed that respondents who were married were approximately 43.26 percent implying that the most (56.74 percent) were not married. In terms of educational attainment, majority of the respondents had primaryeducation (69.88 percent) followed by those who had secondary (22.22 percent) and tertiary education (7.33 percent). Less than one percent of the respondents were reported to have no education.

The study further show that, about 34 percent of the respondents were residing in urban areas whereas about 66 percent who formed the many resided in rural areas. Most of the households had approximately six (6) members on average with the least household indicated to have one member and the household with highest members was reported to have 28 members. On employment, majority (84.04 percent) of the respondents were not employed. Only 15.96 percent were found to be employed. The survey also established that about 70 percent of those who participated in tourism were self-sponsored whereas 30 percent were either sponsored by their employers or their sponsorship came from other sources. It was also revealed that about

(76 percent) of the respondents had access to either television, radio or internet which were used as proxies for advertisement whereas the other (24 percent) did not have access to either radio, television or internet.

# 4.3 Patterns for Price of Tourism and Price for Non-Tourism Goods in Kenya

To establish the patterns or trends for price oftourism as well as price for non-tourism goods in Kenya, the study explored the total cost of tourism incurred (expenditure) by the participants as there was no direct or predetermined price for various destinations. Similarly, for price of non-tourism goods was also established via expenditure on non-tourism goods. Figure 4.1 show the trend for tourism price and price for non-tourism goods in Kenya.



Figure 4.1: Price of Tourism and Price for Non-Tourism Goods in Kenya

From figure 4.1, the study show price for non-tourism being about four times more than tourism prices whereas total income was also about five times the tourism price. As illustrated, it can be concluded that the share for non-tourism goods to total income (91.02 percent) was large or huge compared to the share of tourism price to total income (21.37 percent). These deviations were huge given the fact that some of the participants may have incurred expenditures which were way above their total earnings. For example, the data revealed that the highest expenditure for tourism and non-tourism goods were Kshs 580, 000 and Kshs 300, 000 whereas the lowest spending was reported to be zero Shillings and Kshs 415, 850 (negative value) respectively.

Since the expenditure for non-tourism price was a negative figure, it can be concluded that some of the participants may have borrowed to finance their other day to day activities including consumption.

# 4.4. Correlation Analysis

The study undertook an analysis of the correlation coefficients to ascertain the rate and extent at which various pairs of the study variables were correlated. High correlations promote biasness which arises when one or more pairs of independent variables are perfectly correlated to each other. To this effect correlation matrix was examined. Table 4.2 shows a mix of positive and negative correlations among the variables. Since all pairs were less than the absolute value of 0.5, the study proceeded to estimation. It can however be observed that, all other variables had a positive correlation with tourism expenditure except household size which had a negative correlation. Age of the respondents was inversely correlated with education, residence size of the household and advertising but positively correlated with the rest. Also, marital status was only correlated negatively with household size as well as education levels. The latter was also found to be negatively correlated with place of residence. Lastly, household size was negatively correlated with employment, sponsorship and advertising. All other correlations among the remaining pairs were however positive.

**Table 4.2: Correlation Matrix** 

Variables	Tourism	Age	Gender of	Marital	Education	Place of	Household	Employment	Sponsorship	Advertising
	Expenditure		household	Status	levels	residence	Size			
			head							
Tourism	1.0000									
Expenditure	1.0000									
Age	0.0632	1.0000								
Gender of										
household	0.0524	0.0286	1.0000							
head										
Marital	0.0542	0.3558	0.0323	1.0000						
Status	0.0342	0.3336	0.0323	1.0000						
Education	0.1130	-0.0884	0.1144	-0.0474	1.0000					
levels	0.1130	-0.0004	0.1144	-0.0474	1.0000					
Place of	0.0734	-0.1021	0.0554	0.0009	0.2120	1.0000				
residence	0.0754	0.1021	0.0334	0.0007	0.2120	1.0000				
Household	-0.0283	-0.0247	-0.1052	0.0175	-0.1195	-0.2302	1.0000			
Size	0.0203	0.0217	0.1032	0.0175	0.1173	0.2302	1.0000			
<b>Employment</b>	0.0299	0.0499	0.1994	0.1019	0.1982	0.1650	-0.2137	1.0000		
Sponsorship	0.0395	0.2401	0.1267	0.1796	-0.0106	0.0208	-0.1067	0.1270	1.0000	
Advertising	0.0363	-0.0162	0.0261	0.0442	0.1528	0.0957	-0.0271	0.0344	0.0118	1.0000

# 4.5 Estimation of the Determinants for Domestic Tourism Expenditure in Kenya

The study in the second objective was focused at investigating how each of the determinants identified affected domestic tourism expenditure in Kenya. Tobit regression model was used in estimation and the results are shown in table 4.3. From the tourism expenditure model, overall pvalue was less than 5 % significance level (P value of 0.0000) meaning that the independent variables selected that is determinants (age, gender of the household head, marital status, the educational levels, household size, employment, sponsorship, and advertisement) significantly explained the dependent variable (domestic tourism expenditure).

