AN ANALYSIS OF INTERNATIONAL TOURISM DEMAND FOR KENYA

By

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DECLARATION

This thesis is my original work and has not been presented for award of a degree in any other university or any other award.

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DEDICATION

This work is dedicated to my husband, Simon and to our children: Pauline, Victor and Ivan.

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OPERATIONAL DEFINITIONS OF TERMS

Actual tourism demand: Refers to the aggregate number of tourists recorded in a given location and at a particular point in time.

Attraction: A place, event, building or area which tourists want to visit.

Consumption bundles: This is a complete list of the goods and services that are involved in the choice problem faced by a consumer.

Deferred tourism demand: Refers to those who do not travel for some supply side problems such as accommodation shortages, cancellation of flights and terrorist attacks among others.

Domestic tourism: Tourism involving residents of a given country travelling within that country.

Inbound tourism: Visits to a country by non-residents.

International tourism: Travel between countries by various modes of travel for the purpose of tourism.

International tourism demand: The number of tourist arrivals in the destination country from a country of origin at a given point in time.

Kenya vision 2030: A long-term development blueprint for the country whose aim is to make Kenya the globally competitive and prosperous country with a high quality of life by 2030. The vision is anchored on three key pillars: Economic; Social; and Political Governance.

Long haul: Travel which involves long distances, for example over 1,000 miles (more than 3 hours flight).

Outbound tourism: Visits by residents of one country to another country.

Potential tourism demand: Refer to those who do not travel to a given destination for some personal reasons, for instance, lack of enough money to enable travel and preference for other destinations.

Stationary process: A process whose mean, variance and Autocorrelation structure do not change over time.

Short haul:	Travel between countries which involve shorter distances (for example 250 to 1,000 miles) or travel time (1 to 3 hour flight).
Tourism:	Comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.
Tourists:	People who travel and stay in places outside their usual environment for more than 24 and not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited.

ABBREVIATIONS

IMF	International Monetary Fund
KATO	Kenya Association of Tour Operators
KNBS	Kenya National Bureau of Statistics
KTDC	Kenya Tourism Development Corporation
KWS	Kenya Wildlife Service
GOK	Government of Kenya
UNEP	United Nations Environmental Programme
WTTC	World Travel and Tourism Council
WTO	World Tourism Organization

ABSTRACT

Tourism sector in Kenya plays an important role in the national economy and has been identified as one of the six priority sectors in vision 2030 meant to drive the economy to attain 10 percent economic growth. International tourism demand for Kenya lags behind other African countries like Egypt, Morocco, Tunisia and South Africa. Furthermore, the number of tourists' arrivals to Kenya from different world regions does not increase constantly but have experienced cyclical fluctuations over the years. Moreover, the Kenya tourism product offered is becoming increasingly noncompetitive. There is need therefore, for Kenya to offer demand driven tourism products that ensure visitors come to Kenya and stays longer. GOK, tourism planners and marketers therefore need to clearly understand which important factors influence international tourists' decision to visit Kenya as their destination. Motivated by this need, the study sought to investigate the determinants of international tourism demand for Kenya. Specifically the study established the effect of economic factors, tourist socio-demographic characteristics, political factors and destination characteristics on international tourism demand for Kenya. The study used both longitudinal and cross sectional research designs. The study used panel data for economic variables from eleven countries for the period 1991 to 2011 collected from the World Bank database, United Nations database, International Monetary Fund database and Kenya National Bureau of Statistics. Survey data were collected from individual tourists leaving the country through Jomo Kenyatta International Airport using questionnaires. The study used a dynamic panel regression model to determine the effect of economic factors on international tourism demand for Kenya and a count data regression model to determine the effect of socio-demographic characteristics, political factors and destination characteristics on international tourism demand. The study results indicated that tourism price, travelling cost, trade openness and word of mouth effect were the main economic factors influencing international tourism demand for Kenya. The dummy variable representing the 2008 post election clashes and the lagged dependent variable representing the word of mouth effect were also significant. In addition, the tourist's socio-demographic characteristics such as annual household income, age and occupational status were found to significantly influence international tourism demand. The political factors composite index and destination characteristics composite index were also important determinants of international tourism demand. Taking into consideration of all these factors affecting tourism demand, the government and all the tourism stakeholders should work towards making Kenya tourism product competitive by ensuring that the prices remain competitive, diversifying tourism by creating tourism products which meets the needs of specific groups. The existing tourism products should also be improved in order to remain competitive, the tourism infrastructure and services should be well established and of good quality. The government should continue to engage in bilateral trade. Therefore, all the tourism stakeholders should work towards making Kenya a destination of choice.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

1.1.1 Overview of International Tourism

The World Tourism Organization (WTO) has recognized tourism as one of the largest and fastest growing industries in the world. The growth of tourism industry is demonstrated by the ever increasing number of destinations opening up and investing in tourism development, turning modern tourism into a key driver for socio-economic progress through the creation of jobs and enterprises, infrastructure development and the export revenues earned (WTO, 2012). According to World travel and tourism council (WTTC, 2012) travel and tourism in 2011 globally employed about 8.7 percent of total employment, generated 9.1percent of total gross domestic product and visitor exports generated US$1,170.6 billion (5.3 percent of total exports). In developing countries, tourism plays an important role in stimulating investments in new infrastructure, as well as generating government revenues through various taxes and fees.

International tourism plays an important role of promoting world peace, both by providing an incentive for peace keeping and by building a bridge between cultures (Eilat & Einav, 2004). In Africa tourism has been identified as a key sector for the achievement of shared economic growth and poverty alleviation (Mitchell & Ashley, 2006; World Bank, 2006). Given the importance and magnitude of tourism sector in most developed

and developing economies, knowledge concerning the nature of the demand upon which it is based is of both theoretical and practical relevance.

Despite occasional shocks, international tourist arrivals have shown increased growth rising from 25 million in 1950, to 278 million in 1980, 528 million in 1995, and 1,035 million in 2012. According to UNWTO Tourism Towards 2030, the number of international tourist arrivals worldwide is expected to reach 1.8 billion by the year 2030 (WTO, 2012). Table 1.1 shows the projected international tourist arrivals by region in millions.

Table 1.1: International Tourist Arrivals by Region of Destination

	International tourist arrivals received					Average annual growth (percent)	Share (percent)	
	Actual data			Projections				
	1980	1995	2010	2020	2030	2010-2030	2010	2030
Total	277	528	940	1360	1809	3.3	100	100
Africa	7.2	18.9	50.3	85	134	5.0	5.3	7.4
Americas	62.3	109.0	149.7	199	248	2.6	15.9	13.7
Asia/Pacific	22.8	82.0	204.0	355	535	4.9	21.7	29.6
Europe	177.3	304.1	475.3	620	744	2.3	50.6	41.1
Middle East	7.1	13.7	60.9	101	149	4.6	6.5	8.2

Source: World Tourism Organisation (2012)

From table 1.1, the number of international tourist arrivals worldwide is expected to increase by an average 3.3 percent a year over the period 2010 to 2030. Asia and the Pacific arrivals are forecast to increase by 331 million to reach 535 million in 2030 (4.9 percent growth per year). The Middle East and Africa are also expected to more than double their arrivals in this period, from 61 million to 149 million and from 50 million to 134 million respectively. Arrivals in Europe will grow from 475 million to 744 million and the Americas will grow from 150 million to 248 million. The global market shares of Asia and the Pacific will increase to 30 percent in 2030 up from 22 percent in 2010, the Middle East to 8 percent from 6 percent and Africa to 7 percent from 5 percent. Global market shares for Europe will decline to 41 percent from 51 percent while for the Americas will decline to 14 percent from 16 percent.

Though world tourism has experienced continued expansion and diversification over the past six decades, Africa's tourism market share remains small compared to other world regions. This is despite the fact that Africa has a lot to offer that cannot be found elsewhere as it holds a rich history as the continent of the explorers and as a place for adventures. In Africa there are unique places, some of the greatest views in the world and natural attractions that few other regions can match. This is true not only for the natural resources, but also for its culture, traditions and customs (Christie & Crompton, 2001).

1.1.2 International Tourism Demand

Pearce (1995) referred to tourism demand as the relationship between individual's motivation to travel and their ability to do so. Song and Witt (2000) considered tourism

demand as the amount of a set of tourist products that the consumers are willing to acquire during a specific period of time and under certain conditions which are controlled by the explanatory factors used in the demand equation. The total demand for tourism is considered to consist of three basic components which include actual demand, suppressed demand and no demand (Cooper, Fletcher, Fyall, Gilbert & Wanhill, 2008; Page & Connell, 2006). The no demand component constitutes the category of those who do not wish to travel or are unable to travel. Suppressed demand refer to the section of the population who do not travel for some reason while actual demand refer to the aggregate number of tourists recorded in a given location or at a particular point in time. Page and Connell further noted that actual demand depended on the specific features and characteristics of those product and service alternatives that the customer evaluates to make the final purchase decision. This includes choosing the destination, the time and duration of travel, the activities undertaken at the destination, and the amount of money spent for the holiday. The study focused on actual demand.

Demand for tourism is segmented and is distinguished through a number of different markets. Tourism demand can be analyzed for groups of countries, individual countries, regions or local areas. Demand can also be disaggregated by categories as types of visits and types of tourists. Tourism visits can take place for various reasons including holidays, business trips, visits to friends and relatives (VFR), conferences, and religious purposes among others (WTO, 2010). International tourism demand is usually measured in terms of the number of tourist visits from an origin country to a destination country, in terms of tourist nights spent in the destination country or in terms of tourist expenditures

by visitors from an origin country in the destination country. The number of tourist arrivals is most frequently used as the measure of demand, followed by tourist expenditure or tourist receipts (Crouch, 1994, 1995; Lim, 1999; Song & Li 2008; Witt & Witt, 1995).

1.1.3 Determinants of International Tourism Demand

Tourism demand modelling and forecasting studies rely heavily on secondary data in terms of model construction and estimation. To determine the explanatory variables influencing tourism demand, the empirical models borrow heavily from the consumer theory (Song & Witt, 2008). The traditional theory of demand considers the price of a commodity, prices of other commodities, consumer's income and tastes as the most important determinants of market demand (Koutsoyians, 1991). Koutsoyians further explains that demand is also affected by other factors such as the distribution of income, total population and its composition, wealth, credit availability, government policy, past levels of demand and past levels of income. Cooper et al., (2008) noted that at the individual level the factors that influence demand for tourism are closely linked to models of consumer behaviour and that no two individuals are alike and differences in attitudes, perceptions, images and motivation have an important influence on travel decisions. Goeldner and Ritchie (2003) stated that the demand for travel to a particular destination is a function of the person's propensity to travel and the reciprocal of the resistance of the link between origin and destination areas. A person's propensity to travel is determined largely by his/her psychographic profile, socio economic status and marketing effectiveness. Resistance relates to the relative attractiveness of various

destinations and depends on the economic distance, cultural distance, cost of tourist services, quality of service and seasonality.

Page and Connell (2006) considered a range of exogenous factors to influence tourism demand in both the tourist generating and destination areas. The factors influencing demand in the tourist generating area were grouped as economic determinants, social determinants and political determinants. Those influencing demand in the tourist destination area were grouped as economic factors, supply-related factors and political factors. Other factors like promotional efforts of the destination; health, safety and security issues; time and cost considerations and seasonal variations were considered to also influence demand.

Though tourism demand could be affected by a wide range of factors, such as economic, attitudinal and political factors, the most commonly considered factors influencing tourism demand are origin income, the own price of a destination, substitute prices of alternative destinations and dummy variables to capture the effects of one-off events (Song, Li, Witt & Fei, 2010). Overviews of previous empirical studies on international tourism demand (Li, Song & Witt, 2005; Lim, 1999; Song & Li, 2008) revealed that tourists' income, tourism prices in a destination relative to those in the origin country, tourist prices in the competing destinations and exchange rates were the most significant determinants of international tourism demand.

Song and Li (2008) noted that the availability of the data determines, to a large extent, where tourism demand studies are carried out and due to this fact, most empirical tourism researches were done in United States of America and Western Europe. Song and Li further observed that many of the studies on international tourism demand in various countries have employed both causal and non-causal methods to determine the demand function. The accuracy of different modelling methods vary for data from country to country over different time periods, and therefore, neither a single model nor a single method will necessarily be appropriate for all origin-destination pairs (Witt & Witt, 1995). Witt and Witt further explained that for the causal models, tourism demand is influenced by certain factors for some origin-destination pairs. Divisekera (2003) found out that the responsiveness of demand for international travel varies by country of origin and country of destination. Thus, factors influencing tourism demand can be considered to vary among different pairs of countries.

1.1.4 International Tourism in Kenya

Kenya offers foreign visitors a variety of travel experience as it is bestowed with diverse tourist attractions. Tourist attractions comprise tropical beaches, abundant wildlife in their natural habitats, vibrant bird and wildlife migration patterns, world heritage sites, and various cultural attractions from the various tribes. The three major tourism product lines in Kenya are safari tourism, coastal tourism and business/conference travel. Kenya is also strategically located, making it the region's main commercial centre. Nairobi, Kenya's capital city with good hotels and conference facilities is well positioned to attract the business markets such as meetings, incentives, conferences and exhibitions.

Nairobi is the headquarters for many international organizations such as United Nations and its governing bodies. A large proportion of Kenya's tourism centres on safaris and tours of its great National Parks and Game Reserves. Thus, Kenya has great tourism potential.

The Ministry of Tourism and Wildlife conducts the overall management and policy formulation for the tourism sector. It works together with other four government organizations, each mandated to manage a specific aspect of the tourism sector. These are Kenya Tourism Development Corporation (KTDC), which was formed in 1965, and is charged with monitoring tourism investment and promotion; Kenya Utalii College, established in 1973, a hotel and tourism training institution responsible for manpower development; Kenya Wildlife Service (KWS), established in 1989, responsible for wildlife conservation and management; the Kenya Tourism Board (KTB), established in 1996, responsible for marketing Kenya’s tourism. Kenya‘s tourism sector benefits from having a variety of associations providing a collective voice for many sector operators. The key associations include Kenya Association of Tour Operators (KATO), Kenya Association of Travel Agents (KATA), Eco-Tourism Society of Kenya (ESOK) and Kenya Association of Hotelkeepers and Caterers (KAHC) (World Bank, 2010).

Tourism in Kenya has for many years played a vital role in the economy of the country. In 2011, travel and tourism in Kenya contributed to 13.7 percent of the Gross Domestic Product (GDP) and 11.9 percent of the total employment (WTTC, 2012). Furthermore, tourism has led to growth of industries such as hospitality, transport, accommodation,

entertainment, travel agencies and related services, administration, finance and health, among others, that are directly linked to it. Through its multiplier effect, tourism has stimulated growth in several other industries like construction, agriculture, hand crafts, manufacturing and processing. Tourism development has led to economic growth of the country through creation of indirect and direct job opportunities and park entry fees. The tourism sector has thus been identified as one of the six priority sectors in vision 2030 meant to drive the economy to attain 10 percent economic growth (GOK, 2007).

Kenya receives tourism from various source markets and the Ministry of Tourism works closely with each individual source market to develop a deep understanding of the consumers of Kenya tourism. Tourism in Kenya has grown over the years. Figure 1.1 shows the annual number of visitors arriving in the country and those departing from the country for the period 1963 to 2012.

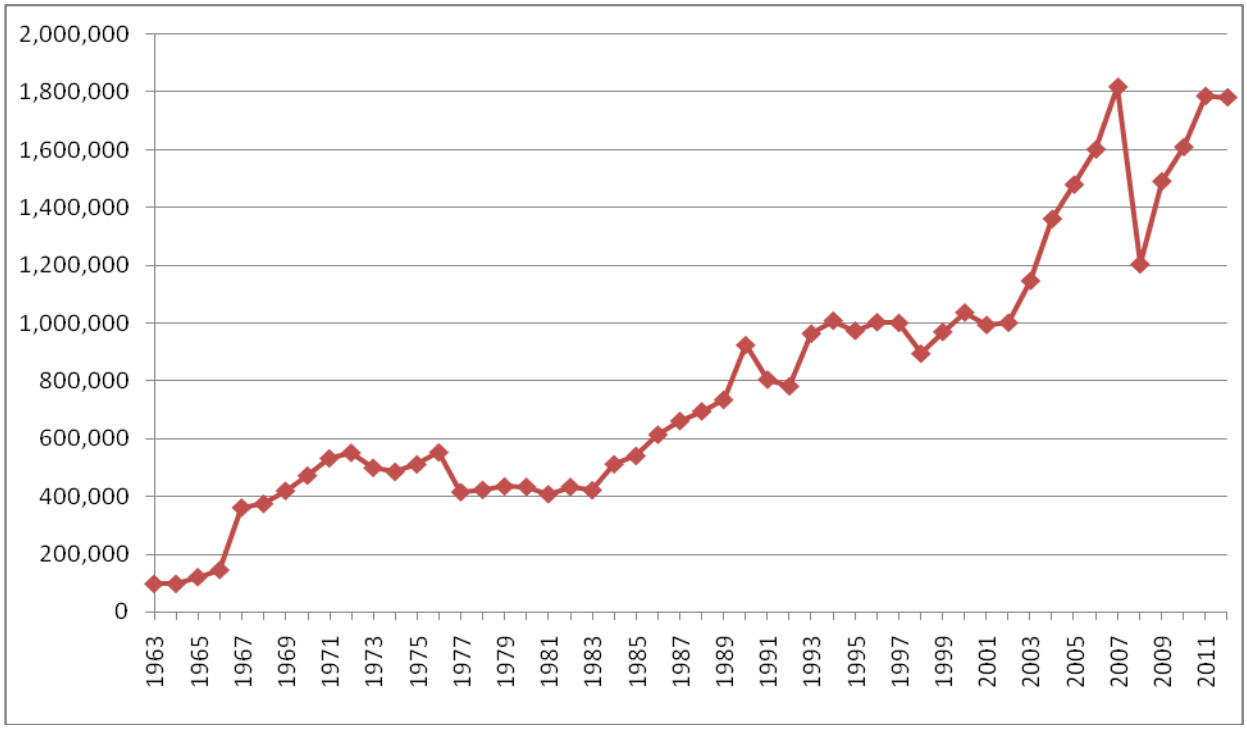

Figure 1.1: Tourist Arrivals

Source: Government of Kenya; Statistical Abstracts, Various Issues

Figure 1.1 shows an upward trend with cyclical fluctuations in the number of visitors arriving in the country. The numbers of tourists visiting Kenya increased significantly between the years 2000 to 2007 but also dropped significantly in 2008 as reflected in Figure 1.1. The number of arrivals started increasing again in 2009. The total tourist arrivals for 2012 was 1,780,768 which was a decline of 0.3 percent over the arrivals for 2011 of 1,785,382. There is need to maintain this growth and minimize the fluctuations.

KTB (2010) divided the Kenya tourism source markets into six regions namely Europe, Americas, Asia, Middle East, Oceania and Africa. Figure 1.2 shows the average tourist arrivals to Kenya by the various regions calculated for the years 2010 to 2012.

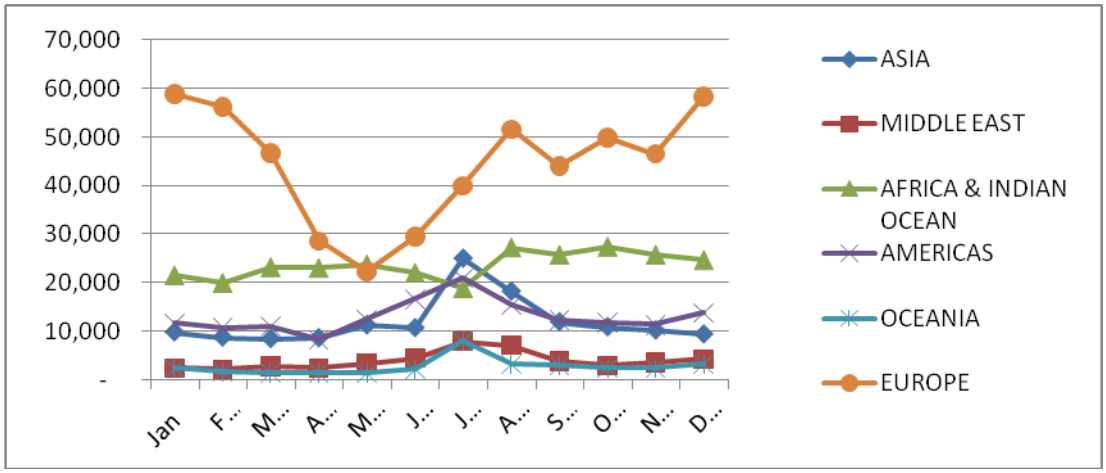

Figure 1.2 : Average Tourists Arrivals by Region

Source: Kenya Tourism Board (2010, 2011, 2012)

According to Figure 1.2, Europe contributes the largest number of tourists visiting Kenya and is the key tourist source market. The number of tourist arriving from Europe is at its lowest during the months of April to June and then increases though with some small fluctuations up to January when number of tourists is the highest. Peak demand for Asia, Middle East, Americas and Oceania occurs during the month of July. Tourist arrivals from Africa are at the lowest in the month of July. Kenyan tourism demand from the Middle East and Oceania is the least and tourism demand from these two regions does not vary much throughout the year.

The total tourist air arrivals to Kenya by purpose of visit in 2009 were grouped into nine categories namely business, conference, holiday, transit, study, sport, visiting friends and relatives and purpose not stated (KTB, 2009). The number of tourists visiting Kenya by air for different purposes from various regions are as shown in Figure 1.3.

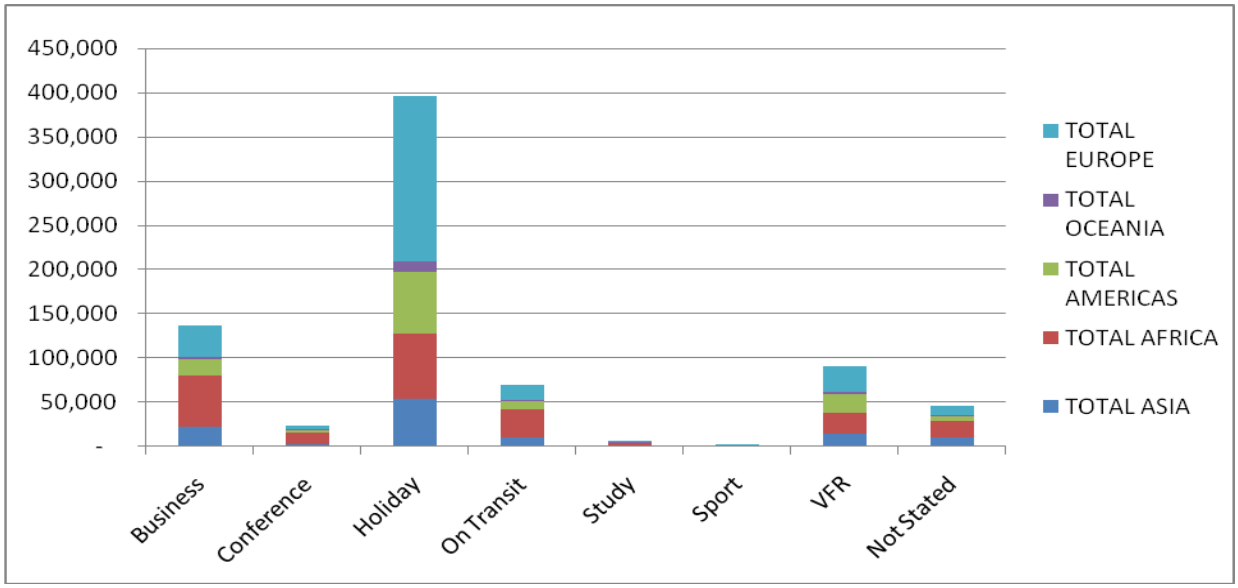

Figure 1.3: Tourist Air Arrivals by Purpose of Visit

Source: Kenya Tourism Board (2009)

Figure 1.3 shows that most of the tourists who came to Kenya by air were on a holiday, followed by those who came for business purposes and then by those visiting friends and relatives. Majority of the holiday tourists were from Europe while most of those who came for business purposes were from Africa. Those who came for study and sports purposes were very few. This shows that there is need to diversify Kenya tourism in order to capture a greater tourism market.

