

# **Factors Affecting Life Insurance Demand:**

## **A case study on (Ethiopian Insurance Corporation) EIC**



**By**

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**June, 2017**

**Addis Ababa, Ethiopia**

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**A Research Submitted to the School of Graduate Studies of Saint Merry University in  
Partial Fulfillment of Degree of Masters of General Business Administration**

**Advisor: Getie Andualem (PhD)**

**June, 2017**

**Addis Ababa, Ethiopia**

## Endorsement

This thesis entitled, “**Factors Affecting Life Insurance Demand: A case study on (Ethiopian Insurance Corporation) EIC**”, has been submitted to St. Mary University, School of Graduate Studies for examination with my approval as a University Advisor.

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## Declaration

I, Abenezer Shiferaw declare that this work entitled “**Factors Affecting Life Insurance Demand: A case study on (Ethiopian Insurance Corporation) EIC**” is outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other University.

It is offered for the partial fulfillment of the degree of MA in Business Administration [MBA].

**By: Abenezer Shiferaw**

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This Thesis has been submitted for examination with my approval as a University advisor.

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## **ACRONYMS/ABBREVIATIONS**

CBHI - Community Based Health Insurance Organization

CEE - Central Eastern Europe

CIS - Commonwealth of Independent States

CLRM - Classical Linear Regression Model

EIC - Ethiopian Insurance Corporation

EPF - Employees' Provident Fund

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## **ABSTRACT**

The fundamental purpose of insurance, whether of people or of property, is protection against possible economic loss, economic loss being simply defined as the unintentional and permanent loss of something which has monetary value. Moreover, insurance is significant part of modern economy and it is huge source of employment. The main objective of this study is to investigate factors affecting life insurance purchase, what factors significantly affect customers towards the purchase of life insurance policies and to assess the factors affecting the development of life insurance in Ethiopia. The study is made based on a primary data collected through self-administered questionnaire from buyers' who have purchased life insurance from EIC and aged 18 years or older. To analyze the data a combination of descriptive form of data analysis and multiple regression analysis was used. Multiple Regression analysis was performed to investigate the effect of each explanatory variable on life insurance demand. Accordingly except family size and gender factor, income level, age factor, education level and health status were found to be significant determinants of life insurance demand. Among the six determinant factors, income level takes the highest fraction in influencing the demand for life insurance policy followed by age factor, family size, gender, education level and health status in that order.

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## **CHAPTER I: - INTRODUCTION**

### **1.1 Background of the Study**

The fundamental purpose of insurance, whether of people or of property, is protection against possible economic loss, economic loss being simply defined as the unintentional and permanent loss of something which has monetary value. Moreover, insurance is significant part of modern economy and it is huge source of employment. Common examples of economic loss are: - Theft of one's household goods, damage or destruction of a car in an accident, total or partial destruction of a factory by fire was arising from a neglected cigarette, an airplane crash, etc. While the worldwide insurance market, especially the life insurance market, has grown rapidly and the internationalization of the insurance business is becoming more widespread, these areas have not been greatly researched.

When we come to our country, our history and even in the current culture there were and still are traditional institutions of society welfare known as "IDIR and EKUB" meant to combat fortuitous types of accidents in a daily life. These self-help institutions of society had been in service of general public of our country since long time in the remote past.

On the other hand, modern insurance in Ethiopia though not as old as "IDIR or IKUB" was introduced at the beginning of the 20<sup>th</sup> century (Zelege, 2007). The insurance sector in the country is underdeveloped compared to other financial sectors, such underdevelopment of insurance are much more in life insurance division. Analysis of

the life insurance business during the year 1967 to 1972 which indicates that the share of life insurance in total gross premium income of the industry declined from 15.1% in 1967 to 7.9% in 1972 (Zelege, 2007).

The total or partial, temporary or permanent loss of this income represents an economic loss to all those who are dependent on that income for their livelihood. The loss of such income can come about through a variety of causes; Life Insurance is concerned only with those economic losses caused by death, disability and old age (Dorfman, 1978).

## **1.2 Background of the Ethiopian Insurance Corporation**

Ethiopian Insurance Corporation (EIC) was established in 1976 by proclamation No.68/1975. The Corporation came into existence by taking over all the assets and liabilities of the thirteen nationalized private insurance companies, with Birr 11 million (USD 1.29 million) paid up capital aiming the following objectives.

- Engage in all classes of insurance business in Ethiopia;
- Ensure the insurance services reach the broad mass of the people;

Subject to the provision of Article 18 of the Housing and Saving Bank establishment proclamation No. 60/1975, promote efficient utilization of both material and financial resources. EIC was operating the business for about nineteen years under protected monopolistic system as state owned sole insurer.

After the demise of the Marxist regime in mid-1991 a fundamental change has taken place and there was a shift in political, economic and social orientation from totalitarianism to that of liberalism.

Therefore, EIC was reestablished as public enterprise under proclamation number 201/94 with Birr 61 million (USD 7.13 million) paid up capital. Upon reestablishment of the Corporation in 1994 as state owned enterprise, the law covers the following new objectives to the Corporation:

- Engage in the business of rendering insurance services;
- Engage in any other related activities conducive to the attainment of its purposes.

(EIC, About us)

### **1.3 Statement of the problem**

Insurance sector in general and life insurance in particular in Ethiopia have been given little attention to from the public. We all recognize that, unlike the value of property, the value of a human being cannot be measured in terms of money but we should care about the economic value of a person.

The continued life of an income earner may have economic significance to many people. Certainly it is most important to any dependents he may have. These dependents have to bear the expenses of last illness and burial. Their greatest economic loss, however, is the loss of the future earnings on which their livelihood

depends apart from the emotional trauma suffered as the result of the death of a loved one.

In different cultures there is different way of dealing with sickness and death. When we come to Ethiopia people have strong ties with each other, our society believes in helping each other when this bad things happen.

For this research we are going to look deep in perspective of Factors Affecting Life Insurance Demand in general and also compare which the customers will incline towards if they are introduced and get basic idea about purchase policies, and of course it is expected to be varied by the customer's culture, and socio- demographic factors such as age and sex, professional status, income level, educational level, marital status, and the subjective interpretations of utilities and preference to risk. Therefore, this study is done with the purposes of investigating factors affecting life insurance purchase decision. In this paper, the scope is limited only to analyze to what extent the above mentioned factors affect life insurance purchase and excluding other national economic factors and organizational structure issues.

#### **1.4 Research questions**

- What are factors affecting life insurance purchase in relation with their demographic factors?
- Which of these demographic factors affect customers in the process of life Insurance Policy purchase?

- Are the insurance companies marketing failure particularly (EIC's) for the low development of life insurance in Ethiopia?

## **1.5 Objectives of the Study**

### **1.5.1 General Objective**

The main objective of this study is to investigate factors affecting life insurance purchase, what factors significantly affect customers towards the purchase of life insurance policies and to assess the factors affecting the development of life insurance in Ethiopia.

### **1.5.2 Specific Objectives**

The specific objective and the study are:

- Investigate main factors affecting customers towards the purchase of life insurance policy in EIC.
- Identify relative importance of factors in purchasing life insurance policy.
- Examine what is responsible for the low development of life insurance in Ethiopia?

## **1.6 Research hypothesis**

For this project, the following hypotheses which considers age and gender, Religion, Educational status, Income level, Employment status has significant relationship with life insurance policy purchase.

H<sub>1</sub>: There is statistically significant and positive relationship between health status and life insurance demand.

H<sub>2</sub>: There is statistically significant and positive between education level and life insurance demand.

H<sub>3</sub>: There is statistically significant and positive relationship between gender factor and life insurance demand.

H<sub>4</sub>: There is statistically significant and positive relationship between income level and life insurance demand.

H<sub>5</sub>: There is statistically significant and positive relationship between age factor and life insurance demand.

H<sub>6</sub>: There is statistically significant and positive relationship between family size and life insurance demand.