**Table 4.3: Tobit Regression Results** 

Tobit regression

Number of observns = 7,012

F(12, 7000) = 99.80

Prob > F = 0.0000

Log pseudo likelihood = -10096.887

Pseudo R2 = 0.0519

Ln Tourism Expenditure	Coefficients.	Robust Std. Err.	t	P>t	[95% Conf.	
Age					Interval]	_
_						
35-59 years	.2364642	.0284721	8.31	0.000	.1806502	.2922782
60 years and above	.2281464	.0455853	5.00	0.000	.1387854	.3175075
Gender of the household head	.17917	.0255751	7.01	0.000	.1290351	.2293049
Marital status	.1573114	.0270333	5.82	0.000	.1043181	.2103048
Education levels						
Primary	5639162	.1791548	-3.15	0.002	9151139	2127185
Secondary	3252018	.1795584	-1.81	0.070	6771907	.026787
Tertiary	.1824767	.1808159	1.01	0.313	1719773	.5369306
Place of Residence	.1747244	.0261559	6.68	0.000	.1234509	.2259979
Household Size	0283699	.0049983	-5.68	0.000	038168	0185718
Employment status	.074324	.0275663	2.70	0.007	.0202857	.1283624
Sponsorship	.1583962	.034659	4.57	0.000	.090454	.2263385
Advertising	.1700038	.0468589	3.63	0.000	.0781461	.2618615
_cons	7.603722	.1898216	40.06	0.000	7.231615	7.97583
/sigma	1.021228	.0110648			.9995372	1.042918

⁰ left-censored obs

Source: Author's Computation.

Further, the pseudo R2 of 5.19in the model implies that this proportion or percent of explanatory or independent variables explain domestic tourism expenditure variable to that

^{7,012} uncensored obs

⁰ right-censored obs

extent. To proceed, the study considered marginal effects of variables for interpretation purposes. The results are as shown in table 4.4.

Table 4.4: Marginal Effects for Tobit Regression Model

Ln Tourism Expenditure	Marginal Effects.	Robust Std. Err.	t	P>t	[95% Conf	. Interval]
Age						
35-59 years	0.2365***	.0284721	8.31	0.000	.1806598	.2922685
60 years and above	0.2281***	.0455853	5.00	0.000	.1388008	.317492
Gender of the household head	0.1792***	.0255751	7.01	0.000	.1290438	.2292963
Marital status	0.1573***	.0270333	5.82	0.000	.1043272	.2102956
Education levels						
Primary	-0.5639***	.1791548	-3.15	0.002	9150532	2127793
Secondary	-0.3252*	.1795584	-1.81	0.070	6771298	.0267262
Tertiary	0.1825	.1808159	1.01	0.313	171916	.5368694
Place of Residence	0.1747***	.0261559	6.68	0.000	.1234597	.2259891
Household Size	-0.0284***	.0049983	-5.68	0.000	0381663	0185735
Employment status	0.0743***	.0275663	2.70	0.007	.020295	.1283531
Sponsorship	0.1584***	.034659	4.57	0.000	.0904658	.2263267
Advertising	0.1700***	.0468589	3.63	0.000	.078162	.2618457

(*** (**)(*) Significantat 1% 5%and 10% level respectively.

Source: Author's Calculation.

From estimation of the results in table 4.4, almost all coefficients were revealed to have a statistical significant effect on domestic tourism spending in Kenya except the coefficient on tertiary education level which had insignificant coefficient. To ascertain the validity of the estimated coefficient, cross sectional post estimation tests were conducted.

# 4.6 Discussions of the Robust Tobit Regression Results

From the estimated models, most of the identified factors were found to be statistically significant in determining domestic tourism expenditure in Kenya. The discussion ensues focusing on the significant determinants only where the coefficients for marginal effects are considered. In determining domestic tourism expenditure in Kenya, the study established that age of the respondents had a significant effect. Specifically, being in the age bracket of 35-59

years led to a significant rise by 23.65 percent holding other factors constant compared to being in age bracket of 18-34 years. Also, being the age of 60 years and above led to a significant rise by 22.81 percent holding other factors constant compared to being in age bracket of 18-34 years. This finding was supported by the study result of Wynen (2019) who explored the determinants of spending behaviors for same-day tourist visits. The study concluded that the duration of a same-day visit, age is important determinant of same-day tourism visit expenditures.

