ST.MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESMENT OF PROFITABILITY OF MOTOR INSURANCE BUSINESS: IN THE CASE OF BERHAN INSURANCE COMPANY

BY: HAILYE GERAWORK

SGS/0257/2008A

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A THESIS SUBMITTED TO ST.MARRY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of T/Giorgis Assefa (Asst. professor). All source of material used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institutions for the purpose of earning any degree.

Name _____ Signature _____

St. Mary's University, Addis Ababa **June, 2017**

ENDORSEMENT

This thesis has been submitted to St. Mary's university, school of graduate studies for examination with my approval as a university advisor.

_____ _____

Name Signature and Date

St. Mary's University, Addis Ababa June, 2017

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LIST OF ACRONYMS

ABI	Association of British Insurance
AEI	Association of Ethiopian Insurers
BIC	Berhan Insurance Company
BI	Bodily Injuries
CII	Chartered Insurance institute
CMTP	Compulsory Motor Third party
FDRE	Federal Democratic Republic of Ethiopian
GDP	Gross Domestic Product
GNP	Gross National Product
GWP	Gross Written Premium
HIC	High Income Countries
IFO	Insurance Fund Office
LIC	Low Income Countries
MTPL	Motor Third Party Liability
NBE	National Bank of Ethiopian
NCD	No Claim Discount
OECD	Organization for Economic Cooperation and Development
UK	United Kingdom
UN	United Nation
UNECA	United Nation Economic Commission for Africa
VAT	Value Added Tax
WHO	World Health Organization
WTO	World Trade Organization

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ABSTRACT

Motor insurance is the most prevalent line of insurance in the world, and in Ethiopia the largest sector in non-life insurance. Despite the large proportion that motor insurance constitutes of all general insurance premiums, it is reported to be a loss leader for most insurance companies. This is the significant economic challenge the insurance companies face in Ethiopian: grow the business while improving the profitability of motor class of business. The study aim at identifying the main cause of the problems associated with motor insurance, its impact on the profitability of Berhan insurance company, factors contributed to high motor claims ration and giving recommendations based on the findings. It focuses on the data of insurance industry and Berhan insurance company for the past five years (2011/12 to 2015/16). Primary data was collected through questionnaires and in depth interview methods. Furthermore, Secondary data were also obtained from NBE, federal police commission and Federal Transport and financial publications of NBE were analyzed. Failure to charge equitable level of premium (inefficient in pricing); inability to select risk precisely; increased cost of claim; increased administration and acquisition costs; and low investment income; have been identified as a key determinants of the problem. This study recommends that charging equitable level of premium based on statistical data, reducing costs and expenses, and diversifying investment opportunities. Moreover, join coordination works with the stakeholders, lobby policy makers and legislative bodies to produce the required level of behavioral change in order to curb the growing problem in this regard.

Key words: Motor insurance, profitability

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Insurance industry assists the development process of an economy in several ways. Primarily it acts as mobilize of savings, financial intermediary promoter of investment activity, stabilizer of financial market, risk management and an agent to allocate capital recourses efficiently. Although the insurance industry has grown rapidly in the industrialized countries, its growth neither in the developing countries like Ethiopia has neither been satisfactory nor in tandem with the growth of other sector of the economy.

The development of the insurance sector since 1994 in many ways resembles that of the banking sector, with the establishment of several new private insurance companies in addition to the state owned EIC which still continues to be the largest player. The range of insurance products offered is limited indicating that the sector is still at an early stage of development. Reinsurance and auxiliary services (such as actuaries) are hardly available in Ethiopia. Besides insurance companies have limited capacities and premium setting is based on outdated methods, and there is a considerable lack of a risk assessment methodologies. Capacity limitations also affect regulation of the sector with insurance supervision being largely ineffective (Ageba, 2010).

Contrary to the banking sector, however, competition is stiff in the insurance industry. Private insurance companies are ambitious to increase their sales volume, have been granting unfair and unjustifiable discounts to attract customers and attain sales forecast. This aggressive pricing policy has led to an unhealthy spiral of premium cutting. Finally Insurance companies' investment activities are heavily constrained by the restrictions that the NBE's investment proclamations imposed. The lack of infrastructure, especially a stock market, further constrains insurance company's investment activities (Ageba, 2010).

At present, there are about 17 insurance companies including the state owned EIC, operating in the country after acquiring license from the National Bank of Ethiopia to offer Insurance services as per the insurance business proclamation No. 86/1994. The license enables the insurance companies to transact insurance business under "general insurance/Non Life" and/or "long-term/Life" insurance (NBE, 2012). Motor insurance business is the largest sector in non life category. However, the business of motor insurance in Ethiopia is not as such attractive to

insurers. Almost all insurance companies describe in their annual report that motor insurance has consistently registered a negative results.

