



SAINT MARRY UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**THE ROLE OF MOTOR INSURANCE INCENTIVES IN
REDUCING ROAD TRAFFIC ACCIDENTS: THE CASE
OF LION INSURANCE COMPANY S.C**

By

Serkalem Habtamu

Addis Ababa, Ethiopia
July 2 ,2018

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**A THESIS SEBMITTED TO ST.MARRY'S UNIVERSITY COLLEGE,
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SAINT MARYS UNIVERSITY COLLEGE
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSSINESS

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Declaration

I, the undersigned, declare that this study entitled “ **The role of Motor insurance incentives in reducing road traffic accidents : In the case of Lion Insurance company S.C**” is my own work. I have undertaken the research work independently with the guidance and support of the research advisor. This study has not been submitted for any degree or diploma program in this or any other institution and that all sources of materials used for the thesis has been duly acknowledged

Declared by

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Date: July 02,2018

Certification

This is to certify that the thesis prepared by Serkalem Habtamu, entitles “**The role of Motor insurance incentives in reducing road traffic accidents : In the case of Lion Insurance company S.C**” and submitted to St Marry University School of graduate study complies with the regulations of the university and meets the accepted standards with respect to originality and quality with my approval as the university advisor

Signature_____

St Marry University

Addis Ababa

July 02, 2018

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Abstract

In this study, the researcher to study the role of motor insurance incentives in reducing road traffic accidents. The motor insurance incentives used by Lion Insurance Company S.C has been examined using mixed methodological approach, i.e. qualitative and quantitative. Both primary and secondary data sources were consulted where as questionnaire and interview were used as a data collection from the target respondents of the Staffs of Lion Insurance Company S.C and service users. The respondents were selected using convenient sampling technique. Descriptive method of data analysis using SPSS 16 was employed and presented in the form of tables, figures, frequency and percentages. It is revealed that No claim Discounts and premium loading (Bonus mauls) have a huge role in promoting road safety by affecting the driver behavior. Additionally the out of pocket payments (Excess) deduction is also one of the motivator that affects the driver's behavior on the road. Even though it's not held frequently, trainings provided to fleet driver's brought a significant change on the drivers by creating awareness. In order to bring a significant change training should also be given frequently for all driver's by creating awareness about all the claim processing's, and safety measures. Promoting the mass media in awareness creation campaigns and funding the road transport management were also revealed as an option in promoting road safety. However this activity were not actively held. Additionally it's revealed that Addis Ababa's road infrastructure is also a reason for the frequently accidents occurred. In general, motor insurance incentives should be highly considered as it is very important in reducing road traffic accidents by affecting driver's behavior on the road, by creating awareness through training and by supporting the mass media and road transport management.

Key words :- Motor insurance, road traffic accident, role of motor insurance incentives, Premium loading, No claim discount

ACCRONYMS

EBI	Educational background based insurance
LIC	Lion Insurance Company S.C
MBI	Marital Status Based Insurance
MII	Motor insurance industry
NCD	No Claim Discount
RTA	Road Traffic Accident
TP	Third Party
UW	Underwriting

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Almost all nations in the world suffer due to traffic accidents. Thousands of lives and properties in millions are lost each year. For this, people share the risk they face for insurance companies in order to recover their losses. Insurances use some incentives while selling insurance cover as while claim processing. A claim is a request to an insurance company for payment relating to an accident, illness, or damage to property. Accordingly, this study tried to find a way to minimize such losses using motor insurance incentives while selling insurance cover. It examines how insurance incentives can affect drivers, to be responsible and careful on the road in return minimizes traffic fatalities. We use some insurance incentives to examine Motor insurance incentives in reducing traffic accidents. Out of pocket expenses during claim request such as (excess & contribution), additionally considering discounts or additional loading during premium calculation considering loss ratio, age, sex, Marital status, usage based insurance, no claim discounts, point record driving license are some incentives examined in this study.

The insurance mechanism is nothing more than a formal process that allows widely divergent policyholders to “pool” their collective risk. This allows people to substitute a known premium for an unknown and highly variable potential loss (Robert, Darren, Sally and Neil, 2004).

Transportation by its nature provides enhanced opportunities but it is also a risk to travelers, drivers and pedestrians. Despite the important positive role urban transport plays in economic, social and political activities of cities and towns, it also generates major social and economic problems through traffic accident. Historically and even now, motor vehicle accidents have been viewed as random events that happened to offer an inevitable outcome of road transport (Mekete 1997).

Road traffic accident is defined as any vehicle accident occurring on a public high way. It includes collisions between vehicles and vehicles, vehicles and animals, vehicles and pedestrians or vehicles and fixed obstacles (Bhavna and Hemendra,2016).

Road traffic accidents are a major cause of premature deaths and disabilities. About 1.25 million people die each year as a result of road traffic crashes. It is the leading cause of death among people aged between 15 and 29 years out of which three quarters (73%) of all road traffic deaths occur among young males under the age of 25 years who are almost 3 times as likely to be killed in a road traffic crashes as young females. Among these world fatalities 90% of it occur in low and middle income countries even though these countries have approximately 54% of the world's vehicles. Road traffic crashes cost most countries 3% of their gross domestic product. Without sustained action, road traffic crashes are predicted to become the seventh leading cause of death by 2030 (WHO, 2018).

1.2 Practice of insurance in Ethiopia

Practice of modern insurance in Ethiopia is traced back to the bank of Abyssinia which was established in 1905 as the first bank of Ethiopia. It has been acting as agent for a foreign insurance company to underwrite fire and marine policies (Zelege, 2007). According to a survey made in 1954, there were nine insurance companies that were providing insurance service in the country. With the exception of Imperial Insurance Company that was established in 1951, all the remaining of the insurance companies were either branches or agents of foreign companies. In 1960, the number of insurance companies increased considerably and reached 33. At that time insurance business like any business undertaking was classified as trade and was administered by the provisions of the commercial code (Yuvaraj ; Gashaw 2013).

According to Zelege (2007), the first significant event that the Ethiopian insurance market observation was the issuance of proclamation No. 281/1970 and this proclamation was issued to provide for the control & regulation of insurance business in Ethiopia. Consequently, it created an insurance council and an insurance controller's office, its strange impact in the sector. The controller of insurance licensed 15 domestic insurance companies, 36 agents, 7 brokers, 3 actuaries & 11 assessors in accordance with the provisions of the proclamation immediately in the year after the issuance of the law (Yuvaraj ; Gashaw 2013).

After four years that is after the enactment of the proclamation, the military government that came to power in 1974 put an end to all private enterprises. Then all insurance companies operating were

nationalized and from January 1, 1975 onwards the government took over the ownership and control of these companies & merged them into a single unit called Ethiopian Insurance Corporation. In the years following nationalization, Ethiopian Insurance Corporation became the sole operator (Yuvaraj ; Gashaw 2013).

In this regard the pre 1974 Ethiopian financial system was “ market economy” and there were 13 private insurance companies. In 1975, following the government centrally planned economic system the financial institution and other means of private ownership were decided to be “nationalized” and there was one government owned insurance companies, i.e Ethiopian insurance Corporation (EIC).The industry remained a state monopoly up until 1994 when the current regime adopted the “Free market” economy and the government issued proclamation No. 86/1994- licensing and supervision of insurance business which allowed Ethiopians and enterprises fully owned by Ethiopians to invest in and establish insurance companies (Zafu Eyessuswork,2014). Since then, sixteen privately owned insurance companies have been established and operating in Ethiopian insurance market along with formerly government owned insurance company. Accordingly those insurance companies as at June 30, 2014 operate with an invested capital of birr 2 billion through 332 branch network all over the country, out of which 182 i.e 55% were located in Addis Ababa.

The insurance sector in Ethiopia is governed by insurance Business proclamation No 746/2012. According to the proclamation it is prohibited to transact insurance business, both general insurance and long term insurance in Ethiopia without obtaining an insurance business license from the National Bank of Ethiopia (NBE). The role of the insurance business proclamation legal frame work is to ensure the reliability and stability of the insurance sector by placing effective administration, supervision and control of insurance business.

1.3 Statement of the Problem

Transportation is vital for the economic development of a nation fills the gap between the production and consumers, widens the market by facilitating the movement of people commodities and information from place to place. Many researchers have proved that it plays a major role in the life of an individual and has brought far apart regions more closely to each other.

For a nation's development and growth transportation is vital. It eases the exchange made between producers and consumers, facilitates the movement held in the market, movement of people, commodities and information from place to place. However, nowadays despite its importance it also is generating social, economical and environmental problems.

Road traffic accident is a global disaster which is causing a huge loss of property and lots of lives. 1.17 million deaths occur each year due to road accidents 70% of which occur in developing countries, while in the United States, Japan and Europe that account the lion's share of motor vehicle ownership holds 30% of the world's road accident. About 10% of global deaths occur in Africa, which is slightly less than those for the entire developed world or all of Latin America, Central America and the Caribbean (TRL and Ross Silcock, 1999).

Ethiopia is one of the developing countries with low level of income coupled with high rate of population growth. Due to its low developing stage and poor economic performance, transport is said to be at its infant stage. Despite all the efforts made for road development, road crashes remain to be one of the critical problems of the road transport sector in Ethiopia (UNESA, 2009). The country has experienced average annual road traffic accidents of 8115 over the past 11 years. (Central Statistical Agency, [CSA], 2000/01-2010/11). In Ethiopia, over 2000 people lost their life 8000 people were injured and a property worth 500 million birr is damaged every year. Traffic accident not only affects people that are involved but also has a great impact on the country's economy (FRSC, 1997).

According to the available data from Addis Ababa traffic police in the year 2004/2005 the total number of motor vehicle causality was 10,543 and the yearly causality increase was 113 per 10,000 vehicles. These fatal, serious injury property and psychological damage of the remaining relatives will not allow any citizens to keep idle. Therefore in addition to the community effort to minimize such hazards, insurance companies need also to involve in some incentive ways to decrease to the minimum or stop the problem. To involve in the efforts that is being made, insurance can involve by applying additional premium loading for those who are highly prone to accidents, provide no claim discounts for those who avoid risk. Additionally as per the above mentioned studies male young drivers are highly prone to accidents, therefore insurance can somehow involve in premium setting based on sex and age.

Al-Balbissi (2013) in his valuable research study assessed the influence of driver sex on road accidents. As per his study the researcher found out that male accident rates are significantly higher. This trend is consistent through all the analysis. Accident differences are significant only in normal driving conditions. Driver over age 50 had the lowest accident rates. Accident rate differences were caused by lack of attention and impatience among male drivers. However this accidents which are cause by male drivers and carelessness was not given any solution in order to minimize such accidents which this paper in the contrary tried to found out incentives that can avoid or at least reduce such incidents.

National Road Safety Council (NRSC, 2011), being public good, road safety comprises many dimensions which include legislation, funding, resource allocation, promotion of road safety, monitoring, evaluation, research and development, knowledge dissemination and coordination. These functions are expected to be primarily undertaken by the public, but to achieve the desired results; it needs to be carried out in partnership with civil society and businesses. Reductions in the incidence and severity of road related trauma is of paramount importance to society, aimed at reducing the personal and economic burden to injured people and flow-on impact to families and the broader community (Fronsko, 2011).

Road safety policies and automobile insurance contracts often use incentive mechanisms based on traffic violations and accidents to promote safety driving. These mechanisms are monetary and non-monetary. So this research address on how to reduce the road traffic accident taking Motor Insurance Industry as a means in Ethiopia. Therefore, the researcher is initiated to examine how motor insurance promote road safety (reduce road traffic accidents). Who are more prone to road traffic accidents based on sex, gender, educational back ground & marital status, which incentives highly affect driving behavior so as to protect the lives of millions and reduce road trauma. To the best knowledge of the researcher, there is no single study done so far regarding such background especially no sufficient study is not made on the roles motor insurance incentives can play. Hence, the researcher considers that this paper fills the research gap that has been observed, and yet not addressed by those who did their studies on road traffic accidents.