Competition for tourist market shares globally and in Africa has intensified as many countries have now realized the importance of tourism and have invested heavily in it (WTTC, 2012). Kenya aims to be one of the popular tourists' destinations in the world as stipulated in its vision 2030 (GOK, 2007). Currently, Kenya ranks 10th as a tourist destination in Africa (WTO, 2012) with Egypt, Morocco and South Africa receiving the highest number of tourists in that order (Appendix 4). To be ranked among the top ten,

Kenya must expand her global and African market share by offering new products, expanding tourist expenditure per capita and by improving her international marketing strategies.

In recent years Botswana, South Africa, Tanzania, Zambia, and Namibia, among others, have increased competitive pressure on Kenya in the area of safari and wildlife viewing. For beach tourism, Kenya, competes with countries such as Zanzibar, Mozambique, Maldives, Mauritius, and Seychelles who have focused on developing mid-to high-end products that combine access to exclusive beaches and recreational experiences, such as diving and sport fishing, which increase the tourist‘s perception of value for money (World Bank, 2010). Previously, Kenyan tourism has been based on beach and wildlife attractions. Recently, the government has started exploring other forms of tourism like business, culture and sports (GOK, 2011). As Kenya gears up its efforts to make itself a tourism premier destination in Africa, it becomes more important to understand the factors that influence international tourism demand for Kenya among others things.

1.2 Statement of the Problem

International tourism demand for Kenya lags behind other African countries like Egypt, Morocco, Tunisia and South Africa (WTO, 2012). This is despite the fact that Kenya is bestowed with diverse tourist attractions and thus has great tourism potential. Furthermore, the number of tourists’ arrivals to Kenya from different world regions does not increase constantly but have experienced cyclical fluctuations over the years as shown in Figure 1.1. Moreover, the Kenya tourism product offered is becoming

increasingly noncompetitive. Kenya is experiencing problems of competition due to degradation and reduction of the quality of Kenya's tourism product as more tourists are switching to other countries in the region such as Zimbabwe, Botswana, Swaziland, Tanzania and Uganda which offer similar tourist attractions (World Bank, 2010).

There is need therefore, for Kenya to offer demand driven tourism products that ensure visitors come to Kenya and stays longer. GOK, tourism planners and marketers therefore need to clearly understand which important factors influence international tourists' decision to visit Kenya as their destination. Song and Li (2008) noted that identifying the determinants of tourism demand and estimating magnitudes of their influence on tourism demand are of great interest to decision makers in tourist destinations. An understanding of tourism demand is a starting point for the analysis of why tourism develops, who patronizes specific destinations and what appeals to the client market (Hall & Page, 2002). Empirical studies on international tourism demand have focused on tourism demand in developed countries while Africa has received very little attention (Rogerson, 2007; Xiao & Smith, 2006). The studies have mainly considered the economic factors affecting tourism demand ignoring the non economic factors due to unavailability of data. Eilat and Einav (2004) and Naude and Saayman (2005) noted that when modelling international tourism demand in Africa, both economic and non economic factors such as the destination characteristics should be taken into consideration since tourism demand may also be significantly affected by non economic factors .

Empirical studies explaining international tourism demand for Kenya are limited. Previous studies on tourism in Kenya mainly focussed on tourism development in Kenya (Ondicho, 2003); choice of attractions, expenditure and satisfaction of international tourists to Kenya (Odunga, 2005) and the economic contribution of tourism (Valle & Yobesia, 2009). Summary (1987) carried out a study on estimation of tourism demand for Kenya considering tourists from United Kingdom, United States of America, Italy, France and Germany using multivariable regression analysis. Some of the study results for the country-specific demand functions were inconclusive as the regression model used suffered from multicollinearity problems. The study by Summary (1987) did not consider non economic factors which can also influence international tourism demand for Kenya.

This study, therefore, attempted to fill this gap by investigating the economic and noneconomic factors influencing international tourism demand for Kenya using both secondary and survey data. The survey data facilitated analysis of noneconomic determinants of international tourism demand. Dynamic panel and count data regression models were used to analyze secondary and primary data respectively to enhance robust study results.

1.3 Objectives of the Study

The purpose of the study was to investigate the determinants of international tourism demand for Kenya. Specifically the study sought to:

i. Establish the effect of economic factors on international tourism demand for Kenya.

ii. Determine the effect of tourist socio-demographic characteristics on international tourism demand for Kenya.

iii. Determine the effect of political factors on international tourism demand for Kenya.

iv. Establish the effect of destination characteristics on international tourism demand for Kenya.

1.4 Research Hypotheses

The study sought to test the following null hypotheses:

H_{01}: There is no significant relationship between economic factors and international tourism demand for Kenya.

H_{02}: There is no significant relationship between tourists' socio-demographic characteristics and international tourism demand for Kenya.

H_{03}: There is no significant relationship between political factors and international tourism demand for Kenya.

$H_{04:}$ There is no significant relationship between destination characteristics and international tourism demand for Kenya.

1.5 Significance of the Study

Kenya aims to be among the top ten long-haul tourist destinations globally. To be ranked among the top ten, Kenya must expand her global and African market share by offering new products, expanding tourist expenditure per capita and by improving her international marketing strategies (GOK, 2007). The study contributes towards providing information on factors influencing international tourism demand for Kenya. Knowledge

of the factors that significantly influence Kenyan international tourism demand could help the government, tourism sector and other associated sectors and policy makers in planning growth strategies, which will promote higher level of tourism in the country. Understanding why people decide to travel and what influences their choice of destination are of critical importance in developing appropriate marketing strategies.

Further the study is expected to contribute to the body of knowledge on the determinants of international tourism demand, especially in Africa. The study also demonstrates the application of dynamic panel regression approach to the estimation of international tourism demand. In addition the study will provide a future base for more in-depth studies on international tourism demand in Kenya.

1.6 Scope of the Study

The study established the factors influencing international tourism demand for Kenya focussing on inbound tourists. The study used both annual panel data on tourist departures for the period 1991 to 2011 for eleven countries and cross sectional survey data. The eleven panels considered were United Kingdom, Germany, Italy, France, United States of America, Canada, India, Japan, Israel, Uganda and Tanzania. These countries were considered because only their data on tourist departures were available for the study period. South Africa was considered to be a competing tourist destination to Kenya since it is the major tourists' destination South of Sahara during the period under study (Appendix4). The cross sectional survey was conducted for a period of one month

during October/ November 2012 at JKIA. Primary data were obtained from individual tourists from various countries leaving the country through JKIA using questionnaires.

1.7 Limitations of the Study

The study used annual published data since it was not possible to get the entire monthly or quarterly data for all variables for the study period. In this case, it was not possible to observe the effect of seasonality factors on international tourism demand. Lack of data on tourist arrivals by country and purpose of visit prompted the researcher to use data on tourist departures in the regression analysis. This did not affect quality of the study results as tourist departures are also considered appropriate measure for international tourism demand. Lack of historical data for some variables such as tourism marketing expenditure for each tourist origin country among others resulted in excluding them from the study. To avoid the problem of omitted variables in the regression model, a panel regression model which is able to handle the problem comparatively well, as compared to time series regression model was used.

Survey data was collected to provide information on non-economic variables such as tourists'socio-demographic characteristics, political factors and destination characteristics which were not available from the existing secondary data. The survey data was only obtained from tourists who left the country through JKIA. This meant that, tourists using other means of transport or those who left through other airports were not covered in the study. Despite this limitation, the survey sample was considered to be representative of

international tourists to Kenya. This is because most of the international tourists visiting Kenya use JKIA as it is the largest and strategically placed airport in the country.

Another limitation was that the questionnaires were written in English only and translation of the questionnaire into other languages such as French, German, Italian and Japanese was not possible. Since the questionnaire was administered directly to the tourist, it was possible to clarify the questions to those who had language challenges. The challenge on non response was addressed by explaining clearly to the respondents the purpose of the study and assuring them that the information provided was to be treated confidentially.

1.8 Organization of the Study

The study was organized in five chapters. Chapter one provided a background to the study, research objectives, significance of the study, scope and limitations encountered in the course of the study. In chapter two, review of relevant literature to the study, both theoretical and empirical is given, the research gap identified and the conceptual framework derived from the literature reviewed. Chapter three outlines the research methodology that was used to carry out the study. The study findings and their interpretation are presented and discussed in Chapter four. Finally in chapter five, the summary and conclusions of the study and the policy implications are given.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, a review of literature on international tourism demand is given. The review begins with theories and models related to tourism demand, followed by a discussion of various empirical studies. A summary of literature reviewed is then given and the research gap identified. Finally, the conceptual framework for the study is discussed.

2.2 Fundamentals of Consumer Behaviour and Tourism

The study of consumer behaviour focuses on how individuals make decisions to spend their available resources on consumption-related items. An understanding of consumer decision processes is essential in order are to understand and predict demand for tourism. Hall and Page (cited in Page & Connell, 2006, p. 63) asserts that the factors which shape the tourist decision-making process to select and participate in specific forms of tourism lies within the field of consumer behaviour and motivation. Further, Cooper et al. (2008) explains that the tourism consumer decision process can be viewed as a system made up of four basic elements namely energisers of demand, effectors of demand, roles and decision-making process and determinants of demand. The energisers of demand include forces such as motivation which lead the tourist to carry out action. Even though motivation may exist, demand is filtered through economic, sociological or other psychological factors. Moreover, the individual's decisions are affected by the image of a

destination and information collected. The family members involved in the different stages of the purchase process also play an important role.

2.2.1 Theories of Motivation

Page and Connell (2006) stated that motivation acts as trigger which stimulates the chain of events in the tourism process. Understanding motivation enhances understanding of tourist behaviour thus helping understand why people travel. The Maslow's hierarchy of needs theory developed in 1943 is the best known theory of motivation. Maslow (1943) grouped individual needs hierarchically into five categories as physiological needs, safety needs, social needs, esteem needs and self-actualization needs. According to Maslow theory a person has different needs which he wants to satisfy and these needs motivate person to act. As each of these needs is significantly satisfied, it drives and forces the next need in the next level to emerge.

Maslow's hierarchy of needs provides insight into ways in which a trip may satisfy disparate needs (Goeldner & Ritchie, 2003). According to Page and Connell (2006), Maslow's hierarchy of needs can be used to explain the source of the tourist's initial needs and wants, where the satisfaction of these needs may lead to purchase of a holiday. For instance tourists visiting friends and relatives may be considered to show need for belongingness and love while those choosing a holiday to keep up with friends and neighbours show need for self esteem. Horner and Swarbrooke (2001) noted that when the tourist needs are satisfied it may lead to positive word of mouth recommendation of a destination tourism products to friends and families, which in turn brings in new tourists.

Maslow hierarchy theory can therefore be used to explain travel behaviour and can help to determine which factor play a vital role to effect on person decision to visit destination and practice some activities. Thus understanding tourists' needs can help the tourism enterprises come up with different facilities and services with features that address certain tourist's needs. Use of Maslow hierarchy of needs theory in explaining tourism motivation is limited since tourists may have more than one motivation to travel.

Dann (1977) described motivation as push and pull factors. The push factors produces a desire to travel in order to satisfy a need such as a value or belief while the pull factors such as a destination price influence a destination choice. A destination's attributes can impact on tourists' decision on destination selection. Dann (1981) identified seven elements within the overall approach to motivation. The elements identified as noted by Page and Connell (2006, p. 68) include travel as a response to what is lacking yet desired implying that tourists are motivated by the desire to explore new and different experiences from those experienced before; destination pull in response to motivational push; motivation as a fantasy implying, a tourist may be motivated to travel to engage in behaviour not acceptable at home; motivation as classified by purpose of visit such as visiting friends and relatives, leisure, study or health; motivational typologies implying the type of tourist may influence the motivation to travel ; motivation and tourist experiences implying tourism often involves travel to places not visited previously and finally motivation as auto-definition and meaning implying the ways in which tourists define their situations and respond to them may provide a better understanding of tourist motivation. According to Page and Connell, tourist types, the personality traits of tourists

that enable their classification, could provide an explanation for why some tourists travel to certain destinations.

Plog (1974) developed a theory based on the United States (US) population which he used to classify the US population into a series of interrelated psychographic types. Plog then identified two opposite types of tourist, allocentric type and psychocentric type each at the end of a continuum. According to Plog, majority of the people fall in between these two extreme categories and are referred to as midcentrics. Page and Connell (2006) referred to the allocentrics as the type of individuals who enjoy travelling independently, are adventurous and who rarely return to the same place twice, hence they are labelled as wanderers by market researchers. Copper et al., (2008) noted that the psychocentrics are conservative in their travel patterns, prefer safe destinations and often take many return trips. They are referred to as repeaters by tourist marketers.

Plog (1974) found out that those who were at the lower end of income scales were more likely to be psychocentric types whereas those at the upper income level were more likely to be allocentric. Plog further explained that allocentrics will prefer destinations where tourism is unspoilt and undiscovered while the psychocentrics on the other hand desire the comfort of a well developed and safe destination. The personality scale can be used to explain why destinations rise and fall in popularity. In particular, tourists' personality characteristics determine their travel patterns and preferences. Plog (1974) characterized Hong Kong leisure travelers as near psychocentrics.

The various theories of motivation were used in the study to help the researcher to understand what motivates tourists to visit certain destinations and how the tourists select activities and experiences to suit their psychological and motivation profiles. The motivation theories, hence, enhanced understanding of the personal characteristics of tourists visiting Kenya. Motivation, therefore, is an essential concept in the explanation of tourist demand.

2.2. 2 Models of Consumer Behaviour in Tourism

Cooper et al. (2008) states that one approach to understanding tourism demand is to evaluate theories and models of consumer behaviour linked to purchasing behaviour. Consumer behaviour is normally conceived as a process of stages. As a part of this approach the decision to travel involves some or all of the following stages. The first stage is the need arousal to travel, followed by recognition of the need to travel, the level of involvement of trip which refers to amount of time and effort invested in the decision process, the identification of travel alternatives, evaluation of travel alternatives, decision choice made, purchase action and post purchase behaviour. Various models have been used to try explaining tourism purchase behaviour.

The schmoll model (1977) as discussed in Cooper et al. (2008, p. 57) is based on motivation, desires, needs and expectations as personal and social determinants of travel behaviour. According to Schmoll the eventual decision which includes the choice of destination, travel time and type of accommodation among others is the result of a distinct process involving several successive stages, such as, travel stimuli, personal and

social determinants, external variables and destination characteristics each of which exerts some influence over the final decision. The Schmoll model is presented in Figure 2.1.

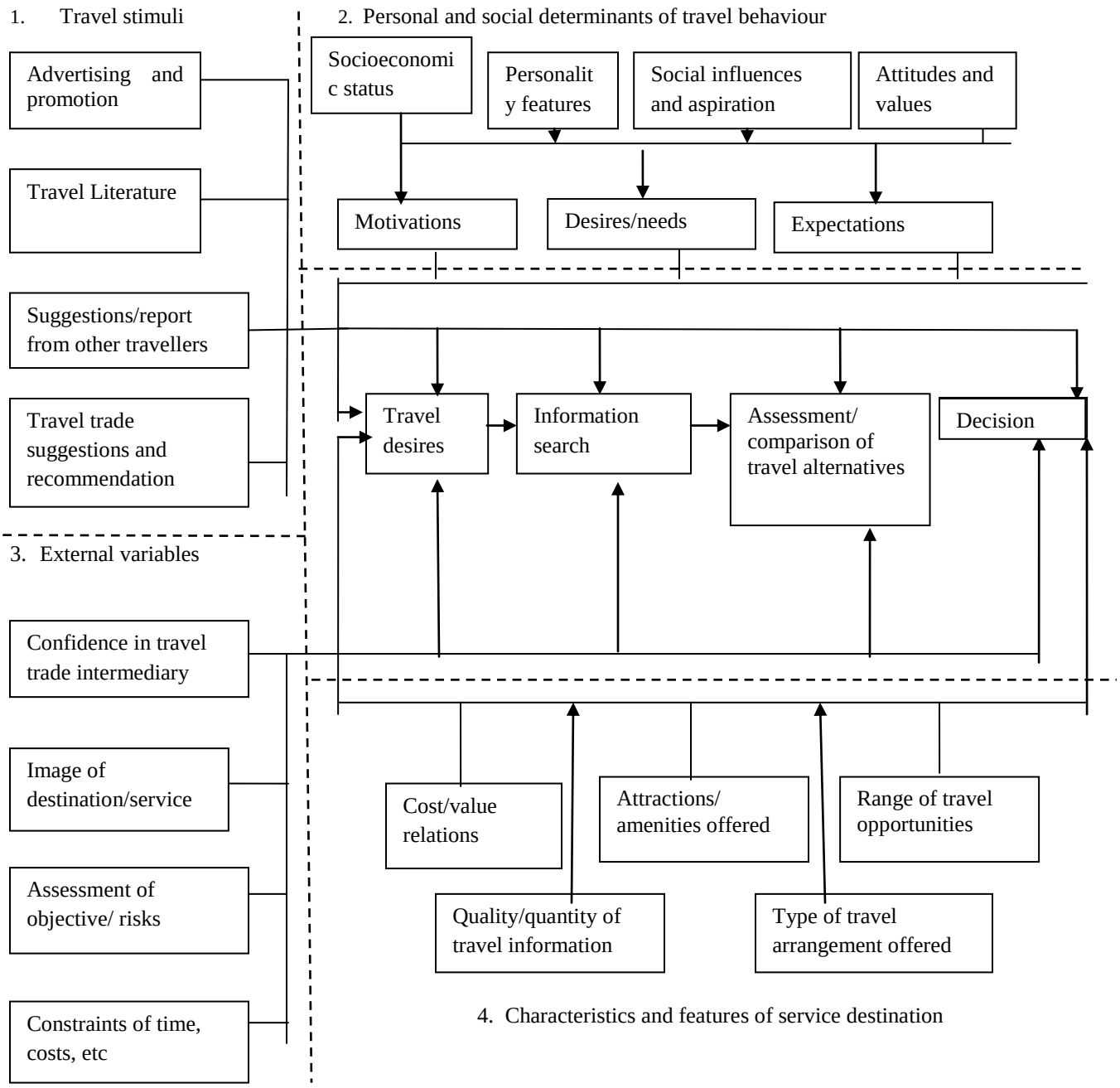

Figure 2.1: The Schmoll Model

Source: Cooper et al. (2008)

From Figure 2.1, travel stimuli comprise external stimuli that can awaken an individual desire of need to travel in the form of promotional communication, personal and trade recommendations. Personal and social determinants determine customer goals in the form of travel desires and expectations. The external variables involve the prospective traveller's confidence in the service provider, destination image, learnt experience and cost and time constraints. Finally, the destination characteristics consist of related characteristics of the destination or service that have a bearing on the decision and its outcome.

Mathieson and Wall (1982) offer a five stage process of travel buying behaviour namely the felt need or travel desire, information and evaluation, travel decision, travel preparation and travel equipment and travel satisfaction evaluation. The model also identifies four interrelated factors namely tourist profile which includes age, education, income attitudes, previous experience and motivations; travel awareness implying image of a destination's facilities and services; destination resources and characteristics which includes attractions and features of a destination and trip features which includes distance, trip duration and perceived risk of the area visited. According to Mathieson and Wall (1982), a desire to travel is felt and reasons for or against the desire are weighed. Potential tourists then utilize travel information to get knowledge. The tourist then selects the destination, mode of travel, accommodation and activities to engage in. After bookings are made and confirmed, travel takes place. Lastly during and after travel overall experience is evaluated and the results influence subsequent travel decisions. The Mathieson and Wall model as discussed in Cooper et al. (2008) is given in Figure 2.2.

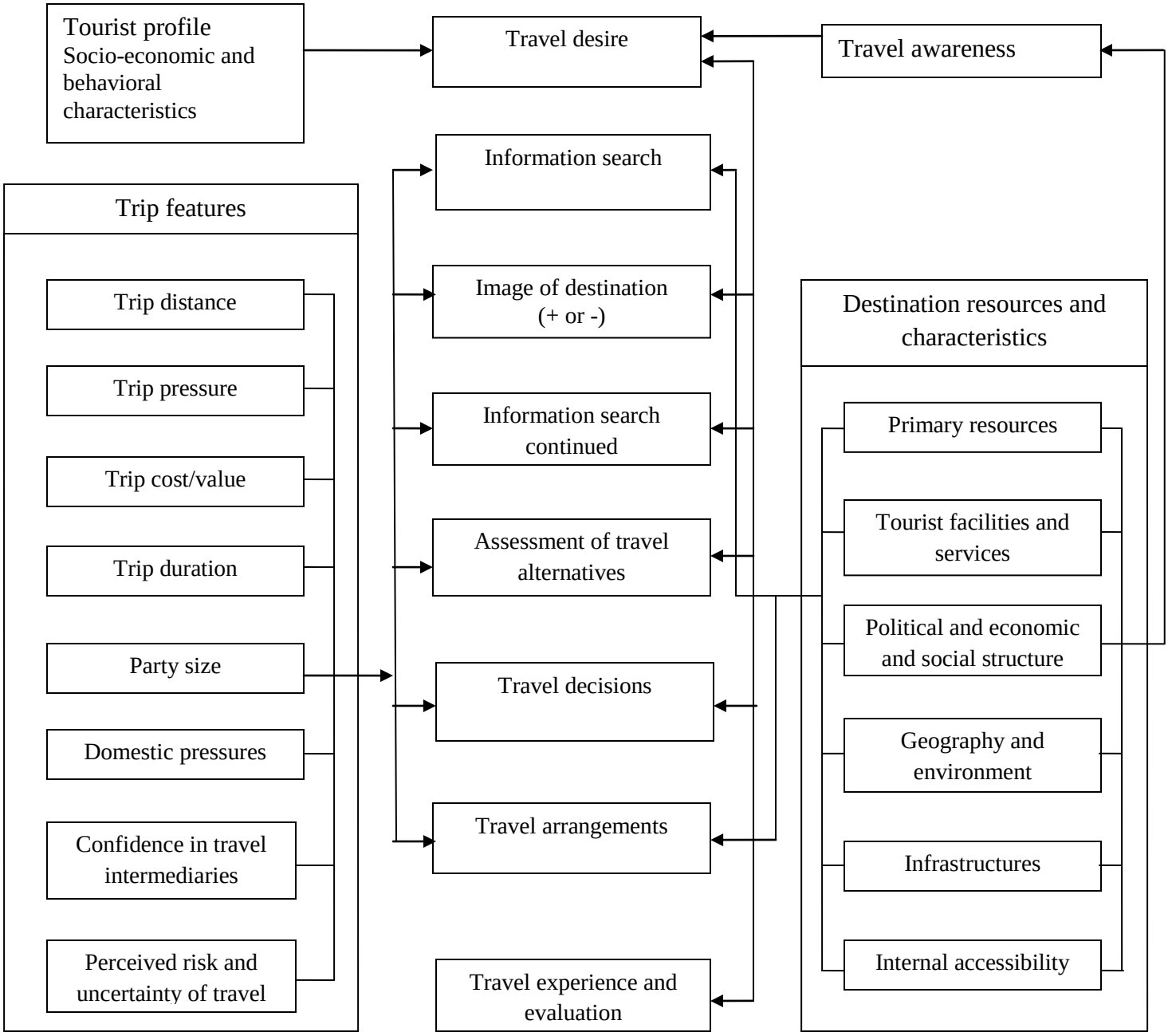

Figure 2.2: the Mathieson and Wall model

Source: Cooper et.al (2008)

2.2.3 Utility Maximization Theory

The choice of where to allocate scarce resources among competing choices depends upon an individual's underlying utility function. Utility refers to the perceived value of a good and the central assumption on which the theory of consumer behaviour and demand is built is that an individual makes choices so as to maximize his utility. The consumer attempts to allocate his limited money income among available goods and services so as to maximize his satisfaction. The objects of consumer choice are consumption bundles. The consumer is assumed to be rational and has full information of the available commodities, their prices and his income. In order to attain this objective, the consumer must be able to compare the utility of the various 'baskets of goods' which he can buy with his income (Koutsoyiannis, 1991; Varian, 1990)

The utility functions take different forms depending on whether the goods are perfect substitutes, perfect complements or imperfect substitutes. The fact that one good is substitutable for another has immediate economic consequences in that as one good can be substituted for another, the demands for the two kinds of good are bound together by the fact that customers can trade off one good for the other if it becomes advantageous to do so. An increase in price (ceteris paribus) will result in an increase in demand for its substitute goods. A complementary good is a good with a negative cross elasticity of demand, in contrast to a substitute good. This means a good's demand is increased when the price of another good is decreased.