On the other hand, Compulsory Motor Third Party Insurance Proclamation No.559/2008 has introduced mandatory insurance cover of motor vehicles for third party risks in Ethiopia. The law requires vehicles to have a third party insurance arrangement before being driven on a road. The Proclamation is adopted to mitigate the death, bodily injury as well as property damages to third parties caused by motor vehicle accidents. Pedestrians, passengers in vehicles as well as drivers are exposed to such accidents by motor vehicles. Motor Third Party Insurance legislation is received by insurers with uncertainties because of the challenge that motor insurance business was not considered profitable let alone with the addition of compulsory motor third party insurance.

Berhan Insurance S.C. was established in October 30, 2010 to engage in rendering general insurance services. As it is the case in all Business organizations, generating profit to its shareholders is among the objectives of the company. However, even though motor premium contributed more than 58% of the premium of the company from 2011/2012 to 2015/2016 financial years, the financial report indicated that motor account did not make positive contributions to the profit making objective of the company. Studies so far in this connection suggested that inadequate pricing and redundant claims problems are among the factors that generally contribute for the negative result of motor insurance. Thus the study will be important to the management of Berhan insurance Company to make decision that would alter the situation experienced during the past five years under consideration.

1.2 Statement of the problem

Motor insurance is the most prevalent insurance line in the world and, in Ethiopia the largest sector in non-Life insurance. In 2014/15 Ethiopian insurance companies generate a total premium income of 62% of all general insurance premiums from motor class of business. However, the business of motor insurance in Ethiopia is not as such attractive to the insurers.

Returns to shareholders are among the primary objectives of Berhan Insurance Company. Even though motor insurance premium takes the highest share in the portfolio mix of the company, as per the past five year report the contribution of motor account to this primary objective is very much insignificant. That meant the revenue generated from motor insurance business did not cover its own direct costs. Motor being the highest in the portfolio mix of the company the losses of motor account are not generally expected to be subsidized by profits generated from other classes of business, this indicates that motor insurance was eroding

overall profitability of the company. Hence if motor accident is allowed to continue making losses the company would not be in a position even to stay in business.

Previous researches conducted with regard to motor mostly focused on motor vehicle accidents. Academic researchers conducted in the form of masters thesis includes: the causes of motor vehicle accidents and possible counter measures on Addis Ababa –Shashemene Roads (Segni, 2007); taxi traffic accidents in Addis Ababa (Mebratu, 2002); analysis of traffic accidents in Addis Ababa (Samuel, 2006) are some of the studies conducted to consider the engineering and road safety aspects of road traffic accidents in Ethiopia. Some researchers conducted on the area of motor insurance sector includes: the evaluation of motor risks and status of motor insurance in Ethiopia (NBE, 2004). Regarding the profitability performance of motor insurance business on insurance company revenue account was not adequately assessed.

Therefore as the motor class of business represents the largest share interns of GWP in non-life insurance sector, a clear insight/assessment about the financial performance of motor class of business on the profitability of insurance company has been the problem assessed in this study. The absence of more and specific empirical studies in insurance companies concerning the financial performance of motor insurance on company's profitability is then what motivated the researcher to put my own contribution on assessing the profitability of motor insurance business.

1.3 Research questions

Berhan insurance is one of the private insurance companies licensed by NBE in October, 2010 to provide non-Life insurance business in Ethiopia. It comes to grow from time to time but the significance of profitability from underwriting motor class of business is questionable, accordingly the study tries to answer the following questions.

- What is the contribution of motor insurance to the profitability of Berhan insurance Company?
- What are the factors contributing to high motor claims ratio?
- What are the problems associated with underwriting motor insurance?
- How the company reduces the adverse impact of motor insurance

1.4 Objective of the study

This study aims to achieve the following objectives:

1.4.1 General objective

The general objective of the study is to assess the profitability of motor insurance business for the past five years of operation.

1.4.2 Specific objectives

Based on the above general objectives, the following are specific objectives of the study:

- To investigate the contribution of motor insurance business on the profitability of Berhan insurance
- To identify the factors that make motor class of business a loss leader among other BIC business portfolios;
- To identify the problems associated with underwriting motor insurance
- To assess the mean that how the company made motor class profitable

1.5 Definition of key terms

Bonus malus system: the use of premium discounts for claim-free driving and surcharges for crash involvement (OECD, 1990).

Claim: is notification of an incident that may lead to compensation (CGU, 2004).

Claims incurred: refers to the losses sustained by the insurer in a given period (Ransom, 2008).

General insurance: is non-life insurance from which motor insurance is one segment (Reja, 2008).

Gross premium: means the total premium including provision for anticipated claim, insurer's administrative expense and profit margin (CGU, 2004).

Indemnity: is monetary compensation payable to offset the loss of the insured (Ransom, 2008).

Insurance: is the promise given by insurer to the insured to make the damage good (CGU, 2004).

Insurance policy: refers to the legal document that proves the existence of insurance cover (Ransom, 2008).

Loss ratio: is the ratio of premium collected against the claims incurred (Ransom, 2008).

Motor insurance: is insurance arrangement for the risks relating to the motor vehicle and the damage it may result to others (Ransom, 2008).