1.4 Research question

In light with the statement of the problem, the study tries to answer the following basic research questions

1. How does motor insurance participate in promoting road safety?
2. What are the major motor insurance incentives that will affect road traffic accidents?

1.5. Objective of the study

1.5.1. General Objective

The general objective of the study is to investigate and identify the role of motor insurance industry incentives in reducing road traffic accidents (promoting road safety) in Ethiopia. Road safety in this study means preventing, reducing and compensating RTA (road traffic accidents).

1.5.2. Specific objectives

Recalling the above mentioned general objective , important objectives are to:

1. To examine how the motor insurance industry involves in road safety in Ethiopia.
2. To analyze the factors influencing motor insurance industry's involvement in road safety.
3. To determine effective incentives with significant impact on reducing traffic accidents

1.6 Scope of the study

As it is stated earlier, road traffic accidents have been increasing from time to time however, satisfactory attention is not given to identify the root cause of the problem as well as a solution for it. So the finding of this study help to ;

- Practitioners (traffic police) to be aware of the role of the insurance company in reducing such accidents and the study paves a way for both departments to work together to in order to minimize such incidents.

- It gives awareness for owners as well as drivers how much their action have a huge impact on individual's day to day life and be aware about their driving behavior on road.
- To provide information to insurance company about how the insurance policy have a huge influence in one country's well being and use this information to adjust their policy in a way that could decrease such fatal accidents.
- Thus I believe that this research paper will give a clue to those who are interested in conducting research on insurance company's incentives and it's impact of traffic fatalities.

1.7 Significance of the study

Even though some studies has been made In the area deep finding and researches were not made. Hence the primary objectives of this research is to assess in what way the incentives of that of motor insurance can have impact and reduce traffic fatalities and compensate the road trauma in the country. Additionally the current study has the importance of Adding knowledge on the gap created around the issue Promising in terms of resolving the problem associated with road traffic accidents in relation to motor insurance policies.

Findings of this study leading to new problems for further investigation Signaling and motivating the various stakeholders to take appropriate actions by incorporating the issue in their policies and strategies; it provides policy makers, insurances institutions etc with adequate, and reliable data so as to implement feasible and appropriate insurance policy solutions in order to reduce road traffic accidents.

1.8 limitation of the study

This study has encountered problems like absence and shortage of fully organized data and low level of willingness from the respondents and also there was unavailability /shortage/ of secondary data in the desired way regarding the subject matter.

1.9 organization of the thesis

The research paper is organized under five sections with different sub sections. The first chapter deals with the introduction part. which includes background of the study ,statement of the problem, objectives of the study, research questions, scope of the study, significant of the study, limitations and organization of the study.

Chapter two highlights the review of the literature. The third chapter deals with the research methodology used in the study including the research design, data source and type, study population sampling techniques and sample size, data processing and analysis. chapter four presents the research finding, interpretation, analysis and discussion. The last chapter deals with the summary of major findings, conclusion and recommendations.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Insurance

Insurance plays a vital role in economic development. Of all the use of insurance sector some are, contribution of insurance sector to economic growth and employment, reduces the capital firms need to operate, fosters investment and innovation by creating an environment of greater certainty, offering social protection alongside the state, facilitate firm's access to capital, promotes sensible risk management measures, fostering stable consumption throughout life and mobilizing savings (CEA, 2006). In this regard insurance is defined a a social device providing financial compensation for the effect of misfortune (Hansell, 1974).

Insurance The most common method of dealing with risk is to shift, or transfer the risk to an insurance company. Insurance is an agreement where, for a stipulated payment called the premium, one party (the insurer) agrees to pay to the other (the policyholder or his designated beneficiary) a defined amount (the claim payment or benefit) up on the occurrence of a specific loss. Through the ages, it has been as a mechanism whereby the insurer organizes the process by which the unfortunate few, who suffer losses, share the burden with many who are exposed to risk of similar losses.

The earliest known instance of insurance dates back to the Babylonian period circa 2250 BC, when the Babylonian developed a type of loan insurance for maritime business. Examples can be found in the code of Hammurabi. Upon receipt of a loan to fund his shipment, a merchant would typically pay the lender and additional premium in exchange for the lender's guarantee to cancel the loan should the shipment be stolen or lost at sea. Insurance had originally evolved as a commercial instrument after 1666 as a result of the great fire of London that insurance for households, aptly named "Fire Insurance".

Risk-averse individuals are able to enjoy greater utility from their most important assets via the purchase of insurance products. Almost every conceivable assets or activities can be insured through familiar product types such as motor, travel and home content insurance, and by business through

professional and product liability insurance cover for business interruption and many other contingencies.

2.1.2 Motor insurance incentive mechanism in road safety

Major reasons for the improvement of road safety in developed countries has been the development of incentives for safe driving. Insurers and regulators have introduced several contract mechanisms to improve road safety. Experiencing rating shames used by insurance industry have incentive properties (Boye and Dionne, 1989: Dionne and vanase, 1989,1992: Abbring et al,2003).here under mentioned are some of the motor insurance incentives used in this study.

2.1.2.1 Excess

Excess is the amount that is paid by the Policyholder before the insurance comes into force. This amount is deducted from the total Claim by the insurance company while processing it for reimbursement. In case of cashless claims, the Deductible part is paid by the policyholder and rest is handled by the insurance company (Easy policy, 2012).

When you buy an insurance policy, your insurance company expects you to do everything within your power to prevent a loss from happening. In other words, you're not expected to be careless. So, to make sure that you protect the insured property/asset properly, the insurance company asks that you bear part of the claim in the event of a loss. An Excess is therefore the amount that you contribute towards a claim. An excess can be imposed by the insurer or voluntarily chosen by the insured. The higher the excess amount,the lower the premium payable by the insured. This is because a higher excess means that the insured is contributing more in the event of a claim (Megainsight,2015).

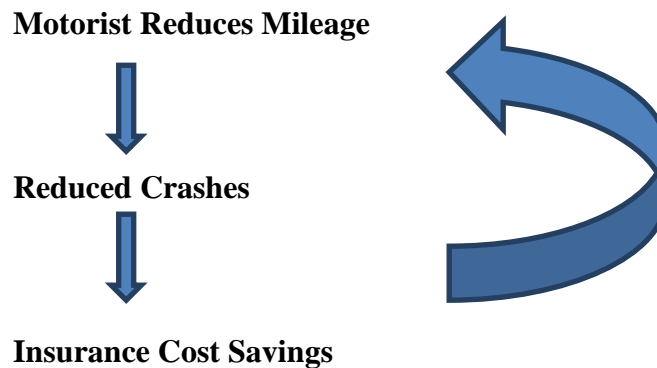
2.1.2.2 Contribution (Betterment)

Betterment occurs when in the course of repairing an accident-damaged vehicle, an old part is replaced with a new franchise part. In line with the principle of indemnity, you will have to bear the difference in costs as you are in a better position after the accident with the new franchise part. However, the application of betterment is at the discretion of your insurance company. Should your insurance

company apply betterment, it will be in accordance with the standard scale of betterment adopted by the industry as follows.

2.1.2.3 Distance based vehicle insurance

Distance-based(also called Pay-As-You-Drive PAYD,) means that vehicle fees are directly based on the number of miles a vehicle is driven during a given period. Distance-based insurance is based on the principle that prices should reflect costs, and consumers who reduce the costs they impose should receive proportionate savings. Reduced driving reduces the risk of crashes and insurance claims (Todd Litman 2006).



Source:- Todd Litman 2006

2.1.2.4 Usage based insurance

This is an insurance coverage which is given based on the insured's vehicle. It is a recent innovation by auto insurers that more closely aligns driving behaviors with premium rates for auto insurance. Mileage and driving behaviors are traced using odometer readings or in-vehicle telecommunication devices (telematics) that are usually self-installed into a special vehicle port or already integrated in original equipment installed by a car manufacturer. The basic idea of telematics auto insurance is that a driver's behavior is monitored while the person drives. The insurance company then assesses the data and charges insurance premiums accordingly. The use of telematics helps insurers more accurately estimate accident damages and reduce fraud by enabling them to analyze the driving data (such as hard braking, speed and time) during an accident (NAIC 2017).

It is a relatively new concept based on the assumption that the premium should be adopted as far as possible, to risks associated with the usage of a given vehicle. The UBI model of premium calculation factor in more accurate & personalized information on the actual vehicle usage. In consequence, premiums for drivers who use vehicle safety or cover less distance may be lowered/ it is telematics based tariff which is applied through the help of the combination of telecommunication & data processing. According to Wydro, the key function of telematics system is the manipulation of information i.e the collection, processing distribution (including transmission) and use of information in d/f decision making process. It refers to the information and communication device installed in vehicles. Insurance telematics is principally applies in pricing schemes of motor insurance:- these includes A) pay as you drive or pay as you go , here th tariff takes into account the relationship between the premium & a vehicle millage. B) pay as you speed :- which includes a system a financial penalties for speeding which takes the form of decreases in previously granted discounts (Kurylowicz,Lukasz 2016).

According to Hager Baumer, the insurers who implement UBI tariff will be seen as customer oriented, proactive and environmentally responsible, for example due to the effect of millage reduction. UBI ,ay also help organizations to improve their corporate image & potentially increase the market share. Additionally one of the impact of UBI on insurance is claims frequency reduction (Kurylowicz,Lukasz 2016).

As per the study made on customer driving behavior 5 billion miles of driving data was collected accordingly it has been found that 1) driving behavior is the most predictive risk factor more than twice as predictive of claims cost as any other factors 2) drivers with the highest risk driving behavior have loss costs that are approximately 2-5 times higher than drivers with the lowest risk behavior 3) the majority of drivers with lower risk driving behavior are subsidizing a smaller no of drivers with high risk behavior 4) 7 out of 10 drivers who try snap shot receive discount . thus the study made concluded that most drivers rates are higher than the risk they present & they are subsidizing higher risk behavior. However with the usage based insurance, insurers can offer customers a far more personalized price & lower risk drivers will benefit will benefit the most.

As driving data becomes more available, rates will becomes far more individualized and fairer than they are today.

2.1.2.5 Bonus Malus system (No claim discounts)

Bonus malus is the most common form of a posteriori rating in automobile thirdparty liability insurance. The policyholder moves around the classes of a Markov chain according to his annual number of claims. Claim free years are rewarded by premium discounts or bonuses; at fault accidents are penalized by surcharges called maluses. The different principles underlying the design and evaluation of bonus malus systems are reviewed (Catherine, Englund, Nielsen and Tanggaard, 2013).

Bonus-Malus is a mechanism for adjusting the parameters of insurance contracts according to the past record of policyholders. For example, the premium can be adjusted based on individuals' past record of accidents (Lemaire, 1995; Dionne and Vanasse, 1989, 1992; Brouhns et al., 2003) or on the number of demerit points accumulated (Dionne et al., 2000).

Henriet and Rochet (1986) have distinguished two roles played by the bonus-malus, showing that its two roles involve different rating structures. The first role deals with the problem of adverse selection where all that counts is the frequency of the accidents observed over time, the objective being to evaluate as faithfully as possible the true distribution of accidents related to unchanging characteristics. Linked to moral hazard, the second role implies that the distribution of accidents over time must be taken into account in order to maintain the incentives for cautious behavior at an optimal level. This means, that more weight must be given to recent information in order to maintain such incentives.

2.1.3 The relation of Road traffic accident and marital status, sex, and age

Age and sex are used as rating criteria because they provide a relatively costless statistical measure of expected loss costs. While the "age" of the driver cannot be proven to be the cause of accidents, there is strong statistical evidence that age and automobile loss costs are correlated.