## **1.7 Significance of the Study**

The paper is significant in several aspects: Firstly, will be useful information for marketers of EIC on how they formulate and implement relevant marketing strategies towards addressing the right factors affecting life insurance purchasing demand. Second, it is a piece of contribution to the current knowledge in the practice of life

insurance marketing in Ethiopia and invites for further research to bring customers' attitudinal change in the areas of insurance purchasing and benefits. And hopefully the findings of this paper will serve as inputs for the government that is on the process of establishment Community Based Health Insurance Organization (CBHI) to reorganize & repackage products and services to meet the people's culture and way of life, by including Life insurance which can serve in place of the traditional institution 'EDIR'.

### **1.8 Scope or Delimitation of the Study**

This paper is delimited to the data that is obtained from only sample customers of Ethiopian insurance corporation (EIC). In this paper, moreover, customers life insurance purchasing demand is investigated in relation to their demographic factors. This paper excluded also varied characteristics and effects of organizational and administrative factors affecting customers. Lastly, the study also does not include other macro-economic factors effect on buyers towards life insurance policy purchase too.

### **1.9 Organization of the Paper**

This paper will be organized into five chapters. Chapter one will try to present with introduction, Chapter two with the review of the related literature, and Chapter three discusses the methodology employed in the study, including, research design, sample size and sampling technique, data source and collection method, procedure of data collection, method of data analysis and model specification. Chapter four is about data

analysis and interpretation of results. Finally, chapter five will contain summary of findings, conclusions and recommendations.

## **CHAPTER II: - REVIEW OF RELATED LITERATURE**

### **2.1 Introduction**

The primary purpose of this chapter is to get the theoretical understanding and investigation of factors that affect life insurance purchase. First, overview of insurance concepts and developments in Ethiopia and fundamental nature of general insurance is explained based on scholar's theoretical lens. Second, defining life insurance based on the definitions given by different scholars on the terms and meanings of life insurance policy and adopted the meaning of the term as it is related to the study. Third, the literature review examined studies which have explained the need and purpose of purchasing life insurance policy for buyers. Fourth, the review of the literature has tried to assess unique nature of life insurance policy. Finally, it is tried to summarize the relationship of review of the literature to the current subject under the study.

### **2.2 Historical Development of Insurance Concept in Ethiopia**

As there is no acceptable evidence as to where and when the service called "Insurance" had begun in the global history of human civilization, it is true for Ethiopia too. However, some scholars and researchers in social systems speak affirmatively the existence in history, in the various form of traditional institutions formed on family, religious, tribal, national and on other parochial lines in Africa continent meant to combat fortuitous accidents in daily life. Among these social welfare Institutions in Ethiopia were "IDIR and IKUB" having some similarities with modern Insurance service (Wondaferaw, 2003).

For instance, in the case of “Edir” people form an association where by each members contributes affixed sum, normally to a common fund from which predetermined compensation are paid to members up on occurrence of un foreseen events such as death of family members or relatives. The compensations are meant to cover expenses that a member would incur as the result of the incidents. The “Edir” also owns physical asset like tents, house hold goods like plates and drinking cups, chairs and others were used during the periods of mourning. The other insurance type of association is “EKUB’ where member contribute affixed sum of money weekly, or monthly to a pool of fund and lots are cost where up on the winners receive the money so collided and uses for another member at a premium, if something happens to a member, who had already taken the money, that would not enable him to continue contributing to the fund, his guarantor will have to be held responsible or liable (EIC, Annual Report, 2013)

Although, people have been using these and others mutual associations, Insurance in its modern form could hardly be traced beyond the 1920’s the first Insurance business was transacted by the bank of Abyssinia (HABESH), which began operation in 1905 during the regime of Minilik II, as an agent to a foreign company, whereby, covers given were for fire and marine risks. Then after many foreign owned companies or in collaboration with other companies have exercised the service Insurance in Ethiopia. (Dechasa, 2015)

According to some researches, year 1951 marked the beginning of a new chapter in the history of Insurance industry in Ethiopia in that it witnessed the launching for the

first time entirely owned by Ethiopians called “Imperial Insurance Company” formed by the initiatives taken by some enlighten Ethiopians and the expatriates, which brought significant development in financial sector of the economy lead to the coming in to existence some eighteen company in 1954 operating in different parts of Ethiopia engage in offering coverage for life, marine, motor and fire or property Insurance services. Proclamation No. 281/70 which was the first Governmental act on the supervision of Insurance business in the country brought about a significant change, in that the government put the governmental control in place for it feel the promotion and protection of the public Interest was timely as the scope of Insurance business in the country expanded and Insurance registration license was setup under the Minster of trade and Industry tourism (Zelege, 2007).

Consequently, January 1975, the Government of “Dergue” Monopolized the service of Insurance under the title “Ethiopian Insurance Corporation established by proclamation No. 26/1975 which brought the right for the government to confiscated the 13 private companies ownership and the control under it.

After the demise of the Marxist regime in mid-1991 a fundamental change has taken place and there was a shift in political, economic and social orientation from totalitarianism to that of liberalism. Therefore, EIC was re-established as public enterprises under proclamation number 201/94 with Birr 61 million (USD 7.13 million) paid up capital.

Upon re-establishment of the corporation in 1994 as state owned enterprise, the law covers the following new objectives to the Corporation:

- Engage in the business of rendering insurance service ; and
- Engage in any other related activities conducive to the attainment of its purposes

(EIC, Company Profile)

As can be deduced from the above: Ethiopian Insurance Industry service development has been experiencing many ups and downs in different contemporary governmental policies which the country has experienced; however, the chance for the industry to exhibit immense growth was once lost during the time which by many is understood it as “missed opportunity” in all aspects of Ethiopian Economic life. In fact, the road trans versed so far has been courses while the future seems holding a challenging future whose fruits could be reaped only through determination to say good-bye-to stereotype models of thinking added to visions for qualitative changes.

However, the overall insurance industry performance of the country exhibits increase of 2% in terms of gross written premium was observed over the previous year’s performance though compared with the achievement of the country’s GDP, the growth in the sector of Insurance Industry was found to be minimal (EIC, Annual Report, 2013) .

As a result life insurance sector which is one of the major sections in EIC is responsible for insurance service dealing with the provision of different types of life insurance policy including endowment, term, and whole life and other types to the buyers has a long age of experience but with no significant development and achievement in market.

A supporting fact to the above statement is that the analysis of the life insurance business during the year 1967 to 1972 indicates that the share of life insurance in total gross premium income of the industry declined from 15, 1% in 1967 to 7.9% in 1972 (Zelege, 2007).

### **2.3 Definition and Concepts of Life Insurance**

Life insurance undertakes to protect the insured's family, creditors, or others against financial loss growing out of the death of the insured. The contract embodies an agreement in which the insurer undertakes to pay a stipulated sum upon the death of the insured, or at some designated beneficiary.

Legal status was given long ago to the definition which indicates the life insurance agreement to be: "a contract by which the insurer, for a certain sum of money or premium proportioned to the age, health, profession, and other circumstances of the person whose life is insured engages that, if such person shall die within the period limited in the policy, the insurer will pay the sum specified in the policy, according to the terms thereof, to the person in whose favor such policy is granted" (H.Magee & Bickelhaupt, 1964).

The above definition entails that like the general insurance, life insurance policy, has a contractual nature, in addition the policy provides methods for payment of the proceeds in installments or in some manner other than a lump sum; the choice is made by the insured, or by the beneficiary, if the insured has not made a choice.

As a social and economic device life insurance is a method by which a group of people may cooperate to ameliorate the loss resulting from the premature death of members

of the group. The insuring organization collects contributions from each member, invests these contributions, guarantees both their safety and a minimum interest return, and distributes benefits to the estates of the members who die (Assefa, 2004).