Motor vehicle: is engine propelled moving that is recognized as a motor vehicle by the regulator (FDRE, 2008).

Net premium: it is the payment that an insurer earns for the lapsed period of the insurance cover (CGU, 2004).

Premium: is the consideration that the insured pays to the insurer to obtain cover (CGU, 2004).

Reinsurance: is partial transfer of the risk to another insurer or reinsurer (CGU, 2004).

Risk based supervision: is the supervisory tool that focus on identification of significant risks and undertake measurement of the direction of the risk over time (NBE, 2012).

Road safety: is absence of injuries on the road to the road users (UNECA, 2009).

Underwriting: refers to the steps followed to assess the risk that an insurer accepts from the insured (Diacon & Carter, 2003).

1.6 Significance of the study

The main reason for this study is that the researchers of concerned body have not paid enough attention to this subject in the insurance sector. Therefore, this study is expected to provide empirical evidence on the contribution of motor insurance business on company's profitability. Furthermore many parties will be benefited from the results of the study and these parties are;

Management of Berhan Insurance S.C: On the basis of the research findings the management can take appropriate corrective actions to reverse the situation and make the motor account profitable.

The Insurance Industry: as stated earlier in this paper, motor insurance premium takes the lions share in the portfolio mix of the industry in Ethiopia. However, this class of business is not profitable for many of the insurance companies, thus this research would enable such companies review their status from the research findings point of view and take the necessary action to make the motor account profitable.

Regulators: National Bank of Ethiopia will be interested in knowing whether the companies operate successfully or failed to take the necessary measures to avoid crises of the bankruptcy.

Moreover, this study can potentially serve as a stepping stone for further research in the area.

1.7 Delimitation/scope of the study

The study has not gone up to addressing the cases of each and every class of business of the insurance company. Rather the horizon of the study confined merely on assessing the profitability of motor insurance without any overall performance assessment tool. It would have also been very useful, if it included the impact of all class of business on insurance company's profitability. However, due to the constraints of cost, data, time and other resources the researcher was forced to limit the study only on the profitability of motor insurance business.

1.8 Limitation of the study

The impact or contribution of the motor insurance to other portfolio in a packaged policy has not covered by this research. This study is also limited to Berhan Insurance S.C and the findings cannot generalize to whole industry. Despite these limitations, this research will contribute considerably to the understanding that motor insurance has a negative impact on insurance company profitability and provide a foundation to guide further research in this area.

1.9 Organization of the paper

This study has been organized in to five chapters. In the first chapter an introduction to the research (Background of the study), statement of the problem, research question, objective of the study, significance of the study and delimitation of the study were clarified. Chapter two presents the previous studies by looking at insurance, motor insurance, profitability, the impact of motor insurance on profitability and other class of business in general so as to revise relevant literature. Chapter three presents the research design and methodology. Chapter four presents the findings/results and discussions, and Chapter five presents the conclusions and recommendations based on the findings of the study.

CHAPTER TWO

LITERATURE REVIEW

2. 1 Introduction

This chapter deals with the concept of insurance, profitability and provides investigations regarding motor insurance business on the profitability of Berhan insurance company. In the investigations, the factors that have an impact on financial performance or profitability of insurance company were classified as underwriting performance losses and expenses.

The review of related literature the researcher divided in to four sections; the first section deals with the concept of insurance, characteristics, practices and types of insurance, the second section provides studies concerning profitability performance of insurance companies together with measure of profitability in insurance companies. The third section presents previous investigations on the motor insurance performance in insurance companies; the last section summarizes empirical literature concerning effective factors for motor crash.

2. 2 The concept of insurance

There is no single definition for insurance can be defined from the view point of several disciplines, including law, economy, history, actuarial science, risk theory and sociology. A working definition of insurance and the one that captures the essential characteristics of a true insurance plan by the commission on insurance terminology of the American risk and insurance association is defined as following:

Insurance is the pooling of fortuitous losses by transfer of such risk to insurers, who agrees to indemnity insured people for such losses, to provide other pecuniary benefits on the occurrence, or to render services connected with the risk (Rejda, 2008,p.13).

Also from a view point of individual, insurance can be defined as an economic device where by the individual substitutes small Certain coat (the premium) for a large uncertain financial loss (the contingency insured against) that would exist if it were not for the insurance In addition to eliminating Risk for the individual through transfer, the insurance device reduces the aggregate amount of risk in the economy by substituting certain cost for uncertain losses. So from the view point of society insurance is an economic device for reducing and eliminating risk through the Process of Combining a sufficient number of homogeneous exposures in to a group to make the losses predictable for the group as a whole (Vaughan, 1999)

Moreover, there is another definition by Bickelhaupt (1983 p.13) that defines insurance as:

Insurance is an agreement by which one party (the insurer) promises to pay another Party (the insured or policy holder) a sum of money if something happens which causes the insured to suffer a financial loss. Hence, in the case of accident the responsibility for paying such losses is transacted from policy holder to the insurer. In return charges the insured a price, the insurance premium.