2.1.3.1 Age

The Insurance Institute for Highway Safety (2003) found that while seniors do not have an increased tendency to get into crashes, their fragility means that they experience elevated death rates per mile driven. However, at age 75, older drivers do begin to be markedly over involved in crashes. In 2001-2002, per mile driven, drivers 75 years and Older had higher rates of fatal motor vehicle crashes than

drivers in other age groups except teenagers. Fatal crash rates in 2002 begin to rise at age 75 and rise sharply at age 85 and above.

A vast body of road safety research has demonstrated the extent of “young driver problem”, whereby younger inexperienced drivers are considerably over-represented in the accident statistics (Drummond 1989).

Joksch and Thoren (1984) examined the effects of driver sex and age, on driver fatality rates per vehicle mile of travel. The effects of these variables were described by these workers as interacting on three levels; the risk of accident involvement, the severity of the accident and the risk of an injury being fatal. The risk of accident involvement and the severity of the accident are both higher for younger drivers, while the risk of fatality increases with increasing age.

2.1.3.2sex

In a study by storie (1977), significant differences in driving characteristics were found between the two sexes with regard to speed, skill and attitude. Females are more likely to drive at lower speeds and overtake more carefully. Males on the other hand, were generally more skillful, able to perform difficult maneuvers, and more likely to risk driving under the influence of alcohol. No significant difference however had previously been found between male and female drivers as related to being at fault in accidents.

Male drivers tend to be involved in more accidents compared to their female peers, and this tendency decreases with the increase in the driver’s age. Moreover, married young drivers have fewer accidents than single drivers (Eman K. Ali, Sherif M. El-Badawy and El-Sayed A. Shawaly 2014).

Waller et al (2001) notes that in addition to having a higher number of crashes, men acquire their first crash earlier in their driving career. Norris et al (2000) and others attribute this greater level of proneness to be in a car accident to higher driving speeds among men and less regard for traffic laws.

Women tend to have fewer crashes and their car accident claims tend to cost less than men’s and Men are more likely than women to be involved in serious accidents – that is, men experience more head-on collisions, roll-overs, loss-of-control crashes and collisions involving pedestrians, cyclists or animals

whereas women are more likely than men to collide with stationary objects or reverse into other cars (source: 2007 AAMI claims data).

Stradling (2000) evidenced that more male drivers than female drivers reported being penalized from speeding (9% : 6%) but that this difference did not reach statistically significant . furthermore, Stradling (2000) found a gender difference in the general on set of speed reduction when driving. female drivers were observed to slow down sharply in their 20s and then to maintain this velocity across the rest of this age range (20-29). Male drivers however, do not reduce their velocity until during their 30's yet still nominate higher speeds than their age equivalent females. The male & female nominated speeds were not observed to converge sound age 50 (and this was corrected for millage differences). Stradling (2000) therefore noted that female appear to “grow out” of speeding much more quickly than males do.

2.1.3.3 Marital status

Drivers who are married tend to be more responsible and accountable. Marital status also seems related to driving performance; married individuals with certain exceptions seem to be less often involved in accidents and to receive fewer violations. (Deborah Valentine, Martha Williams & Robert K.Young 1978). Eli Lehrer, president of the nonprofit research group The R Street Institute, says, “Marriage really does make people more careful and responsible... it isn't at all surprising that this translates into better driving behavior.”

2.1.4Third party motor insurance

The risk of road trauma and it's economic consequence is many, particularly in developing society, poor household are vulnerable to road shock because of lack of fair and timely compensation systems. In these regard motor insurance play significant role, since millions of people are killed and tens of millions injured on the roads each year (Aeron 2002).

Consequently, these affairs have attracted the attention of many countries to adopt compulsory Third Party (CTP) motor insurance with the aim of laying down a mechanism to alleviate the problems associated with motor accidents (Zelege, 2004).

Therefore, the enactment of proclamation No. 559/2008 after long time had passed the draft law on CTP motor insurance has been considered as a landmark and an important development in Ethiopia (Demiss, 2009). The enforcement of the proclamation will be expected to minimize problem posted by motor accident. The Federal Democratic republic of Ethiopia (FDRE) insurance fund administration agency (IFAA) is an executive government body established under ministry of transport with a responsibility to oversee the enforcement of mandatory third-party insurance all over the country, to ensure all motor vehicle accident victims can receive medical treatment without any precondition and to provide compensation to victims for the extent of damage (IFAA, 2010).

Motor Third Party Liability (MTPL) insurance has been introduced in the formerly centrally planned economies in the past decade, but it is poorly understood. Motorists are inclined to view it as a form of tax that they are at liberty to evade, rather than as a protection against their personal liability due to a concept that is not familiar to the general public (Gonulal, 2010). Overtimes the issue of MTPL insurance had attracted the attention of many governments in many countries to adopt MTPL insurance policy and the law has been practice in many parts of the worlds (Temesgen Zeleke, 2004).

2.1.5 Risk aversion

Insurances when giving policy cover must select insured's that are willing to adverse risks especially as per their claim experience. For example a vehicle sustaining an accident (collision or overturning) with the same driver and the same reason, the insured must take some action to minimize such losses e.g. using GPS in order to control the speed and the distance the driver went or give additional training otherwise let go for such irresponsible ones. Giving additional incentives for such insured's might also encourage other to do the same.

2.1.6 Crashworthiness and crashprone.

When insuring a vehicle, vehicle safety can be measured in many ways for E.g. Examining the vehicle characteristics for which certain risks are relatively high or low, either in terms of its crashworthiness or crash proneness. "Crashworthiness" is taken to mean a vehicle's secondary safety performance in a collision (McLean, 1982). It involves two structural properties or requirements in crash protection. First, a crashworthy vehicle is one in which minimizes intrusion of its own structure into the passenger compartment. Sever intrusions can often result in injury to the vehicle's occupants from direct contact

with the intruding structure (Fildes et al 1991). Second, a crashworthy vehicle is one which aims to absorb much of the energy of the crash in its own structure, thereby reducing the level of impact forces on the occupants.

“crashproneness”, on the other hand is taken to mean the susceptibility of vehicle to crashing which is more akin to the primary safety concept of crash involvement and avoidance. It involves the vehicle’s ability to avoid collisions by features, such as its stability, resistance to failure, and braking capacities. Not surprisingly, driver’s abilities (or more correctly inabilities) are often intimately associated with crashproness. That is, a vehicle which is over involved in terms of collisions rates may be prone because of some vehicle defect or simply because it is attractive to drivers known to be over-involved in collisions. This raises the possibility that vehicles that attract those over-involved in collisions (say young drivers) may require superior handling and braking characteristics.

vehicle rating for different makes/models is regularly published in organizations in Scandinavia, UK & USA defining performance figures on vehicle crashworthiness and crashproneness. This can be done by normalization, i.e. making the exposure distribution the same for all makes/models, or by estimating the expected rating of a specific make/model (taking exposure into account) for use as a reference figure against which the actual rating should be compared (Fildes B.N ,Lee S.J and Lane J.C 1993).

Johnstone (1984) noted that vehicle factors have been estimated in several studies to be the cause of about 10% of crash involvements (road user factors cause about 90% and environmental factors cause about 30%; multiple cause are common). At least some of these vehicle-related causal factors are due to vehicle condition rather than to vehicle design. Thus there is much less potential for finding make/model differences in vehicle design related to crash involvement.

Cameron et al (1992) argued that the development of crashworthiness ratings should be given priority in vehicle safety rating because of their greater potential to find significant differences in vehicle design between makes and models of cars. Crash involvement ratings are constrained by the relatively small role that vehicle design plays in causing crashes (assuming that its effects can be separated for the factors affecting the risk crashes).

2.1.7 Motor (Auto) Insurance

Motor insurance scheme could in theory, be expected to create more incentives for safe driving, as it links individual premiums to past accidents.

Auto insurance is a type of property & casualty (P&C) insurance that provides compensation for events such as vehicle damage, personal injury & liability for damages and injuries caused to others.

Now a day's insurance is classified in different ways, based on risk point of view, business point of view and on the nature of insurance. Insurance from risk point of view is further classified as personal, property and liability insurance. In Ethiopia, until 1950, motor vehicle insurance cover was categorized along with general accident insurance. But now a day as the number, type and use of vehicle increased, motor insurance cover is treated as a separate class of business (IFAA, 2010).

2.1.8 Motor Vehicle transportation in Ethiopia

Motor vehicle is any mechanical or electrical power propelled vehicle moving on roads. More vehicles made their first spluttering appearance at the turn of the 20th century. Since they were much slower and so cumbersome than the common horse and carriage. As a result during the early years of motoring there seemed little need to consider the implications and requirements of insurance. By the time of the First World War, motor vehicle was developed and improved at an alarming rate with the change in technology and to comply with considerable interest for the motor car (Talk Once, 2010).

2.1.9 Road Traffic accident in Ethiopia & its causes

RTA in Ethiopia is a cause of significant losses of human and economic resources in the 2007/08 fiscal year. Polices reported 15,086 accidents which caused the losses of 2,161 lives and over eth 82 million equivalent to US 7.3 million (cost estimate of property damage by police). despite having very low road network density and vehicle ownership, the country has a relatively high accident record which has been indicated as the worst example by different authors (Jacobs & Sayer, 1983; TRL 7 ross silcock partnership, 1991).

According to the police reports, more than 90% of the traffic accidents are caused by human errors. Of these accidents drivers are indicated as responsible causes in about 89%.

Accordingly, the major causes traffic accidents are failure to give way for pedestrians followed by over speeding and failure to give way for other vehicles in that order. However the major causes of fatal accidents in their order of importance are failure to give way for pedestrians, over speeding , failure to respect right hand rule. The causes of driver errors are many which include inadequate training, driving under the impact of alcohol, drug or chat & others. Chat used to be one of the critical problems in eastern part of the country. However, its influence is currently expanding throughout the country. The traffic accident statics in 2007/08 also indicate that over 5% of the fatal accidents and the total accidents occur when driving without having a driving license.

Currently, road traffic accidents are becoming one of the major public safety and development obstacles; particularly the toll is highest in developing world. Over 90percent of the world's fatalities on the roads occur in low-income and middle-income countries, which have only 48 percent of the world's registered vehicles (WB, 2009). Various studies have indicated that Ethiopia has one of the highestfatality rate per vehicle in the world. It is in excess of 100 fatalities per 10,000 vehicles. This should be compared with Kenya and the United Kingdom, where the figure is about 19 and 2 per 10,000 vehicles respectively. Among the major causes of road accident in Ethiopia, the main contributors are the inexperience of many drivers, ineffective policies, generally awkwardroad and vehicle condition, urban traffic congestion and imbalance traffic supply and 22 demand. If things are going like this recent study indicate, road trafficaccidents will soon became the fifth leading cause of death (Mengesha Amare, 2014).

Table 2.1. Motor vehicles accident in Ethiopia during five years average (2003-2008)

No.				
1	Death: <ul style="list-style-type: none"> • Driver • Passenger • Pedestrian Sub Total	149 894 819 1862	10.85	8 48 44 100
2	Serious injury	2344	13.65	
3	Minor injury	2528	14.72	
4	Property damage	10,435	60.78	
	Total	17,169	100	

Source: IFAA, 2011

In Ethiopia, at an average, 17,169 vehicle accidents register annually. From this, 6,734(39%) were body injury/death and 10,435 (61%) accidents were caused property loss. This means, at an average, there were around 1.1 victims per 10 accidents, of these deaths, 8% are drivers, 48% are passengers and 44% are pedestrians (IFO, 2011). In 2007/8 fiscal year, police reported 15,086 accidents which cause the losses of 2,161 lives and over ETB82 million cost estimate of property damage. Up to 2005/6 traffic accidents and fatalities rate increased at 17% and 10% per year respectively.

2.2 Empirical studies

It's well known that insurance companies never considered their contribution on road safety except running the company only as one of the business sectors. Even though researches have been made on the insurance industries few has been made regarding the role of motor insurance industries in reducing road traffic accident or more specifically on road safety. The under mentioned statements and findings will draw attention to those studies related to the involvement of motor insurance industry's in reducing road traffic accidents and supporting road safety management.