The consumer's demand functions give the optimal amounts of each of the goods as a function of the prices and income faced by the consumer. The demand functions are written as:

$X_1 = X_1(P_1P_2M)$

$X_2 = X_2(P_1P_2M)$

When the consumer income changes, the optimal choice for the goods changes yielding an income expansion path. The income consumption path is used to derive the Engel curve. On the other hand, a change in price also changes the optimal choice of the consumer yielding a price offer curve which is used to derive the demand curve. A clear distinction is made between the normal, inferior, ordinary and giffen goods. A normal good is one for which the demand increases when income increases. An inferior good is one for which the demand decreases when income increases. An ordinary good is one for which the demand decreases when its price increases. A giffen good is one for which the demand increases when its price increases.

The consumer is considered to have a given income which sets limits to his maximizing behaviour. The demand functions for the optimal choice bundle of the consumer is determined as follows. The consumer problem is stated as:

Max $U(X_1X_2)$

subject to

$P_1X_1 + P_2X_2 = M$

The solution to utility maximization problem gives the consumer's choice of X_1 and X_2 as a function of prices and income. These are known as the generalized demand functions.

To solve the problem, Lagrange theorem is used to rewrite the constrained optimisation problem into a non-constrained form:

$$L = U(X_1X_2) - \lambda(P_1X_1 + P_2X_2 - M) = 0$$

Differentiating L with respect to X_1, X_2 and λ, setting the derivatives equal to zero, the resulting first order conditions are:

$$\frac{\partial L}{\partial X_1} = \frac{\partial U}{\partial X_1} - \lambda P_1 = 0$$

$$\frac{\partial L}{\partial X_2} = \frac{\partial U}{\partial X_2} - \lambda P_2 = 0$$

$$\frac{\partial L}{\partial \lambda} = P_1X_1 + P_2X_2 - M = 0$$

Solving the three equations simultaneously, the demand functions for the optimal choice bundle are obtained.

Assuming that consumer's utility function is of Cobb-Douglass form: $U(X_1X_2) = X_1^{\alpha}X_2^{\beta}$ where X_1 = tourism as a commodity and X_2 = all other goods and services. The consumer problem then becomes:

$$\text{Max } U = X_1^{\alpha} X_2^{\beta}$$

subject to

$$P_1X_1 + P_2X_2 = M$$

where α, β are positive constants and M is the income.

Introducing a Lagrangian multiplier and converting the above equations into a composite function we have:

$$L = X_1^{\alpha} X_2^{\beta} - \lambda(P_1X_1 + P_2X_2 - M)$$

Obtaining the first order conditions,

$$\frac{\partial L}{\partial X_1} = \alpha X_1^{\alpha-1} X_2^{\beta} - \lambda P_1 = 0 \qquad (2.1)$$

$$\frac{\partial L}{\partial X_2} = \beta X_1^{\alpha} X_2^{\beta-1} - \lambda P_2 = 0 \qquad (2.2)$$

$$\frac{\partial L}{\partial \lambda} = P_1X_1 + P_2X_2 - M = 0 \qquad (2.3)$$

Re-writing and dividing equation (2.1) and (2.2) above, then:

$$\frac{\alpha X_1^{\alpha-1} X_2^{\beta}}{\beta X_1^{\alpha} X_2^{\beta-1}} = \frac{\lambda P_1}{\lambda P_2}$$

$$\frac{\alpha X_1^{\alpha-1-\alpha} X_2^{\beta-(\beta-1)}}{\beta} = \frac{P_1}{P_2}$$

$$\frac{\alpha X_2}{\beta X_1} = \frac{P_1}{P_2}$$

Such that

$$X_2 = \frac{P_1}{P_2}\frac{\beta}{\alpha} X_1 \qquad (2.4)$$

$$X_1 = \frac{\alpha}{\beta}\frac{P_2 X_2}{P_1} \qquad (2.5)$$

Equation (2.4) and (2.5) represent the income expansion paths or the income offer curve. Substituting equation (2.4) and (2.5) into equation $P_1X_1 + P_2X_2 = M$ (2.3) one at a time, then:

$$P_1X_1 + P_2\left[\frac{\beta}{\alpha}\frac{P_1X_1}{P_2}\right] = M$$

$$P_1X_1 + \frac{\beta}{\alpha}P_1X_1 = M$$

$$\left(1 + \frac{\beta}{\alpha}\right)P_1X_1 = M$$

$$X_1 = \frac{M}{\left(1+\frac{\beta}{\alpha}\right)P_1}$$

$X_1^* = \frac{\alpha}{\alpha+\beta}\frac{M}{P_1}$ demand function for X_1.

Similarly, $X_2^* = \frac{\beta}{\alpha+\beta}\frac{M}{P_2}$ demand function for X_2.

X_1^* and X_2^* are referred to as the demand function that represents the optimal choice bundle $X_1^*X_2^*$. They provide the solution to the consumer utility maximizing problem. Given the market prices and the income level for a consumer, then the functions describe the exact amount of both goods that the consumer would have to consume so as to maximize utility.

Demand is determined by many factors; traditionally the most important determinants of the market demand are considered to be the price of the commodity in question, the prices of other commodities, consumer's income and tastes. Demand is also affected by numerous other factors, such as the distribution of income, total population and its composition, wealth, credit availability, stocks and habits. The change in any one of these factors changes the quantity demanded (Koutsoyiannis, 1991).

In applying the utility maximization theory to tourism demand, the assumption is that the individuals' decisions are made in a two-stage process. In the first stage of the decision making, the tourist decides on the amount of consumption of tourism goods in conjunction with other goods and services. Once consumers have chosen to travel, they face another decision of whether to travel overseas, and if so, to where. The numbers of substitute destinations are nearly infinite, and will appeal to different individuals for different reasons. According to consumer maximization theory, individuals will choose destinations based on optimization of utility. Faced with income and budgetary limitations, consumers choose between competing destinations (Smeral, 1988). However, unlike most other goods, tourism must be consumed at the point of supply, further complicating the consumer choice problem. Empirical modelling based on the standard two-stage theory usually concentrates on the second stage. Effectively, it is the market share of a destination for a given total market size that is modelled. According to Papatheodorou (2006) the classical utility maximizing model can be inadequate in explaining tourist choice due to separability and discreteness in choice structures.

2.3 Empirical Literature

This section provides a review of studies on international tourism demand and is divided into two subsections. One subsection contains those studies concentrating on economic factors while the other subsection contains those studies also considering noneconomic factors. The literature from the two sections is meant to provide information on the determinants of international tourism demand, understanding of how the variables were measured as well as the methods used in the estimation of the demand function.

2.3.1 Literature on Economic Factors

Summary (1987) carried out a study to evaluate the usefulness of multivariable regression analysis in identifying factors which influence tourists' decisions to visit Kenya. The study covered the period between 1963 and 1982. The demand variable was measured by the yearly number of holiday tourists visiting Kenya from each of the origin countries. The explanatory variables used were real disposable income per capita in the origin country, inflation adjusted round-trip airfare from origin country to Nairobi, exchange rate, relative price variable given by the ratio of the Consumer Price Index (CPI) in the origin country to CPI in Kenya, a dummy variable used to measure the impact of the border closure with Tanzania upon wanderlust travellers. The dummy had a value of 1 from 1968 to 1976 and a value of zero for the other years.

The study results indicated that the most important independent variables were income, relative prices and exchange rates. For the Italian tourists, income and air fares were not significant. For tourists from Switzerland and USA, air fares were not significant. The

regression equation for UK was inconclusive. Summary concluded that these results indicate that multivariable regression analysis has limited usefulness in identifying the significant factors which influence tourists' decisions and thus quantitative studies should be supplemented by qualitative analysis in order for Kenyan policy makers to make optimal decisions. The multiple regression used in this study failed to address the problem of multicollinearity. This led to poor performance of UK demand equation as regression suffered from multicollinearity. The current study used the system Generalized Method of Moments (SGMM) estimator which is more efficient than the OLS estimator in the presence of multicollinearity. The current study also considered noneconomic variables while the study by Summary only dealt with economic variables.

Lim (2004) did a study to find out the major determinants of Korean outbound travel to Australia during the period 1980 to 1999 using time series data. The explanatory variables used in the study were the income of the origin, tourism prices, a lagged dependent variable and two dummies capturing the effect of the complete removal of travel restrictions on South Korean residents in 1989 and the currency crisis in the latter half of 1997 and three dummies capturing seasonality. Tourist arrivals were used as a proxy for international tourism demand. Real GNP and Gross National Income (GNI) were proxies for real income while relative prices, exchange rate and real exchange rate were proxies for tourism prices. OLS technique was used to estimate the regression parameters. The regression variables were in logarithmic form. The results obtained showed that international tourism demand by South Korea was both income elastic and price elastic. The tightening of fiscal policies had significant adverse effects on

discretionary expenditures on overseas travel to Australia. Tourist arrivals from South Korea to Australia displayed strong seasonal patterns. Marketing and promotional efforts variable was omitted from the model due to unavailability of promotional expenditure data although the author acknowledges that it can play an important role in attracting tourists from South Korea to Australia. The study also ignored travelling cost variable. The study did not report unit root tests results and it is therefore not possible to know whether the OLS technique used was appropriate or not. The current study used panel data instead of time series data used by Lim.

Munoz (2006) carried out a study on inbound international tourism to Canary Islands for the period 1992 to 2002. The dependent variable was measured by tourist arrivals per capita from country of origin. The independent variables included price divided into two components: cost of living of tourists in Canary Islands relative to the cost of living in each one of the origin countries adjusted by the exchange rate and cost of travel proxied by price of crude oil. The per capita GDP of each of the origin country was used as a proxy for the income variable. A lagged dependent variable was also included in the model. Several time dummies were included to control for the special events occurring during the sample period. The study used the Difference Generalized Method of Moments (DGMM) model. The model variables were in natural logarithm form.

The study results showed that the lagged dependent variable was significant with a coefficient value of 0.60. Also tourism in Canary Islands was dependent on price, cost of travel and the economic conditions of the origin markets. The short-run price elasticities

suggest that tourist arrivals to Canary Islands were not very responsive to price changes but they were price sensitive in the long-run. The estimated short-run and long-run values of travel cost elasticity were -0.13 and -0.22 respectively. The estimated short-run and long-run values of income elasticity were 1.17 and 2.92 respectively, indicating that tourism demand to Canary Island was a luxury good for the consumers. The dummy variables were significant, implying that inbound tourism was affected by the instability generated by international terrorism. The author noted that inclusion of the lagged dependent variable as regressor biased the conventional estimators for panel data and the results of the study could be improved by including advertising expenditure variable omitted in the study due to lack of data. The study did not consider tourism price in other competing destinations which is also an important determinant of international tourism demand.

Chaiboonsri, Sriboonjit, Sriwichailamphan, Chaitip and Sriboonchitta (2010) carried out a study to determine how various factors affect international tourist demand arrivals to Thailand in the long-run during the period of 1986 to 2007. The countries under study were Asia major tourism market for Thailand such as Malaysia, Japan, Korea, China, Singapore and Taiwan. The dependent variable used was the numbers of international tourists arriving in Thailand. The independent variables were the GDP of the countries that the tourists were coming from, the international price of aviation fuel, and the exchange rate of Thai currency in comparison to foreign currencies. A panel cointegration model analysis was performed and the results indicated that income of origin countries, travel costs of origin countries, and exchange rate of origin countries are

influential in determining international visitors' arrivals to Thailand during the period of 1986 to 2007**.** The study used few explanatory variables and did not consider such variables as transportation cost, tourism price in competing destinations and once off events which have been shown to affect international tourism from other empirical studies. The current study incorporated these variables thus enriching the study results.

Habibi and Abbasinejad (2011) carried out a study to identify and measure the impact of the main determinants of the international tourist arrivals to Malaysia. Nineteen most important European tourists' origin countries for Malaysia were considered. Annual panel data for the period 1998 to 2007 was used. The study dependent variable was the number of tourist arrivals from the 19 tourists' origin countries while the explanatory variables included GDP per capita of tourist origin country, relative cost of living of tourist in Malaysia, price of tourism goods and services in alternative destinations, the accommodation capacity (number of hotel rooms) in Malaysia, political stability (absence of violence and terrorism) in Malaysia and dummy variables used to capture the once off events in Malaysia.

The study by Habibi and Abbasinejad (2011) used dynamic panel regression model with regression coefficients estimated by Arellano-Bond DGMM estimator. The lagged dependent variable, hotel room variable, tourism price variable, substitute price variable, political stability variable and the dummy variables were found to be significant. The estimated coefficient for the income variable was found to be insignificant. The current

study used the SGMM estimator which is considered to be more efficient than the DGMM estimator.

Ibrahim (2011) carried out a study aimed at establishing the main determinants of the international tourism flows to Egypt using annual panel data set for the period 1990 to 2008. International tourism demand variable was measured using the number of tourists arriving to Egypt from eight origin countries. Independent variables used were income, price, trade openness, and special factors. The income measure used was the real GDP per capita of the origin country. CPIs were used as proxy for the cost of tourism in destination relative to the cost of living in the origin adjusted by the exchange rate. Trade openness was measured as the total value of import and export of goods and services between Egypt and the origin country divided by GDP of Egypt. Seemingly Unrelated Regression (SUR) method was used to analyse the panel data. The results obtained indicated that tourism in Egypt was sensitive to prices, real effective exchange rate had a significant effect with elastic value of -0.25. Trade openness had positive and significant effect with value of 0.10 and real GDP per capita was positively significant. The study was limited in that other variables such as lagged dependent variable, substitute price variable and travel cost variable found to be relevant in explaining international tourism demand for Africa from other previous studies were omitted from the study due to unavailability of data. Noneconomic factors were also not considered. In addition, the estimation method used, SUR, was not well justified and model diagnostics were not given. The current study used the SGMM model which was appropriate for the data set

under consideration and took into consideration and also considered the non-economic factors.

Muchapondwa and Pimhidzai (2011) modelled international tourism demand for Zimbabwe using monthly time series data for the period 1998 to 2005. The Autoregressive Distributed Lag (ARDL) approach was used to investigate the determinants of international tourism demand for Zimbabwe. In modelling international tourism demand, international holiday visits to Zimbabwe was used to measure international tourism demand. Independent variables considered were taste formation, domestic prices,foreign prices, income of the country of origin and transport costs. Taste formation was captured by the lagged value of international holiday visits. The CPI of Zimbabwe divided by the exchange rate was used to proxy tourism price. Foreign prices were proxied by prices from South Africa since most tourists came to Zimbabwe via South Africa which was captured by CPI. Transport costs were proxied by international oil prices, since it was a major driver for both transport prices and air fares. The monthly United States unemployment rate was used as a proxy for changes in income since the trends in global income have tended to follow the United States economic activity. Dummies for the solar eclipse, Miss Malaika event in 2002, terrorist attack in 11th September, 2001, festive season, and political instability were also included.

The study results indicated that taste formation, transport costs, changes in global income, the December festive season, solar eclipse viewable from the country, the hosting of the continental Miss Malaika pageant in 2002 and the 11th September, 2001

terror attacks in the United States had significant impacts on international tourism demand for Zimbabwe. International tourism demand for Zimbabwe visits was also found to be seasonal, increasing in December every year. International tourism demand was found to be insensitive to both domestic and foreign prices. In addition, the political instability dummy was found not to be significant. The study did not consider the non economic factors.

2.3.2 Empirical Literature on Non-Economic Factors

Eilat and Einav (2004) carried out a study on determinants of international tourism using annual data for the period 1985 to 1998. The data set included all countries worldwide both as origins and as destinations. The study dependent variable was the holiday tourists' flows per capita. The explanatory variables were grouped into four groups namely the price variable, variables that described the origin-destination relationship, variables that were destination specific and variables that were origin specific. The price variable was proxied by the relative cost of living in the destination with respect to the origin measured by the reciprocal of the purchasing power parity conversion factor. The origin-destination variables consisted of economical, cultural and geographical variables. The standardized gross annual value of bilateral trade in goods between the countries was used as a proxy for the intensity of the economic relations between the countries. A dummy variable equal to one if the countries had at least one common language was used to proxy similarity in culture between the origin and the destination. The geographical variables included a dummy for a common border, the distance between the countries where the location of the country was taken to be its capital, proxying transportation costs

and a set of dummies that captured differences in climate. The distance between countries was used to proxy for transportation costs.

The destinations' variables group included a risk variable, an economic variable and geographical variables. The riskiness involved in travelling to a destination country was measured by the minimum of three annual indices for the levels of internal, external and ethnical conflicts. The Gross National Product (GNP) per capita was used to proxy the level of development of the destination country. Three geographical variables were used namely the surface area, a set of dummies for distance from the equator clustered into 7 groups, and 13 regional dummies interacted with a dummy for landlocked countries. Their rationale behind a dummy for countries with access to the sea was that these countries may attract beach tourism. For the origin specific variable GNP per capita was used to measure how the travelling habits of people in the origin country respond to a change in their wealth.

The study by Eilat and Einav (2004) used a multinomial logit model and separate sets of regressions were run for low GNP (below $10,000) destinations and high GNP destinations. The study found that tourism price in developed countries was significant with a price elasticity of about one, while tourism in less developed countries did not respond to price fluctuations. Destination risk index was shown to be quite important for destination choice, for both developed and less developed countries. The coefficient was found to be stable around 0.04, suggesting that on average, an increase in one point in the risk index scaled from 1 to 12, high being better, increased incoming tourists by about 4 percent. Most coefficients on GNP for both origin and destination were significant.

However, the coefficients on origin GNP were generally higher, implying an income elasticity of between one and two suggesting that tourism is a luxury good.

The study by Eilat and Einav (2004) further revealed that coefficients of variables for common border, common language and distance were statistically significant, especially for low GNP countries where the coefficients for these variables were higher. The coefficient for volume of bilateral trade variable became significant only when country pair dummies accounting for relationship-specific unobservable as well as origin and destination fixed effects were included in the model. The study used a static regression model and did not incorporate the dynamic aspect of the data which allows one to look at both short run and long run elasticities. The study failed to report results for unit root tests which it is not clear whether they were done or not. Unit root tests are important when dealing with panel data for many years. If the data used were not stationary, the study results could be spurious.

Naude and Saayman (2005) carried out a study to explain the determinants of tourism arrivals in 43 African countries taking into account tourists' country of origin. The study used both cross section data and panel data largely obtained from the WTO for the period 1996 to 2000. A distinction was made between tourist arrivals from the European Union, America and Canada, and from Africa itself. The total number of tourist arrivals per year to a particular destination was used to measure the demand for tourism to Africa. The independent variables used were total tourism expenditures, which was proxied by real GDP per capita in countries of origin, relative prices measured by the inverse of CPI of a

destination country adjusted by the dollar exchange rate and travel costs proxied by the distance of a country to the origin of its tourists. Other factors included were political stability, personal safety, health risks and available infrastructure and tourist marketing efforts. To measure political stability, an index on political stability or lack of violence (Kaufmann et al., 1999) was used. To the case of tourism marketing, the number of internet users in a country obtained from World Development Indicators was used as a proxy to capture the effects of networks and information on tourist flows. For tourism infrastructure, the relative number of hotel rooms available in a destination was used as an indicator. To proxy for health risk, the prevalence of malaria was used. The incidence or extent of malaria was measured using the index compiled by Gallup et al. (1999) from World Health Organization data.

The methodology employed included single-equation regressions using three different estimators namely OLS, random effects or fixed effects and first-step general method of moments-difference estimator. The results of the study showed that political stability, tourism infrastructure, marketing and information, and the level of development at the destination were key determinants of travel to Africa. The level of income in the origin country, the relative prices and the cost of travel were not significant in explaining the demand for Africa as a tourism destination. The study by Naude and Saayman (2005) did not consider socio-demographic characteristics due to unavailability of data. The current study included the socio-demographic characteristics by using survey data.

Cakici and Harman (2007) carried out a study to determine the destination attributes affecting destination choice of Turkish birdwatchers. The study population were around 550 birdwatchers considered to be living in Turkey during the time of study in 2005. The study considered only 16 percent (88 birdwatchers) of whole Turkish birdwatchers. The data were collected using questionnaires through the internet and face to face. The study variables included destination attributes such as attractions, accessibility, amenities, available packages, activities, ancillary Services. Each item response categories ranged from “not at all important” to “very important”. Demographics of the respondents such as gender, level of education, monthly income, marital status and number of years the respondent has engaged in bird watching were also included. Data were analyzed using descriptive statistics, factor and correlation analyses.

The study findings indicated that the Turkish tourists liked to feel nature with clean air, especially the destinations located in national parks. The favourite destinations were those with easy access, food and beverage outlets, guiding services and accommodation facilities, supported by security and health services. The study also found that the Turkish birdwatchers liked doing nature based activities and bird related activities while they were watching the birds. Majority of Turkish birdwatchers who participated to the study was male, half of them were under 25 years and the average age was 29 years and most of them were single. Although the tourists were well educated, the monthly income reported was low in many cases. The Turkish bird watchers had been doing this activity for an average of 5 years implying it may be a new recreational activity among the young, well-educated and single Turkish males. The study used descriptive statistics and

correlation analysis only. The current study went beyond correlation analysis by doing regression analysis.