According to Skipper and Kwon (2007), insurance is an important risk management risk management tool. In a typical insurance management, the insurer promises, in return for premium, to fulfill its contractual obligations up on the occurrence of some event, often a qualified loss. Insurance also can be viewed as a risk transfer arrangement from the view point of contract law.

2.2.1 Characteristics of insurance

Based on the above definition an insurance agreement typically characterized by pooling of losses, Payment of fortuitous losses, risk transfer and indemnification.

Pooling or the sharing of losses is the heart of insurance. Pooling is the spreading of losses incurred by the few over the entire group, So that in the process, average loss is substituted for actual loss. Moreover , pooling involves the grouping of a large number of exposure units so that the law of large numbers can operate to provide a substantially accurate prediction of future losses (Rajda,2008) The law of large number means that the greater the number of exposure units, the more accurate the insurers can be in calculating their premiums, and this is because they are better able to assess the size of future loss payments and this is because appropriate charge that will enable them to cover those losses (Bickelhaupt,1983)

A payment of fortuitous loss is one that is unforeseen and unexpected and occurs as a result of chance in other words, the loss must be accidental. The law of large numbers is based on the assumption that losses are accidental and occur randomly. Risk transfer means that a pure risk is transferred from the insured to the insurer, who typically is in a stronger financial position to pay the loss than the insured. Indemnification means that the insured is restored to his or her approximate financial position prior to the occurrence of loss. Thus for example .if one's home burns in fire, a home owner's policy will indemnify or restore the person to the previous position (Rejida, 2008).

2.2.2 The insurance company practices

The business of any insurance company is to pay claims in return for the payment of premiums. But running such a business is, of course a great deal more complex than this. According to Diacon & Carter (2003), every insurance company undertakes the following essential activities:

- Underwriting : this is a procedure by which an insurer evaluate the risk of a proposal and decides whether or not to enter into a contract, and if so on what terms
- Deciding a price: pricing is an important part of underwriting and is a process known as premium rating. The price should reflect the clams' costs and expenses associated with the contract but must also include the allowance for the insurer's profit margin. This allowance depends on the level of competition in the relevant insurance market.
- Generating new business: like all other competition , these types of companies want to increase the amount of business that they undertake at the right price .companies differ in their degree of reliance on a direct sales force rather than using brokers, and also in the amount they spend on advertisement.
- Paying claims: the procedure used by companies for paying claims.
- Maintaining fund: insurer cannot pay all claim out of revenue received from Premiums and investment income. Therefore, they must maintain a fund that can be used to pay claims.
- Investing the fund to earn investment income: in many classes of insurance substantial funds are accumulated. Careful investment of these fund allows insurers to earn investment income and make capital gains.
- Buying reinsurance: the insurer may be aware that certain claim payments may exceed his financial resources. Hence, he will wish to pass on part of liability for these claims to another insurer by purchasing reinsurance.
- Provide additional services: as part of their operations, insurers may provide additional services and advice to customers.
- Drawing up accounts: like other trading enterprises, insurers make payments to creditors and receive money from debtors. They must then compile accounts for internal managements, shareholders ,and the taxation and supervisory authorities.
- Paying taxes: insurance companies, like other trading enterprises must pay corporation tax, value added tax, and capital gain tax (Diacon & Carter, 2003).

2.2.3 Different types of insurance

Any risk that can be quantified can potentially be insured. Specific kinds of risk that may give rise to claims are known as “perils”. An insurance policy will set out in details which perils are covered by the policy and which are not. The insurance market consists of two sectors life and non-life insurance sector (Datamonitor, 2006).

The life insurance sector covers all life insurance products including annuities, which can be linked to retirement savings plans. Another classification of life insurance is temporary and permanent insurance. Temporary insurance provides for life insurance coverage for a specified term of years for a specified premium. Permanent life insurance is life insurance that remains in force (in-line) until the policy matures (payout), unless the owner fails to pay the premium when due (the policy expires). The policy cannot be cancelled by the insurer for time defined by low (usually two years).

The non-life insurance sector consists of two segments accidental and health segments, and property and casualty insurance segments (data monitor 2007). Global non-life insurance market segmentation is 24.2% for accident and health insurance and 75.8% for property and casualty insurance (data monitor, 2005).

Also there is broader classification of insurance according to Rejda (2008), insurance can be classified as either private (life and health, property and liability also called property and Casualty), personal line and commercial line) or government insurance (social insurance and other government insurance).

Life insurance pays benefits to beneficiaries when the insured dies. Property insurance indemnifies property owners against the loss or damage of real or personal caused by various perils, such as fire, lightning, collision, windstorm or tornado. The various type of coverage’s by property and casualty insurance-nonlife insurance can be grouped into two major categories: personal line and commercial line.

Personal line refers to coverage’s that the real state and personal property of individuals and families or provides protection against legal liability. It includes: (a) privet passenger auto insurance (b) homeowners insurance (c) personal umbrella liability insurance, and (d) boat owners insurance.