Motor insurance premiums are commonly linked with drivers behavior and risk profile. Accordingly the proportion of drivers at fault in road traffic accidents decreases with the increase in the value of motor insurance premiums.

In the presence of asymmetric information, insurers use partial insurance coverage or experience rating to improve resource allocation. Both schemes have proven to be efficient for handling moral hazard and adverse selection (see Holmstrom, 1979; Shavell, 1979; Pauly 1974; Rothschild and Stiglitz, 1976, for partial insurance, and Chiappori et al, 1974; Dionne and Lasserre, 1985, for experiencing rating). A number of empirical tests have been proposed to measure the efficiency of such mechanisms for road safety (Sloan et al, 1995; Boyer and Dionne, 1989) or to measure the presence of residual asymmetric information problems in insurer's portfolios (Chiappori and Salanie, 2000; Dionne, Gauthier and Vanasse, 2001; Cohen and Siegelman, 2010; Dionne Pinquet, Maurice and Vanasse, 2011a; Dionne, Michaud and Dahchour, 2011).

Worldwide, across all age groups road traffic accidents currently account for 1.27 millions deaths a year (World Health Organization, 2004). Furthermore, traffic accidents constitute the second leading cause of death among people in the age of 20 to 24 years, right after HIV/AIDS (Toroyan and Peden, 2007). Young drivers are strongly overrepresented in road accident statistics. In the Netherlands, young adults (aged 18–24) make up 8% of the driving population, but are involved in 22% of all severe traffic accidents. This means that per kilometer travelled, young adults in the Netherlands are 5.5 times as likely to be involved in a severe traffic accident as older adults (Schoon and Schreuders, 2003). The differences in accident involvement are often attributed to specific characteristics of young adults. For example young drivers, compared to older drivers, have been found to have a more

positive attitude towards taking risks, display stronger motives for risky driving (Hatfield and Fernandes, 2009), and tend to drive at higher speeds (Boyce and Geller, 2002).

Al-Balbissi (2013) in his valuable research study assessed the influence of driver sex on road accidents. Accident records for 3 years and for three different income regions were analyzed. Annual distance traveled, social and economic participation and effect of public vehicle accidents were considered. Effects of environmental factors and driver age were also included. The driver faults analysis identified possible reasons for accident differences. Analysis of accident severity was used to evaluate all differences. The results show that male accident rates are significantly higher. This trend is consistent through all the analysis. Accident differences are significant only in normal driving conditions. Driver over age 50 had the lowest accident rates. Accident rate differences were caused by lack of attention and impatience among male drivers. Appropriate means of communication should alert concerned populations to these findings (Al-balbissi 2003).

As per the research made by Eman K. Ali & Sherif M. El-Badawy and El-Sayed A. Shawaly 2014 The collected data shows that 67% of crashes occurred by single drivers, 20% by married drivers, and only 13% by married drivers who have kids. Increased annual vehicle mileage tends to increase annual crash risk, all else being equal (CAS, 1996, p. 35, 242 and 250; Litman, 2004).

Anyone who has purchased automobile insurance for a driver less than 25 years of age knows that drivers in that age group are substantially overrepresented in motor vehicle crashes. In fact, motor vehicle related injury is the leading cause of death for people aged 1 to 24 in the United States (CDC 1997). The auto fatality rate for 16-20 years old drivers is more than two or three times the rate for middle-aged drivers (U.S department of transportation 2000). Furthermore, a high number of deaths occur among teenage passengers of motor vehicles; in 1993 two-thirds of the deaths of passengers aged 13-19 occurred when other teenagers were driving (Williams and Wells 1995).

Dionne and Ghali (2003) studied the empirical impact of the Bonus Mails rating system in Tunisia on road safety. This rating system is based on the claim history of the insured, where he/she is penalized for each caused accident. They concluded that this rating system reduces the probability that a loyal insured will be involved in a reported accident. They noted that this does not affect the probability of those, who represent a large percentage of the total insured in Tunisia, who frequently switches

insurance companies without being penalized. Some western countries, the Netherlands for example, apply a tougher version of the Bonus Malus system. The claim history of each insured is kept in track by the government, and is transferred automatically to the new insurance company.

As per the empirical evidence by a study of progressive insurance the introduction of insurance premiums that reflect actual millage of insured vehicles may lead to a significant reduction of the millage, estimated at the level of 8% or even 10%. Principally this result is claims frequency. As per the study made the claims frequency in the group with the highest millage was 10 % higher than the frequency of the total sample. The reason for this reduction was explained by two factors. A lower vehicle risk exposure & the fact that a vehicle not used in traffic is not a potential target. More over drivers with UBI policies tend not only to drive less often which alone can reduce the claim frequency, but also have the tendency to drive more safely, which is a significant impact on the over all improvement of road safety (Driving behavior change effect).

2.3 CONCEPTUAL FRAME WORK OF THE STUDY

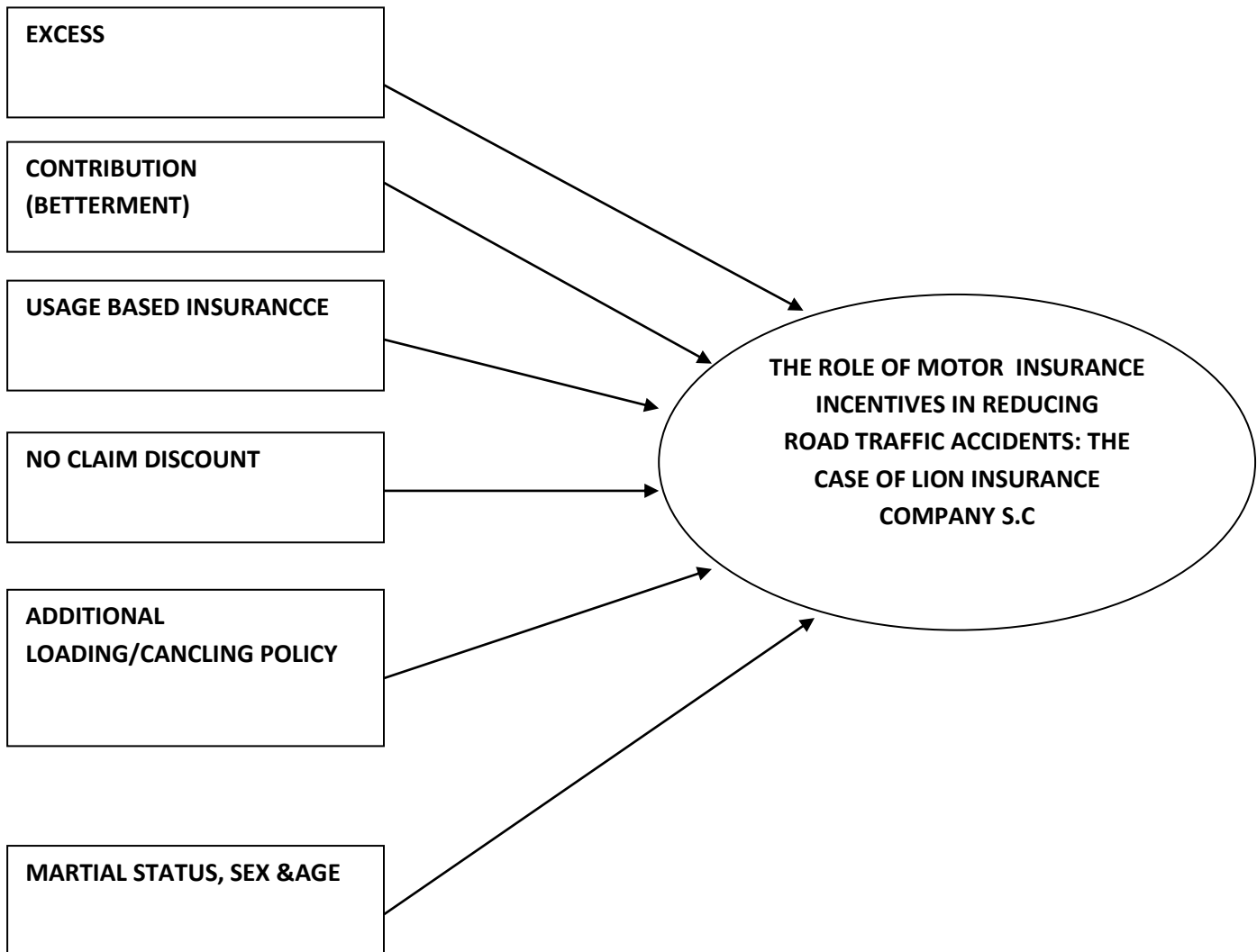


Fig 2.1 conceptual frame of the study.

CHAPTER THREE

RESEARCH METHDOLOGY

3.1 Introduction

This section presents the research methodology for this study. The description includes research design, study area, population of the study, sampling techniques, sample size, and method of data collection.

3.2 Research design

Research design is defined as the clearly defined structures within which the study is implemented (Burns & Grove 2001:223). “Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance” (Kerlinger).

Descriptive research design was employed to suit the phenomena under study (The study If Motor Insurance Incentives On Reducing Road Traffic Fatalities). According to Burns and Grove (2003:201), descriptive research “is designed to provide a picture of a situation as it naturally happens”. It may be used to justify current practice and make judgment and also to develop theories. This study tries to find out the frequency or relationship between the independent variables with that of the dependent road traffic accident.

3.3 Data source and type

For these clarifications qualitative & quantitative data was used in data collection. These have been used because secondary data was collected from published reports and primary data from branch managers, underwriting & claims officers and claims division heads through a semi structured questionnaire which consisted of closed and open ended question. Unstructured interview was held with the top management of Lion Insurance Company S.C who are the General Manager , Marketing manager, operation manager & Claim’s manager using Open ended &close ended questions in order to collect primary data.

3.4 Study population and sample size

3.4.1 Population Study

Population is defined by polit and Beck (2004:50) as the aggregate or totality of those conforming to a set of specification. The sample from the given population should be representative in the sense that each sampled unit will represent the characteristics of a known number of units in the population (Lohr 3). Due to shortage of time and vagueness, the data was collected only from stuffs if Lion Insurance Company S.C from head office and branch offices in Addis Ababa. The target population constituted 18 Branch managers located in Addis Ababa, 71 operational underwriting officers, 17 claim officers and 4 claim division heads. However officers with 3 and more years of experience are selected since they are able to answer the questions as required. Additionally 4 top managements CEO, operation manager, marketing manager and claims department manager are included to collect qualitative data. Additionally in order to collect some data from the service users 10 key informants were selected in a convenient sampling way who have a long standing business relationship with the company and who owns high fleet vehicles.

3.4.2 Sampling Technique

Burns and grove (2003) refer to sampling as a process of selecting a group of people, events or behavior with which to conduct a study. Polit et.al (2001) confirms that in sampling a portion that represents the whole population is selected.

- As per the behavior of the study made, non-probability purposive samplings is used. According to Parahoo (1997) in non-probability sampling researchers use their judgment to select the subjects to be included in the study based on their knowledge of the phenomenon.. Convenient sampling is a type of non-probability or non random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at given time, or willingness to participate are included for the purpose of the study (Iiker et.al. 2015).

3.4.3 sampling size

The sample size of stuffs is calculated based on Yamane's (Yamane 1967).

$$n = \frac{N}{1+N(e^2)}$$

In which n= Sample size

N= Total population

E= error of percentage 5

By using Yamane formula of sample size with an error of 5% and with a confidence coefficient of 95% (Yamane 1967) the calculation from a target population sample of Branch managers, underwriting officer & Senior officers. Claims division heads (managers), claims officers & senior officers are depicted below in table 2.