From the above definition, for many people, the risk management tool that is most appropriate for dealing with the exposure of premature death is life insurance. There are many different types of life insurance, but the standard arrangement is contract specifying that upon the death of the person whose life is insured, a stated sum of money (the policy's face amount) is paid to the person designated in the policy as the beneficiary.

In a personal risk management program, life insurance is an important technique for alleviating the financial consequences of premature death (E.Rejda, 1995). Life insurance death benefits can restore, either partly or completely, the family's share of the decreased bread winner's earnings. There are numerous life insurance policies that can be purchased to meet the financial goals and objectives of consumers. However, because life insurance policies are complex, consumers can become confused about the type of life insurance to buy.

## **2.4 Theoretical Review**

Theoretical models for the life insurance demand have been established by (Yaari, 1965), Pissarides (1980), Campbell (1980), Karni and Zilcha (1985, 1986), Lewis (1989), and Bernheim (1991) were of the view that life insurance was the way by which risk in the household's income, linked to the expected premature death of a household's primary wage earner, was decreased. (Yaari, 1965)

The issue of life insurance demand is not new for researchers and was brought to light beginning from (Yaari, 1965) was the first to develop a theoretical framework to explain the demand for life insurance. Within Yaari framework, the demand for life insurance is attributed to a person's desire to bequeath funds to dependents and provide income for retirement. This framework posits the demand for life insurance to be a function of wealth, expected income over an individual's lifetime, the level of interest rates, the cost of life insurance policies (administrative costs), and the assumed subjective discount rate for current over future consumption.

Simple models of insurance demand were proposed by (Mossin, 1968) considering a risk averse decision maker endowed with an initial wealth level. The results indicate that demand for life insurance varies inversely with the amount of wealth an individual possesses. Hakansson (1969) examined bequest motive in considerable detail using a discrete-time model of demand for financial assets in general and life insurance purchase in particular. Pissarides (1980) extended Yaari's work to prove that life insurance was theoretically capable of absorbing all fluctuations in lifetime income. (Karni, 1985) Developed a methodology towards measuring individuals' risk perceptions (risk averse or otherwise) and how such perceptions affect insurance demand. An important observation made by (Mossin, 1968) was regarding insurance coverage as an inferior good. However, (Briys, 1989) generalized the results showing insurance to be a 'Giffen' good.

(Lenten & Rulli, 2006) extends this framework by explicitly incorporating the preferences of the dependents and beneficiaries into the model. Specifically, he

derives the demand for life insurance as a maximization problem of the beneficiaries, the spouse and the offspring of the life insurance policyholder. Deriving utility maximization by both spouse and offspring separately and assuming no bequest by the policyholder and an is elastic utility function.

(Fortune, 1973) Analyzed the empirical implications of expected utility hypothesis of choice under uncertainty for demand for life insurance and concluded that demand depends on income, non-human wealth and the rate of discount.

(Madura, 2010) on his book on financial markets and institutions stated that Life insurance companies compensate the beneficiary of a policy up on the policyholder's death. They charge policyholders a premium that should reflect the probability of making a payment to the beneficiary as well as the size and timing of the payment. Life insurance companies also commonly offer employees of a corporation a group life policy.

In short, the theoretical review yields variables like income, rate of interest, current consumption and accumulated savings in wealth form as variables influencing insurance consumption. Demographic and social variables were also incorporated in theoretical models and their potential impact on an individual's life insurance consumption decision was investigated. Life insurance consumption increases with the breadwinner's probability of death, the present level of family's consumption and the degree of risk aversion. In the next section, I explore selected empirical studies to highlight those variables which were significant in affecting life insurance demand.

## **2.5 Empirical Review**

(Truett & Truett, 1990) On their comparative study on the demand for life insurance in Mexico and the United States identified that age, education, and level of income affect the demand for life insurance and that the income elasticity of demand for life insurance is much higher in Mexico than in the United States.

Based on a cross-sectional analysis of 45 developing countries, (Outreville, 2011) analyzed the demand for life insurance for the period 1986. The study considered variables like agricultural status of the country in terms of percentage of agricultural labour force in total labour force; health status of the country in terms of amenities like percentage of population with access to safe drinking water; percentage of labour force with higher education and the level of financial development. Two dummy variables were used to reflect competition in the domestic market and foreign insurer participation. Their result shows that personal disposable income and level of financial development significantly relates to insurance development. Since the political philosophy regarding market openness varies from country to country, market structure dummy appeared to be significant.

(Beck, 2002) Conducted a comprehensive research over 68 countries of the world, paying attention to the question what causes the variance in life insurance consumption between different countries. Four different measures of life insurance consumption and incorporate various economic, demographic and institutional factors used in their research. As a result, they found that countries with higher income per capita level, more developed banking sector and lower inflation tend to

consume larger amounts of life insurance. In addition, life insurance consumption is observed to be positively influenced by private savings rate and real interest rate. Such demographic factors as education, life expectancy, young dependency ratio does not have any robust influence on the life insurance consumption.

As to the world bank economic review (2003) the economic indicators such as inflation, income per capital and banking sector development- the religious and institutional indicators are the most robust predictors of the use of life insurance. Education, life expectancy, the young dependency ratio and size of the social security system appear to have no robust association with life insurance consumption.

Lim and Haberman (2003) on their work identified that the savings deposits rate and price change in insurance are two important macroeconomic variables associated with the demand for life insurance in Malaysia. However, the finding on the savings deposits rate fails to show the expected negative sign. They recommended as further research is needed in this respect in order to confirm the relationship between these two variables. A change in the price of insurance has a significant negative relationship with the demand for life insurance. .

Li et.al (2007) they analyzed the determinants of aggregate life insurance demand on a cross-section of developed economies. They found that income plays a major role in the consumption of life insurance products. An increase of 1 percent in aggregate income can be expected to induce at least a 0.6 percent increase in aggregate life insurance demand. In particular, the demand for life insurance decreases with the average life expectancy (lower probability of death) and increases with the

dependency ratio (number of dependents). Education level is positively related to life insurance demand, whereas the influence of social security expenditure is significantly negative. On the other hand, inflation significantly decreases the demand for life insurance. High real interest rates do not persuade households to purchase more insurance, but actually stimulate them to reduce their purchase either because of higher expected benefits for the same invested amount or because of higher preference for immediate consumption relative to deferred consumption

Based on panel data analysis for 14 selected CIS and CEE countries over the period 1996-2006 Nesterova (2008) found that countries with higher life expectancy at birth, income level, old dependency ratio and countries-members of the European Union have higher levels of life insurance consumption, while financial development indicator, inflation and real interest rate reduce the demand for life insurance across countries.

(Kayali, 2009) investigated the determinants of demand for life insurance in cross section of 31 European countries. They found that income is the central variable which affects life insurance consumption. In addition, while the impact of population and income on demand for life insurance is positive, education level and inflation affect life insurance consumption in negative way.

(Kakar & Shukla, 2010) on their research determinants of demand for life insurance in an emerging economy -India using logistic regression has confirmed that insured households tend to be more prosperous, more educated and more optimistic about future security than non-insured households. Both the level of education and

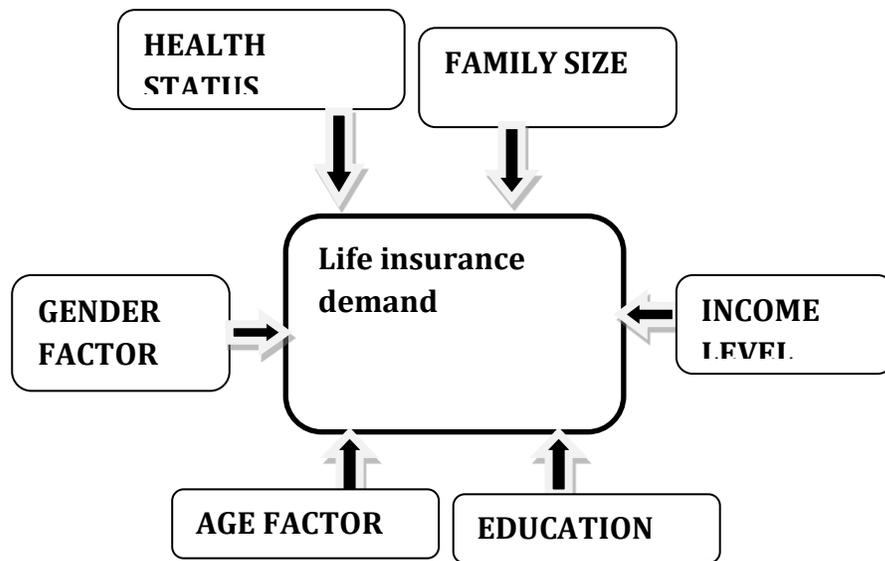
occupation of the chief earner of a household are major determinants of life insurance participation, apart from asset-ownership. Further, households that are more optimistic about the adequacy of future income and savings show higher levels of participation.