Commercial line refers to property and casualty coverage for business firms, nonprofit organizations, and government agencies. Commercial lines include : (a) fire and allied lines insurance, (b) commercial multiple peril insurance , (c) general liability insurance , (d) workers compensation insurance, (e) commercial auto insurance, (f) accident and health

insurance ,(g) inland marine and ocean marine insurance professional, (h) liability insurance, (i) equipment breakdown insurance, (j) fidelity and surety bond, (k) crime insurance, and other miscellaneous insurance.

Government insurance can be divided into social and other government insurance. Social insurance programs are government insurance programs with certain characteristics and that distinguish them from other government insurance programs. These programs are financed entirely or in large part by mandatory contributions from employers, employees, or both and not primarily by the general revenues of government.

Other government insurance programs do not have distinguishing characteristics of social insurance programs and exists at both federal and state level (Rejda, 2008).

2. 3 The concept of profitability

Generally, business organizations are established with a view to earning profit from its business operations. However, sometimes indifferent situations the objects of the business organizations may be change to survival, growth and stability, etc. if the business firm is to survive in a dynamic and expanding environment, it has to go on expanding the scale of its operations on a regular and continuing basis by generating sufficient profit. Hence, the profit margin is the most essential objectives of the business firm which is very good indicator of profitability, any increase in profit margin, when the other things remains the same, represents that the business operations are sound, efficient and successful. It provides incentives and encouragement for prospective investors and attracts external funds and as a major source of internal funds. Among the financial institutions, insurance is part of immune and repair system of an economy and successful operation of the industry can set energy for other industries and development of an economy. To do so the insurance industry is expected to be financially solvent and strong through being profitable in operation (Hacker and Zanios, 2000).

Although there are various approaches, estimating insurer profitability is generally done by examining premiums (insurance price) and investment income and either underwriting results (underwriting gain or loss) or overall operating performance (gain or loss from operations).

According to Kearney (2010), most of the insurance companies use the combined ratio to measure the success of their underwriting activities. The combined ratio is a profitability ratio that indicates whether an insurer has made an underwriting loss or

gain from all of its business activities. Although the combined ratio is the most-often-cited measure of underwriting success, the results that it produces are generally subject to an additional analysis of its components. Changes in premium volume, major catastrophic losses, moral and physical hazards, and delays in loss reporting can distort the combined ratio, making it difficult to evaluate the effectiveness of underwriting Without a clear understanding of their underwriting performance of each business unit, insurers may not be able to respond to conditions that affect their performance.

An insurer ' s overall operating performance (gain or loss from operations) is its net underwriting gain or loss plus its net investment gain or loss for a specific period. This overall figure gives a more complete picture of an insurer 's profitability because investment income generally helps to offset any underwriting losses. The formula for overall gain or loss from its operations is expressed as: overall gain or loss from operation= net underwriting gain or loss + investment gain or loss. To obtain an accurate picture of an insurer's profitability, it is important to analyze the overall gain or loss from operations for several years because any insurer might have a single unprofitable year that is offset by a pattern of profitability over a longer period (Harker and Zenios,2000). An insurer's profits depend heavily on the premium revenue the insurer generates from the sale of its business portfolios. Insurance companies use premium rates based on the insured's loss exposures to determine the premium to charge for insurance policies. Insurers must charge premiums to have the funds necessary to make loss payments. In fact, an insurer's total revenue (premiums and investment income) must equal or exceed the amount needed to pay for losses, to cover its costs of doing business and profit for the investor.

Investment profit also depends, in part, on premium revenue that creates the funds used for investment.

According to William and Segal (2004), the performance of insurance companies in financial terms is normally expressed in net premium earned profitability from underwriting activities annual turnover, return on investment, and return on equity. These measures could be classified as profit performance measures and investment performance measures.

The term profit can take either its economic meaning or accounting concept which shows the excess of income over expenditure viewed during a specified period of time.

On one hand, profit is one of the main reasons for the continued existence of every business organization. On the other hand, profit is expected so as to meet the required return by owners and other outsiders.

Accordingly, the term profitability' is a relative measure where profit is expressed as a ratio, generally as a percentage. Profitability depicts the relationship of the absolute amount of profit with various other factors (Hacker and Zenios,2000).

The variation of profit among business lines of insurance companies over the years in a given company would result to suggest that factors like product pricing risk selection, claims management, marketing & administrative expenses, and investment performance play a crucial role in influencing insurance companies profitability (Swiss Re, 2008).

It is therefore imperative to identify the impact of these factors as it can help insurance companies to take action on what will increase their profitability and investors to forecast the profitability of their companies. To do so, it is better to see their impacts on profitability that were considered in previous times by different individuals. The following points are some of work others among many others.

2. 4 Profitability performance of motor insurance

Motor insurance is the most prevalent insurance line in the world and, in Ethiopia, the largest sector in non-life insurance. In 2006/07, Ethiopian insurance company's generated a total premium income of almost USD 44m or 46% of all general insurance premium from motor class of business. Despite the large proportion that motor insurance constitutes of all general insurance premiums, it is reported to be a loss leader for most insurance companies(Smith and chamberlain, 2009).