Table 3.1 :- sample size

Stuffs	Target Population	Sample size	Percentage
Branch managers	18	17	94.44%
Underwriting officers ➤ 3yr experience	31	27	87.09%
Senior underwriting officers	6	6	100%
Claims Division heads (managers)	4	4	100%
Claims senior officer	3	3	100%
Claims officers ➤ 3 yrs experience	6	6	100%
Total population	68	63	92.65%

3.5 Data processing and analysis

Kaul defines data analysis as, “Studying the organized material in order to discover inherent facts. The data are studied from as many angles as possible to explore the new facts.” Data processing is an important part of the whole survey operation. Data analysis means to organise, provide structure and elicit meaning. Analysis of qualitative data is an active and interactive process (Polit et al 2001:383). As a result, questionnaire were analyzed quantitatively with the help of SPSS to show the frequency and percentages while the others interviews were analyzed qualitatively in order to attain the objective of the study and draw important conclusions followed by recommendations.

CHAPTER FOUR

DATA ANALYSIS, INTERPRITATION & DISCUSSION

4.1 Descriptive analysis , discussion and interpretation based on the data collected form LIC stuffs

Descriptive research designs help provide answers to the questions of who, what, when, where, when, where and how associated with a particular research problem. Descriptive research is used to obtain information concerning the current status of the phenomena to describe “what exists” with respect to variables or conditions in a situation.

4.1.1 Demographic analysis

For the purpose of this study, out of stuffs of Lion Insurance S.C 63 has been selected from officers to management stuffs in a convenient sampling way that are available and willing to provide data for the given questionnaire.

4.1.1.1 Educational status respondents

Table 4.1: Educational status of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid DIPLOMA	1	1.6	1.6	1.6
1ST DEGREE	43	68.3	68.3	69.8
2ND DEGREE	9	14.3	14.3	84.1
MASTERS	10	15.9	15.9	100.0
Total	63	100.0	100.0	

Source: SPSS out put

The above Table 4.1 showed Educational status of respondents under the study. Accordingly, greater part of the respondents was 1st degree holder which is 68.3%, while diploma holder 1.6%, Masters holder 15.9% & 2nd degree holder 14.3%. Thus, the level of education of respondents is dominated by 1st degree graduates. Diploma holders are very least. *So, first degree holders are with larger share than Diploma, 2nd degree holder as well as masters holders that follow.*

4.1.1.2 Job Position of respondents

Respondents from officers to management participated for the study. The position of respondents was categorized in to three. Namely Officers, Senior Officers & Management Staffs.

Table 4.2 : Job position of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	OFFICER	33	52.4	52.4	52.4
	SENIOR	9	14.3	14.3	66.7
	MANAGEMENT	21	33.3	33.3	100.0
	Total	63	100.0	100.0	

Source: Own Survey (2018)

4.1.1.3 Work experience of respondents

Stuffs having work experience of three and greater years that are in the operation were participated in the assumption that more experienced respondents will provide the required information.

Table 4.3 : Respondents Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3-6	36	57.1	57.1	57.1
	7-10	20	31.7	31.7	88.9
	11-15	6	9.5	9.5	98.4
	16-20	1	1.6	1.6	100.0
	Total	63	100.0	100.0	

Source: Own Survey (2018)

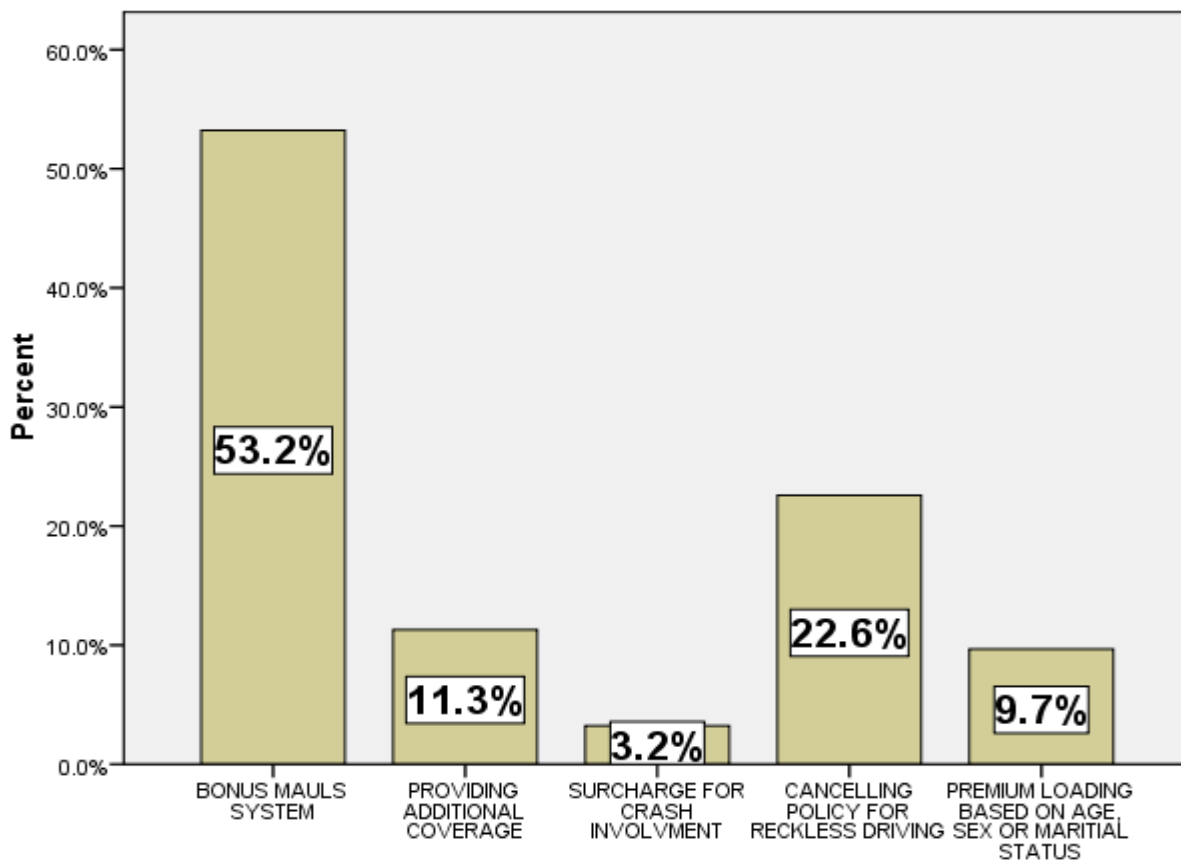
Table 4.3 above shows the work experience of respondents under study. Accordingly, 3-6 years of experience has taken 57.1 %, 7 to 10 years has experience of 31.7 %, 11 to 15 years of experience is taken 9.5 % and at last 1.6% of the respondents had work experience of 16 to 20. Hence, more than half of the samples have of the work experience with 3-6 years followed by those having 7to10 years respectively. Those respondents with 11 to 15 years and 16-20 years of work experience were few when compared with others. *Respondents having 4-6 years of work experience are the leading*

respondents and are followed by those having 7-10, 11-15 & 16-20 years of experience respectively as per their rank.

4.1.2 ways MII (Motor insurance industry) promotes road safety

In order to encourage customers upon policy renewal as well as claims processing, the Motor insurance industry use different incentives. Among those incentives the bonus Maulus system, additional coverage, surcharge for crash involvement, canceling policy for reckless driving are used in the study.

Figure 4.1: ways motor insurance industry promote road safety of respondents



Source: SPSS out put

Bonus-malus is a mechanism for adjusting the parameters of insurance contracts according to the past record of policyholders. For example, the 122 premium can be adjusted based on individuals' past record of accidents (Lemaire, 1995; Dionne and Vanasse, 1989, 1992) or on the number of demerit points accumulated (Dionne et al., 2000).

As per the study made Figure 4.1 above shows 53.2% believe bonus mauls system will promote safe driving. This can be done by assigning premium based on insured's claim experience. 22.6% commented that it can be done by cancelling policy for reckless drivers followed by premium loading based on sex, age & marital status, providing additional coverage & surcharge for crash involvement. With 22.6%, 11.3% & 3.2% respectively.

4.1.3 Repetitive cause for RTA

Table 4.4.: Repetitive cause for RTA based on the companies claim experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid OVER SPEED	22	34.9	34.9	34.9
LACK OF EXPERIENCE	13	20.6	20.6	55.6
OVER LOADING	2	3.2	3.2	58.7
CARELESSNESS	26	41.3	41.3	100.0
Total	63	100.0	100.0	

Source: SPSS out put

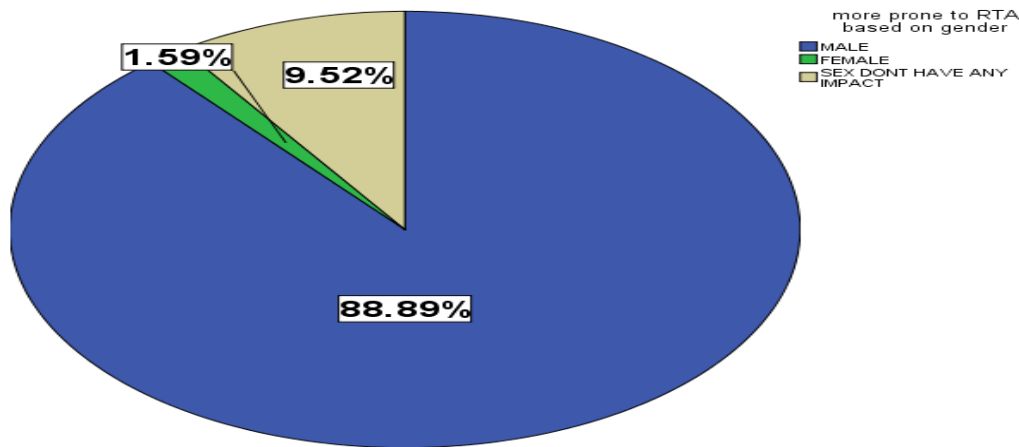
Table 4.4 above depicted the repetitive cause for the accidents occur. Accordingly 41.3% has taken carelessness of drivers on the road. 34.9% of the respondents confirmed over speed of drivers is the reason for the road traffic accidents occurred. While the remaining 20.6% & 3.2% believe lack of experience and overloading respectively are the main causes.

4.1.4 RTA based on gender

In a study by Storie (1977), significant differences in driving characteristics were found between the two sexes with regard to speed, skill, and attitude. Females were more likely to drive at lower speeds and overtake more carefully. Males, on the other hand, were generally more skillful, able to perform difficult maneuvers, and more likely to risk driving under the influence of alcohol.

As per the study made by Quisumbing & Yohannes, 2004, male and female drivers were involved in 10,928 (90.02%) and 684 (5.63%) fatal crashes respectively. Gender in the remaining 528 (4.35%) fatal crashes was not recorded in the crash reports. There are two possible reasons for the high proportion of male drivers involved in crashes. Firstly, professional driving jobs are dominated by male drivers, especially for jobs in remote areas or those that involve nighttime driving. It is worth noting that female involvement in paid employment (or self-employment) is low in Ethiopia

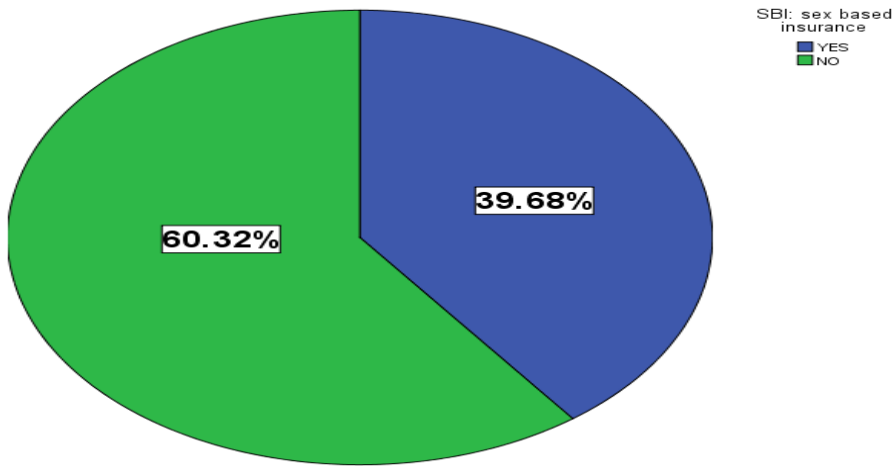
Figure 4.2: More prone to RTA based on gender



Source: SPSS output

As per the data collected figure 4.2 shows that 88.89% confirmed male drivers are more prone to road traffic accidents which has take the majority of the sample. The remaining 9.52% replied that females are more prone while 1.59% of the respondents agreed that gender don't have any impact on road traffic accidents.