Jonsson and Devonish (2008) carried out study to establish the underlying reasons for tourists' decisions to visit the Caribbean Island of Barbados. This study was quantitative in nature and utilized a survey research design. Three hundred tourists staying in 69 hotels in the island of Barbados between December 2006 and March 2007 were targeted. The tourists were chosen conveniently but care was taken to prevent over-representation of some categories. Questionnaires were sent to human resource managers, general managers, or managing directors employed in 20 hotels operating in all tourism regions of Barbados. The 20 hotels were chosen according to size, ownership, and cost. Due to the low response rates, paid research assistants were sent out to administer the questionnaires at the selected hotels. A total of 163 completed questionnaires were obtained, indicating a 54 percent response rate.

The study independent variables were nationality, gender and age and the dependent variable was motivation. Nationality was broken into three categories, that is, those from Britain, United States and Canada while age was divided into three categories namely 18 to 35 years, 36 to 55 years and 56 years and over. A 14-item scale was used to measure 14 ‘‘push’’ and ‘‘pull’’ motives for taking an overseas vacation to a particular destination. Motivation was grouped into cultural, relaxation and physical. One-way Analysis of Variance (ANOVA) was conducted to examine whether tourist motivations (at the factor and item level) differ significantly by nationality, age and gender.

The study revealed that there were significant differences based on nationality regarding travel motivations of tourists. With respect to age differences, older tourists were more likely to travel for reasons based on cultural exploration and relaxation, whereas younger tourists were more likely to travel to engage in sports. With respect to gender differences, the results of the study revealed that male and female tourists did not differ significantly in their motivations to travel to Barbados. Jonsson and Devonish (2008) noted that the study was limited in that since sampling was done conveniently, this could have introduced some level of selection bias. This limitation coupled with the relatively small sample size used, restricted the generalizability of the study findings to the larger population. The study also covered motivation only thus it was narrow in scope. The current study considered demand which is broader and more informative.

To investigate the determinants of length of stay of tourists in Azores, Portugal, Menezes, Moniz and Vieira (2008) carried out a study during the summer of 2003. A sample of 400 tourists was selected based on those tourists who visited the Azores, by nationality, routes and gateways used in 2002. The dependent variable was the number of days a tourist stayed in Azores. The study explanatory variables included tourists' socio-demographic profiles, actual trip attributes, sustainability practices and destination image. The study used the Cox Proportional Hazards (PH) model to establish the determinants of the length of stay at Azores.

The study findings showed that male tourists tended to experience shorter stays. This was also the case for married tourists. The age coefficients were found not to be statistically

significant. Tourists from the Nordic countries, including Sweden, and German tourists were found to experience shorter stays. Tourists with higher levels of education were associated with shorter expected stays compared to those without high level of education. The high-level profession variable was not significant. Tourists visiting friends or relatives tended to exhibit longer stays if they were international tourists. Repeat visitors were found to stay for longer periods. Sustainability practices were found to have some predictive power over length of stay. Those tourists who choose the Azores as a holiday destination for its weather and remoteness experienced the longest stays. Also the tourists who choose the Azores as a holiday destination for its nature and landscape also experienced longer stays. On the contrary, those tourists who attached high importance to cultural heritage in their holiday destination choice process tended to experience shorter stays. Lastly, other factors such as quality and price, availability of packages and flights, and safety and hospitality were found not statistically significant in explaining the length of stay. The study used a survival model while the current study used a count data regression model.

A study on the factors determining tourism demand in Africa was carried out by Idowu and Bello (2010). The study considered 20 panels for the period 1995 to 2005. The study dependent variable was total tourist arrivals in African countries selected in the study. The explanatory variables included income proxied by real world income, exchange rate adjusted to relative prices between Africa and the rest of the world, the crime rate measured by the incidence of recorded crime rate on the continent, a measure of political instability and the number of telecommunication services. The study used a dynamic panel regression model to estimate the demand for tourism in Africa. The study findings

showed that tourists coming to Africa were sensitive to prices. The number of telecommunication infrastructures and lagged dependent variable were also statistically significant. Political instability, crime rate and world income were not statistically significant. The study only considered economic and political factors but did not consider the tourist socio-demographic factors.

Cespedes, Gomez and Becerra (2012) analyzed the influence of socio-demographic and travel indicators on international demand for nature-based tourism in Costa Rica. The study used data from a database of a survey carried out in 2008. A sample of 1,550 international tourists over 18 years of age who departed Costa Rica from Juan Santamaria airport was considered and the response rate was 96 percent. The study dependent variable was the nature tourist activities in Costa Rica which included hiking, visits to volcanoes, observation of flora and fauna, bird watching and canoeing. The explanatory variables were socio-demographic factors (age, level of education, marital status) of the tourists and travel factors. The travel factors included first visit, travelling companions, reason for travelling and visits to parks or nature reserves.

Cespedes et al. (2012) used a discrete choice logit model to estimate coefficient of the study variables. Five variables were determined as having the ability to influence significantly the decision to carry out at least one of nature tourism activities. The study results indicated that for nature tourism, tourists travelling in family were more likely to demand at least one of the nature-based activities than when travelling “alone”. Tourists with “postgraduate studies” were more likely to practice at least one of the nature-based

activities than those with “secondary studies or less”. If tourists did not visit natural parks and reserves on their first trip to the country, they were also less likely to demand nature-based tourism in subsequent visits, compared to those who did visit such places.

Further analyzing individual nature activities, Cespedes et al. (2012) found out that tourists with postgraduate studies were more likely to practice hiking than those with secondary studies or less; the tourists travelling with family were more likely to demand walking activities than those travelling alone and a European tourist was more likely to practice hiking activities than one from the United States. Regarding visits to volcanoes, tourists travelling with family or with a partner were more likely to engage in this activity than those travelling alone and women were more likely to visit volcanoes than men. Tourists from Latin America and the Caribbean showed a high preference for visits to volcanoes while those from Europe wished to observe flora and fauna and birds in particular. The tourists grouped as from other countries also showed a high degree of interest in flora and fauna. The age variable and the other travel factors were not significant for fauna and flora. The current study used a count data regression model since the dependent variable could only assume positive integers values.

Chaiboonsri and Chaitip (2012) conducted a study to model international tourism demand for length of stay in India. Two hundred and forty two questionnaires were collected from international tourists’ arrivals in India during the 2010 to 2011. The study dependent variable was the length of stay while the explanatory variables included the socio-demographic profile of the tourists such as gender, marital status, education level, career,

monthly income in US dollars and tourism spending in US dollars, the trip attributes, the group's variables impact to social development in areas around tourist destinations, the group's variables impact to economic development in areas around tourist destinations, the group's variables impact to environmental development in areas around tourist destinations .

The study used the negative binomial count data regression model and obtained the following results, the study variables such as education, income, the frequency of visiting, pre-trip planning, spending, costs of good and service purchased, hotels cost, travels cost, social development in rural areas, social development in Indian's life style, environmental development in mountains areas, environmental development in city areas and environmental development in rural areas were found to have significant impact for length of stay in India's tourism places. Gender, marital status and income were found to be insignificant. The study used many variables which could have posed an estimation challenge in the negative binomial regression analysis given the study sample size.

2.4 Summary of Literature and Research Gaps

The literature on international tourism demand reviewed has provided insight into the various variables that influence international tourism demand. Most empirical research on international tourism demand has focused on tourism in developed countries while Africa has received very little attention (Xiao and Smith, 2006; Rogerson, 2007). In Kenya, there is no recent study on international tourism demand despite the importance of tourism sector to the country's economy. Empirical studies on international tourism

demand have mainly focused on the influence of economic factors such as price, exchange rate and income on tourism demand, but have failed to explain certain country-specific determinants such as political stability, geographical features, attractions and marketing expenditure among others as noted by Naude and Saayman (2005) due to unavailability of data on these variables. In developing countries, especially in Africa, both economic and non-economic factors should be taken into consideration when modelling international tourism demand since tourism demand may be significantly affected by both economic and non-economic factors (Eilat and Einav, 2004; Naude and Saayman, 2005). Those studies that have incorporated noneconomic factors have only used survey data focussing on the individual tourists, failing to analyze demand at the national level.

From the reviewed studies, various factors have been found to be significant in explaining international tourism demand. The degree of importance of each factor is determined by the origin and destination under consideration since international tourism demand elasticities vary across destinations (Crouch, 1995). Therefore, there is no generalized international demand function as each demand function is unique depending on tourist origin and destination country. This implies that each destination country needs to determine its demand function. In addition, the accuracy of different modelling methods vary for data from country to country over different time periods, and therefore, neither a single model nor a single method will necessarily be appropriate for all origin-destination pairs (Witt & Witt, 1995).

This study attempts to fill the research gaps by analyzing international tourism demand for Kenya taking into account both the economic and non-economic factors. To determine the economic factors influencing international tourism demand, the study used a dynamic panel model, a new econometric model, that helps reduce the statistical problems of cross-sectional and time series regressions. The dynamic regression panel model allows for the control of the unobserved country specific effects that are theoretically important but too difficult to measure, the omitted variable bias, the inclusion of the lagged dependant variables regressor and the endogeneity and simultaneity problems of explanatory variables (Baltagi, 2005). Song and Li (2008) noted that, the panel data approach has rarely been applied to tourism demand analysis in spite of its several advantages.

2.5 Conceptual Framework

There is no specific conceptual framework used in the previous studies but authors for these studies have constructed their own conceptual frameworks considering variables whose data were available. The study conceptual framework was created by the researcher using variables derived from the theoretical and empirical literature on tourism demand reviewed. The main (dependent) variable for the study was international tourism demand for Kenya. The factors affecting international tourism demand for Kenya were drawn from the literature reviewed having been empirically proved to be significantly affecting international tourism demand. The factors that were considered in the study were grouped into economic factors, tourist's socio-demographic characteristics, political factors and destination characteristics.

The study used tourism departures and the number of tourist's nights spent in Kenya as a measure of international tourism demand (dependent variable) as supported from previous studies. Some of the economic factors which were found to significantly affect international tourism demand from the reviewed studies included income, relative price, transportation cost, tourism price at alternative (substitute) tourism destinations, lagged dependent variable and trade openness. Thus these were the variables considered in the study. For the studies reviewed the income elasticity of demand was above unity and also below unity implying that international tourism was considered a luxury good in some case while in other cases it was considered to be a normal good. In some studies income and tourism demand were found to be inversely related implying tourism was an inferior good. From the demand theory price is a major determinant of demand. Tourism services are bought at the point of supply (destination). Consequently, transport costs form a large proportion of the expenditure associated with this consumption. Hence, destination choice and the quantity of what is demanded are influenced by the cost of transport as well as the cost of such services. In the studies reviewed where price was significant, it was either demand elastic or demand inelastic.

Many international tourists consider multiple destinations in their decision on where to visit. This has important implications for the level of demand for a given destination. Higher prices in one destination may result in the consumption of fewer tourism services with compensating or offsetting amounts being consumed in another destination. Tourists may also avoid visiting a high cost destination altogether. In the studies reviewed which included substitute price as an explanatory variable the sign of the cross elasticity of

demand was positive for competing destinations and negative for complementary destinations. Reports about holiday destination often spread through the word-of-mouth. Thus in situations where people do not have first-hand knowledge about a particular destination, recommendations by previous visitors who have visited there, can influence prospective travellers even more than advertising efforts in brochures. The studies which included a lagged dependent variable found it significant and had a positive coefficient of less than one. Economic relations between two countries can encourage travel of the citizens between the countries. The citizens will either travel to do business or take a holiday or combine both. The studies including this variable found it significant with a coefficient less than one.

A range of demographic variables such as the age of traveller, education, family life cycle, ethnic group and occupation among others may affect demand. The age of the tourist is likely to influence the type of travel product and destination chosen. The conventional measurement is chronological age though domestic age better discriminates between types of tourist demand and levels of travel propensity. Domestic age refers to the stage in the life cycle reached by an individual and different stages are characterised by distinctive holiday demand and levels of travel propensity. The individual is expected to be interested in certain preoccupations, interests and activities in each stage of the family life cycle. The level of education may be a determinant of the type of employment and income earning potential of a tourist, hence it will influence the type of tourism experience the tourist will seek. Education tends to broaden people’s interests and thus stimulates travel.

Tourism is an expensive activity which demands a certain threshold of income before participation is possible. The nature of employment may influence travel propensity by determining income and holiday entitlement and also the type of holiday demanded. Increases in holiday entitlement are likely to result in increases in tourism demand. The influence of gender in tourism decision making is not clear. Men and women tend to be viewed differently by society in terms of being travellers. The changes in an individual's age, place of residence, or family composition are thus likely to have an impact on that individual's availability of time and financial resources, which in turn affects destination choice and the pursuit of activities at the destination. Hence, the sum of demographic change that occurs in a society is likely to influence the aggregate demand for tourism products and services and the design of tourism destinations to make them attractive and profitable.

Governments in the tourists generating area and destination can influence demand. Regulation can directly limit the number of tourists through visa restrictions. Political instability, terrorism, tribal and election clashes can affect tourism demand negatively. Political factors can either encourage travel or deter it. The characteristics of destination country especially attractions and natural resources also have significant influence on tourism demand. The destination country offers attractions and hospitality to the tourist. In order for tourists to consume these resources, good facilities and infrastructure are necessary. A good image of the destination is an important element in its selection. A number of factors that enhances the general attractiveness of a destination include: pleasant climate, friendly people, low cost of living and ease of accessibility. Concerns

about a destination prior to travel can affect decisions on whether to travel there. The attractiveness and hence the competitiveness of tourism product depend on the quality and accessibility of the associated services such as security, medical services, telecommunication and banking. The conceptual framework for the study is presented in Figure 2.3.

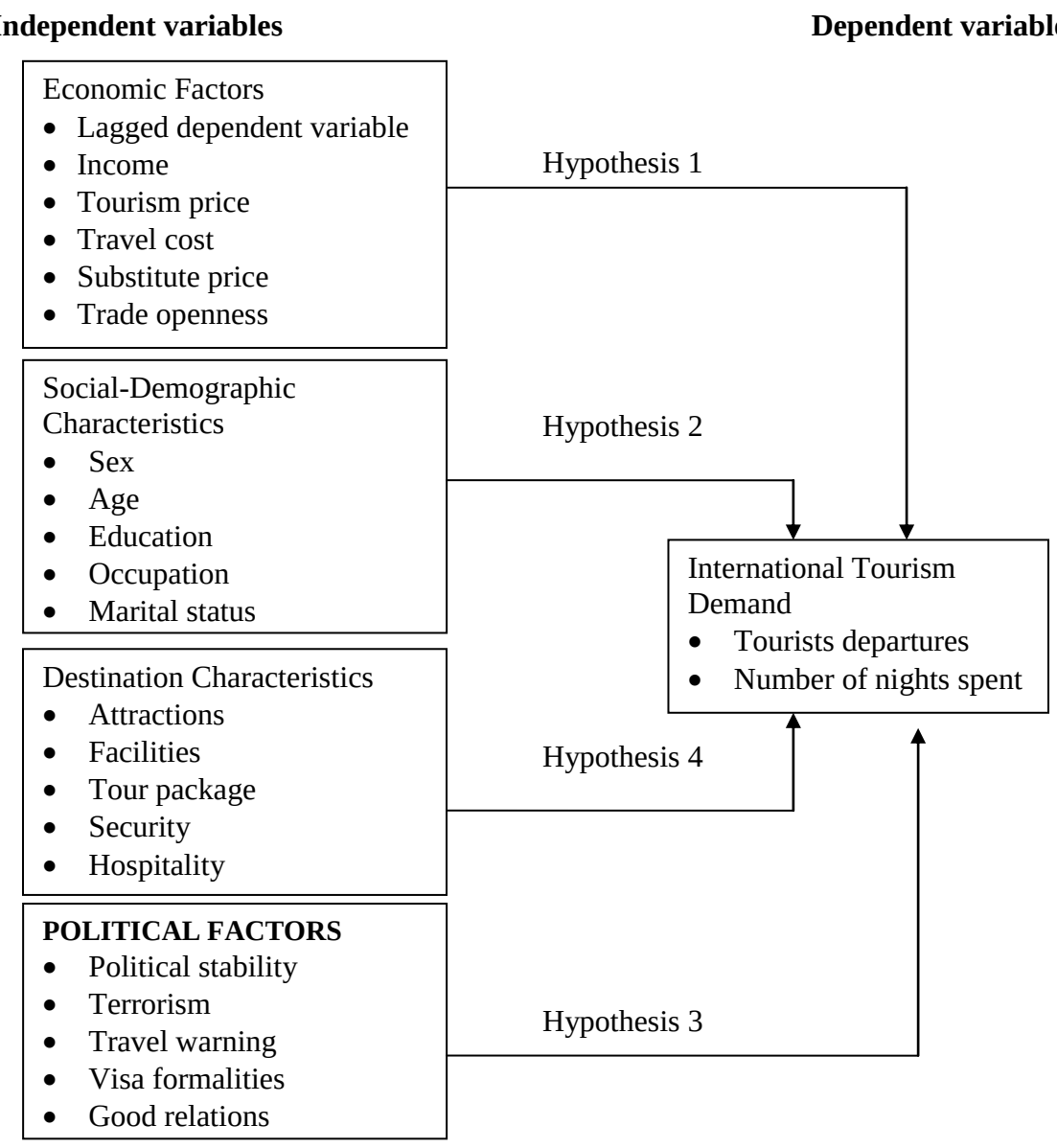

Figure 2.3: Conceptual Framework
Source: Author (2012)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was employed in the study. The sections included are the research design, empirical model, operationalization and measurement of variables, target population, sampling design, data collection instruments, data collection procedure and data analysis and presentation.

3.2 Research Design

The study used both longitudinal and cross sectional research design. In a longitudinal study, measurements are taken on each variable over two or more distinct time periods. This allows the researcher to measure change in variables over time (Sekaran & Bougie, 2010). In longitudinal studies of the panel variety, the research may study the same subjects over time (Cooper & Schindler, 2006). The use of panel data in this study allowed controlling for individual heterogeneity among the different countries in order to avoid biased results. The use of panel data also enabled to have more degrees of freedom than with time-series or cross-sectional data, to control for omitted variable bias and to reduce the problem of multicollinearity, hence improving the accuracy of parameter estimates. In addition, panel data are better able to study the dynamics of adjustment thus are better suited to study the dynamics of change of tourism demand (Baltagi, 2005; Gujarati & Porter, 2009). The panel data was constructed from observations of the several study variables made in 11 countries, that is, United Kingdom, Germany, Italy,

France, United States of America, Canada, India, Japan, Israel, Uganda and Tanzania for the time period 1991 to 2011.

A cross sectional design involves the collection of data from a number of cases at a single point in time and is also referred to as a survey design. The choice of the survey research design was made based on the fact that it allowed the researcher to collect data from respondents at a particular point in time and to measure the relationship of the study variables at the specified time in order to describe how variables were related (Saunders et al., 2007). According to Mugenda and Mugenda (2003), a survey design is an attempt to collect data from an identified group of persons, with the objective of determining the current status given the specified variables. In this study, data from tourists visiting Kenya was collected to determine the current status of demand for international tourism in Kenya with respect to specified variables. In addition surveys are used to learn about people's attitudes, beliefs, values, demographic facts, behaviour, opinions, habits, desires, ideas, and other types of information (McMillan and Schumacher, 1989). Hence the survey study enabled the researcher to learn about the factors influencing tourists to visit Kenya as well as their personal characteristics.

3.2.1 Research Philosophy

This study adopted the positivism research philosophy. Levin, (1988) states that positivist researchers are of the opinion that the reality can be observed and viewed in an objective manner. Positivists feel that the data collection can be carried out in the society and is related to people and their ideas (May, 1997). Principal positivist methods consist of

survey techniques and often involve statistical analysis (Schiffman & Kanuk, 1997). Positivists mostly deliver their results in a generalized manner and follow deductive approach. A positivist research first puts forward a hypothesis which is then studied based on the data collected. This is then empirically analyzed and the hypothesis rejected if disproved in the experiment and accepted if the hypothesis is proved. The research based on this approach is mostly objective and is meant to be based on facts and figures (Nagy & Biber, 2010). The positivism approach was appropriate for this study because the study followed a deductive approach and put forward some hypotheses which were tested using empirical data.

3.3 Empirical Model

The study followed the standard theory of demand which formed the theoretical foundations for modelling international tourism demand of the studies reviewed. The study used the single estimation framework and derived the international tourism demand function for Kenya from all countries rather than from a particular country of origin. In order to explain the determinants of international tourism demand for Kenya, the study used two regression models. A dynamic panel regression model was used to analyze the effect of economic factors on international tourism demand for Kenya while a count data regression model was used to determine the effect of socio-demographics factors, political factors and destination characteristics on international tourism demand for Kenya. The variables included in the models were identified from the literature reviewed.

3.3.1 Dynamic Panel Regression Model

Panel regression models are based on panel data and the two commonly used techniques in panel data estimation are the Fixed Effects Model (FEM) and the Random Effects Model (REM). When the data contains a lagged dependent variable in the regression equation the fixed effects and the random effects estimators produces biased results. In this case, dynamic panel regression models should be used. The dynamic panel regression models are estimated using generalised method of moments (GMM), a method of estimation that provides consistent estimates (Baum, 2006; Roodman, 2009).

A dynamic log-linear model was specified as given in equation 3.1.

$$\ln TD_{it} = \beta_0 + \beta_1 \ln TD_{it-1} + \beta_2 \ln GDP_{it} + \beta_3 \ln TP_{it} + \beta_4 \ln SP_{itSA} + \beta_5 \ln TC_{it} + \beta_6 \ln TO_{it} + \beta_7 D_{2008} + \alpha_i + U_{it} \quad (3.1)$$

where:

i denotes the cross section units (i = 1,2,...,11) and t denotes the time period (t =1,2,...,21).

TD_{it} and TD_{it-1} = Number of tourist departures from Kenya back to the i_{th} tourists' origin for year t and t-1 respectively.

GDP_{it} = Real GDP per capita for tourists' origin country *i* at year t.

TP_{it} = Price of tourism services in Kenya (destination country) at year *t*.

TC_{it} = Travel cost from origin country *i* to Kenya at year *t*.

SP_{itSA} = Price of tourism services in South Africa (competing destination) at year *t*.

TO_{it} = Trade openness between Kenya and tourists origin country at year *t*.

D_{2008} = Dummy variable for 2008 election clashes taking a value of one in 2008 and zero otherwise.

α_i = Unobservable country effect and represents all factors affecting international tourism demand that do not change over time.

U_{it} = stochastic disturbance term.

β_0 = Constant term

β_i (i = 1, 2, 3,...,7) are the parameters to be estimated and refer to the contemporaneous short- run effect of the independent variables on the dependent variable at time t. However, an effect on time t will have an impact on t + 1, t + 2, and so on through the lag of the dependent variable. The long run effect can be calculated as $\frac{\beta_i}{1-\beta_1}$.