(Redzuan, 2011) identified that income is the key determinant in the consumption of life insurance both in the long- and short-run. Evidence also suggests that income has a significant influence on family tactful consumption in the long-run, but its effect is less obvious in the short-run. The number of dependents, level of education, savings in the Employees' Provident Fund (EPF), life expectancy and price of insurance are among the other factors that have a significant impact on the demand for life insurance and family tactful.

(Gashayie, 2013) on his article on determinants of life insurance in Ethiopia examined the determinants of life insurance by a time series data for the period 1991-2010. He identified that life insurance is determined by per capita income, life expectancy, real interest rate and inflation. It is suggested that life insurance industry in Ethiopia seriously consider these factors to bring growth in the insurance industry.

## **2.6 The Conceptual Frame Work of the study**

The conceptual frame work of the study is developed to find out the interrelation between independent variables and dependent variable. The Independent variables are HEALTH STATUS, EDUCATION LEVEL, GENDER FACTOR, INCOME LEVEL, AGE FACTOR and FAMILY SIZE while, the dependent variable is Life insurance demand.



**Figure 2.1: Conceptual Frame Work of the study**

## **CHAPTER III: - RESEARCH METHODOLOGY**

### **3.1 Introduction**

This section of the study presents the methodology that the researcher used to select sample, collect data and analyze the data in accordance with assessing different factors and their effect on customer buying attitude.

### **3.2 Research Design**

The researcher used descriptive research design to assess factors affecting life insurance demand. A descriptive research intends to present facts concerning the nature and status of a situation, as it exists at the time of the study and to describe present conditions, events or systems based on the impressions or reactions of the respondents of the research (Creswell, 1994). Accordingly the researcher merely intended to present the state affairs as it prevails at the time of this study conducted.

### **3.3 Source of data**

To accomplish the research mainly primary data was used with additional reference from a secondary source of data. The primary source of data was collected through structured questionnaire.

### **3.4 Method of sampling**

The sampling technique that was used in this study was Convenience sampling, for the purpose of gathering primary data. Convenience sampling (also known as availability sampling) is a specific type of non-probability sampling method that relies

on data collection from population members who are conveniently available to participate in study Saunders et. al, (2012).

As the aim of this research is to describe and investigate life insurance purchase demand, therefore, the target population is defined as all buyers' who have purchased life insurance from EIC and aged 18 years or older . The age restriction is made to select only actual buyers of life insurance policy that involves a kind of independent decision.

In order to gather pertinent information with respect to the buyers' factors towards life insurance purchase a structured questionnaires were distributed to buyers who have been purchasing life insurance at the help desk for different reasons. And among the distributed questionnaires of 120 only 100 were fully completed and returned with a return rate of 83.3% which is acceptable. Pursuant to the limited variety of insurance policies available to the customers and the researcher considered as the population has homogenous nature and randomly determined the 120 sample size.

### **3.5 Method of data collection**

The preferred instrument for primary data collection in this study was self-administered questionnaire. This is because primarily it provides relatively simple and straight forward approach for investigation of life insurance demand. Secondly it allows respondents relative freedom and thirdly it is efficient in providing large amounts of data at relatively low cost in a short period. Structured questionnaires, whose reliability and validity, in same title already tested by (Yusuf.T Gbadamosi. A & Hamadu.D 2009) was used with some context modification to all selected sample

strata. The first section consists of 6 questions regarding the demographic aspect of the respondents and the second part of the questionnaire gives us ability to filter data and the third section consists of 26 statements evaluated on a 1-5 Likert Scale, where '1' indicates strongly disagree with the statement, and '5' refers to strongly agree with the statement. The third part of the questionnaire consists of questions where the respondents were asked to describe the answers on the space provided for personal responses.

### **3.6 Method of data analysis**

Before analyzing, various procedures were taken in organizing the data in structured and homogenous ways. The data is then analyzed using a multiple regression analysis as mentioned earlier; the result of the study is presented in table form, percentages and charts.

After the data collection and coding, the appropriate data analytic techniques were included. Charts and tables were used in order to analyze the demographic features of the respondents.

### **3.7 Description of Variables and Measurements**

Life insurance demand was measured by one question which describes the overall given factor by the customers. The questions of different factors was followed by a five-point Likert scale having a range of levels like 1, strongly disagree; 2, disagree; 3, neutral; 4 and agree 5. Strongly agree

### 3.8 Model Specification

The research used multiple regression analysis (i.e. a popular and widely used analysis that is similar to linear regression analysis except that the outcome is dichotomous (e.g., success/failure or yes/no or died/lived) for analyzing the factors affecting life insurance demand. The dependent variable (i.e. life insurance demand) is a function of independent variable dimensions.

The equation is:  $LD = \alpha + \beta_1HS + \beta_2EDL + \beta_3GF + \beta_4ECL + \beta_5AF + \beta_6FS + \epsilon$

Where, LD is the measured value of life insurance demand

$\alpha$  is constant term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  are coefficient of the variables