Figure 4.3: impact of gender based insurance



Source: SPSS output

Additionally as per figure 4.3, 60.32% of the respondents confirmed that Gender based insurance cover will not have any impact in minimizing road traffic accidents. The remaining 39.68% replies that it can be an incentive to minimize road traffic accidents.

4.1.5 RTA based on Marital Status

Table 4.5: Road traffic accidents based on marital status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid MARRIED	1	1.6	1.6	1.6
UNMARRIED	24	38.1	38.1	39.7
DIVORCED	10	15.9	15.9	55.6
MARITAL STATUS DON'T HAVE ANY IMPACT	28	44.4	44.4	100.0
Total	63	100.0	100.0	

Source: SPSS out put

Table 4.5 above shows road traffic accidents based on marital status. Accordingly 44.4% replies that marital status does not have any impact on road traffic accidents. While 38.1% confirmed that

unmarried drivers are more prone to accidents. The remaining 15.9% and 1.6% of the respondents said divorced and married are prone to accidents respectively. *Therefore we can see that majority of the respondents which is 44.4% believe marital status don't have any impact.*

4.1.6 Role of Marital Status based premium in minimizing RTA

Table 4.6: Does Marital status based premium based premium promote Road safety

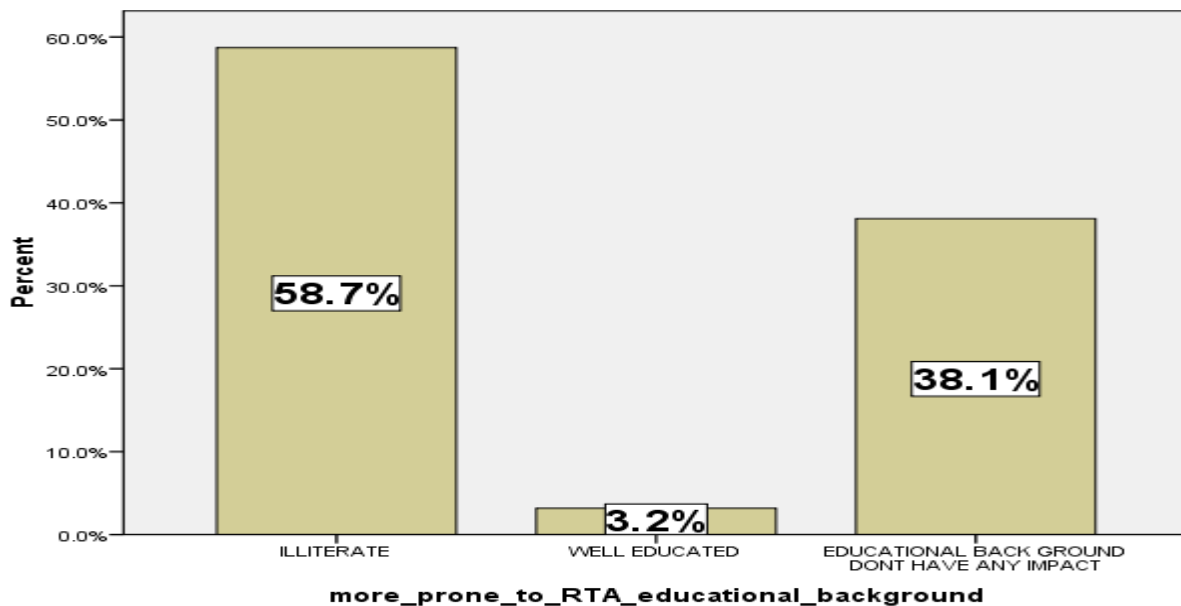
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	17	27.0	27.0	27.0
NO	46	73.0	73.0	100.0
Total	63	100.0	100.0	

Source: SPSS out put

The above Table 4.6 implies respondent's opinion regarding martial based insurance and road traffic accidents. Accordingly, 73%of the respondents confirmed that martial based insurance won't contribute in road traffic accidents. The remaining 27% imply selling insurance based on marital status don't have any impact

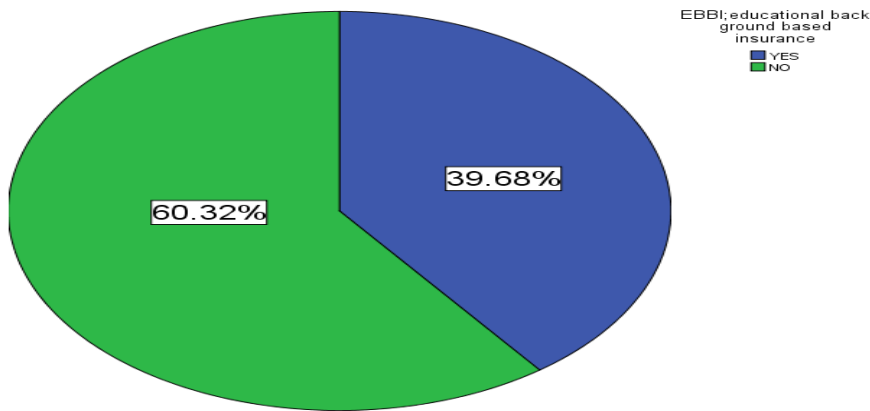
4.1.7 Role of Educational background on RTA and EBI based insurance

Figure 4.4: RTA based on educational status



Source: SPSS output

Figure 4.5: Role of educational background based insurance cover



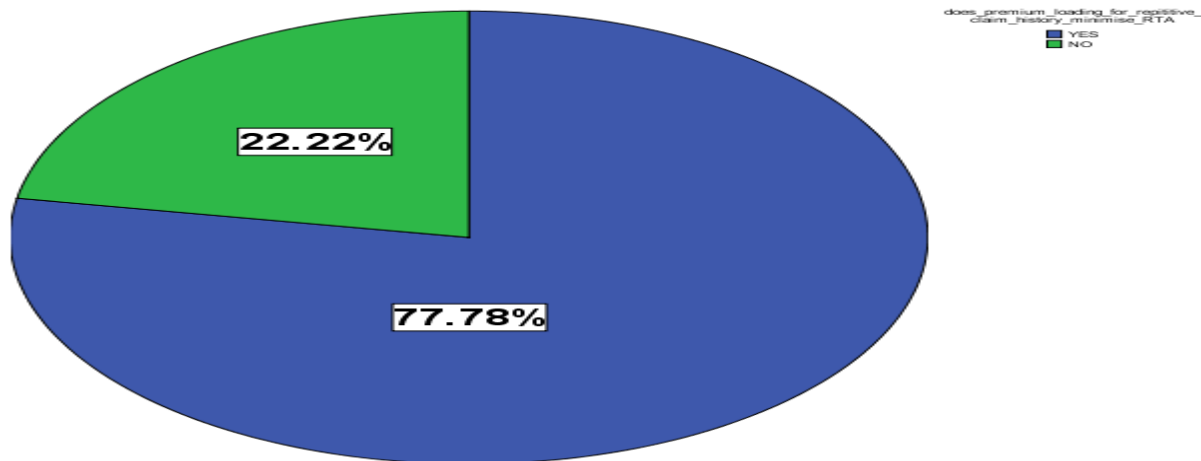
Source: SPSS output

The above figure 4.3 shows that illiterate drivers are more prone to traffic accidents scoring 58.7%. 38.1% believe educational status don't have any impact on driving. while the remaining 3.2% shows married are more prone to road traffic accidents.

Additionally as per figure 4.4, 60.32% replied that EBI don't have any role in promoting road safety. While the remaining 39.68% agreed on its role in promoting road safety.

4.1.8 Role of premium loading in promoting road safety

Figure 4.6: does premium loading promote road safety



Source: SPSS out put

Figure 4.5 above implies if premium loading on those with repetitive claim history will promote road safety. Accordingly, 77.78% confirmed that premium loading will affect the driving behavior of drivers on the road. The remaining 22.22% refuses premium loading impact on road safety.

4.1.9 Excess payment

Table 4.7: who pays excess payment during claim processing

		Responses		Percent of Cases
		N	Percent	
\$excess_payment ^a	who_pays_excess_driver	27	31.0%	42.9%
	who_pays_excess_owner	42	48.3%	66.7%
	who_pays_excess_TP	18	20.7%	28.6%
Total		87	100.0%	138.1%

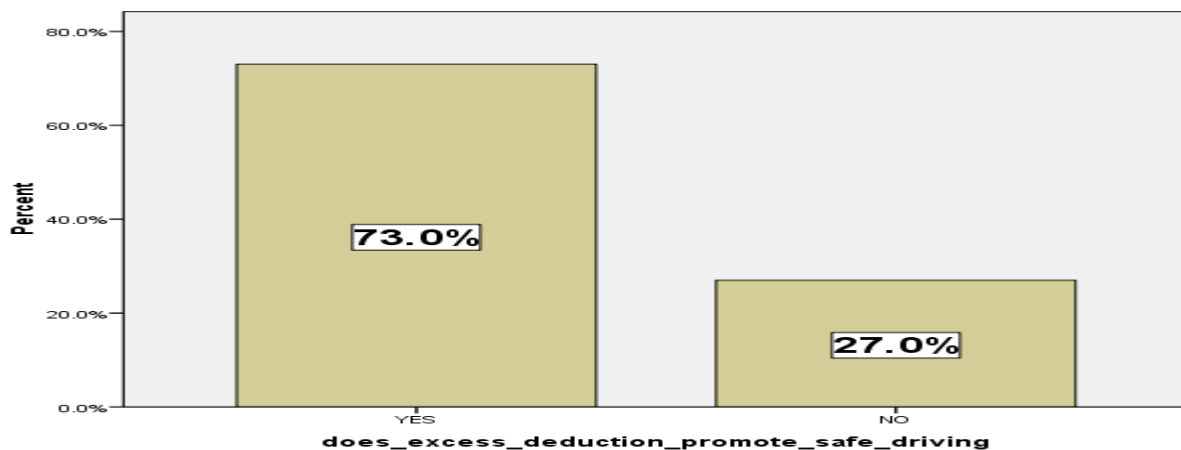
a. Dichotomy group tabulated at value 1.

Source: SPSS out put

As per table 4.7 multiple responses were given. This implies that during the claim processing excess payment differ as per the agreement between the owner and the driver. Additionally the at fault also affect by whom the excess will be paid. Because if the accident is approved by the traffic police the excess will be the responsibility of the third party.

4.1.10 Role of excess deduction in promoting safe driving

Figure 4.7 : Does excess deduction promote road safety



Source: SPSS output

Figure 4.7 above shows that 73% of the respondents believe the excess deduction applied during claim processing have impact on the driver behavior. *While the remaining refuses it's role in reducing RTA. Therefore this clearly shows that excess deduction have a huge impact on safe driving.*

Table 4.8: How excess deductions (payments) during claims processing promote road safety.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid will be careful in order not to pay the said amount	30	47.6	47.6	47.6
during renewal	6	9.5	9.5	57.1
by making the responsible liable	7	11.1	11.1	68.3
by reducing excess up on renewal	1	1.6	1.6	69.8
didnt answer	2	3.2	3.2	73.0
belive excess dont have any relationship with road safety	17	27.0	27.0	100.0
Total	63	100.0	100.0	

Source: SPSS out put

Accordingly as per respondents justification regarding how it can affect road safety, 47.6% said in order not to pay the required excess amount which is described in the policy schedule during underwriting, the driver will make his/her best effort to avert accidents. (Table 4.8). 27% of the respondents believe excess deduction will not have an impact. 11.1% said by making the TP at fault party responsible to pay the excess amount, the MII can participate in promoting road safety. Informing insured's during renewal as an incentive by reducing excess amount upon renewal for a highly risk avert customers agreed in 9.5% and 1.6% respectively. While the remaining 3.2% of the respondents didn't answer. This shows that, as a financial incentive excess deduction have a significant role in road safety.