The difference GMM (DGMM) estimator developed by Arellano and Bond (1991) and system GMM (SGMM) estimator established by Arellano and Bover (1995) and Blundell and Bond (1998) are the commonly used estimators in dynamic panel regression models. The study used the SGMM estimator initially proposed by Arellano and Bover (1995) and further developed by Blundell and Bond (1998), to analyze the effect of economic factors on international tourism demand for Kenya. The SGMM estimator has an advantage over DGMM in variables that are nonstationary or close to be random-walk variables since for random walk like variables, past changes may indeed be more predictive of current levels than past levels are of current changes, so that the new instruments used in SGMM are more relevant (Bond, 2002; Baum, 2006; Roodman,

2009). Since the model specification includes macroeconomic variables which are known in economics for being nonstationary, the SGMM approach is a more appropriate choice.

The GMM procedure has an advantage over other estimation procedures in that the estimator only needs a set of moment conditions, without imposing restrictions on the distribution of the variables, that is, SGMM estimator does not assume normality. The SGMM estimator also allows for heteroskedasticity in the data through use of robust standard errors instead of the normal standard errors. The SGMM estimator uses the levels equation to obtain a system of two equations, one differenced and one in levels. Adding the second equation allows additional instruments to be obtained. The variables in levels in the second equation are instrumented with their own first differences. Thus the SGMM approach generally produces more efficient and precise estimates compared to other dynamic regression model estimators by improving precision and reducing the finite sample bias (Baltagi, 2005).

A crucial assumption for the validity of GMM is that the instruments are exogenous. Consequently, an important procedure in testing the statistical properties of this model is testing for the validity of instruments, which requires testing for the presence of first-order and, in particular, second-order autocorrelation in the error term. Two diagnostics are computed using the Arellano and Bond GMM procedure to test for first order and second order serial correlation in the disturbances. One should reject the null of the absence of first order serial correlation and not reject the absence of second order serial correlation. A special feature of dynamic panel data GMM estimation is that the number

of moment conditions increases with T. Therefore, a Sargan test is performed to test the over-identification restrictions (Roodman, 2009)

The double logarithmic dynamic regression panel model was used in the study to allow the researcher interpret the model parameters directly in terms of demand elasticities. This is in line with the previous studies reviewed in chapter two which have used double logarithm linear models. The empirical results of these studies were interpreted in terms of elasticity of demand, which is defined as the percentage change in the quantity of tourism demand with respect to a percentage change in each of the tourism demand determinants. An elasticity greater than one, that is, where the demand is elastic, implies that the demand for tourism services responds proportionately more than the change in the independent variable. On the other hand, an elasticity of less than one, that is, demand is inelastic, implies that the demand for tourism services responds proportionately less than the change in the explanatory variables. Income elasticity of demand is expected to be positive for most goods and services. Demand for basic goods and services should be income inelastic whilst that for luxury items should be elastic. Negative income elasticity indicates inferior goods, in this case an inferior tourism destination (Koutsoyians, 1991)

3.3.2 Count Data Regression Model

Since the study dependent variable for survey data was measured using count data, a count data regression model was used. A count data regression model is used for modelling the count of things as a function of covariates and the counts are non-negative integers. The most commonly used count data regression models are Poisson and

negative Binomial models. The Poisson distribution is often used to model count data when the events being counted are somewhat rare. As the expected number of events increases, a normal distribution can be used as an approximation to the distribution of counts of events. The models are fit using maximum likelihood methods. The Poisson distribution assumes that the mean and variance of the data are equal. The binomial regression model is used instead of Poisson if the data is overdispersed, that is when the variance of the data is not equal to the mean of the data (Heeringa,West & Berglund, 2010). Since the study data was found to be overdispersed, the negative binomial model was used.

The negative binomial regression model in log-linear form was used to address objectives two, three and four of the study. The model is given in equation 3.2.

$$\ln\left[E(y_i/x_i)\right] = \beta_0 + \beta_1 \text{Expenditure} + \beta_2 \text{Income}_i + \beta_3 \text{Age}_i + \beta_4 DE_i + \beta_5 DO_i + \beta_6 DG_i + \beta_7 DM_i + \beta_8 DC_i + \beta_9 DT_i + \beta_{10} DR_i + \beta_{11} Pol_i + \beta_{12} \text{Dest}_i + \varepsilon_i \quad (3.2)$$

$$\text{var}(y_i/x_i) = E(y_i/x_i)(1+\alpha)$$

where:

Y_i = Number of nights spent by a tourist in Kenya

Expenditure_i = Total amount of money a tourist spent in Kenya in US dollars

Income_i = Annual household income of the tourist in US dollars

Age_i = Age of the tourist in years. The mid-point of grouped data was used instead of age categories.

DE_i = Level of education dummy of the tourist with no college education = 0 and at least college level education = 1

DO_i = Occupation status dummy of the tourist with unemployed = 0 and employed = 1

DG_i = Gender dummy of the tourist where male = 0 and female = 1

DM_i = Marital status dummy of the tourist with single = 0 and married = 1

DC_i = Children dummy of the tourist with have no child = 0 and with children = 1

DT_i = Trip companion dummy of the tourist with travelled alone = 0 and travelled with companions = 1

DR_i = Repeat visit dummy of the tourist with first time = 0 and repeat visit = 1

Pol_i = The composite index representing the political factors influencing the i_{th} tourist

$Dest_i$ = The composite index representing the destination characteristics influencing the i_{th} tourist

ε_i = The random error term

$E(y_i/x_i)$ = Conditional mean of the dependent variable given the value of the independent variables of the i_{th} individual.

α = Dispersion parameter.

Since count data regression techniques model the log of incident counts, the coefficients can be interpreted as follows, for a one unit change in the independent variable, the log of dependent variable is expected to change by the value of the regression coefficient. Rather than reporting Poisson or negative binomial results as a regression coefficient, there is the option of measuring the effect of the independent variable on the dependent

variable through the Incidence Rate Ratio (IRR). The IRR represents the change in the dependent variable in terms of a percentage increase or decrease, with the precise percentage determined by the amount IRR is either above or below 1.

3.4 Operationalization and Measurement of Variables

The variables of the study were operationalized as explained in Table 3.1.

Table 3.1: Operationalization and Measurement of Variables

Category	Variable	Operationalization	Measurement	Hypothesized direction of the variable
Dependent variable	International tourism demand	• Tourists departures • Number of nights spent	Total number of tourists leaving the country back to their country of residence at year t.	None
Independent Variables				
Economic factors	Word of mouth effect	Lagged dependent variable	Number of tourist who left the country back to their country of residence in the previous year.	Positive
	Income	Real GDP per capita	Real GDP per capita of the tourists' origin country measured at constant 2000 US$.	Positive/Negative
	Tourism price	Relative tourism price	$TP_{it} = \frac{CPI_{Kt}/ER_{Kt}}{CPI_{it} \times ER_{it}}$ where $ER_{Kenya/origin}$ is the number of monetary units of Kenya by each monetary unit of the tourists country of origin, CPI_{Kt} and CPI_{it} is the CPI for Kenya and tourist country of origin at year t respectively, ER_{Kt} and ER_{it} are the	Negative

			exchange rates of local currency to the dollar at year t for Kenya and tourist country of origin respectively.	
	Travelling cost	The total expenses travellers incur for their transportation from their country of origin to destination	Proxied by the price of crude oil in US dollars at year t multiplied by the tourists' country of origin exchange rates at year t.	Negative
	Tourism substitute price	Substitute tourism price for South Africa	$SP_{it} = \frac{CPI_{jt}/ER_{jt}}{CPI_{it} \times ER_{it}}$ or where CPI_{jt} is the CPI of South Africa, ER_{jt} is the exchange rate of the South Africa local currency to the dollar.	Positive/ Negative
	Trade openness	The total value of import and export of goods and services between Kenya and the origin region divided by GDP of Kenya.	$TO_{it} = \frac{Export_{it} + Import_{it}}{GDP_{jt}}$ where $Export_{it}$ and $Import_{it}$ is total exports and imports of goods between Kenya and tourist origin country, GDP_{jt} is the GDP of Kenya at current local currency units.	Positive
Political factors	Political factors	Travel restrictions	Yes/ No	Negative
		Political instability in Kenya	Measured using a scale of 1-4.	Negative
		Travel warnings by origin country government	Measured using a scale of 1-4.	Negative
		Visa formalities	Measured using a scale of 1-4.	Positive/Negative
		Good relations between tourist origin country and Kenya	Measured using a scale of 1-4.	Positive
Socio-demographic characteristic	Socio-demographic	Age	The age of tourist measured using eight age categories.	Positive

s	character istics	Sex	Male/ Female	Unknown
		Education	Highest level of education of the tourist using four categories.	Positive
		Occupational status	The occupational status of the tourist measured using five categories.	Positive
		Occupation	The profession of the tourist measured using four categories.	Unknown
		Annual household income	Measured using six categories.	Positive
		Marital status	Measured using four categories.	Unknown
		Family size of tourist	Measured using five categories.	Unknown
		Party composition of the tourist	Measured using seven categories.	Unknown
		Tourist spouse	Measured using a scale of 1-3.	Unknown
		Tourist children	Measured using a scale of 1-3.	Unknown
		Tourist friends & relatives	Measured using a scale of 1-3.	Unknown
		Tourist colleagues	Measured using a scale of 1-3.	Unknown
		Tourist available free time	Measured using a scale of 1-3.	Positive
		Tourist paid holiday entitlement	Measured using a scale of 1-3.	Positive
Destination attractivenes	Attractio ns	Natural (weather, wildlife , scenery, beaches), culture and sports	Measured using a 1-3 scale.	Positive
	Facilities	Availability and quality of accommodation, food, drinks, transport, communication, hospitality of local people, entertainment, direct flights, health facilities.	Measured using a 1-3 scale.	Positive
	Package	Refers to all inclusive travel package to	Measured using a 1-3 scale.	Unknown

		independent travel		
	Distance travelled	Refers to distance between Nairobi and tourist country of residence capital city.	Measured using a 1-3 scale.	Negative
	Security	Crime, terrorism, ethnic clashes, accidents	Measured using a 1-3 scale.	Negative

Source: Researcher (2012)

3.5 Target Population

The study had two target populations, that is, target population at national level and at individual level. The target population at the national level were the tourist departures from Kenya for tourists coming from eleven countries, United Kingdom, Germany, Italy, France, United States of America, Canada, India, Japan, Israel, Uganda and Tanzania for the period 1991 to 2011. The target population was dictated by the availability of tourist departures' data for the study period 1991 to 2011. Only data for the eleven tourism markets considered were available for the tourist departures from Kenya by country and purpose of visit (GOK, statistical abstracts, 1991- 2011). The target population for the study at the individual level was 82, 317 tourists leaving Kenya by air (GOK, statistical abstract, 2011). The accessible population was those tourists leaving the country through JKIA during the data collection period (15th October 2012and 15th November 2012). The researcher used number of tourists' departures through JKIA since it is the largest airport in the country where big international carriers lands and departs.

3.6 Sampling Design

At the national level, there was no sampling done as all the tourist departures from Kenya to the 11 countries were considered. At the individual level a sample size of 400 tourists was considered appropriate for the study. This was calculated at a 95 percent level of confidence and an error margin of 5 percent, using sample size determination table (Research Advisors, 2006) given in Appendix 3. Three days out of seven days were sampled using simple random sampling technique every week. This was repeated for four weeks the time it took to access 400 tourists. The researcher sampled the days instead of the tourists since it is not possible to have a sampling frame of the tourists as the keep on changing. The simple random sampling technique ensured that all the days of the week had an equal probability of being selected. The random sampling of days was meant to ensure that the sample collected was representative of the target population (Sekaran & Bougie, 2011). All the tourists leaving the country through JKIA during the sampled days were included in the study.

3.7 Data Collection Instruments and Procedure

3.7.1 Data Collection Instruments

The study used both secondary and primary data. Secondary data for the study variables at the national level were obtained from various sources such as Statistical Abstracts from KNBS, KTB, World Bank (WB) database, United Nations (UN) database and International Monetary Fund (IMF) database. A data collection guide (Appendix 1) was used in secondary data compilation.

The primary data was collected using questionnaires (Appendix 2). The questionnaire was developed by the researcher and organized on the basis of the research specific objectives to ensure relevance to the research problem. The questions asked covered general information of the respondents as well as information on the study variables. The questionnaire was broken into five sections representing general information of the tourists and the number of nights spent in Kenya, tourists' socio-demographic characteristics section which sought the demographical and social characteristic of the tourist, international tourism demand section where the number of nights spent by the tourist was determined, political factors section dealing with political factors which influenced the tourist decision to visit Kenya, destination characteristics section dealing with destination attractions and facilities considered to have an influence on tourist's decision to come to Kenya and a final section on other information dealing with finding out satisfaction of the tourists with their holiday in Kenya.

Structured, unstructured and matrix questions were used in the questionnaire. According to Mugenda and Mugenda (2003), structured questions are easier to administer while unstructured questions permit a greater depth of response. Matrix questions are easier to complete hence the respondent is unlikely to be put off. Use of these three types of questions enhanced collection of relevant data.

3.7.2 Reliability and Validity Tests

Validity is defined as the extent to which the instrument measures what it purports to measure, whereas reliability is concerned with the extent to which the instrument yields

the same results on repeated trials. To ensure content validity, the researcher reviewed theoretical and empirical literature to come up with the relevant dimensions of the research variables to measure the study variables. A rational analysis of the instrument by experts familiar with the constructs of interest was also done. The experts reviewed all the items for readability, clarity and comprehensiveness and gave advice as to which items should be included in the final instrument. To ensure criterion-related validity, the study specified the domain of indicators which were relevant to measurement of study variables. The researcher ensured construct validity through proper operationalization of study variables. To do this the researcher sought advice from experts in the research area and also by reviewing previous studies and finding out how these studies operationalized the variables of interest.

Cronbach's Alpha coefficient was used as a measure of internal consistency as it provides a unique quantitative estimate of the internal consistency of a scale (Mugenda, 2008). Cronchbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. The study used the benchmark defined by Sekaran and Bougie (2011) which states that reliabilities less than 0.60 are considered to be poor, those in the 0.70 range, acceptable and those over 0.80 good (Sekaran & Bougie, 2011). Thus, reliability of 0.70 and above was acceptable for the study. A pilot results of 20 tourists indicated that the questionnaire inter item consistency was satisfactory for all the study variables as shown in Table 3.2.

Table 3.2: Reliability of Data Collection Instrument.

Variable	Number of items	Chronbach's alpha
Social demographic characteristics	13	0.798
Political factors	6	0.816
Destination characteristics	21	0.812

Source: Pilot study data (2012).

3.7.3 Data Collection Procedure

Before commencement of data collection, a research permit was obtained from National Council of Science and Technology (NCST) as required. Secondary data was collected through analysis of statistical abstracts, international Monetary Fund financial statistics, and World Bank database. Data for tourist departures from Kenya, total imports of goods and services and total exports of goods and services were obtained from statistical abstracts (1991 to 2011 issues) at KNBS and entered in an Excel spreadsheet. Data for the other variables were obtained from WB database, UN database and IMF database. The use of Excel spreadsheet in compiling the data collected allowed the researcher to easily organize the data in panel form. Data for the study variables were then computed from the compiled data.

Primary data collection took approximately one month. The data was collected from tourists leaving the country through JKIA during the period 15th October 2012 to 15th

November 2012 using personally administered questionnaires. This was done with the assistance of two research assistants who were first trained on how conduct the data collection process to enhance high response rate. A total of 400 questionnaires were distributed to departing tourists at the JKIA international departure lounges. The data was collected on three different days selected randomly every week for a period of three weeks. The personally administered questionnaires used enabled the researcher and research assistants to collect all the completed questionnaires within a short period of time, clarify on the spot any doubts that the respondents had on any question, explain the purpose of the research thus motivating the respondents to answer frankly and also it was less expensive since one person could administer the questionnaires to a large number of people (Sekaran & Bougie, 2011).

3.8 Data Analyses and Presentation

The data collected was analysed in accordance of the study objectives and hypotheses. To address objective one, a dynamic panel data regression analysis was carried out. Descriptive statistics (mean and standard deviation) were first computed. Before carrying out the regression analysis, the data was first tested for stationarity. Regression analysis requires that data be stationary in order to be able to make meaningful inferences. The use of non-stationary variables in regressions might lead to spurious results. The study used the Fisher-type (Choi, 2001) panel regression unit root tests to investigate whether there were any variables in the model that were non-stationary. Fisher-type tests conduct unit-root tests for each panel individually, and then combine the p-values from these tests to produce an overall test. The SGMM estimator was used to estimate the regression

parameters. The regression model diagnostic tests for autocorrelation and instruments overidentification were carried out using the Arellano- Bond tests and Hansen statistic respectively.

The survey data was both qualitative and quantitative; the qualitative data was first reduced through coding and categorization into common themes. The reduced data was then displayed using frequency tables and charts and conclusions drawn. Quantitative data was analysed using descriptive statistics such as the frequency distribution, bar charts, pie charts, percentages and mean ranks. Inferential statistics were also used for hypotheses testing. Before hypothesis tests and regression were carried out, the data was first tested for normality using the Shapiro-Wilk's test of normality. The Kruskal-Wallis test was used to test the hypotheses whether there was significant mean rank differences on the number of nights spent in Kenya by a tourist and the tourist socio-demographic characteristics. The Kruskal-Wallis test was used because it does not assume normality in the data and is much less sensitive to outliers and thus it could be used when these assumption of normality have been violated as was the case in the study data. For the case where the explanatory variable had only two categories the Mann-Whitney U test was used instead.

To address objectives two, three and four of the study, a count data regression model was used. For regression analysis purposes, the study used summated scores of individual item scores on a scale of 1-4 for political factors and summated scores of individual item scores on a scale of 1-3 for destination attractiveness factors to come up with a composite

score for each variable. The explanatory variables were first tested for multicollinearity using a pairwise correlation matrix. To determine which model was appropriate for regression analysis between the Poisson and negative binomial, the Pearson chi-square goodness of fit test and the likelihood ratio test were used. Pearson chi-square goodness-of-fit test was used to test whether the study data for the dependent variable followed the Poisson probability distribution. The likelihood ratio test was used to test for over dispersion of the data.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study and the analysis of the collected data is classified into three major sections. Section 4.2 reports the descriptive statistics of the study variables, Section 4.3 reports and discusses regression results for economic variables while section 4.4 reports and discusses regression results for non-economic variables. A panel data regression model was used to examine the effects of economic factors on international tourism demand at the national level (objective one). A count data regression model using the survey data was used to determine the effects of socio-demographic characteristics, political factors and destination characteristics on international tourism demand at the individual level (objective two, three and four).

4.2 Descriptive Statistics

Before estimation there was need to examine the data in detail. Descriptive statistics were used to describe the basic features of the data in the study.

4.2.1 Economic Factors

Table 4.1 presents the descriptive statistics for economic variables for the eleven countries considered for the period 1991 to 2011. A total of 231 observations were used for analysis. The economic variables considered were income measured by real GDP per capita, relative tourism price, substitute price, travel cost and trade openness.

Table 4.1: Descriptive Statistics for Economic Variables

Variable	Observations	Mean	Standard deviation	Minimum	maximum
Total tourist departures	231	63658.01	68925.11	4300	313600
Holiday tourists departures	231	49971.86	57302.68	3800	258100
Real GDP per capita	231	18482.54	12597.93	189.791	40837.27
Relative tourism price	231	5.280243	9.098876	0.004877	35.41114
Tourism price in South Africa	231	62.96549	102.6574	0.0597958	322.9008
Travel cost	231	17234.84	40056.59	7.678017	280669.7
Trade openness	231	0.0107475	0.0120338	0.0000397	0.0529732

Source: Study Data (2012)

The data presented in the Table 4.1 show that the overall average number of tourists leaving Kenya over the study period was around 63,658, ranging from a minimum of 4,300 tourists to a maximum of 313,600. This reflects great variability (a standard deviation of 6,8925.11) in the number of tourists visiting Kenya from the different countries. Majority of the tourists who visited Kenya were holiday tourists (an average of 49,972 tourists per year). The average real GDP per capita was 18,482.54 US dollars, with a minimum of 189.791 US dollars and a maximum of 40,837.27 US dollars. This high variability (standard deviation of 12,597.93) was because the data was from

countries which were at different levels of development (developed and developing countries). There was also high variability for travel cost, which was caused by the different exchange rates between the tourist origin country's local currency and the US dollar. The other variables, tourism price, substitute price and trade openness did not show much variability. Tourism price in South Africa (average of 62.96549) is relatively higher than in Kenya (average of 5.280243).

4.2.2 Non-Economic Factors

The non-economic factors considered in the study were the tourist socio-demographic characteristics, political factors and destination characteristics. The survey data used to analyze the influence of socio-demographic factors, political factors and destination attractiveness factors on tourism demand was collected from tourists leaving the country through JKIA during the data collection period by use of questionnaires. 400 questionnaires were distributed to tourists at JKIA departure lounges but only a total of 304 were filled and collected. According to Mugenda and Mugenda (2003) and Saunders, et al. (2007), a response rate of 50 percent is adequate, a response rate of 60 percent is good, and a response rate of 70 percent is very good. Therefore, the response rate of 76 percent for the study was found to be acceptable for analysis. The descriptive statistics for tourism demand measured by the number of nights spent by tourist in Kenya were as presented in figure 4.1.

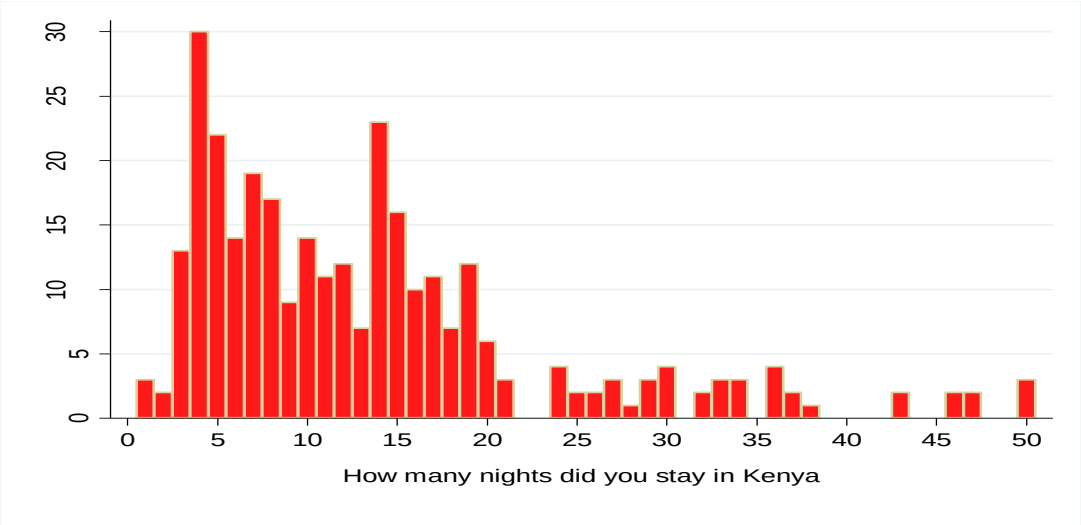

Figure 4.1: Number of Tourist Nights

Source: Study Data (2012)

Figure 4.1 shows that most of the tourists stayed in Kenya for only two weeks. There was great variability in the number of tourist nights spent as reflected in the minimum (1 night) and maximum (50 nights) values of the data.