The coefficient on gender of the household head was found to be statistically significant at 1 percent level. Household headed by male had higher domestic tourism expenditures by 17.92 percent holding other factors constant. Our result was supported by Wynen (2019) who revealed that gender of household head and motivation were significant determinants in the regression model that is estimated.

The coefficient on marital status was shown to be statistically significant at 1 percent level. Being married was found to increase domestic tourism expenditures by 15.73 % holding other factors constant. It is supported by Wynen 2019 who revealed found that that being married had a positive and significance effect on same day tourism visit expenditures.

The study evaluated education variable in four different levels where those who had no education were used as reference group. The coefficient on primary level of education was statistically significant at 1 % level. Having primary education level led to a significant decline in domestic tourism expenditures by 56.39 percent holding other factors constant compared to those having no education. Similarly, having secondary education level led to a significant decline in domestic tourism expenditures by 32.52 percent holding other factors constant compared to those having no education. However, these significance was weak since the p value (p>t=0.07) was less than 10 percent level of significance.

The coefficient on place of residence was established to be statistically significant at 1 % level. The study found that those individuals who resided in urban areas increased domestic tourism expenditures by 17.47 percent ceteris paribus. The findings are similar to that of Omare (2016) which indicated that the level of education, price of domestic tourism, place of residence, familial commitments and perception on the affordability of domestic tourism determined expenditure on domestic tourism in the country.

The coefficient on household size was shown to be significant at 1 percent level. The research revealed that an extra member to the household led to decreased local tourism expenditures by

2.8 percent holding other factors constant. The findings are the same as those of Brida and Scuderi (2014) which revealed that size of the household and household numerousness had a significant effect on domestic tourism expenditure.

The coefficient on employment status was shown to be significant at 1 % level. The study found that being employed increased domestic tourism expenditures by 7.43 percent holding other factors constant. The findings are similar to that of Brida and Scuderi (2014) who carried out a study to examine the determinants of domestictourism expenditure. It showed that income, employmentstatus, size of the household, healthstatus, education, household numerousness, marital status education levels, place of residence had a significant effect on tourism expenditure

The coefficient on source of sponsorship was found to be statistically significant at 1 percent level. The study revealed that sponsoring oneself as opposed to being sponsored increased domestic tourism expenditures by 15.84 percent holding other factors constant. The finding is supported by Cohen (2014) who found out that motivation and source of sponsorship expectations from visiting tourism sites, technology and the income of consumers also play an important role in influencing how a consumer spends on tourism-related consumption.

Lastly, the coefficient on advertisement was shown to be statistically significant at 1 percent level. The study concluded that tourism advertisement increased domestic tourism expenditures by 17 percent holding other factors constant. The findings are the similar to that of Okello (2012) who revealed out that marketing campaigns influence demand and expenditure on domestic tourism at the country's national park. The findings are also similar to that of Chabari (2014) who found out that marketing campaigns had significant effect on inbound tourism.

#### **4.7 Estimation Tests**

# **4.7.1 Normality Test**

To proceed with estimation, the study employed the Shapiro Wilk test todetermine the distribution of the stochastic error terms. Table 4.5 show that at 5% significance level, overall residuals of the variables were not normally distributed given the p value.

**Table 4.5: Shapiro Wilk Test for Normality** 

Variables	Obs	w	v	Z	Prob>z
Residuals	7144	0.98112	70.131	11.272	0.00000
Note: The normal approximation the sampling distribution of W is valid for 4<=n<=2000					

Normality test results show the pvalue of the residuals of 0.0000 which is less than 0.05 implying that the null hypothesis of normality of error term is rejected. To correct for normality problem, the study employed a nonlinear model.

# 4.7.2 Test for Heteroscedasticity

The study explored the presence of constant variance of the error terms across in the Tobit model. To ascertain presence or absence of homoscedasticity, the study made use of the residual plot method. Figure 4.2 shows the graph of residual squared against linear prediction. As can be observed, the scatter plots exhibit a systematic pattern. This implies that heteroscedasticity is present. To correct for the same, the study made use of robust standard errors to avoid spurious estimates as a remedy.