4.1.11 Role of No claim discount (NCD) in promoting safe driving

Table 4.9 Role of NCD on road safety

			if_yes_how_NCD				Total
			ENCOURAGE DRIVERS AS WELL AS OWNERS IN ORDER TO PAY LESS PREMIUM	DONT HAVE ANY RELATIONSHIP WITH ROAD SAFETY	DIDNT ANSWER	BY GIVING AWARNES S TO CLIENTS AT THE TIME OF RENEWAL	
does_NCD_promot_safe_driving	YES	Count	44	0	1	2	47
		% within if_yes_how_NCD	97.8%	.0%	100.0%	100.0%	74.6%
		% of Total	69.8%	.0%	1.6%	3.2%	74.6%
	NO	Count	1	15	0	0	16
		% within if_yes_how_NCD	2.2%	100.0%	.0%	.0%	25.4%
		% of Total	1.6%	23.8%	.0%	.0%	25.4%
Total	Count	45	15	1	2	63	
	% within if_yes_how_NCD	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	71.4%	23.8%	1.6%	3.2%	100.0%	

Source: SPSS output

Table 4.9 above shows whether or not NCD (no claim discount) have any effect in promoting road safety and the ways it affect safe driving. Accordingly 74.6% of the respondents believe NCD have positive impact on safe driving while 25.4% opposes it's contribution to road safety. Additionally from those who agreed NCD'S contribution to road safety, 71.4% agrees that drivers will take a good care on the road while driving in order to gain the discount that will be offered during renewal for no claim customers. Drivers (owners) will be motivated thinking of the low premium that will be paid. While the remaining believe that NCD don't have any impact (23.8%). While 3.2% suggested by creating awareness upon renewal and 1.6 % didn't reply. *Therefore as per the data collected we can see that majority majority of the stuffs have seen the role NCD plays in promoting road safety.*

4.1.12 Role of driving experience on road safety and the measures taken while underwriting (selling policy) and claim processing.

Table 4.10: Measures taken during underwriting regarding driving experience

			Position			Total
			OFFICER	SENIOR	MANAGEMENT	
if_yes_how_during_selling	consider driving experience while selling policy	Count	6	1	4	11
		% within position	18.2%	11.1%	19.0%	17.5%
		% of Total	9.5%	1.6%	6.3%	17.5%
no measure during under writing		Count	4	2	3	9
		% within position	12.1%	22.2%	14.3%	14.3%
		% of Total	6.3%	3.2%	4.8%	14.3%
didnt answer		Count	3	1	1	5
		% within position	9.1%	11.1%	4.8%	7.9%
		% of Total	4.8%	1.6%	1.6%	7.9%
Driving experience don't have any impact		Count	4	1	0	5
		% within position	12.1%	11.1%	.0%	7.9%
		% of Total	6.3%	1.6%	.0%	7.9%
take measure as per the law		Count	2	0	1	3
		% within position	6.1%	.0%	4.8%	4.8%
		% of Total	3.2%	.0%	1.6%	4.8%
named and unnamed base cover		Count	3	0	4	7
		% within position	9.1%	.0%	19.0%	11.1%
		% of Total	4.8%	.0%	6.3%	11.1%
based on claim history of the driver there is loading		Count	11	4	8	23
		% within position	33.3%	44.4%	38.1%	36.5%
		% of Total	17.5%	6.3%	12.7%	36.5%
Total		Count	33	9	21	63
		% within position	100.0%	100.0%	100.0%	100.0%
		% of Total	52.4%	14.3%	33.3%	100.0%

Source: SPSS out put

The above table 4.10 describes staffs view regarding driving experience impact on safe driving and what kind of measure being taken during underwriting (selling policy) as well as claim processing. Accordingly 6.5% of the staffs agreed that based on the loss ratio of the insured which indicated their driving experience premium loading or discount will be made. 17.5% of the staffs said driver experience will be considered as well as 11.1 % said named & unnamed base insurance cover is given in order to control the driver's holding the vehicle using premium incentive based on the driver age and experience. The remaining 14.3% said no measure during underwriting, 7.9% didn't answer the question, 4.8% said the company will take measure as per the road and transport authority law & regulation. At last 7.9% of the respondents believe driving experience don't have impact on safe driving. 36.5% of the staffs confirmed that insured's loss ratio describes the driving experience in return based on their loss ratio the company offer discount for low claim experienced insured's and apply additional loading for high risk customers. *Based on the output we can see that by loading on insured's upon renewal.*

Table 4.11: measures taken during claims processing regarding driving experience

			position			Total
			OFFICER	SENIOR	MANAGEMENT	
if_yes_how_during_claim	deduct 200 Birr for under 1 year driving experience	Count	24	7	17	48
		% within position	72.7%	77.8%	81.0%	76.2%
		% of Total	38.1%	11.1%	27.0%	76.2%
	no measure during claim processing	Count	0	0	1	1
		% within position	.0%	.0%	4.8%	1.6%
		% of Total	.0%	.0%	1.6%	1.6%
	didnt answer	Count	3	1	2	6
		% within position	9.1%	11.1%	9.5%	9.5%
		% of Total	4.8%	1.6%	3.2%	9.5%
	driving experience don't have impact	Count	4	1	0	5
		% within position	12.1%	11.1%	.0%	7.9%
		% of Total	6.3%	1.6%	.0%	7.9%
	take measure as per the law	Count	2	0	1	3
		% within position	6.1%	.0%	4.8%	4.8%
		% of Total	3.2%	.0%	1.6%	4.8%
Total	Count	33	9	21	63	
	% within position	100.0%	100.0%	100.0%	100.0%	
	% of Total	52.4%	14.3%	33.3%	100.0%	

Source: SPSS output

Regarding claim processing (Table 4.11) 76.2% of the respondents confirmed that 200 birr deduction will be made for inexperienced drivers having less than one year driving experience. 4.8% said measure as per the road and transport authority will be taken while 1.6% believe no measure taken while claim processing and 7.9% of the respondents believe that driving experience don't have impact on road safety. *Therefore as per the cross tabulation analysis 76.2% of the respondents believe the company involves in road safety in claims processing by deducting additional 200 birr during compensation when the driver has less than one year driving experience.*

4.1.13 The measures taken by LIC in order to promote road safety

Table 4.12: any measure taken by the company to promote safe driving

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	52	82.5	82.5	82.5
NO	11	17.5	17.5	100.0
Total	63	100.0	100.0	

Source: SPSS output

As per the table 4.12 above majority of the stuffs (82.5%) confirmed that the company takes measures to promote road safety while the remaining (17.5%) refused. Which shows that there is information gap between the stuffs.

Table 4.13 : Measures taken by LIC to promote safe driving

		how_to_participate_in_road_safety ^a			Total
		Trainingfordrivers	Sponsoring the mass media	Fundingtheroadt ransportmanagem ent	
Any_measure_taken_by_LIC_ YES to_reduce_RTA	Count	33	22	18	52
	% within any_measure_taken_by_LIC_to_reduce_RTA	63.5%	42.3%	34.6%	
	% within \$how_to_participate_in_road_safety	100.0%	100.0%	100.0%	
	% of Total	63.5%	42.3%	34.6%	100.0%
Total	Count	33	22	18	52
	% of Total	63.5%	42.3%	34.6%	100.0%

Table 4.13 : Measures taken by LIC to promote safe driving

		how_to_participate_in_road_safety ^a			Total
		Trainingfordrivers	Sponsoring the mass media	Fundingtheroadt ransportmanage ment	
Any_measure_taken_by_LIC_ YES to_reduce_RTA	Count	33	22	18	52
	% within any_measure_taken_by_LIC_to_reduce_RTA	63.5%	42.3%	34.6%	
	% within \$how_to_participate_in_road_safety	100.0%	100.0%	100.0%	
	% of Total	63.5%	42.3%	34.6%	100.0%
Total	Count	33	22	18	52
	% of Total	63.5%	42.3%	34.6%	100.0%

a. Dichotomy group tabulated at value 1.

Source: SPSS output

Table 4.13 shows the measures taken by the company in order to promote road safety. As per the output multiple responses were given regarding the measures; Accordingly, 63.5% of the respondents replies that the company involves through providing training for fleet drivers. 42.3% agreed that the company can involve through sponsoring mass medias’ during awareness creation campaign. while the remaining 34.6% agreed road safety involvement through funding road transport management when requested. However among the respondents 17.5% disagree the company’s involvement in road safety.

4.2 Qualitative analysis and discussion as per the interview

For the purpose of this study, the top managements who are the general Manager, marketing management head, operation manager, & the claim department head were the participants from the lion insurance company S.C. additionally in order to justify the stuffs reply, key informants from service users were also included in the study. These service users were selected in a convenient sampling way who have a long standing relationship with the company and also owns fleet vehicles.

4.2.1 Ways LIC involves in the prevention of road traffic accidents and service user’s reply regarding LIC’S measure

The high frequency of Road traffic accidents became the main reason for the high cost escalation for insurance companies as well as for the loss of plenty lives and property. Due to this all parties need to

participate in the prevention of road traffic accidents in order to minimize such losses. Accordingly, regarding the involvement of lion insurance company's contribution in the campaign, the interviewees replied different ways the company contributes. These are through sponsoring the mass media during awareness creation campaigns, providing training for fleet drivers, funding the road transport management in road reconstruction & placing road signs. Additionally the company provides brochures and pamphlets for customers in order to create awareness. During training the company informs regarding safety measures, and also share the company's experience regarding the main cause of accidents. Additionally it gives details about driving license grades and what vehicle to drive as per the road and transport authority rule and regulation. As per the output, the interviewees marked it have positive responses from the trainees as well as the owners of the vehicles.

These high fleet vehicle owners justified that the company's commitment in giving training to their drivers is not forgettable and also marked that it gives the drivers a good awareness about the road transport authority rule and regulations. Additionally the pamphlets which occasionally provided upon renewal is a good notice to create awareness.

4.2.2 Motor insurance incentives impact on road safety and the measures taken during underwriting as well as claims processing & its role in service users.

The interviewees from the top management marked different motor incentives that promote road safety. They have commented that low excess amount will be provided for a highly risk avert customers during renewal. Additionally to encourage such customers additional discounts will be provided. However they have highly marked that as per the companies experience NCD (No claim discount) which is provided for customers who didn't request for a claim will be rewarded with a discount upon renewal. This becomes a very good financial incentive that encourage the insured's to drive safe on the road.

In the reverse, those customers with repetitive claim history are provided higher premium so that they will be responsible while driving. Premium loading as well as canceling policy will be held during underwriting as per the claim department notice if the customer is highly prone to road traffic accidents. During claim, customers with low loss ratio are provided a better claim. Ex-gratia will be

made even though their claim request is not appropriate (out the policy). In the reverse for those with high loss ratio, additional part cost contribution will be loaded and no ex-gratia will be provided.

Service users also marked that NCD (No claim discount) become a good motivator. Due to these the users become more strict on their drivers controlling their driving behavior as well as consider the drivers driving experience while hiring in order to avoid the risk. Some also marked that rather than young drivers, they prefer more matured and mostly married, since these people are more responsible.