4.2.2.1 Socio-Demographic Factors

The study sought to determine the tourists' socio-demographic characteristics in terms of sex, marital status, region of origin, age of respondents, annual household income, level of education and occupation status. Table 4.2 presents the descriptive statistics for the tourist's socio-demographic characteristics.

Table 4.2: Tourists' Socio-demographic Characteristics

Variable	Description	Percentage
Sex	Male	57.6
	Female	42.4
Marital status	Single	32.9
	Married	60.9
	Windowed	5.6
	Divorced	0.7
Region of origin	Europe	58.2
	America	18.4
	Asia	12.5
	Africa	6.9
	Australia	3.6
Age	18-24	10.2
	25-34	46.4
	35-46	20.4
	47-66	18.4
	Over 66	4.6
Family size	No children	43.3
	one child	20.9
	Two children	25.7
	Three children	5.2
	More than three children	4.9

Source: Study Data (2012)

Table 4.2 shows that 57.6 percent of respondents were males, while the remaining 42.4 percent were females. In terms of marital status, 32.9 percent of the tourists visiting Kenya were single, 60.9 percent were married, 5.6 percent were widowed and 0.7 percent was divorced. As for the age distribution, 10.2 percent of them were 18 to 24 years, 46.4 percent were 25 to 34 years, 20.4 percent were 35 to 46 years, 18.4 percent were 47 to 66 years, and 4.6 percent were over 66 years. Tourists from Europe constituted the biggest percentage (58.2 percent), followed by America at 18.4 percent, Asia with 12.5 percent, Africa with 6.9 percent, and lastly Australia with 3.9 percent. The tourists having no

children were 43.3 percent, those with one child were 20.9 percent, those with two children were 25.7 percent those with three children were 5.2 percent and those with more than three were 4.9 percent. These results implied that the majority of the tourists who came to Kenya were males, married, aged between 24 to 46 years and did not have children.

The distribution of the tourists' annual household income in US dollars was as presented in Figure 4.2.

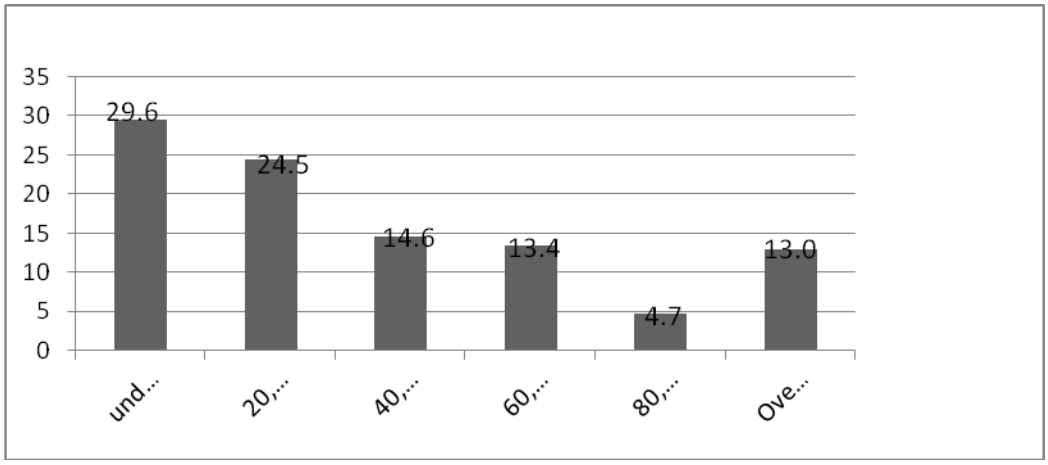

Figure 4.2: Annual Household Income in Dollars

Source: Study Data (2012)

Figure 4.2 shows that 29.6 percent of the respondents had an annual income of less than 20,000 US dollars, 24.5 percent had an annual household income of 20,000 to 39,000 dollars, 14.6 percent had annual household income of 40,000 to 59,000 US dollars, 13.4 percent had annual household income of 60,000 to 79,000 US dollars, 4.7 percent had an annual income of 80,000 to 99,000 US dollars, while 13 percent had an annual income of

over 100,000 US dollars. This indicates that more than half of the tourists visiting Kenya had an annual household income of 39,000 US dollars and below.

The level of education of the respondents consisting of elementary, secondary, college and university education was as presented in Figure 4.3.

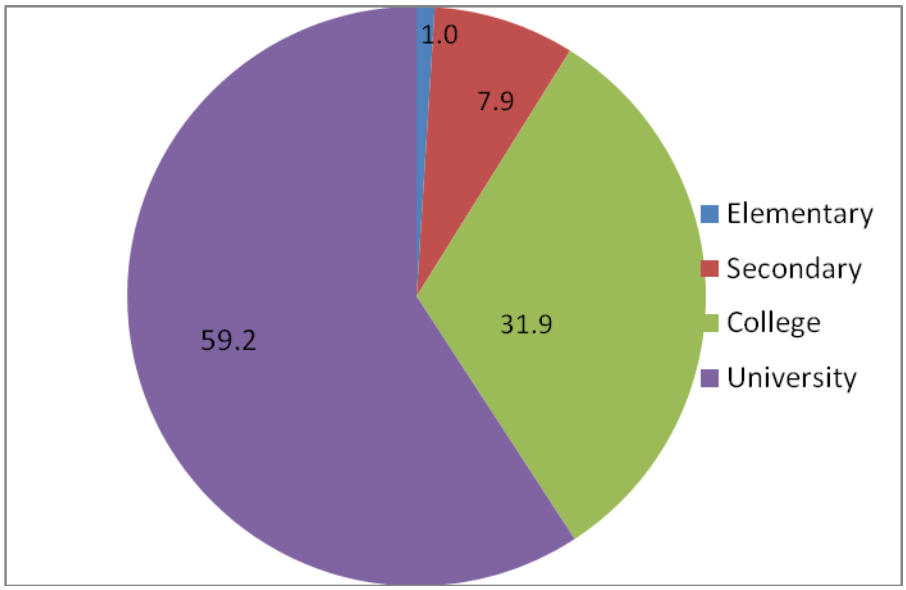

Figure 4.3: Level of Education

Source: Study Data (2012)

As Figure 4.3 shows, 59.2 percent of the respondents were university graduates, 31.9 percent were college graduates, 7.9 percent were secondary school graduates, and only 1 percent of the respondents had elementary education. The results indicate that over 90 percent of the tourists visiting Kenya had college education.

The percentages of respondents by their occupational status are presented in Figure 4.4.

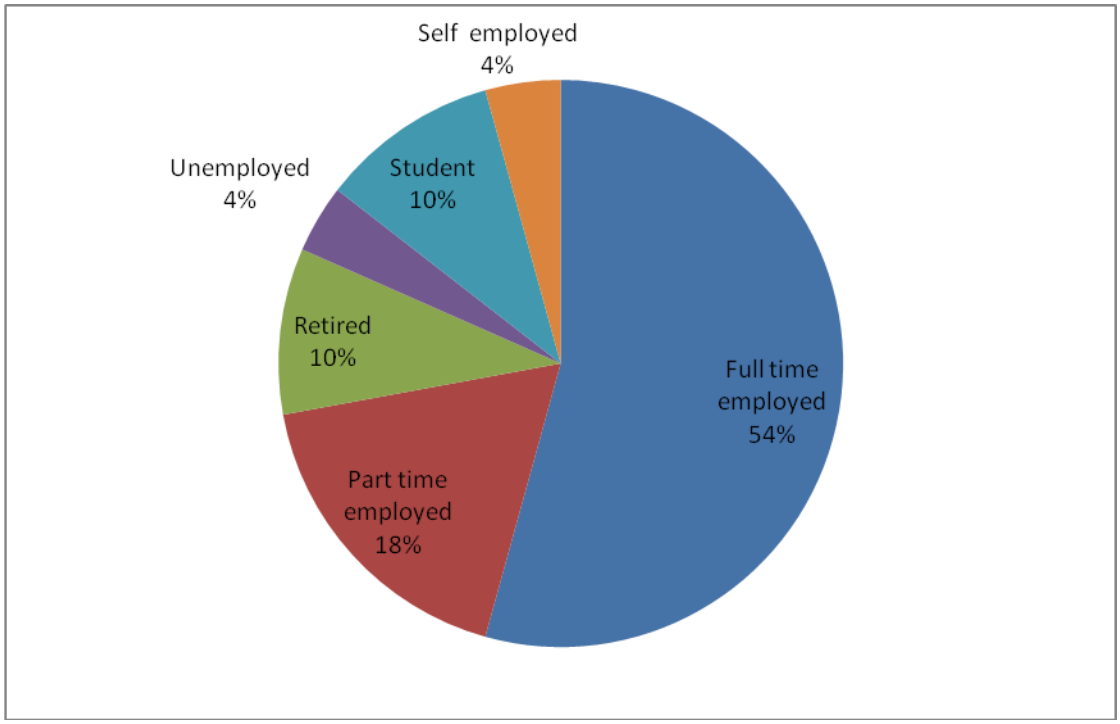

Figure 4.4 : Occupational Status

Source: Study Data (2012)

As summarized in Figure 4.4, the study found out that 54.3 percent of the respondents were full-time employees, 17.8 percent were part-time employees, 9.5 percent were retired, 3.0 percent were unemployed, 10.2 percent were students and 4.3 percent were self-employed. The results indicates that most of the tourists were professionals implying that most were only able to travel they got an annual leave or were in Kenya partly to offer their professional services.

The tourists' trip characteristics were given in terms of purpose of visit, number of travel companions and whether it was a repeat visit. The study results are presented in Table 4.3.

Table 4.3: Trip characteristics

Variable	Description	Percentage
Purpose of visit	Holiday	64.8
	Business	20.9
	Visiting friends/ relatives	8.9
Travel companions	Alone	31.8
	Spouse	26.2
	Spouse & children	9.6
	Colleagues	12.6
	Friends	17.2
	Relatives	1.7
	Children	1.0
Repeat visits	1	56.9
	2	20.7
	3	9.5
	4	5.6
	5	1.6
	6	1.0
	7	1.3
	10	1.3
	11	0.7
	12	0.7
	13	0.7

Source: Study Data (2012)

Most of the tourists (64.8 percent) had come for holiday, 26.3 percent came for business and 8.9 percent had come to visit friends and relatives. The percentage of the tourists travelling alone was 31.8, while the remaining percentage was for those travelling either with a spouse (26.2 percent), with a spouse and children (9.6 percent), with colleagues (12.6 percent), with friends (17.2 percent), with relatives (1.7 percent) and with children

(1 percent). From the study results, majority of the tourists were in Kenya for the first time (56.9 percent) while others had visited several times before. In addition, the results indicated that most tourists (68.2 percent) had visited Kenya for a holiday experience and had travelled with others (spouse, children, friends, relatives or colleagues).

4.2.2.2 Political Factors

Five political factors were considered in the study namely political stability in Kenya, fear of terrorists' attacks, travel warnings by your government, visa Formalities, and good relations between Kenya and tourists' countries. Table 4.5 shows their descriptive statistics.

Table 4.4: Political Factors

Factors	Observations	Mean	Standard deviation
Political stability in Kenya	269	2.67	1.02
Fear of terrorists attacks	266	2.70	.885
Travel warnings by your government	257	3.45	.918
Visa Formalities	253	3.53	0.852
Good relations between Kenya and tourist's country	265	3.09	1.068

Source: Study Data (2002)

Table 4.4 shows the tourists were highly influenced by visa formalities (mean =3.53) followed by government travel warning (mean = 3.45), good relations between Kenya and their countries (mean = 3.09), fear of terrorists' attacks (2.70) and lastly political stability (2.67) when making decision on whether to visit Kenya. This shows that political factors influence tourists' decision to visit Kenya.

4.2.2.3 Destination Characteristics

Table 4.5 shows the descriptive statistics for destination characteristics considered to influence tourists' decision to visit Kenya.

Table 4.5: Destination Characteristics

Factors	Observations	Mean	Standard deviation
Information availability	260	2.14	0.612
Advertisement and promotion	261	2.66	0.616
Availability of Tour packages	256	2.52	0.697
Inexpensive tourism product	252	2.42	0.570
Availability of direct flights	259	2.43	0.686
Nearness of destination	255	2.56	0.718
Kenya's wildlife	268	1.62	0.832
Kenya's scenery	264	1.67	0.837
Kenya's Beaches	259	2.01	0.944
Kenya's diverse culture	266	1.90	0.868
Kenya's museums	256	2.55	0.712
Kenya's sports facilities	255	2.02	0.612
Good weather in Kenya	260	2.06	0.774
Fear of insecurity/crime level	257	2.51	0.740
Fear of attack by disease	252	2.61	0.643
Hospitability of Kenyan people	257	2.40	0.729
Shopping facilities	250	2.73	0.528
Good transport/ communication	254	2.52	0.675
Sharing of a common language	256	2.52	0.638

Source: Study data

Table 4.5 shows that each of the considered destination factors considered influenced tourist decision to visit Kenya to some extent. Availability of shopping facilities, advertisement and promotion of Kenya tourism, fear of attack by disease, museums in Kenya, nearness of destination, insecurity and crime level in Kenya, availability of safe and good transport/ communication facilities and sharing of a common language were the

most important factors (had a mean of 2.50 and above) the tourists considered when making a decision to come to Kenya. The other factors such as availability of direct flights, inexpensive tourism product, hospitability of Kenyan people, information availability, good weather in Kenya, Kenya's sports facilities Kenya's Beaches, Kenya's diverse culture, Kenya's scenery and Kenya's wildlife were also found to influence the tourist decisions to visit Kenya to some extent.

In order to establish the level of satisfaction of the tourists, rating of the quality of tourist attractions, facilities and services utilized during the tourists visit was done. The study results are presented in Table 4.6.

Table 4.6: Rating of Attractions, Facilities and Services

Attractions/facility/service	Observations	Mean	Standard deviation
Wildlife	252	1.7738	.95748
Sceneries	255	1.8588	.93261
Beaches	202	2.2079	1.10013
Cultural	232	2.3836	.99535
Historical sites	208	2.7788	1.08531
Tour guidance	223	2.8430	1.20342
Transport/communication	254	3.3386	1.07960
Accommodation	252	3.1746	1.15410
Meals/drinks	258	3.3062	1.25814
Entertainment & recreation	225	3.5467	1.14127
Airport facilities/services	254	3.5157	1.04340
Souvenirs & other purchases	237	3.5105	.97255
Tour company services	237	3.3882	1.21830

Source: Study Data (2012)

The study results indicated that the tourists found wildlife; sceneries, beaches and cultural attractions to be very good (had a mean of approximately 2). Historical sites, tour guidance services, accommodation facilities, meals and drinks, transport and communication facilities and tour company services were rated as good with a mean of approximately 3. Souvenirs and other commodities purchased airport facilities and services and entertainment and recreation were rated as average with a mean of approximately 4. The results implies that tourists attractions in Kenya rates highly but the tourism infrastructure had a lower rating.

The tourists were also told to rank Kenya in terms of total costs as a tourist destination. Further they were requested to describe their tourism experience. The study results are presented in table 4.7

Table 4.7: Rating in terms of Total cost and Holiday Experience

Rating	Observations	Mean	Standard deviation
Total holiday costs	263	2.6350	.74382
Holiday experience	254	1.8858	.62139

Source: Study Data (2012)

As the results in Table 4.7 shows, tourists found a holiday in Kenya to be fairly expensive and their holiday experience was very good. The results indicate that the tourists were satisfied with their visit to Kenya.

4.3. Effect of Economic Factors on International Tourism Demand

The first objective of the study was to establish the effect of economic factors on international tourism demand for Kenya. The study employed a dynamic panel regression model with the model parameters estimated by the SGMM estimator. The study variables were first tested for stationarity before regression analysis was carried out and the Fisher-type panel regression unit root tests (Choi, 2001) was used to investigate whether there were any variables in the model that were non-stationary. The null hypothesis being tested by Fisher- type tests was that all panels contain a unit root against the alternative that at least one panel was stationary. The Augmented Dickey-Fuller (ADF) option and the inverse normal *Z* statistic were used to test for unit roots as recommended by Choi's (2001). Further, the drift option was considered as the mean for all the study variables for all countries was nonzero. A lag of one was used in the ADF regressions performed to compute the test statistic since the study used annual data. The demean option was used to mitigate the impact of cross-sectional dependence as suggested by Levin, Lin, and Chu (2002). A summary of the Fisher panel unit root test results are presented in Table 4.8. The p-values are given in parentheses.

Table 4.8: Panel Unit Roots Tests Results

Variable (in natural logarithms)	Drift option	Trend option
Total tourist departures	-5.6872** (0.0000)	0.4672 (0.6798)
Holiday departures	-5.7103** (0.0000)	0.4072 (0.6581)
Income	-0.9867 (0.1619)	3.9479 (1.0000)
First difference of income	-6.6045** (0.0000)	-3.2165** (0.0006)
Relative tourism price	-5.1427** (0.0000)	-1.0683 (0.1427)
Tourism price for South Africa	-5.1427** (0.0000)	1.0683 (0.1427)
Travel cost	-4.0449** (0.0000)	-0.9923 (0.1605)
Trade openness	-7.8890** (0.0000)	-4.3816** (0.0000)

Note: ** denotes rejection of null hypothesis at 5% significance level

Source: Study Data (2012)

From Table 4.8, considering the drift option, it can be observed that at 5 percent level the null hypothesis that all panels contain unit roots was rejected for the variables total tourists' departures; holiday tourists' departures, relative tourism price, tourism price for South Africa, travel cost and trade openness, all measured in natural logarithm form. This means that these variables were stationary at levels. The implication is that these variables were integrated of order zero. The natural logarithm of the income variable (real GDP per capita) at level was not stationary but became stationary after the first differencing implying it was integrated of order one. These results reflects those of a study carried out by Naude and Saayman (2005) but contradicts results of a study by Chaiboonsri et al. (2010) who found the study variables to be cointegrated of order one.

A panel dynamic regression model specified by equation 3.1 was used to determine the effect of economic factors on international tourism demand for Kenya (objective one). Two regression analyses were carried out separately for the two dependent variables considered (total tourist departures and holiday tourist departures). The total tourists' departures consisted of all those people who visit Kenya for holiday, business or are on transit. The analysis for holiday tourist was necessary since most of the international tourists visiting Kenya came for a holiday experience. The study used the SGMM estimator to estimate the regression coefficients. The validity of the results obtained in SGMM depends on the model statistical diagnostics; hence the model diagnostics first were first carried out. Compared to OLS model, SGMM does not assume normality and it allows for heteroskedasticity in the data through use of robust standard errors. The SGMM estimator assumes that the twice-lagged residuals are not autocorrelated and that the instruments used are exogenous. Specification testing in the SGMM model thus involved testing for instruments exogenity and for residual serial correlation. The model diagnostic results for the two regressions run are given in the Table 4.9.

Table 4.9: System Generalized Method of Moments Model Diagnostics

Estimated Model	Diagnostic Test	Test Statistic	P- value
Dependent variable: total tourist departures	Arellano-Bond test for AR(1) in first differences H0:There is no first-order serial correlation in residuals	Z = -2.62 *	0.009
	Arellano-Bond test for AR(2) in first differences Ho: There is no second-order serial correlation in residuals	Z = 0.25	0.804
	Hansen J-test of overidentifying restrictions H0: Model specification is correct and all overidentifying restrictions (all overidentified instruments) are correct (exogenous)	χ^2 = 6.02 Degrees of freedom = 6	0.421
Dependent variable: total holiday tourist departures	Arellano-Bond test for AR(1) in first differences H0:There is no first-order serial correlation in residuals	Z = -2.58*	0.004
	Arellano-Bond test for AR(2) in first differences Ho: There is no second-order serial correlation in residuals	Z = 0.11	0.909
	Hansen J-test of overidentifying restrictions H0: Model specification is correct and all overidentifying restrictions (all overidentified instruments) are correct (exogenous)	χ^2 = 6.60 Degrees of freedom=6	0.580

Note: *indicates rejection of the null hypothesis at 5 percent level of significance**.**

Source: Study Data (2012)

The system GMM estimator is consistent only when second-order correlation is not significant although first-order correlation need not be zero. The null hypothesis of no first order autocorrelation in Table 4.9 is rejected at 5 percent level of significance since the p-values of 0.009 and 0.004 respectively are less than 0.05. This implies that there is

first order autocorrelation which is usually expected. The null hypothesis of no second order serial correlation in Table 4.9 is not rejected at 5 percent level of significance since the p-values of 0.804 and 0.909 respectively are greater than the 0.1. This implies that there is no second order autocorrelation. These results agree with those of the study by Munov (2006) and Naude and Saayman (2005) who found out that there was first order autocorrelation but no second order correlation in the regression analysis.

The Hansen J-statistic test which has a null hypothesis of correct model specification did not reject the null hypotheses at 5 percent level since the p-values of 0.421 and 0.580, respectively were greater than 0.05. Hence it can be concluded that the model had valid instrumentation. Considering together the various statistical tests conducted there was enough evidence to conclude that the examined statistical tests satisfied the key assumptions of SGMM estimation and that this model was appropriate for estimation. The model diagnostic results concur with those of the studies done by Munov (2006) and Naude and Saayman (2005).

The regression results for the one step SGMM estimator using total tourist departures as the dependent variable are presented in Table 4.10

Table 4.10: One Step System Generalized Method of Moments Estimator Results – Total Tourists Departures

Dependent variable: Natural Logarithm of Total Tourists Departures					
Variable (in natural logarithm)	Short-run Coefficient	Long-run coefficient	Standard error	t-Statistic	P-value
Lagged dependent variable	0.5106936*	-	0.0969905	5.27	0.000
Income	0.0453827	0.092749	0.783392	0.58	0.575
Tourism price	-0.1022619	-0.2089936	0.1303075	-0.78	0.451
Substitute price	0.1771963	0.3621377	0.15534468	1.14	0.281
Travel cost	-0.1112822	0.22742846	0.0927611	-1.20	0.258
Bilateral trade	0.1870006**	0.38217485	0.070185	2.66	0.024
Dummy 2008	-0.2123706***	-	0.1047781	-2.03	0.070
Constant	6.178468**	-	1.453396	4.25	0.002
Number of observations		220			
Number of groups (i.e. countries)		11			
Number of instruments		14			
F- test of joint significance Ho: Independent variables are jointly equal to zero		F(7, 10) = 151.45		P-value = 0.000	

Note *, **, and *** denotes rejection of the hypothesis at 1%, 5%, and 10% significant level.

Source: Study Data (2012)

The results of the regression model in Table 4.10 showed that the coefficient of the lagged dependent variable had the expected positive sign and was statistically significant at 5 per cent level of significance. This is in line with other reviewed studies (Muchapondwa & Pimhidzai, 2011; Munoz, 2006). This implies that Kenya tourism demand has a dynamic nature and that it generates repeat visits. Thus, about 51 percent of total tourism demand for Kenya is explained by repeat visits and hence. Word of mouth effect plays an important role in tourism demand. The major implication of this finding

for the tourism industry is that provision of high quality services is crucial for earning a good reputation and attracting new and repeat tourists.