HS: is the measured value of HEALTH STATUS

EDL: is the measured value of EDUCATION LEVEL

GF: is the measured value of GENDER FACTOR

ECL: is the measured value of INCOME LEVEL

AF: is the measured value of AGE FACTOR

FS: is the measured value of FAMILY SIZE

$\epsilon$ - Error term

## **CHAPTER IV: - DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

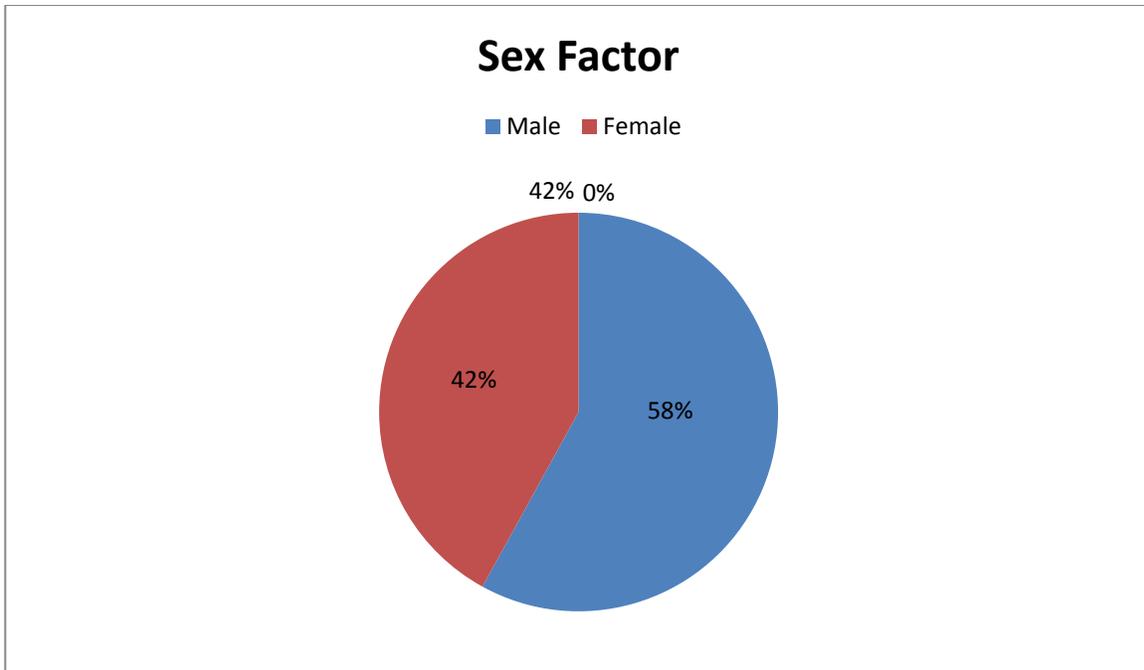
### **4.1 INTRODUCTION**

The analysis and interpretation of this study is based on the data collected from the customers of selected EIC branches currently operating in Addis Ababa. The data was collected through survey questionnaire. The survey questionnaires were distributed to a randomly selected 120 life insurance policy holders, and 100 distributed questionnaires were properly completed and returned. Hence, the data gathered were organized and analyzed in a manner that enables to answer the basic research questions raised at the beginning of the study.

This chapter is broadly categorized in to three sections. The first section explores the respondents' profile. The second section deals with multicollinearity analysis which shows whether an overlap or sharing of predictive power of independent variables is observed or not. The third section shows a brief description of the regression output and hypothesis testing result.

### **4.2 REVIEW OF RESPONDENT'S PROFILE**

The questionnaires were distributed with convenient sampling method to the respondents who are eligibly available at the counter of selected branches. The demographic characteristic consists of sex, age, educational background, employment level, income category and years spent in using the life insurance policy. This aspect of the analysis deals with the personal data which is briefly described through the pie chart and tables found below.



*Source: Own Survey (2016).*

**Figure 4.1 Respondent’s Gender Mix**

The above pie chart gives information on the composition of the respondents in terms of sex. The reason that the researcher included this part is for example, to make sure that respondents are in appropriate mix in terms of gender. As a result, the responses to the items in the instrument are also expected to be balanced.

The survey showed that there were more males as compared to females. Male respondents represented 58%; on the other hand 42% were females. As a result, as the pie chart indicates there is an appropriate mix of gender in the study.

**Table 4.1 Respondent's Age Composition**

	Frequency	Percent	Valid Percent	Cumulative Percent
18-28	6	6.0	6.0	6.0
29-41	19	19.0	19.0	25.0
42-53	28	28.0	28.0	53.0
54-61	21	21.0	21.0	74.0
>62	26	26.0	26.0	100.0
Total	100	100.0	100.0	

*Source: Own Survey (2016).*

A table 4.1 summarizes the respondents' age composition. Information on age might give a clue about respondents' understanding level about the issues raised on the survey questionnaires. Most of the respondents are in the age range of 42-53 and it's also about 28% of the total sample size. The second largest portion was found to be the age category of greater than or equal to 62 years.

**Table 4.2: Educational Background**

	Frequency	Percent	Valid Percent	Cumulative Percent
DIPLOMA	2	2.0	2.0	2.0
FIRST DEGREE	69	69.0	69.0	71.0
MASTERS AND ABOVE	29	29.0	29.0	100.0
Total	100	100.0	100.0	

*Source: Own Survey (2016).*

When it comes to the educational background of respondents, it is clearly understood from the above table 4.2 that about 98% of the respondents are first and second degree holders. This indicates that most of the respondents can understand and evaluate the subject matters and its paramount important for the successful acquisition of the respondent's valuable judgment pertaining to the study area.

**Table 4.3: Years Spent In Using Life Insurance**

	Frequency	Percent	Valid Percent	Cumulative Percent
LESS THAN ONE YEAR	23	23.0	23.0	23.0
FROM 2-3	24	24.0	24.0	47.0
FROM 3-5	12	12.0	12.0	59.0
MORE THAN FIVE YEARS	41	41.0	41.0	100.0
Total	100	100.0	100.0	

*Source: Own Survey (2016).*

As it can be easily observed on the above mentioned table, about 41% of the respondents found to spend more than five years of using life insurance policy of availed by EIC. It's reached that 77% percent of the respondents were using life insurance facilities for more than two years.

**Table 4.4: Household Income Category**

	Frequency	Percent	Valid Percent	Cumulative Percent
12001-15000	33	33.0	33.0	33.0
>15000	67	67.0	67.0	100.0
Total	100	100.0	100.0	

*Source: Own Survey (2016).*

A table 4.4, deal with household income category of the respondents and 67% portion of the respondents earn more than ETB 15,000.00. The remaining 33% fall under the income category from ETB 12,001 up to 15,000 and the rest of income categories were found to be insignificant for this study.

**Table 4.5: Employment Level**

	Freque ncy	Percent	Valid Percent	Cumulative Percent
PERMANEN T	19	19.0	19.0	19.0
PROBATION	1	1.0	1.0	20.0
CONTRACT	42	42.0	42.0	62.0
PART TIME	38	38.0	38.0	100.0
Total	100	100.0	100.0	

*Source: Own Survey (2016).*

As table 4.5 shows, respondents who are not considered as permanent and controlled by a company's holds the highest portion and part time workers were found to be the second largest section of the total respondents.

In general, the above analysis of respondents profile information provides some insight on the number of buyers in each age range or sex category but it does not tell whether age or sex has statistical association or relation with buyers' purchasing power to life insurance policy.

## **4.3 Tests for the CLRM Assumptions**

### **4.3.1 Test of Multicollinearity**

It's true that, one obstacle that presents difficulty in rendering regression analysis is the existence of multicollinearity. Multicollinearity refers to the situation when independent variables are multi collinear; there is overlap or sharing of predictive power. This may lead to the paradoxical effect, whereby the regression model fits the data well, but none of the explanatory variables (individually) has a significant impact in predicting the dependent variable Gujarati (2004). This is because when the predictor variables are highly collinear with one another, they share essentially the same information. Thus, together, they may explain a great deal of the dependent variable, but may not individually contribute significantly to the model. Thus, the impact of multicollinearity is to reduce any individual explanatory variable's predictive power by the extent to which it is associated with the other explanatory variables. A number of different methods can be used for diagnosing collinearity problem. The most used one is the variance inflation factor (Weisberg, 1985).

**Table 4.6: Collinearity Statistics**

Model	Collinearity Statistics	
	Tolerance	VIF
EDUCATION LEVEL	.297	3.368
GENDER FACTOR	.428	2.337
HEALTH STATUS	.595	1.681
INCOME LEVEL	.207	4.833
AGE FACTOR	.293	3.410
FAMILY SIZE	.440	2.274

*Source: Generated from SPSS output (2016).*

As it can be presented in table 4.6, the explanatory variables included in the study were not significantly suspected to multicollinearity problem because all of the VIF coefficients are below 5. As a result, none of the predictor variables contribute uniquely and significantly to the prediction of independent variable after the other independent variables is included.

#### **4.3.2 Autocorrelation Assumption**

The autocorrelation assumption is made of the CLRM's disturbance terms and the covariance between the error terms over time is zero; it assumed that the errors are uncorrelated with one another. Usually, Durbin-Watson (DW) test is used for first order autocorrelation. It tests a relationship between an error term and its immediately previous value. As we observe from table 4.7 the value of DW statistics is 1.2036950.