In order to control their driving the some users change their strategy and make excess which is the responsibility of the one who causes the accident, to be the cost of the drivers. Due to this the users highly marked that they have seen dramatic change on the driver's being responsible on the road in order not pay the expense.

4.2.3 Vehicles that are highly prone to road traffic accidents and their purpose at the time of accident.

As per the companies claim experience, the interviewees marked that among the vehicles types insurance cover is provided Sino-trucks, mini-buses and vitz are high risk vehicles with repetitive claim history that bring cost escalation to the company. These vehicles that are mostly used for general cartage, public transport and car hire are those vehicles that have additional loading during premium.

The main cause for accidents is due to Age of drivers, low driving experience, and carelessness are the main cause for claims registered. Additionally, even though these vehicle types are driven frequently they are not serviced on time. Road infrastructure is also marked by the interviewees as a cause for some accidents.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The main purpose of this research was to analyze the role of motor insurance incentive in reducing road traffic accident : The case of lion insurance company S.C. The research was guided by two research questions

The researcher used descriptive & exploratory research design to investigate the role of the motor insurance incentives role in reducing road traffic accidents.

The participants were employees of lion insurance company which are located in Addis Ababa, Top managements of the company & service users which have long standing relationship with the company owning fleet vehicles. Accordingly as per yamane's sample size equation; samples were selected in a convenient way based on their availability & willingness to participate in the study. Branch managers, claim division heads, senior underwriting & claims officers, the top management & service users were participated in the data collection procedure.

Accordingly as per the questionnaire prepared, participants gave their reply regarding the study and interviewees gave their comment about the company's practice. Additionally the selected service users also justified about the service given by the insurance company.

premium as per driver's demographic background, Out of pocket payments (Excess, part cost contribution), NCD, premium loading, training, sponsorship & promotion were the issues under the study.

Accordingly, premium loading as per driver's demographic background was believed that it wouldn't have any role on driver's behavior on road. No claim discounts and premium loading was found that it would have huge role in promoting road safety. Additionally even though it have a very small impact, promotion and sponsorship of the mass media as well as trainings given to drivers was found to be useful in promoting road safety.

5.2 Conclusion

The finding showed that Bonus mauls system had the highest score in promoting road safety followed by canceling policy & providing additional coverage. In which the remaining respondents reply that premium loading based on age, sex & marital status and surcharge for crash involvement has the lowest role.

Regarding the cause for repetitive claims, it was noted that driver's carelessness on the road become the leading cause for Road traffic accidents followed by over speed, lack of experience & over loading respectively.

Based on the findings male drivers are more prone to road traffic accidents scoring the highest claims request followed by female with the lowest score. Some of the respondents also believed that gender don't have any impact road safety. Accordingly as per the analysis made majority believe gender based insurance don't have any role in reducing road traffic accidents.

Based on marital status, majority replied that marital status don't have any impact on road traffic accidents followed by unmarried drivers, divorced and married drivers respectively involving in road traffic accidents. As per our key informants married and matured drivers are prioritized during hiring since these drivers are highly responsible and risk avert. However majority belie marital status based insurance (MSI) won't have any role in promoting road safety.

Regarding educational background illiterate drivers are more prone to accidents. Some believed educational background don't have any impact followed bay well educated respectively.. how ever as per the finding Educational background based insurance don't have any role in promoting rod safety.

Premium loading during underwriting on those with repetitive claim history as per the claims department notice, have a huge impact in reducing road safety. As per the interviewee made with the management, it is marked that premium loading become a high financial incentive discouraging insured's with higher premium payment and promote road safety and reduce road traffic accidents.

Some times policy canceling will be made on a high risk customers as per their claim experience reported by the claims department.

Regarding excess payment during claim processing, multiple responses were give showing that excess payment depends on the agreement between driver and the owner. However the output shows that the owners pay excess payment most of the time followed by drivers and TP at fault respectively.

Accordingly it is noted that excess deduction highly promote road safety. Service users also marked that they have seen significant change on their drivers when they impose the excess deduction on the drivers for each claims. Fear not to pay the said amount is the reason that reduce accidents.

Furthermore by encouraging drivers as well as owners, majority agreed NCD's role in promoting road safety while very minority believe that NCD don't have any impact on promoting road safety. Additionally key informant also justified that NCD become a good incentive in encouraging them in order to pay less premium by avoiding accidents as much as possible. The top management also marked NCD's high role on their customer by motivating them in reducing road safety.

Regarding driving experience very minority refused its role in promoting road safety which shows driving experience have a high role in reducing road safety. Accordingly it is noted that especially by the claim department, driving license measure is taken by imposing penalty on those with less than one year driving experience.

Regarding the overall measures taken by the company in order to reduce RTA, majority confirmed that training given for fleet drivers brought positive outcome. This was also justified by the key informants who are owners of fleet that the training offered by the insurance company is very helpful. They also marked that the training given regarding road transport authorities law and regulation regarding driving license not only helped the drivers but also informed the owners about the regulation regarding driving license, which they noted that it helped to reconsider during hiring. By doing so drivers will be able to drive as per his/her driving license which will reduce road traffic accidents.

Additionally sponsoring the mass media during awareness creation programs is also the way the insurance company involves in promoting road safety. Further more, funding the road transport management in road safety signs, road reconstruction etc. . . .) is also the way to contribute in the campaign followed by the brochures and pamphlets offered for insured's as awareness creation.

As per the claim experience of the company sino-truks, mini-buses & vitz are the vehicles with repetitive claim experience and high loss ratio. These vehicles are mostly used for general cartage & public use. As per the analysis the cause for such repetitive claim was because these type of vehicles are frequently driven. However these vehicles are not serviced on time. Additionally due to drivers age & not being experienced made it even worse. Externally the road infrastructure is the other reason for the cause of the accidents.

5.3 Recommendation

Based on the findings of the study and the conclusions made, the following recommendations are forwarded.

No Claims Discounts (NCD) & Additional premium loading (bonus mauls) which is applied during renewal were the most important incentives that have huge role in reducing road traffic accidents (promoting road safety). Due to the claims department notice to the underwriting regarding claim experience of customers, it's is clearly seen that it have a huge role in providing data that can be used upon renewal. Therefore the MII should focus highly on this area since these have a huge role on the drivers and also the MII should strengthened data gathering regarding those customers having high claim ratio and low claim experience.

Regarding the out of pocket payments like that of excess, which is stated in the policy schedule which is paid during each claim notification, the industry must convince owners who pay themselves, to make it the responsibility of the driver at the time of the accident. Since carelessness is main cause for the road traffic accidents occurred, as a financial incentive Bonus Mauls system will highly affect the driver's behavior on the road.

Even though education based insurance will not have any impact on promoting road safety it is justified that most accidents are occurred by the illiterates. Since it is believed that training which is given to drivers have a huge role in creating awareness as well as informing insured's about Road and Transport Authority Law and regulation regarding driving the MII should high emphasis in the area. Accordingly frequent training should be given in the area for both driver's and owner of vehicles.

Since the motor insurance industry have a huge role in promoting road safety, the road and transport management must tightly work with the motor insurance industry with providing detail information about frequently updated driving license regulations, and creating opportunities for training to be held with driver's so as to minimize road traffic accidents .

Even though promoting the mass media and funding the road transport is not frequently done, insurances that participate in such programs should be well recognized by the government in order to encourage their participation. Since promoting has a huge role in creating awareness and funding the road transport management in reconstructing the road infrastructure those participating in such measures should double their effort and those who are not participating should join the campaign to bring a significant change.

Additionally, since servicing the vehicles which are driven frequently are also a cause for road traffic accidents, the insurance company as well as the road transport management should create a way to control such owner. Because of the vehicles nature which is used for public use transportation and general cartage many lives and property is at stake because of the owner carelessness. Therefore, as the road transport management is highly taking measures regarding over speeding and driving drinking, it must also set the k/m a vehicle can be driven before service and create away to control those who refuses the regulation.

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**Appendix 1: Questionnaire
St. Marry University**

Questionnaire For Insurance Professionals

Dear respondents, The purpose of this interview guide questions is to collect primary data on ‘**The role motor insurance incentives in reducing road traffic accidents**’ for partial fulfillment of master’s degree in Business Administration (MBA) study. The information you provided will be used purely for academic purpose and shall be kept strictly confidential.

Thank you in advance for your kind assistance in completing the attached questionnaire

Background of the Interviewee

1. Educational status

- | | |
|---------------------------|---------------------------|
| A. Certificate | D. 2 nd Degree |
| B. Diploma | E. Masters |
| C. 1 st Degree | F. Doctorate Degree |
| F. Other _____ | |

2. Position,

- | | |
|------------|----------------|
| A. Officer | C. Management |
| B. Senior | D. Other _____ |

3. Work experience _____

4. In which of the following Ways Motor Insurance Industry of Promotes Road Safety?

- A. Bonus mauls system
- B. Providing Additional coverage
- C. Surcharge for crash involvement
- D. Cancelling policy for reckless driving
- E. premium loading based on age, sex or marital status

5. As per the companies claim experience, what is the main and repetitive cause for the accidents occurred

- | | |
|-----------------------|-----------------|
| A. Over speed | D. Pedestrian |
| B. Lack of experience | E. Carelessness |
| C. Overloading | F. other _____ |

6. As per the claim history which one of the following are more prone to car accident.

- | | | |
|---------|-----------|------------------------------|
| A. Male | B. Female | C. Sex don’t have any impact |
|---------|-----------|------------------------------|

7. Do you believe sex based insurance premium would minimize traffic accident?

- | | |
|--------|-------|
| A. Yes | B. No |
|--------|-------|

8. As per the claim history which one of the following are more prone to car accident.
 A. Married B. Unmarried C. Divorced D. Marital status don't have any impact
9. Does your company sell marital based insurance cover?
 A. Yes B. No
10. Do you believe marital status based premium would minimize traffic accident
 A. Yes B. No
11. As per the claim history which one of the following are more prone to car accident.
 A. Illiterate B. Well educated C. Educational background don't have any impact
12. Do you believe educational background based premium would minimize traffic accident
 A. Yes B. No
13. Do you believe premium loading on insured's with a repeated claim history will promote safe driving?
 A. Yes B. No
14. Who pays the excess amount during claim request?
 A. Driver C. TP @ fault
 B. Owner D. Other _____
15. Do you agree that excess deduction promote safe driving?
 a. yes b. no
16. If yes in what way.....
17. Is there no claim discount for insured's? _____
 a. yes b. no
18. Do you believe this will promote safe driving?
 a. yes b. no
19. If yes in what way...
20. Does driving experience have impact on safe driving?
 a. yes b. no
21. If yes, what kind of driving experience based measure does your insurance company take during giving insurance cover or while claim processing?
22. Is there any measure taken by your company in order to reduce road traffic accident?
 a. yes b. no
23. If yes what is it and in what way do you believe it will promote safe driving?

Appendix 2: Interview

The following interview questions were conducted with top managers of LIC.

1. What is your company doing to positively contribute to the prevention of Road Traffic Accident in order to promote road safety?
2. Do you believe that Motor Insurance Incentives promote road safety? If Yes How?
3. Is there any measure taken in your company during under writing as well as claim processing, in order to encourage insured's who are highly risk avert & in order to minimize highly risky customers with repetitive claim history?
4. As per the clam experience of the company which vehicle types are more prone (have high tendency for accident) to accidents, being the reason behind high cost escalation?
5. Could you please describe the purpose & use of those vehicles that brought cost escalation to your company?

The following interview questions were conducted with Service users of LIC.

6. Did you ever get any support from LIC'S regarding Motor Insurance in order to promote road safety?
7. During claim processing who pays the out of pocket payments? Do you believe it would have impact on the driving behavior if it was your driver's responsibility?
8. Out of the Motor insurance incentives (encouraging) which one do you believe have the highest role in promoting road safety? (excess, NCD, bonus mauls, premium loading based of age, gender or marital status, premium as per the vehicle usage)