According to Thomas's (2002), the economic health of the motor insurance industry will affect both its attractiveness to investors and the likelihood of investment in road safety activities. Unfortunately, the motor insurance industry too often appears to be a lass making business in both HICs and LICs. In India, recent loss ratios (claim cost ratio to premium income)have been reported to be as high as 189 per cent. In 1998, South Africa's RAF deficit was reported to be doubling every three to five years, with the premium paid at the time estimated to be only 40 per cent of that needed(Joffe, 1998).

In Ghana, the fund for victims of uninsured/untraced vehicles has had to pay for the outstanding claims of the insurance companies which have gone bankrupt (Thomas,

2002). Similarly, Dorfman (2009), would also argued that "Automobile accidents cause billions of dollars in annual damage, including destroyed property, medical and funeral expenses, and loss of income."(p.222).

According to the study conducted in Cyprus, motor insurance is the largest class of non-life business mainly because of its compulsory by law However the findings of the study revealed that motor class of business are consistently recorded adverse/negative effects on the insurance company results. The main causes of the negative results have been identified as low premium rates charged, increased cost of claims, high acquisition and administration costs, and inadequate investment income (Demertriou 2002)

According to Swiss Re (2008) insurance profits are primarily determined by underwriting performance i.e. losses and expenses, which are affected by product pricing, risk selection, claims management , and marketing and administrative expenses) and second by investment performance, which is a function of asset allocation as well as asset leverage in the following section ,let us see the impact of these factors in detail.

2.4.1 Motor insurance premium rating

The role of healthy competition in a business environment is indispensable for economic growth and development. Also in the insurance industry an insurer must normally compete in order to satisfy its customers there by realizing reasonable profit by charging reasonable, adequate and fair price. The determination of insurance premium (insurance price) initially imamates from the law and some business considerations. For example in many parts of the world, motor third party liability (MTPL) insurance premiums will be set by tariffs and formed part of the regulation. The rates set by the tariff are the maximum that could be charged by insurance companies and was considered low for most types of vehicles, especially private saloon cars.

The premium charged to the insured must represent the risk introduced to the insurance company and allow an acceptable level of profit margin. However, in a competitive market such as motor insurance, the actions of competitors play an important role as well. For example according to the survey conducted in Cyprus, possible reaction companies fear they will face from competitions and insured's alike, and the absence of statistical information and qualified personnel which would guide the market in calculation the correct premium to be loaded/charged was cited as the main causes to charge an equitable level of motor insurance (Demertriou, 2002).

Similarly, in most countries of the world, the government determines, after consulting with the insurance industry, on the cost of motor insurance premiums. In many LICs, the third party premiums charges are influenced by transport fleet operators. The lowest third party premium for a private car was reported to be approximately $ 16 while in India, it was about $10 for a motor vehicle with greater than 1500cc (47 for less than 1500cc). Such low premiums obviously affect not only the potential compensation amounts available but also on the sensitivity of the premium to any pricing incentives.

Adjusting insurance premiums to reflect perceived risk is the traditional, if not necessarily effective, road safety intervention adopted by insurers (Thomas, 2012).

It is standard practice to base the insurance premium on the vehicle type, and many countries also consider geographical location. For example in the UK government allow premiums to be set by the insurers and many factors can influence the price. UK insurers offer premium reductions on the basis of age, sex, additional drivers training and just recently, an insurer is offering to charge on the basis of mileage with a black box fitted veto the vehicle. Other countries use penalties to discourage drinking driving. In the UK, drivers convicted of a drink driving conviction will experience difficulty in finding an insurer and their premiums will double in price. The impact of a drink driving conviction will also affect the insurance premium for several years (Thomas, 2012).

The bonus mauls system is also adopted by some motor insures in some parts of the world. It refers to the use of premium discounts for claim-free driving and surcharges for crash involvement. For example study shows that no-claims discounts (NCD) are still popular in the UK, British, Columbia and Sweden, with discount up to 75 per cent available in the UK (OECD, 1990). Even in countries where NCDs are popular, such as the UK, the ABI acknowledges NCDs are not thought to be effective in reducing collisions. NCDs are believed by many to encourage non-reporting of claims, especially minor claims, rather safer driving conditions.

Motor insurers are commonly believed to be able to encourage safer driving habits by offering rewards and financial incentives for additional training and for not being involved, or at least not reporting any claim. The most common variable in third party insurance premiums appear to not a no claims discount. However, this is not believed by the insurance industry to lead to safer driving or fewer collisions but at best, reduced reporting of claim discounts remain popular but they should be viewed more as a marketing tool than as effective road safety intervention.

On the other hand insurance premium are made up of different parts, including the cost of estimating, collecting and managing the premiums the cost managing the premiums, the cost of paying the claims, taxes, levies, duties, reinsurance costs, the profit margin and the cost of the insurance company administering the insurance cover, and the cost of insuring the particular valuable.