**Table 4.7: Durbin-Watson Test**

Model	R	R-squared	Adjusted R-squared	Std. Error of the Estimate	Durbin-Watson stat
1	.832(a)	.693	.670	.250	1.2036950

*Source: Generated from SPSS output (2016).*

As stated on the work of (Brook, 2008). *DW* has 2 critical values: an upper critical value ( $dU$ ) and a lower critical value ( $dL$ ), and there is also an intermediate region where the null hypothesis of no autocorrelation can neither be rejected nor not rejected. The relevant critical values for the test are  $dL = 0.88$ ,  $dU = 1.61$ , so  $4 - dU = 3.12$  and  $4 - dL = 2.39$ . The test statistic (1.2036950) clearly lies between the upper and 4 minus the upper limits and hence the null hypothesis of no autocorrelation is not rejected and it would be concluded that the residuals from the model appear to be not auto-correlated. Therefore, the analysis satisfies the assumption of independent of errors.

### **4.3.3 Hypothesis Testing**

In order to understand and determine the significant and positive relationship between independent and dependent variables, a number of hypotheses were devised. The regression analysis shows sig. test of determinant factors that affect life insurance demand along with the degrees of freedom to check the hypothesis which was formulated by the researcher.

According to the Table 4.6, there is a significant relationship between the five dimensions of service quality and customer satisfaction since their coefficients are

significant at 1% significant level. Furthermore, the hypotheses were devised and tested as shown below:

H<sub>1</sub>: There is statistically significant and positive relationship between health status and life insurance demand.

Research hypothesis one predicts a statistically significant and positive relationship between health status and life insurance demand. Similar to the hypothesis, the regression output showed positive and statistically significant relationship and this would enable the researcher not to reject the hypothesis H<sub>1</sub>.

H<sub>2</sub>: There is statistically significant and positive between education level and life insurance demand.

Research hypothesis two predicts a statistically significant and positive between education status and life insurance demand. Similar to the hypothesis, the regression output witnessed the positive and statistically significant relationship and this would enable the researcher not to reject the hypothesis H<sub>2</sub>.

H<sub>3</sub>: There is statistically significant and positive relationship between gender factor and life insurance demand.

Research hypothesis three predicts a statistically significant and positive relationship. However, contrary to the hypothesis, the regression output showed negative relationship is noted. Therefore, this would enable the researcher to reject the hypothesis H<sub>3</sub>.

H<sub>4</sub>: There is statistically significant and positive relationship between income level and life insurance demand.

Research hypothesis 4 predicts a statistically significant and positive relationship. Similar to the hypothesis, the regression output noted that positive and is statistically significant relationship and this would enable the researcher not to reject the hypothesis H<sub>4</sub>.

H<sub>5</sub>: There is statistically significant and positive relationship between age factor and life insurance demand.

Research hypothesis five predicts a statistically significant and positive relationship and likely to the hypothesis, it's observed that there is positive and statistically significant relationship and this would enable the researcher not to reject the hypothesis H<sub>5</sub>.

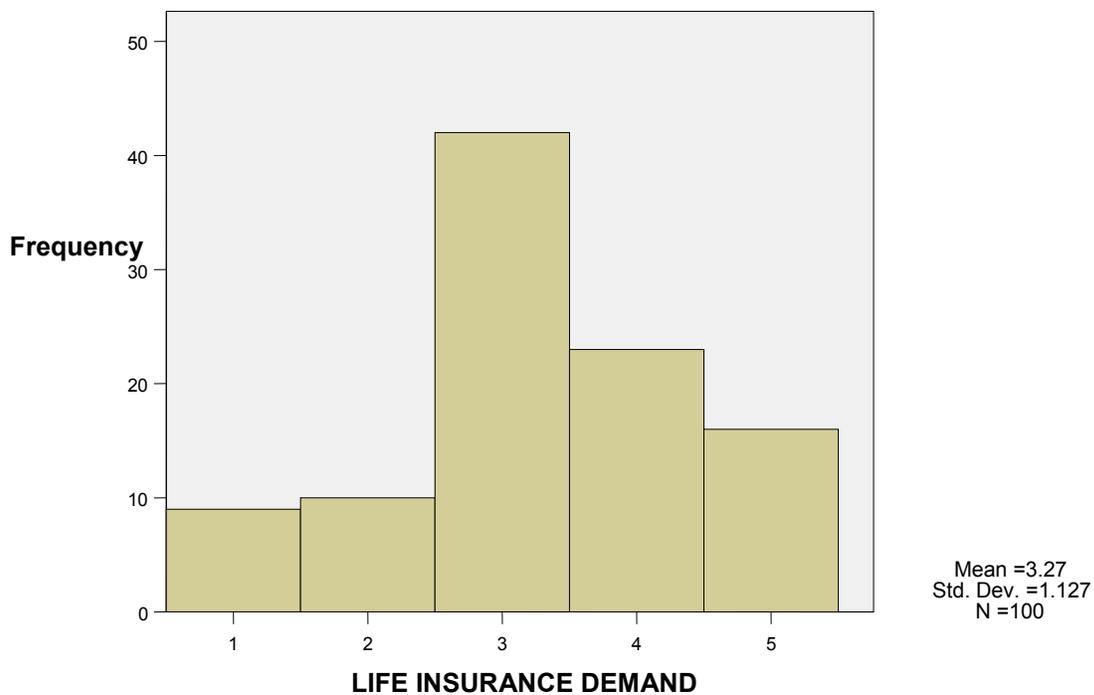
H<sub>6</sub>: There is statistically significant and positive relationship between family size and life insurance demand.

Research hypothesis five predicts a statistically significant and positive relationship and unlike to the hypothesis, it's observed that there is negative and statistically significant relationship and this would compel the researcher to reject the hypothesis H<sub>6</sub>.

#### 4.3.4 Test of Normality

Normality test of data is applied to determine whether a data is well-modelled by a normal distribution or not, and to compute how likely an underlying random variable is to be normally distributed. It's known that an absolute value of the score greater than 1.96 or lesser than -1.96 is significant at  $P < .05$ . Consistent with the above assumptions the z-value lies between -1.96 and +1.96 since when the skewness value which is .251/.241 it gives as 1.04 and while the Kurtosis value is -.330/.478 gives a z-value of -.690. Therefore, the required z-value lies between 1.96 and -1.96 and it can be noted that it's approximately normally distributed in terms of skewness and kurtosis.

**Figure 4.2: Test of Normality**



#### 4.4 Regression Analysis

Multiple regression analysis was employed to test the determinant factors affecting life insurance demand. It is a useful technique that can be used to analyze the relationship between a single dependent and several independent variables (Hair et al., 1998).

**Table 4.8: Regression Analysis result**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.280	.477		6.878	.000
	HEALTH STATUS	.014	.062	.042	.233	.000
	EDUCATION LEVEL	.091	.059	.144	1.536	.008
	GENDER FACTOR	-.145	.095	-.395	-1.525	.003
	INCOME LEVEL	.462	.054	.771	8.574	.000
	AGE FACTOR	.199	.091	.347	2.196	.001
	FAMILY SIZE	-.196	.107	-.403	-1.825	.007
2	R	R Square	Adjusted R Square	Std. Error of the Estimate		
	.832(a)	.693	.670	.250		

Source: Own Survey (2016).

As it can be noted on Table 4.8, the coefficient of adjusted ( $R^2$ ) was 0.67, representing that 67 percent of life insurance demand can be predicted due the change has been observed by the above six mentioned explanatory variables. The remaining 33% change in the dependent variable is because of other factors that are not included in the model. Thus, the six independent variables namely income level, health status, age, gender, education level and family size significantly determine the life insurance demand. The sig. (p-value) shows that all explanatory variables except the educational level and family size are statistically significant at five percent significance level. Finally, the research found the established regression function as follows:

$$LI = 3.280 + .014 * HS + 0.091 * EDL - 0.145 * GF + .462 * ECL + 0.199 * AF - 0.196 * FS$$

As it can be observed from table 4.8, the regression proves as there is both positive and negative relationship and significant relationship between the explanatory variables and that of the dependent variable.