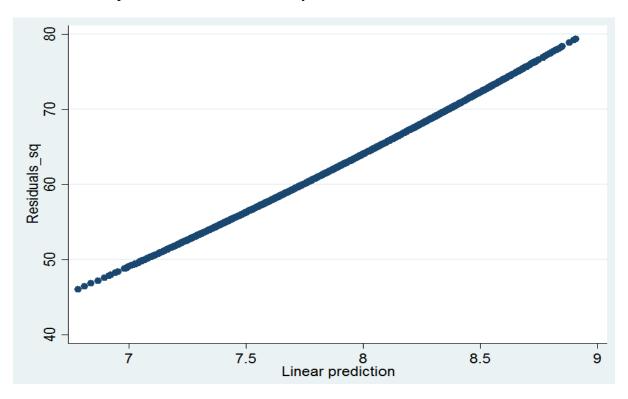


Figure 4.2: Residual Square for Domestic Tourism Expenditure against Linear Prediction

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND POLICY RECOMMENDATIONS

#### 5.1. Introduction

This chapter presents the summary of the study results in relation to the objectives, literature reviewed and major variables identified as determining domestic tourism expenditure. It later makes comprehensive conclusions upon which key policy recommendations are drawn. Suggestions for further areas of study are also made.

# 5.2. Summary of the Study Findings

This research was carried out with the knowledge that the domestic tourism was improved by the United Nations (UN) declaration which recognized tourism as a potential booster of economic growth. Many countries in the world are turning to the promotion of local tourism to drive economic development. This is due to the realization that local populations are untapped opportunities in the tourism industry. Though growing gradually, Kenya's local tourism is not very well developed. Kenya has done massive investments to improve the promotion of inbound tourism while for a long time ignoring local tourism. Thus the main focus of this study was to establish determinants of domestic tourism expenditure, as an alternative to foreign tourism, for the sole purpose of ensuring sustained growth of the tourism sector in Kenya. Specific objectives include; to determine the patterns of price of tourism and price of nontourism goods in Kenya and to establish the specific determinants of domestic tourism expenditure in Kenya.

The study used of the 2015-2016 Kenya Integrated Household Budget Survey (KIHBS) whichcaptured information on domestic tourism regarding expenditures as well as different determinants. Domestic tourism expenditure was used as dependent variable whereas factors suchas age, gender of the householdhead, marital status, the educational levels, size of the household, employment, sponsorship and advertisement. Tobit regression was employed in empirical estimation where significance was tested at all levels (1%, 5% and 10% levels). From the results, it was shown that age of the respondents, gender of household head, marital status, individuals with primary and secondary education levels, place of residence, household size, employment status,

source of sponsorship and advertisement had a statistically significant impact on domestic tourism expenditure in Kenya.

#### **5.3. Conclusions**

As revealed in the literature, local tourism has advanced into an increasingly vital contributor to the development of the economy of many states globally. Based on the descriptive and estimated model, the study concludes as follows;

- i. The highest portion of income was utilized in consumption of non-tourism goods compared to tourism and tourism related activities.
- ii. Age of the respondents, gender of householdhead, marital status, place of residence, employment status, source of sponsorship and advertisement had a positive and statistically significant impacton domestic tourism expenditure
- iii. Comparing to individuals with no levels of education, those individuals with primary as well as secondary education levels, as well as household size had a negative and statistically significant impact on domestic tourism expenditure in Kenya.

# **5.4. Policy Implications**

In Kenya, foreign tourism has been the lifeline of the tourism sector. Based on the model results, the study recommends the following;

The government to establish and support more centers to create awareness to local population on the best local destinations. This will see more local influx to interior tourism destinations. These centers could as well focus or target the older population including the retirees as well as male headed households not forgetting urban population which is characterized as workaholic to promote consumption of local tourism. This is because age, gender of the head of household as well as advertisement were positive and significantly related to domestic tourism expenditures in Kenya.

There is need also for counties to develop and support domestic tourism initiatives apart from conservation initiative, by also collaborating with national government in educating the young population in primary and secondary levels of education on significance of tourism. This is based on the fact that education levels (primary and secondary) had significant impact on domestic tourism expenditures in Kenya.

This may aid individuals in the society to have more purchasing power hence increased consumption of domestic tourism consequently boosting economic development. It is evident that large household sizes lower consumption of domestic tourism expenditure. This could be due to competition or challenge with movement along a large family/group hence the government may well subsidize the cost of domestic tourism to encourage use by large households as well as promote self-sponsorship by individuals in the society. This is because household size, employment and sponsorship were found to have asignificant effect on domestictourism expenditures in Kenya.

# 5.5. Areas for further study

This paper mainly concentrated in analyzing the determinants of domestic tourism expenditures in Kenya using the recent household that is the KIHBS. The study mainly used the domestic tourism expenditures in Kenya as the dependent variable with several demographic and socioeconomic determinants. The study did not however consider other factors such as the age of the household head, political climate, environmental factors, culture, nature of occupation, among other factors. These factors need to be considered in future studies. Further studies should also consider using other datasets including the datasets from neighboring counties for comparison purposes. For comparison, we recommend more studies estimating the effect of identified determinants on other indicators or measurements of demand for tourism across counties in Kenya and East Africa Community states.

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