Insurance companies typically set premiums depending on the amount of risk the insured valuable as of being damaged, lost stolen or injured. For instance, with car in insurance, premiums may be based on the age and sex of the main driver and their driving experience and accident and traffic conviction record; who else may be driving the vehicle; where the vehicle is kept; what the vehicle is used for, for instance if the vehicle is used for business purpose, as this may mean it will be driven more and is more likely to be involved in an accident; the vehicles value, if the car is an exotic import with expensive and hard to get parts; and previous claims record (CUG, 2004)

2.4.2 Cost of claims management

Claims and loss handling is the materialized of insurance; it is the actual "product" paid for. Effective claims management is critical for achieving customer loyalty (thus retention), and helps for increasing wallet share and generating positive word of mouth. It is also an opportunity to liaise with third party service providers and minimize losses. In managing the claim handing practices are a major business risk that must be and overcome (CEA,2007).

Components of motor claims rate to bodily injuries, deaths and property damages are: cost of labor, cost of vehicles and spare parts, level of value added tax (Vat), medical cost, court awards, fraudulent claims and administration cost in handing claims (Demertriou,2002).

Motor claims involving bodily injury (BI) have different characteristics to material damage claims which mean that, in practice, these two types of claim are separately processed by most motor insurance companies. More specifically, BI claim are less frequent, but involve larger compensation payouts, greater variability in the payments and higher litigation rates. As a result, BI claim settlement have the largest impact on insurer's claims expenditure (Bell, 2006; CEA, 2007) and entail a long handing period.

Quarterly journal of chartered insurance institute was illustrated the claims liability of automobile products as "with automobile components, claims in this area tend to be infrequent bur significant, with routine claims climbing into the tens of millions of pounds."(Gibson, 2010:36).

According to the survey conducted in Cyprus, the main reason for the negative underwriting result of motor insurance market was identified as increased cost of claims due to increased cost of spare parts, increased cost of labor, increased cost of spare parts, increased court awards, increased number of fraudulent claims and increase in VAT (Demertriou, 2002).

The study conducted in Iran shows that, the third party motor insurance is unprofitable and risk business in insurance companies. The reasons for high third-party insurance losses were identified as increasing severity and frequency of losses: due to the increasing number of vehicles, increasing risky behaviors in young driver, increasing acceleration vehicles and …cited (Dchghani, 2011), poor quality of some domestic cars i.e. bad quality of domestic cars such as the lack of equipped with safety systems as ABS brakes and airbags nonstandard of these cars is the reasons for the increasing financial losses, as well as becoming the financial losses to lives a and finally, existence of lots of cars without insurance in the country i.e., according to the law of large numbers, whatever insured population is greater in result insurance companies will have a greater chance of success in loss management (Asli, 2012).

Another reason is lack of accuracy of the premium and failure to observe the user type of vehicle made many insurers in loss. That is the user type in receiving premium is not obeyed that is mainly due to non-compliance with the principle of good faith as the basic princi8ple of insurance. From the above statement we infer certainly that, personal cars pay lower insurance premiums than non-personal cars, because non-personal cars such as taxis, school bus are riskier more than personal car. Nevertheless, the insurance companies without attention to their user type take same premium from them that causes losses for insurance companies and have serious consequences for at-fault drivers when compensation payment. More over the existence of old and non-standard cars, particularly old heavy vehicles are one the reason of high losses caused by third-party motor insurance. Due to the risk of technical defects of these cars and their problem in causing accident, taking the same premium for cars top model would not be correct way and it increases the claims ratio of the insurers (Asli, 2012).

2.4.3 Acquisition and administration costs

The second most important costs and expense that affect the profitability of insurance company is the high commission rates paid to the agents/brokers who introduce the business to insurance companies, and direct and indirect administration costs in relation with this class of business.

The cost of acquiring business depends very much on the way business is soured to the companies. Most of the motor insurance business is introduced to insurance companies

through agents and/or brokers who are remunerated by way of commissions of at least 20%, which is considered high (Demertriou, 2002).

The cost of policy administration and handling claims are the other most important factors that have a negative impact on the profitability of insurance company.

2. 5 Factors affecting profitability of motor insurance

Fook (1995) identified that the Malaysian General insurance industry was confronted with the following problems prior to 1985:-

- Lack of control particularly in respect of underwriting acceptance of risk, issuance of cove notes/policies and payment of claims
- High management cost
- High acquisition costs
- High claim processing costs
- Unprofessional rating and rate cutting due to competition
- Fraud

Demertion (2002) also identified the following reasons for the negative result of motor account in Cyprus;-

A. Increased cost of claims being the result of:-
    - Increased cost of Medical expense
    - Increased cost of Legal expense
    - Increased cost of labour
    - Increased cost of spare parts
    - Increased court award
    - Increased number of fraudulent claims
B. High commission rates paid to agents
C. Low premium rates

Although the these studies conducted abroad, its believed that profitability of motor account is highly affected by most of the factors indicated in the above mentioned research papers even in the case of other countries like Ethiopia. Quoting law premium rate would negatively affect the motor account. In order to make the motor account profitable certain percentage of profit margin should be further loaded. Thus, unless the rate is set considering all these factors, the amount of premium collected may not be sufficient to cover costs and leave certain profit margin.