The estimated coefficient for the income variable (proxied by real GDP per capita of tourists' origin country) had the expected positive sign but was not statistically significant at 5 percent suggesting that demand for tourism in Kenya is not dependent on the economic situation of the tourist origin country. This results support those from the studies by Idowu and Bello (2010) and Naude and Saayman (2005). The coefficient of the tourism price variable had the expected negative sign but was found not statistically significant at 5 per cent level. This implies that international tourism demand to Kenya is not dependent on the price of tourism in Kenya. This result is in line with study findings by Muchapondwa and Pimhidzai (2011). The insignificant results could have been contributed by the fact that total tourist departures consisting of holiday, business and transit departures was used as a measure of international tourism demand. Business tourists and those on transit may not be overly concerned with price of tourism in the country.

The coefficient of the cost of travel variable had the expected negative sign but travel cost was not a significant determinant of tourism demand for Kenya at 5 percent level of significance. These findings for travel cost agree with those by Eilat and Einav (2004) and Naude and Saayman (2005). The coefficient for tourism price in South Africa variable was positive as expected but was not statistically significant at 5 percent level of significance implying that South Africa is not Kenya's competitor when considering total

tourists departures. The coefficient of bilateral trade between tourist origin country and Kenya had the expected positive sign and was statistically significant at 5 percent level, implying that bilateral trade arrangements between Kenya and partnering country significantly influences tourism demand in Kenya. These results are in agreement to those by Eilat and Einav (2004) and Ibrahim (2011) that engagement in bilateral trade between the tourist origin and destination countries enhances tourism demand. The dummy variable representing post election clashes in 2008 had a negative sign as expected and was not statistically significant at 5 percent level. However, it was statistically significant at 10 percent level which is also an acceptable level of significance. This implies that political instability in Kenya during the post election clashes had a negative effect on tourism demand. The study results support the assertion by Naude and Saayman (2005) that political instability in a tourist destination decreases tourism demand.

The effect of economic factors on international tourism demand for Kenya using total holiday tourist departures as the dependent variable was also determined. The results for the one step SGMM estimator for holiday tourists' departures are presented in Table 4.11.

Table 4.11: One step System Generalized Method of Moments Estimator Results– Holiday Tourists Departures

Dependent variable: Number of Holiday Tourists Departures					
Variable (in Natural Logarithms)	Coefficient	Long-run coefficient	Standard error	t- Statistic	P-value
Lagged dependent variable	0.8950026*	-	0.0402255	22.25	0.000
Income	0.0123397	0.11752386	0.0189806	0.65	0.530
Tourism price	-0.2290335**	-2.1813254	0.081737	-2.80	0.019
Substitute price	0.1155911	1.1008949	0.0670358	1.72	0.115
Travel cost	-0.1010797**	0.96268765	0.0429785	2.35	0.041
Bilateral trade	0.04831559**	0.46015987	0.0160541	3.01	0.013
Dummy 2008	-0.3145587**	-	0.1120612	-2.81	0.019
Constant	0.1737639	-	0.6795226	0.26	0.803
Coefficient of adjustment			10.5		
Number of observations			220		
Number of groups (countries)			11		
Number of instruments			16		
F- test of joint significance Ho: Independent variables are jointly equal to zero			F(7, 10) = 682.85		P-value = 0.000

Note *, **, and *** denotes rejection of the hypothesis at 1%, 5%, and 10% significant level.

Source: Study Data (2012)

The coefficient of the lagged dependent variable had the expected positive sign and was statistically significant at 1 percent level with a coefficient of 0.895. This implies that holiday tourism demand for Kenya is influenced by tourists' report to others about their holiday experience. Repeat visits account for around 89.5 percent of holiday departures. The value of the adjustment coefficient (10.5 percent) gives evidence of a rather low adjustment process between the actual variation of the demand for tourism and the desired long-run level. This means that the number of holiday tourists departing from Kenya each year does not differ substantially from the previous year giving evidence of

rigidity in the number of holiday tourists' departures. This is an expected result since tourism demand in Kenya has been concentrated mainly in European countries. The finding supported those for earlier studies by Munoz (2006) and Habibi and Abbasinejad (2011).

The coefficient of the income variable (proxied by real GDP per capita of tourist origin country) was positive as expected, confirming the theoretical prediction that demand increases with improvements in income levels but was not statistically significantly different from zero. This implies that the income of the tourist generating country was not a major determinant of holiday tourism demand for Kenya. The study results agrees with those obtained by Naude and Saayman (2007) and Idowu and Bello (2010). The coefficient of the tourism price variable was found to be statistically significant at 5 percent level with a negative coefficient of 0.229. In the short-run, demand for Kenya tourism was found to price inelastic, that is, it is not very responsive to price changes. These results agree with those found by Munoz (2006), Idowu and Bello (2010) and Habibi and Abbasinejad (2011). A 1 % increase in tourism prices would lead in the short-run to a 0.23% decrease in the number of holiday tourists visiting Kenya. However, in the long-run international tourism demand for Kenya was price elastic and thus sensitive to price changes with an estimated long run elasticity value of negative 2.18.

The coefficient for tourism price in South Africa was positive as but not statistically significant at 5 percent level. This implies that South Africa is not a substitute destination for tourists visiting Kenya for a holiday. These results agree with those by Muchapondwa

and Pimhidzai (2011). The coefficient of cost of travel had the expected negative sign and was statistically significant at 5 per cent level. This means that the travelling cost is a determinant of holiday tourism demand for Kenya. These results agree with those from the study by Munoz (2006), Chaiboonsri et al. (2010) and Muchapondwa and Pimhidzai (2011). The cost of travel elasticities (-0.101 in the short run and 0.963 in the long run) suggest that tourism is inelastic to variations in the cost of travel.

The coefficient for bilateral trade variable was positive as expected and was statistically significant at 5 percent level implying that the greater the bilateral trade between the tourist origin country and Kenya, the higher would be the demand for holiday tourism to Kenya. This finding is in line with those obtained by Naude and Saayman (2005) and Ibrahim (2011). The coefficient of the dummy variable representing political instability in Kenya during 2008 post election clashes was negative as expected and was statistically significant at 5 percent level. This means that holiday tourists are sensitive to political instability and will avoid visiting the country if it is politically unstable. This result is in accordance to those found by Naude and Sayman (2005), Munoz (2006) and Habibi and Abbasinejad (2011).

4.4. Hypotheses Tests on Tourists Socio-Demographic Characteristics

A normal distribution is assumed in many statistical procedures such as correlation, least squares regression and hypothesis testing (Sekaran & Bougie, 2011). When the response variable is the counted number of occurrences of an event, this may not be true; hence there was need to test for normality first before any further analysis was carried out on

the survey data. The Shapiro-Wilk's normality test was used to test whether the response variable was normally distributed. The results of the test are presented in Table 4.12.

Table 4.12: Shapiro-Wilk Test of Normality for Survey Data

Dependent variable	Test statistic	Degree of freedom	P-value
Tourist- nights spent	0.854	304	0.000

Source: Study Data (2012)

The results from Table 4.12 show that the p-value of 0.000 is less than the level of significance of 0.5; hence the null hypothesis that the data is normally distributed was rejected. This implies that statistical procedures which assume normality cannot be used as this would bias the results. The test results agree with those for the study by Menezes et al. (2008) and Chaiboonsri and Chaitip (2012) who found that the response variable was not normally distributed.

The number of tourist nights spent in Kenya can differ by the individual socio-demographic characteristics such as sex, marital status, annual household income, level of education and age. It was therefore in order, to first establish whether tourists night differ by the tourist socio-demographic characteristics since all the various categories of the socio-demographic variables could not be considered in the regression equation. Since the data was not normally distributed the analysis of variance (ANOVA) test could not be used. Instead alternative nonparametric tests, that is, the Kruskal-Wallis and the Mann-Whitney U tests were used to examine whether tourist nights differ significantly by

the tourist socio-demographic characteristics. The null hypothesis being tested by both test statistics was that the mean ranks of number of nights spent by respondents in each group of the variable under consideration were equal against the alternative hypothesis that not all the mean ranks were equal. The null hypothesis was rejected if the p-value was less than 0.05.

In order to evaluate whether the number of nights spent in Kenya differ by sex on the average a Mann-Whitney U test was conducted and the results are presented in Table 4.13.

Table 4.13: Mann-Whitney U test Results on Tourist Nights by Gender

Factor	Categories	Mean Rank	Test Statistic	P-value
Gender	Male	147.34	U = 10384.5 Z=-1.194	0.233
	Female	159.50		

Source: Study Data (2012)

Since the p-value of 0.233 is greater than 0.05 the null hypothesis that the average number of nights spent was the same for both groups was not rejected. This means that there was no significant difference between the number of nights spent by male and female respondents. Hence the gender of the tourist does not influence the number of nights they spend in Kenya. This study finding is in line with those from a study by Jonsson and Devonish (2008).

To test whether the number of nights spent by a tourist in Kenya differed by their marital status, the Kruskal-Wallis test was used and the results are presented in Table 4.14.

Table 4.14: Kruskal-Wallis test Results on Tourist Nights by Marital Status

Variable	Categories	Mean Rank	Test Statistic	P-value
Marital status	Single	143.56	$\chi^2 = 5.764$ Degrees of freedom =3	0.124
	Married	154.67		
	Widowed	190.29		
	Divorced	77.50		

Source: Study Data (2012)

The results in Table 4.14 indicate that the p-value of 0.124 was greater than the level of significance of 0.05. Hence, the null hypothesis that the number of tourist nights spent in Kenya was the same for all groups was not rejected. This implied that there was no significant difference in the number of nights spent by tourists in Kenya whether single, married, divorced or widowed. This study finding contradicts the results obtained by Menezes et al. (2008) where there was significant difference between those married and those not married on the number of nights spent and the married respondents were found to spend less number of nights than those not married.

To examine whether the number of nights spent by a tourist in Kenya differs significantly by their annual household income, the Kruskal-Wallis test was used. The results of the test are presented in Table 4.15.

Table 4.15: Kruskal-Wallis Test on Tourist Nights by Annual Household Income

Factor	Categories	Mean Tourist Nights	Mean Rank	Test Statistic	P-value
Annual household income in US dollars	Under 20,000	16.69	146.04	$\chi^2 = 18.06$ Degrees of freedom = 5	0.003
	20,000-39,000	12.56	126.55		
	40,000-59,000	15.38	137.23		
	60,000-79,000	11.97	122.00		
	80,000-99,000	10.33	112.00		
	100,000 and over	9.91	83.71		

Source: Study Data (2012)

The results in Table 4.15 show a p-value of 0.003 which was less than 0.05, the level of significance; hence the null hypothesis of equal group mean ranks was rejected. This means that there was a statistically significant difference on the number of nights spent by the respondents in the different annual household income groups at 5 percent level of significance. Those with an annual household income of less than 20,000 US dollars spent 17 nights on the average; those with an annual household income between 20,000 US dollars and 39000 US dollars spent an average of 13 nights; those with annual household income between 40,000 US dollars and 59,000 US dollars spent an average of 15 nights; those with annual household income between 60,000 US dollars and 79,000 US dollars spent an average of 12 nights; those with annual household income between 80,000 US dollars and 99,000 US dollars spent an average of 10 nights while those with an annual household income of 100,000 US dollars and over spent an average of 10 nights. The study findings contradict those found by Chaiboonsri and Chaitip (2012) where the income group differences were found not to be significant. The study finding

implies that those with higher annual household income spent fewer nights than those with lower annual household income.

The Kruskal-Wallis test was used to establish whether the number of nights spent by a tourist in Kenya differs by the level of education. The results are presented in Table 4.16.

Table 4.16: Kruskal-Wallis Test on Tourist Nights by Education Level

Variable	Categories (Level)	Mean Tourist Nights	Mean Rank	Test Statistic	P-value
Level of education	Elementary	3.00	12.00	$\chi^2 = 15.043$ Degrees of freedom = 3	0.002
	Secondary	11.42	138.15		
	College	15.64	178.49		
	University	12.83	145.44		

Source: Study Data (2012)

The results in the Table 4.16 show that the test statistic, $\chi^2 = 15.043$, was significant at 5 percent level since the p-value of 0.002 was less than 0.5. Thus the null hypothesis of equal mean ranks among the various groups was rejected implying that the number of nights spent by a tourist in Kenya differ by their level of education. Those respondents having only elementary education spent on average 3 nights, those with secondary education spent 11 nights on average; those with college education spent an average of 16 nights while those with university education spent an average of 13 nights. These results are in line with those by Cakici and Harman (2007) and Menezes et al. (2008).

To find out whether there tourist-nights differed significantly by age the Kruskal-Wallis test was used and the results are given in Table 4.17.

Table 4.17: Kruskal-Wallis Test on Tourist Nights by Age

Variable	Categories	Mean Tourist Nights	Mean Rank	Test Statistic	P-value
Age in years	18-24	13.87	171.77	$\chi^2 = 7.872$ Degrees of freedom = 4	0.096
	25-34	13.12	146.11		
	35-46	13.21	136.01		
	47-66	14.77	173.67		
	Over 66	13.07	162.54		

Source: Study Data (2012)

Table 4.17 results indicate that the null hypothesis of equal mean ranks among the different groups was not rejected at 5 percent level of significance since the p-value of 0.096 was greater than 0.05. However, if a 10 percent level of significance was used the null hypothesis would be rejected. Thus the tourist-nights could be considered to differ significantly in the various age groups at 10 percent level of significance though it does not differ at 5 percent level. On average, the respondents between 18 and 24 years spent 14 nights; those between 25 and 34 years spent 13 nights; those between 35 and 46 spent 13 nights; those between 47 and 66 years spent 15 nights while those over 66 years spent 13 nights. These results are in line with those by Jonsson and Devonish (2008) but contradict those by Menezes et al. (2008) where length of stay was not significantly different by age categories.

The Kruskal-Wallis test was used to test whether the number of nights spent by a tourist in Kenya differs by their purpose of visit and Table 4.18 shows the results.

Table 4.18: Kruskal-Wallis Test Results for Purpose of Visit Groups' Differences

Variable	Categories	Mean Tourist Nights	Mean Rank	Test Statistic	P-value
Purpose of visit	Holiday	14.01	162.70	$\chi^2 = 11.80$ Degrees of freedom = 2	0.003
	Business	11.19	123.57		
	Visiting friends/relatives	16.81	163.81		

Source: Study Data (2012)

The results in Table 4.18 indicate that the test statistic is significant at 5 percent level of significance hence, the null hypothesis of equality of mean ranks was rejected. This means that the number of nights spent by a tourist in Kenya differ by purpose of visit. The respondents who had come on holiday spent an average of 14 nights; those who had come for business purpose spent 11 nights on average while those who had come to visit their friends/relatives spent 17 nights on average. The study findings are in line with those by Jonsson and Devonish (2008), Menezes et al. (2008) and Cespedes et al. (2012).

4.5 Regression Results on Non-Economic Factors

Count data regression analysis was carried out to establish the effect of tourist socio-demographic characteristics, political factors and destination characteristics on international tourism demand for Kenya. Before carrying out the regression, collinearity tests were conducted using tolerance value and the variance inflation factor (VIF) which is the inverse of the tolerance value. Variance Inflation Factor (VIF) measures how much the variance of the regression coefficients is inflated by multicollinearity problems. If VIF equals 0, there is no correlation between the independent measures. A VIF measure

of 1 is an indication of some association between predictor variables, but generally not enough to cause problems. Tolerance is the amount of variance in an independent variable that is not explained by the other independent variables. If the other variables explain a lot of the variance of a particular independent variable we have a problem with multicollinearity. Thus, small values for tolerance indicate problems of multicollinearity. A tolerance value of 0.10 corresponding to a VIF of 10 is acceptable (Sekaran and Bougie, 2011). The collinearity statistics are given in Table 4.19.

Table 4.19: Results for Collinearity Statistics

Explanatory Variables	Collinearity Statistics	
	Tolerance	VIF
Expenditure	0.680	1.472
Income	0.743	1.346
Age in years	0.613	1.632
Education dummy	0.890	1.123
Occupation dummy	0.591	1.691
Female dummy	0.893	1.120
Married dummy	0.506	1.975
Children dummy	0.540	1.852
Trip companion dummy	0.771	1.296
Repeat visit dummy	0.605	1.653
Political factor index	0.723	1.384
Destination characteristics index	0.565	1.768

Source: Study Data

Table 4.19 shows that the explanatory variables are not highly correlated since none of them has a VIF of more than 10 and torelance value of less than 0.2 (Sekaran & Bougie, 2011). This implies that there is no sizeable muliticollinearity that can affect regression.

Poisson and negative binomial regression models are designed to analyze count data. Count models are estimated using maximum likelihood method. Choosing between Poisson and negative binomial models depends on the nature of the distribution of the dependent variable. Therefore, one should measure the distribution of the study data before choosing between Poisson and negative binomial regression. The researcher used the Pearson Chi-Square goodness-of-fit test to test the hypothesis that the dependent variable followed a Poisson distribution. The regression model diagnostics results are presented in table 4.20.

Table 4.20: Regression Model Diagnostic Results

Test Statistic	Degrees of Freedom	P-value
Pearson Chi-square (χ^2) = 621.3348	172	0.0000
Likelihood-ratio test (of alpha = 0) = 202.37	1	0.0000
Alpha	0.1735217	
Mean	13.51645	
Variance	101.25391	

Source: Study Data (2012)

The Pearson test statistic is significant at 5 percent level, thus the null hypothesis that the data fits the Poisson distribution is rejected. In addition, Poisson regression model assumes that the conditional mean and variance should be equal, which is not the case (mean of 13.5 and variance of 101.25). This means that the data does not fit the Poisson model well. The likelihood ratio test is a test of the over-dispersion parameter, alpha. The likelihood ratio test with a null hypothesis of alpha is equal to zero, rejects the null hypothesis, implying that alpha is significantly different from zero. This reinforces the

conclusion that the Poisson distribution is not appropriate, hence the use of the negative binomial regression model. The model diagnostic results are in line with those diagnoses by Chaiboonsri and Chaitip (2012).

The negative binomial regression model was used to determine the effect of noneconomic factors on international tourism demand at the individual level. Both the coefficients and the IRR were reported. The IRR represents the change in the dependent variable in terms of a percentage increase or decrease, with the precise percentage determined by the amount the IRR is either above or below 1 (Heeringa, West & Berglund, 2010). Table 4.21 presents the results of the negative binomial regression model.

The table shows that the number of observations used in the count data regression analysis were 184. Wald chi-square test statistic had a value of 180.14. The null hypothesis that all the estimated regression coefficients were equal to zero was rejected at 5 percent level of significance since the p-value of 0.000 was less than 0.05. This means that some of the regression coefficients were different from zero. Positive coefficients indicate higher rate whereas negative coefficients indicate lower rate. Rather than reporting the negative binomial regression results using regression coefficients, the effect of the independent variable on the dependent variable was reported in terms of the IRR.

Table 4.21: Negative Binomial Regression Results

Variable	Coefficient	IRR	Standard Error	Z-Statistic	P-value
Expenditure	0.0001094*	1.000109	0.0000293	3.74	0.000
Income	-0.0000115*	0.999985	0.00270184	-10.52	0.000
Age	0.0071775**	1.007203	0.0031095	2.31	0.021
Education dummy	-0.2166887	0.8051806	0.249181	-0.870	0.387
Occupation dummy	0.4847904*	1.623835	0.1095877	4.42	0.000
Female dummy	0.0965974	1.101417	0.0808405	1.19	0.232
Married dummy	-0.146501	0.8637248	0.098315	-1.49	0.136
Children dummy	0.1335843	1.142918	0.91677	1.46	0.145
Trip attribute	-0.2196762***	0.8027787	0.1199412	-1.83	0.067
Repeat visit	-0.2073308**	0.8127507	0.093681	-2.21	0.027
Political factors index	-0.1459322**	0.86421163	0.0660987	-2.21	0.027
Destination attractiveness	0.4389932*	1.551145	0.1378551	3.18	0.001
Constant	1.9282*	-	0.512828	3.76	0.000
Waldi-chi square = 180.14 Degrees of freedom = 12			P- value = 0.0000		
Number of observations			184		

Note: * significant at 1% level; ** significant at 5% level and *** significant at 10% level.

Source: Study Data (2012)

4.5.1 Effect of Tourists Socio-Demographic Characteristics on International Tourism Demand

The tourist socio-demographic characteristics included in the regression model were expenditure, annual household income in US dollars, age in years, education dummy with a value of 0 for tourists without college education and a value of 1 for tourist with college education and above, occupation dummy with a value of 0 for unemployed tourists and a value of 1 for those employed, female dummy with a value of 0 for a male and a value of 1 for a female tourists, married dummy taking 0 value if the tourist was not married and

value 1 if the tourist was married, children dummy taking value of 0 for tourists without children and a value of 1 for those with children, trip companion dummy with a value of 0 for those travelling alone and value of 1 for those travelling together with others and repeat visit dummy with a value of 0 for those visiting the first time and a value of 1 for those visiting again.

The coefficient of the expenditure variable had the expected positive sign and was significant at 5 percent level (p-value of 0.000 was less than 0.05). The IRR value of 1.000109 for the expenditure variable suggested that the number of nights spent increased by approximately 0.011 percent with every one US dollar increase in expenditure. The annual household income variable had a negative coefficient which is contrary to what was expected. This coefficient was statistically significant at 5 percent level since the p-value of 0.000 was below 0.05. The IRR value of 0.99999 implied that if the annual household income increased by one US dollar, the number of nights spent would decrease by 0.001 percent. Further investigation into the data to find out the cause of the unexpected negative coefficient revealed that the respondents who had higher annual household income spent fewer nights compared to those with lower annual household income. The implication of this is that tourist with high annual income may not be willing to stay for a longer period in Kenya but will probably prefer to visit other destinations as well. These results are in line with those from a study done by Chaiboonsri and Chaitip (2012).

Age coefficient had a positive sign and was significant at 5 percent level (p-value of 0.021 which is less than 0.05). The implication was that when the tourist's age increased by one year, the number of nights spent increased by 0.72 percent. This means that older tourists spent more nights in Kenya compared to the younger ones. Occupation dummy coefficient had a positive sign and was significant at 5 percent level since the p-value of 0.000 was less than 0.05. This meant that the respondents who were employed spent 1.62 times the incident rate for those not employed. This implies that the respondents who were employed spent more nights in Kenya compared to those who were not working.

The coefficient of the trip companion dummy was negative and not significant at 5 percent but was significant at 10 percent level (p-value of 0.067 was less than 0.1 but greater than 0.5) with an IRR value of 0.803. This implies that those respondents who travelled accompanied by others spent 0.803 times the number of nights less than those who travelled alone. This means that those who travelled alone spent more nights in Kenya than those travelling with others or those travelling in groups. The coefficient of repeat visit dummy had a negative sign and was significant at 5 percent level of significance (p-value of 0.27 was less than 0.5). The IRR value for this variable was 0.813 implying that those who had visited Kenya before spent 0.813 times the number of nights less compared to those who had not visited before. This means that the tourists who were on their first visit to Kenya spent more nights than those who were on a repeat visit. This is contrary to results obtained by Menezes and Vieira (2008) and Chaiboonsri and Chaitip (2012) who found out that repeat tourist stayed longer.