Accordingly, the effect of income level is much higher and superior to the remaining explanatory variables with a  $\beta$  coefficient of 0.462 and it's a significant predictor of life insurance demand. Consistent with a study conducted by Sarkodie and Yusuf, (2015), income was significant in affecting purchasing power of life insurance for Ayeduase-Kumasi Community, Ghana. Thus, a 1% change in income level of life insurance policy holders would result a 46.2 percent increase on life insurance demand. This result agreed with various previous research findings like Chang. et. al., (2013) and Mekonnen, (2010). They confirmed that the significant positive

relationship of income level and life insurance demand. As a result it can be consistent with the general notation that a higher level of education may lead to a greater degree of risk aversion and more awareness of the necessity of insurance in and in particular with Greene and Swadener, (1974) it is assumed that a higher level of education may lead to a greater degree of risk aversion and more awareness of the necessity of life insurance purchase.

Age factor is the second determinant variable and the second strong indicator followed by family size, gender factor, and education level and health status in explaining the dependent variable life insurance demand. Therefore, a 1% increase in age factor would result 19.9 percent rise on the dependent variable.

In order to understand and determine the significant and positive relationship between independent and dependent variables, a number of hypotheses were devised. The regression analysis shows sig. test of determinant factors that affect life insurance demand along with the degrees of freedom to check the hypothesis which was formulated by the researcher.

According to the Table 4.6, there is a significant relationship between the five dimensions of service quality and customer satisfaction since their coefficients are significant at 1% significant level. Furthermore, the hypotheses were devised and tested as shown below:

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regression output showed positive and statistically significant relationship and this would enable the researcher not to reject the hypothesis H<sub>1</sub>.

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H<sub>6</sub>: There is statistically significant and positive relationship between family size and life insurance demand.

Research hypothesis five predicts a statistically significant and positive relationship and unlike to the hypothesis, it's observed that there is negative and statistically significant relationship and this would compel the researcher to reject the hypothesis H<sub>6</sub>.

## **CHAPTER V: - SUMMARY, CONCLUSION AND RECOMMENDATION**

### **5.1 INTRODUCTION**

The study was intended to investigate the effect of determinant factors of life insurance demand taking a case to selected branches of EIC. Accordingly, this chapter briefly sums up the overviews of its main outcomes, conclusion of the study and recommendations pertaining to the identified findings. Finally, future research directions are also presented.

### **5.2 Summary of Major Findings**

Based on the analysis made in previous chapter, summary of major findings are drawn as follows.

- ☞ As it can be observed from the descriptive analysis of respondents profile result, the actual respondent's background ratings describes as there is appropriate mix on age and sex composition and this would provide the researcher to build some insight on the general composition of life insurance policy holders.
- ☞ It is observed that the selected demographic factors are paramount important antecedent of life insurance demand. Among the six determinant factors, income level takes the highest fraction in influencing the purchasing power of people's life insurance policy followed by age factor, family size, gender, education level and health status.
- ☞ Age factor is the second explaining variable with  $\beta$  coefficient of 0.199. This determinant factor also has a significant and positive relationship with life

insurance demand. Thus, a 1% increase in people's age dependably would result 19.9 percent rise on the purchasing decision of peoples.

☞ The result of this study also shows that, except gender factor and family size the remaining four determinant factors have statistical significance and positive relationship with the dependent variable which is life insurance demand.

### **5.3 Conclusion**

The study aims to assess the determinant factors affecting life insurance demand and the significant relationship existed between independent variables and that of the dependent variable.

Questionnaire method was employed to collect all the necessary data and 83.3% of 120 questionnaires were completed and returned. The explanatory variables included in the study were not suspected to multicollinearity problem since all of the VIF coefficients of independent variables were below 5. Therefore, none of the variables contribute and predict of independent variable after the other independent variables is included.

Moreover this study had similar results to previous studies and deviates as well. As the regression analysis shows that, the selected determinant factors are important antecedent of life insurance demand. This weighty link is more sustained by adjusted  $R^2$  result which constructs that more than 67% change in life insurance demand is arising due to the change made by the six variables namely health status, education level, gender factor, income level, age factor, family size. Beside among the six

determinant factors, economic level takes the lion share in explaining the purchasing power of life insurance holders.

Above all, the proposed model was adequate as the overall significance test observed at ten percent significant level. In addition, all the hypotheses were strongly supported and the proposed framework of the present study was able to demonstrate positive and significant relationship between explanatory and dependent variables. Therefore, notably this study provides evidence for the direct effect of the six determinant factors on life insurance demand as suggested by the literature.

#### **5.4 Recommendation**

Here, the researcher forwarded the following recommendations to the management of the EIC and suggestion for other researchers. The main theme of the recommendation focuses on the proper enhancement of six determinants of life insurance demand.

- ☞ As the regression output shows, income level of societies set aside as an important and highly determinant factor as compared to the remaining variables in affecting the customers perception toward the chance of purchasing or acquiring life insurance policy. Thus insurance companies need to reduce their premium price so that to make it affordable for the lower income generating group. Rather, market segmentation could also help insurance firms to address all income level of customers and this would finally result to minimize their premium charges.

- ☞ As the education level have significant and positive relationship with life insurance demand, NBE and insurance companies should further enhance the existing level public awareness by using different approach. For instance they can use different Medias, internet and billboard as a medium of promotion and such advertisement programs will be much productive in creating big picture to the general public.
- ☞ Finally, the researcher suggests that such area needs further investigation which should be conducted in large sample size so that the life insurance business could have grown more than its present status and internal researchers of insurance companies should also measure their customer expectation toward identifying determinants factors of life insurance business so that wisely improve their existing practice and gain a strategic advantage and survive in today's ever-increasing competitive environment.

## **5.5 Direction for Future Research**

This study was conducted to examine the determinant factors of life insurance demand in the case of selected branches of EIC currently operating in Addis Ababa.

However, the present study has a number of limitations which can be overwhelmed by the future studies. Firstly, the nature of sampling unit under study cannot be generalized to a larger population and future researches should have to draw sample of respondents on more number of branches for the sake of generalizing the results of the study.

Secondly, future study should use more insurance companies in order to conduct the study that creates a comprehensive picture about nationwide life insurance demand

from customer perspective. Therefore, it's better if the proposed model can also be extended to other insurance businesses as well so that to identify the gap.

## Reference

- Assefa, T. (2004). Risk Management and Insurance,. *Mekele University, Faculty of Business & Economics*.
- Beck, T. a. (2002). Economic, Demographic, and Institutional Determinants of Life Insurance Consumption across Countries.
- Briys, E. G. (1989). *More on Insurance as a Giffen Good*.
- Dechasa, D. B. (2015). ASSESSING THE CHALLENGES OF SALE OF LIFE INSURANCE PRODUCTS WITH REFERENCE TO ETHIOPIAN INSURANCE CORPORATION IN HAWASSA DISTRICT. *PEZZOTTAITE JOURNALS*.
- Dorfman, M. (1978). *Introduction to Insurance Practice; 4th Ed*. New Jersey, U.S.A.: Pearson Education Inc, Upper Saddle River.
- E.Rejda, G. (1995). *Principles of Risk Management and Insurance*. Harper Collins College Publisher.
- EIC. (2013). *Annual Report*.
- EIC. (n.d.). *About us*. Retrieved 2016, from EIC Official website: [www.eic.com.et](http://www.eic.com.et)
- EIC. (n.d.). *Company Profile*. Retrieved from EIC: [eic.com.et](http://eic.com.et)
- Fortune. (1973). Journal of Finance. *A Theory of Optimal Life Insurance: Development and Tests*.
- Gashayie, A. (2013). *Determinants of Life Insurance in Ethiopia: International Journal of Research in Commerce & Management*.
- H.Magee, J., & Bickelhaupt, D. L. (1964). *General Insurance*.
- Kakar, P., & Shukla, R. (2010). The Determinants of Demand for Life Insurance in an Emerging Economy—India. *The Journal of Applied Economic Research*.
- Karni, E. a. (1985). *“Uncertain Lifetime, Risk Aversion and Life Insurance*.
- Kayali, S. Ç. (2009). Determinants of demand for life insurance in European countries. *Problems and Perspectives in Management*.
- Lenten, L. J., & Rulli, D. N. (2006). A Time-Series Analysis of the Demand for Life Insurance Companies in Australia: *Australian Journal of Management*,.
- Madura, J. (2010). *Financial markets and institutions*.
- Mossin, J. (1968). *Aspects of Rational Insurance Purchasing*.
- Outreville, J. F. (2011). The Relationship Between Insurance Growth And Economic Development:. *80 Empirical Papers For A Review Of The Literature*.