The coefficient for the level of education dummy was negative but was not significant at 5 percent level. The insignificance could have arisen due to the reduction of categories in the regression equation. The reduction of categories was necessary in order to reduce the number of variables in the regression equation to avoid losing many degrees of freedom because of too many dummy variables being included. The coefficient of the female dummy was negative but not significant at 5 percent level implying that gender is not a major determinant of international tourism demand. The coefficient for the married dummy variable was negative but was not significant at 5 percent level. This means that marital status was not a significant factor influencing tourism demand in Kenya. The coefficient for the children dummy was also not significant at 5 percent level of significance and had a positive sign. The coefficients for education, gender and marital status dummies had the same signs as those in the study by Menezes et al. (2008) though in this study they were not significant.

4.5.2 Effect of Political Factors on International Tourism Demand

For regression analysis purposes, the political factors' composite index was constructed by calculating the summed scores per respondent and then dividing it by the number of items. The political composite index had the expected negative coefficient and was significant at 5 percent level since the p-value of 0.027 was less than 0.05, with IRR value was 0.864. This means that if the political factors index decreased by one unit, the number of nights spent in Kenya will decrease by 13.6 percent, that is, if the political situation in the country deteriorates tourism demand will decrease as not many people will be willing to come to Kenya. This is in line with the study findings by (Eilat and

Einav 2004; Naude and Saayman, 2005) who also found political instability to be an important determinant of international tourism demand affecting demand negatively.

4.5.3 Effect of Destination Characteristics on International Tourism Demand

For regression analysis purposes, the destination characteristics composite index was constructed by calculating the summed scores per respondent and then dividing it by the number of items. The coefficient for destination characteristics index was significant at 5 percent level (p-value of 0.01 was lower than 0.05. The coefficient was positive as expected and the IRR value was 1.55 implying that if the destination characteristics index increased by one unit, the number of nights spent would increase by 55 percent. These results agree with those for the study by Menezes et al. (2008).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This chapter contains the summary of the study findings, conclusions drawn from the study, recommendations emanating from the study and finally areas of further research suggested.

5.2 Summary

Tourism sector in Kenya plays an important role in its national economy and has been identified as one of the six priority sectors in vision 2030. Kenya also aims to be one of the top ten long-haul tourist destinations in the world, offering a high-end, diverse, and distinctive visitor experience by 2030. In order to attain this goal the government must lay down strategies which will help improve tourism in Kenya. To come up with better strategies the government of Kenya and all those involved in the tourism sector must seek to understand what factors influence a tourist to visit a certain destination. This study was therefore motivated by the need for an empirical analysis of the determinants of international tourism demand for Kenya. Specifically, the study sought to determine the effect of economic factors, tourist's socio-demographic characteristics, political factors and destination characteristics on international tourism demand for Kenya.

To model international tourism demand for Kenya two regression models were used. A dynamic panel regression model was used to establish the effect of economic factors on international tourism demand using panel data for eleven countries for the period 1991 to

2011. A count data regression model was used to determine the effect of socio-demographic characteristics of the tourist, political factors and destination characteristics on international tourism demand for Kenya using survey data. Data was collected at Jomo Kentatta international airport from tourists leaving the country using questionnaires. A total of 400 questionnaires were issued but only 304 were returned.

The first objective of the study was to establish the effect of economic factors on international tourism demand for Kenya. The study employed SGMM dynamic regression model to estimate the regression coefficients which were interpreted as demand elasticities. The empirical results for the SGMM estimator indicated that the significant economic factors influencing international tourism demand for Kenya were tourism price, travel cost, bilateral trade, lagged dependent variable representing word of mouth effect and the 2008 dummy representing the election clashes.

The second objective of the study was to determine the effect of tourist socio-demographic characteristics on international tourism demand for Kenya. The kruskal-Wallis test was conducted to determine whether the tourists' socio-demographic characteristics lead to different levels of international tourism demand for Kenya. The study found out that international tourism demand differs by age, annual household income and purpose of visit. The results obtained from the negative binomial regression showed that the tourist socio-demographic factors influencing international tourism demand were expenditure, annual household income, age, occupation and repeat visits.

The third objective was to determine the effect of political factors on international tourism demand for Kenya. when making decision to come to Kenya the tourists were highly influenced by visa formalities, government travel warning and good relations between Kenya and their countries. Political factors were found to affect international tourism demand negatively. The fourth objective was to establish the effect of destination characteristics on international tourism demand for Kenya. Some of the important destination factors influencing tourist decisions to visit Kenya were the availability of shopping facilities, advertisement and promotion of Kenya tourism, fear of attack by disease, museums in Kenya, nearness of destination, insecurity and crime level in Kenya, availability of safe and good transport/ communication facilities and sharing of a common language were the most important factors. Destination characteristics were found to be a significant determinant of tourism demand and improvement of destination characteristics were expected to increase international tourism demand.

5.3 Conclusions

The aim of the study was to estimate the demand function of international tourism in Kenya with respect to 11 main tourism suppliers. The study applied the single equation methodology in estimating the international tourism demand model for Kenya for tourists from different origins. It can be concluded from the study that international tourism demand is price inelastic in the short run but price elastic in the long run. Elasticity of cost of travel was found to be both inelastic in the short run and long run. If the price of tourism and the cost of travelling increase, the international tourism demand for Kenya is expected to decrease. The lagged dependent variable (word of mouth effect) was

significant implying that international tourism demand for Kenya is influenced by tourists' report to others about their holiday experience. Tourists are sensitive to political instability in Kenya; hence the post election clashes affected international tourism demand for Kenya negatively. Bilateral trade was an important determinant of international tourism demand, hence good relations between Kenya and tourist generating countries is expected to enhance tourism demand.

The tourist's socio-demographic characteristics (that is, expenditure, annual household income, age, occupation, travelling companions and repeat visits) were found to have an effect on international tourism demand for Kenya. The study finding suggested that those with higher annual household income spent fewer nights than those with lower annual household income implying that those with high income prefer short visits and then probably move on to other destinations. The findings further showed that the tourists who were employed (either part time or full time) spent more nights in Kenya compared to those who were not working. The older tourists were found to spend more nights in Kenya compared to the younger ones. Those visiting Kenya for the first visit time spent more nights than those who were on a repeat visit. The tourists travelling alone were found to spend more nights in Kenya than those travelling with others or those travelling in groups. Political factors were found to affect demand negatively while destination factors were found to influence demand positively.

5.4 Contribution of the Study to Body of Knowledge

Xiao and Smith (2006) and Rogerson (2007) have noted that previous empirical studies on international tourism demand have focused on tourism demand in developed countries while Africa has received very little attention. This study therefore fills this research gap by adding into the empirical studies on international tourism demand in Africa. Naude and Saayman (2005) observed that when modelling international tourism demand in Africa, both economic and non economic factors should be considered. Since the study considered both economic and non economic factors, it adds into the knowledge of the economic and non economic factors influencing international tourism specifically in Kenya and Africa in general. The study also demonstrates the application of dynamic panel regression and the negative binomial regression approaches to the estimation of international tourism demand and can be used to provide a future base for more in-depth studies on international tourism demand.

5.5 Recommendations

5.4.1 Policy Implications

Based on the study findings, the following are some of policy implications and strategies that can be proposed for the development of tourism industry in terms of sustaining the growth of tourists' arrivals and attracting more tourists into the country. Since the study found that the 'word of mouth effect' was significant in explaining international tourism demand, the tourism industry should embark on offering high quality services to enhance the country's image in order to attract new and repeat tourists. The government together

with the ministry of wildlife should engage in sustainable tourism to avoid tourism products degradation.

Tourism price was also an important determinant of international tourism demand, thus the government and other players in the tourism sector (for instance, the tour operators, travel agents and car hire companies, hoteliers among others) should aim at making the tourism price competitive compared to other countries in Africa to avoid most of the competition from neighbouring countries. The Government in conjunction with Kenya airways should invest in low cost air carriers operating within and outside the country. The government should come with favourable policies that will encourage investors to invest in the tourism sector. Travel agents should ensure the transportation costs within the country are competitive and should not exploit visitors. The government should continue to engage in bilateral trade with more countries as it is currently doing.

International tourism demand was found also to be affected by tourist socio-demographic characteristics. Therefore, the government, KTB, ministry of wildlife and ministry of finance and planning should facilitate creation of new products catering for different age groups, professionals and people of different socio-economic status. In addition, the existing tourism products, facilities and services should be improved in order to encourage repeat visits as well as attract new tourists. The Tourism sector and other stakeholders should come up with tourism products, activities and services which encourage much spending. Furthermore, since political factors and destination characteristics were also found to be significant determinants of demand, the government

should enhance political stability in the country. All the tourism sectors stakeholders and other related industries as well as every citizen, should work towards creating a positive image through a conducive friendly and peaceful environment, high quality tourism products and good tourism infrastructure which will make those tourists visiting the country come back and also tell others about the goodness of Kenya as a tourist destination. This will ensure Kenya becomes the tourists' destination of choice.

5.5.2 Areas for Further Research

Future research could build on the results of this study to enrich the existing knowledge of determinants on international tourism demand. Further research could be done to develop demand functions for various tourists markets which can be used to forecast international tourism demand in Kenya. The study used a dynamic panel regression model but other studies involving cointegration models can be done. A study focussing on the impact of tourism on the economy can also be carried out.

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APPENDICES

APPENDIX 1: SECONDARY DATA COLLECTION GUIDE

Year	Country	Holiday	Transit	Business	Total departures	Population	GDP per capita	CPI_Kenya
1991	United Kingdom							
	Germany							
	Italy							
	France							
	USA							
	Canada							
	India							
	Japan							
	Israel							
	Uganda							
	Tanzania							
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2011	United Kingdom							
	Germany							
	Italy							
	France							
	USA							
	Canada							
	India							
	Japan							
	Israel							
	Uganda							
	Tanzania							

Year	Country	Exchange Rate	CPI_Origin	CPI_South Africa
1991	United Kingdom			
	Germany			
	Italy			
	France			
	Usa			
	Canada			
	India			
	Japan			
	Israel			
	Uganda			
	Tanzania			
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2011	United Kingdom			
	Germany			
	Italy			
	France			
	Usa			
	Canada			
	India			
	Japan			
	Israel			
	Uganda			
	Tanzania			

APPENDIX 2: PRIMARY DATA COLLECTION INSTRUMENT

Questionnaire

General Instructions: Thank you for accepting to participate in this survey. This questionnaire is part of research exercise in fulfilment of the Degree of Doctor of Philosophy in Management Science of Kenyatta University. The purpose of this questionnaire is to collect data on "the factors influencing tourism demand for Kenya". Please fill in your responses as guided in each of the following sections. Kindly complete the whole questionnaire.

Section A: General Questions

Please indicate the following details

1. Date of arrival.....Date of departure.....
2. Nationality.....Country of residence.....
3. Purpose of your visit? □ Holiday □ Business □ visiting friends/ relatives
   □ Others (please specify).....
4. Did you book your trip through a tour Company? □ No □ Yes.
5. If yes, which tour company?.....
6. If no, explain how you booked your trip and how much did it cost (USD).....
   .....

7. Did you encounter any problem when booking the trip? □ No □Yes. If yes please explain.

   .....

8. How much did you pay to book the trip to Kenya through the tour company?

   .....

9. How long before departure did you book your flight?.....

Section B: Socio-demographic Characteristics

10. Sex: □ Male □ Female

11. Age in years □ 18-24 □ 25-29 □ 30-34 □ 35-39 □ 40-46

    □ 47-55 □ 56-66 □ Over 66

12. Highest level of education completed: □ Elementary □ Secondary □ College

    □ University □ Other (please specify).....

13. Occupational status: □ Full time employed □ Part time employed

    □ Retired □ Unemployed □ Student

    □ Other (specify).....

14. If employed on full time or part time basis, please state your profession.....

15. Marital status: □ Single □ Married □Widowed

    □ Other (specify).....

16. Size of family: □ No children □ One child □ Two children □Three children □ more than 3 children

17. Please indicate your annual household income in US dollars

    □ Under $20,000 □ $20,000- $39,000 □ $40,000 – $59,000

□ $60,000 – $79,000 □ $80,000 – $99,000 □ $100,000 and over

18. How did you finance your trip to Kenya? □ Savings □ Credit/ loan

□ Savings & credit □ Paid for by employer

□ Other (please specify).....

19. Please estimate how much money you have spent in Kenya on this trip (USD).....

20. Out of this total expenditure, about how much did you spend in other activities/ things other than accommodation and flight (USD)?.....

21. Who accompanied you to Kenya? □ Alone □ Spouse □ Spouse & children

□ Colleagues □ Friends □ Relatives □ Other (Specify).....

22. Number of people in the group you visited with.....

23. To what extent did the following influence your decision to come to Kenya?

	Great extent	Some extent	No extent
Spouse			
Children			
Friends & Relatives			
Colleagues			
Availability of free time			
Paid holiday entitlement			

Section C: International Tourism Demand

24. How many nights did you stay in Kenya? ……..

25. How many times have you visited Kenya, this time inclusive? .....

Section D: Political Factors

26. Were there any restrictions in your country barring you from travelling? □ Yes □ No

27. If yes, please explain why you still came to Kenya.....

.....

28. When making your decision to travel to Kenya, how much did the following influence your decision:

	Very much	much	little	No
Political stability in Kenya				
Fear of terrorists attacks				
Travel warnings by your government				
Visa formalities				
Good relations between your government and Kenya				
Others (specify)				

Section E: Destination Characteristics

29. How did you get to know about Kenya? □ Friends, relatives &colleagues

□ Media

□ Internet □ Travel Brochures □ Exhibitions □ Other (specify).....

30. Where did you obtain information used to plan your trip? □ Travel agency/Tour operator □ Airline □ Friends/ relatives/Colleagues □ Internet

□ TV/Radio/Film □ Newspapers/Magazines/ Brochures

□ Other (specify).....

31. To what extent did the following influence your decision to visit Kenya? Tick in the relevant column.

Item	Great extent	Some extent	No extent
Availability of information about Kenya			
Advertising and promotion of Kenyan tourism			
Availability of Tour packages			
Inexpensive tourism product compared to other countries			
Availability of direct flights to Kenya			
Short travelling time/ distance from my country to Kenya			
Kenya's wildlife			
Kenya's scenery			
Kenya's beaches			
Kenya's diverse culture			
Kenya's museums			
Kenya's sports facilities			
Good weather in Kenya at this time than in your country			
Fear of insecurity/crime level in Kenya			
Fear of attack by diseases eg. Malaria			

Hospitality/friendliness of Kenyan people			
Availability of good hotels			
Availability of entertainment & recreation facilities			
Availability of shopping facilities			
Availability of good/safe transport and communication facilities			
Sharing of a common language			

32. Please rate the quality of tourism attractions, facilities and services utilized on this trip.

Attractions/Facility/service	Excellent	Very good	Good	Average	Below average
Wildlife					
Sceneries					
Beaches					
Cultural attractions					
Historical sites					
Tour guidance					
Transport and communication used within Kenya					
Accommodation services					

Meals/ drinks					
Entertainment and recreation facilities					
Airport facilities/services					
Souvenirs and other commodities purchased					
Tour company services					

33. Please list your top three most favourite destinations worldwide in order of preference.

    1..... 2.....3.....

34. Which other countries would you like to visit in the near future in Africa? List in order of reference.

    1.....2.....3.....

35. How would you rank Kenya in terms of total costs (including airfare) as a tourist destination?

    □ Very expensive □ Expensive □Fair □ cheap □ Very cheap

36. How would you describe your holiday in Kenya?

    □ Excellent □ Very good □ Normal □ Bad

37. Suggest some recommendations which you think will help improve tourism in Kenya

    ……

Thank you for completing this questionnaire

APPENDIX 3: SAMPLE SIZE TABLE

Table A1: Required Sample Size

		Confidence = 95.0%				Confidence = 99.0%			
Population Size	Probability of Success	Degree of Accuracy/Margin of Error				Degree of Accuracy/Margin of Error			
		0.05	**0.035**	**0.025**	**0.01**	**0.05**	**0.035**	**0.025**	**0.01**
10		10	10	10	10	10	10	10	10
20		19	20	20	20	19	20	20	20
30		28	29	29	30	29	29	30	30
50		44	47	48	50	47	48	49	50
75		63	69	72	74	67	71	73	75
100		80	89	94	99	87	93	96	99
150		108	126	137	148	122	135	142	149
200		132	160	177	196	154	174	186	198
250		152	190	215	244	182	211	229	246
300		169	217	251	291	207	246	270	295
400		196	265	318	384	250	309	348	391
500		217	306	377	475	285	365	421	485
600		234	340	432	565	315	416	490	579
700		248	370	481	653	341	462	554	672
800		260	396	526	739	363	503	615	763
900		269	419	568	823	382	541	672	854

1,000		278	440	606	906	399	575	727	943
1,200		291	474	674	1067	427	636	827	1119
1,500		306	515	759	1297	460	712	959	1376
2,000		322	563	869	1655	498	808	1141	1785
2,500		333	597	952	1984	524	879	1288	2173
3,500		346	641	1068	2565	558	977	1510	2890
5,000		357	678	1176	3288	586	1066	1734	3842
7,500		365	710	1275	4211	610	1147	1960	5165
10,000		370	727	1332	4899	622	1193	2098	6239
25,000		378	760	1448	6939	646	1285	2399	9972
50,000		381	772	1491	8056	655	1318	2520	12455
75,000		382	776	1506	8514	658	1330	2563	13583
100,000		383	778	1513	8762	659	1336	2585	14227
250,000		384	782	1527	9248	662	1347	2626	15555
500,000		384	783	1532	9423	663	1350	2640	16055
1,000,000		384	783	1534	9512	663	1352	2647	16317
2,500,000		384	784	1536	9567	663	1353	2651	16478
10,000,000		384	784	1536	9594	663	1354	2653	16560
100,000,000		384	784	1537	9603	663	1354	2654	16584
264,000,000		384	784	1537	9603	663	1354	2654	16586

Source: The Research Advisors (2006)

APPENDIX 4: TOURIST ARRIVALS IN AFRICA

Table A2: Tourist Arrivals in Africa

Country Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Algeria	866,000	901,000	988,000	1,166,000	1,234,000	1,443,000	1,638,000	1,743,000	1,772,000	1,912,000	
Angola	51,000	67,000	91,000	107,000	194,000	210,000	121,000	195,000	294,000	366,000	425,000
Benin	96,000	88,000	72,000	175,000	174,000	176,000	180,000	186,000	188,000	190,000	199,000
Botswana	1,104,000	1,193,000	1,274,000	1,406,000	1,523,000	1,474,000	1,426,000	1,736,000	2,101,000	2,103,000	2,145,000
Burkina Faso	126,000	128,000	150,000	163,000	222,000	245,000	264,000	289,000	272,000	269,000	274,000
Burundi	29,000	36,000	74,000	74,000	133,000	148,000	201,000				
Cameroon	277,000	221,000	226,000		190,000	176,000	185,000	262,000	298,000		
Central African Republic	11,000	10,000	3,000	6,000	8,000	12,000	14,000	17,000	31,000	52,000	
Chad	43,000	57,000	32,000	21,000	26,000	29,000	16,000	25,000	22,000	31,000	
Comoros	24,000	19,000	19,000	21,000	23,000	26,000	29,000	15,000			
Congo, Dem. Rep.	103,000	55,000	28,000	35,000	36,000	61,000	55,000	47,000	50,000	53,000	
Congo, Rep.	19,000	27,000	22,000	23,000	31,000	35,000	43,000	54,000	63,000	85,000	
Djibouti	20,000	22,000	23,000	23,000	26,000	30,000	40,000	40,000	53,000		
Egypt, Arab Rep.	5,116,000	4,357,000	4,906,000	5,746,000	7,795,000	8,244,000	8,646,000	10,610,000	12,296,000	11,914,000	14,051,000
Eritrea	70,000	113,000	101,000	80,000	87,000	83,000	78,000	81,000	70,000	79,000	84,000

Ethiopia	136,000	148,000	156,000	180,000	184,000	227,000	290,000	312,000	330,000		
Gabon	155,000	169,000	208,000	222,000	244,000	269,000	296,000	325,000	358,000		
Gambia, The	79,000	57,000	81,000	89,000	90,000	108,000	125,000	143,000	147,000	142,000	91,000
Ghana	399,000	439,000	483,000	531,000	584,000	429,000	497,000	587,000	698,000	803,000	
Guinea	33,000	38,000	43,000	44,000	45,000	45,000	46,000	30,000			
Guinea-Bissau		8,000				5,000	12,000	30,000			
Kenya	899,000	841,000	838,000	927,000	1,199,000	1,399,000	1,464,000	1,686,000	1,141,000	1,392,000	1,469,000
Lesotho							347,000	292,000	285,000	320,000	414,000
Libya					43,000	81,000	42,000	38,000	34,000		
Madagascar	160,000	170,000	62,000	139,000	229,000	277,000	312,000	344,000	375,000	163,000	196,000
Malawi	228,000	266,000	383,000	424,000	427,000	438,000	638,000	735,000	742,000	755,000	746,000
Mali	86,000	89,000	96,000	110,000	113,000	143,000	153,000	164,000	190,000	160,000	169,000
Mauritania	30,000										
Mauritius	656,000	660,000	682,000	702,000	719,000	761,000	788,000	907,000	930,000	871,000	935,000
Morocco	4,278,000	4,380,000	4,453,000	4,761,000	5,477,000	5,843,000	6,558,000	7,408,000	7,879,000	8,341,000	9,288,000
Mozambique		323,000	541,000	441,000	470,000	578,000	664,000	771,000	1,815,000	2,224,000	
Namibia	656,000	670,000	757,000	695,000	716,000	778,000	833,000	929,000	931,000	980,000	984,000
Niger	50,000	52,000	39,000	55,000	57,000	58,000	60,000	48,000	73,000	66,000	
Nigeria	813,000	850,000	887,000	924,000	962,000	1,010,000	1,111,000	1,212,000	1,313,000	1,414,000	
Rwanda								710,000	765,000	699,000	666,000

Senegal				495,000	667,000	769,000	866,000	875,000			
Seychelles	130,000	130,000	132,000	122,000	121,000	129,000	141,000	161,000	159,000	158,000	175,000
Sierra Leone	16,000	24,000	28,000	38,000	44,000	40,000	34,000	32,000	36,000	37,000	39,000
Somalia											
South Africa	5,872,000	5,787,000	6,430,000	6,505,000	6,678,000	7,369,000	8,396,000	9,091,000	9,592,000	7,012,000	8,074,000
Sudan	38,000	50,000	52,000	52,000	61,000	246,000	328,000	436,000	440,000	420,000	
Swaziland	281,000	283,000	256,000	461,000	459,000	837,000	873,000	870,000	754,000	908,000	868,000
Tanzania	459,000	501,000	550,000	552,000	566,000	590,000	622,000	692,000	750,000	714,000	783,000
Togo	60,000	57,000	58,000	61,000	83,000	81,000	94,000	86,000	74,000	150,000	
Tunisia	5,058,000	5,387,000	5,064,000	5,114,000	5,998,000	6,378,000	6,550,000	6,762,000	7,050,000	6,901,000	6,903,000
Uganda	193,000	205,000	254,000	305,000	512,000	468,000	539,000	642,000	844,000	807,000	946,000
Zambia	457,000	492,000	565,000	413,000	515,000	669,000	757,000	897,000	812,000	710,000	815,000
Zimbabwe	1,967,000	2,217,000	2,041,000	2,256,000	1,854,000	1,559,000	2,287,000	2,506,000	1,956,000	2,017,000	2,239,000

SOURCE: WT0 (2012)