Redzuan, H. (2011). Analysis Of The Demand For Life Insurance And Family Takaful.

Truett, D. B., & Truett., .. a. (1990). *The Demand for Life Insurance in Mexico and the United States*.

Wondaferaw, M. (2003). Comparative Analysis of the Performance of Private and Public Insurance Companies.

Yaari, M. (1965). *Uncertain Lifetime, Life Insurance, and the Theory of the Consumer*.

Zelege, H. (2007). *Insurance in Ethiopia, Historical development, Present status and future challenges*.

# ANNEX 4 QUESTIONNAIRES

## PART I. RESPONDENT'S BACKGROUND INFORMATION

1. Sex

- 1 Male                      2 Female

2. Educational Background

- 1 Diploma                      2 1st Degree                      3 Masters & Above

3. Current employment status

1. Permanent                      2. Probation                      3. Contract                      4. Part Time

4. Please indicate the range that best describes your monthly household income.

1. From Birr 1,000 – 5,000                      2. From Birr 5,001 – 8,000  
3. From Birr 8,001 – 12,000                      4. From Birr 12,001 – 15,000  
5.  $\geq$ Birr 15,001

5. Age:

1. 18-25                      2. 26-36                      3. 37-49                      4. 50-60                      5. >60

6. How many years you spent using of life insurance policy?

1. Less Than One year                      3. From 2-3  
2. From 1-2                      4. From 3-5  
5. More Than Five years

7. What type of life insurance policy do you have? *Please tick as many as applicable.*

1. Endowment Policy (meant for savings purposes like education, retirement etc.)  
2. Term Insurance ( provides a certain amount of life insurance coverage for a specified maturity period say 1year, 5years, 10years etc).  
3. Whole Life Insurance (provides lifetime protection –i.e. promises “till death do us apart”)

**PART TWO: DETERMINANTS OF LIFE INSURANCE DEMAND**

Please circle your feelings to each statement using 5 Likert scale [(1) = strongly disagree; (2) =disagree; (3) = neutral; (4) = agree and (5) = strongly agree]

**a. INCOME:**

Questions	Range of Agreement				
	SD	D	N	A	SA
I am satisfied with my current income/salary.					
My income is enough for my monthly spending.					
Incomes directly affect the purchasing power.					
I have a habit of monthly saving.					
My monthly income is proportionally allocated.					

**b. THE SIZE OF FAMILY**

Questions	Range of Agreement				
	SD	D	N	A	SA
Do married households are predicted to have grater probability to own life insurance.					
The increased of number of children will increased my spending.					
The more the children, the harder for me to taking care of them.					
The size of family will influenced my purchasing decision.					
The family members who are still in school or unemployed will consider as my burden.					

**c. LEVEL OF EDUCATION**

Questions	Range of Attitudes				
	SD	D	N	A	SA
An individual education level is positively related to greater risk aversion.					
With better educated makes me more aware of the risk and the hazard of financial stability.					
A society with higher education is likely to be more knowledgeable about how to prevent the unfortunate events.					

The education would increase my understanding of living necessity and responsibilities.					
I believe with higher education of level it will alert me the importance and benefits of life assured.					

**d. AGE**

Questions	Range of Agreement				
	SD	D	N	A	SA
Life insurance is important in all group of age.					
When age increase, health status are more risky.					
Life insurance more expensive as I get older.					
Women live longer life than men.					
Age and Gender will affect the insurance buyer attitude.					

**e. GENDER**

Questions	Range of Agreement				
	SD	D	N	A	SA
Do you think that women live longer life than men?					
Gender will affect the insurance buyer attitude.					

**f. HEALTH STATUS**

Questions	Range of Agreement				
	SD	D	N	A	SA
Do you think that the decreased risk of death may prohibit purchasing of life insurance policy?					
Do you think that your health status may force you to own life insurance policy?					
Do you think that the one who will be good enough in his current health status will stay no to buy life insurance?					

**g. PEOPLES ATTITUDE AND AWARENESS**

Questions	Range of Attitudes				
	SD	D	N	A	SA
Purchasing life insurance is a “must” in my life cycle to prevent emergency.					
I believed that the purchase of life insurance would benefit my future.					
If I have a good economic condition, I will purchase a better life insurance.					

**PART THREE: QUESTIONS DESIGNED FOR DEPENDENT VARIABLE**

Questions	Range of Attitudes				
	SD	D	N	A	SA
Purchasing life insurance is a ‘must’ in my life cycle to prevent emergency?					
Do you think that the number of life insurance policy holders is exhaustively increased?					
I believed that the types of life insurance policy will drastically increased					
Overall I feel comfort on my current life insurance facility					

# ANNEX: 1 RESPONDENTS PROFILE

## SEX FACTOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	58	58.0	58.0	58.0
	FEMALE	42	42.0	42.0	100.0
	Total	100	100.0	100.0	

## EDUCATIONAL BACKGROUND

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DIPLOMA	2	2.0	2.0	2.0
	FIRST DEGREE	69	69.0	69.0	71.0
	MASTERS AND ABOVE	29	29.0	29.0	100.0
	Total	100	100.0	100.0	

## HOUSEHOLD INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12001-15000	33	33.0	33.0	33.0
	>15000	67	67.0	67.0	100.0
	Total	100	100.0	100.0	

## AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-28	6	6.0	6.0	6.0
	29-41	19	19.0	19.0	25.0
	42-53	28	28.0	28.0	53.0
	54-61	21	21.0	21.0	74.0
	>62	26	26.0	26.0	100.0
	Total	100	100.0	100.0	

## YEARS SPENT IN USING LIFE INSURANCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS THAN ONE YEAR	23	23.0	23.0	23.0
	FROM 2-3	24	24.0	24.0	47.0
	FROM 3-5	12	12.0	12.0	59.0
	MORE THAN FIVE YEARS	41	41.0	41.0	100.0
	Total	100	100.0	100.0	

## ANNEX: 2 VIF COEFFICIENTS OF INDEPENDENT VARIABLES

Coefficients(a)

Model		Collinearity Statistics	
		Tolerance	VIF
1	EDUCATION LEVEL	.297	3.368
	GENDER FACTOR	.428	2.337
	HEALTH STATUS	.595	1.681
	INCOME LEVEL	.207	4.833
	AGE FACTOR	.293	3.410
	FAMILY SIZE	.440	2.274

a, Dependent Variable: LIFE INSURANCE DEMAND

## ANNEX 3: REGRESSION OUTPUT

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.280	.477		6.878	.000
	HEALTH STATUS	.014	.062	.042	.233	.000
	EDUCATION LEVEL	.091	.059	.144	1.536	.008
	GENDER FACTOR	-.145	.095	-.395	-1.525	.003
	INCOME LEVEL	.462	.054	.771	8.574	.000
	AGE FACTOR	.199	.091	.347	2.196	.001
	FAMILY SIZE	-.196	.107	-.403	-1.825	.007

a Dependent Variable: LIFE INSURANCE DEMAND

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832(a)	.693	.670	.250

a Predictors: (Constant), HEALTH STATUS, EDUCATION LEVEL, GENDER FACTOR, INCOME LEVEL, AGE FACTOR, ,FAMILY SIZE