Similarly, fraudulent claims would increase the amount of losses which would negatively affect profitability. A fourth report delivered b the CII and Ernest & Young in UK under the title "bringing profitability back from the brink of an extinction a report on the UK retail motor insurance market" concluded that profitability will be enjoyed by the few who demonstrate a firm grip on the fundamentals of the firm business through operational excellence (control over their claims costs, operating expenses, and acquisition costs). Hence, service excellence would enable companies to minimize costs and to wil business even by quoting premium rates relatively higher than competitors.

2. 6 Effective factors for motor accident

The study of World Health Organization (WHO) estimated that 1.17 million deaths occur each year worldwide due to road traffic accidents. A breakdown of the figure indicates however, that about 70 percent of the deaths occur in developing countries. The increased rate of fatal road traffic accident worldwide has been attributed to population explosion and increased motorization. Increased motorization may be characterized briefly as the `automotive revolution`, that is the motorizing of urban population especially in the developing countries. Traffic crashers also has an impact on the economy of developing countries at an estimated cost of 1-2% of a country's GNP per annum, as a result of morbidity, mortality and property – related costs (WHO, 2012).

Causes of motor vehicle crashes are multi-factorial and involve the interaction of a number of pre-crash factors that include people, vehicles and the road environment (Haddon, 1980; AMA, 1983; Robertson, 1992). Human error is estimated to account for between 64 and 95% of all causes of traffic crashes in developing countries (TRL, 1990; Atubi, 2009c). A high prevalence of old vehicles that often carry may more people than they are designed to carry, lack of safety belt and helmet use, poor road design and maintenance and the traffic mix on roads are other factors that contribute to the high rate of crashes in less developed countries.

Similarly, the evaluation and analysis of traffic accidents in Iran indicates that human is one of the major factors affecting accidents. In general, the human factor effects on accidents by four main ways as following (Doerpinghaus & et al, 2008);

- How to Drive: how to drive is a sign of personality and traits of driver. Behaviors such as speed and illegal overtaking, not to observe minimum distance to the vehicle in front, left shift, disregard for other vehicles and traffic lines and signs, driving, driving when tried and aggressive conditions towards other or a gaucherie

due to improper training, inexperience, bad decisions are effective human factor on accidents.

- *Gender and age*: mainly young people have more risky behavior than older people. In addition, studies have shown the influence of gender on risky behavior and men show more risky behavior compared to women and driving accuracy rate in women is higher than men (Borodolini and Giacomo, 2011).
- *Sensory and perceptual mistakes*: these mistakes are caused by factors such as incorrect look at surroundings, level of consciousness, confusion, low concentration and traffic mistakes.
- *Reduction of driver's physical and mental power*: these factors can be such drug abuse, certain medications, illness, and so on.

Factors of environment (road) can be an effective factor for accidents. It can be categorized under the following general framework:

- *Geometric Design:* Geometric design includes intersection design (Distance of vision, directing traffic in the traffic lanes, and control of traffic entry and exist points, etc), evaluation of engineering features of direction at the horizontal and vertical direction and design of cross-sections.
- *Fine and coarse Texture of Road Surfaces:* Fine and coarse textures and road surfaces consist of slippery road surface, relationship between speed and resistance against possible slips, uniformity of road surfaces.
- *Road signs and lines:* These signs are including prohibitions and components relating to road safety such as design and technical and engineering aspects of road that impact traffic safety, things that increase safety of vehicles, training programs for road users, development or revision of the relevant provisions of the road transportation, full and proper implementation of the provisions relating to road transportation, relief and aid after accident.
- *Transportation safety management:* Generally, transportation safety management is defined in framework of issues that related to the permitted speed and how to control them, control of intersections, one-way systems and parking.

Similarly, in Ethiopia, the findings of the study conducted by united nation economic commission for Africa indicated that more than 90 per cent of the traffic accidents were caused by human errors. Of these accidents, drivers are indicated as responsible causes in about 89 per cent (UNECA, 2009).

Accordingly, the major causes of traffic accidents are failure to give way for pedestrians, followed by over speeding and failure to give way for other vehicles in that order (UNECA, 2009). Similarly, 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 influence of alcohol, drug or Chat, and others. The police traffic accident statistics in 2007/8 indicated that over 5% of the fatal accidents were occur when driving without having a driving license.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In the previous chapter the pertinent literature of this research project have been reviewed. This chapter was covered the research design and methodology being used in this research. For this purpose, first research design was discussed. Second, population and sampling techniques were explained. Third, types of data and data collection tools were discussed. Fourth and finally, procedures for data collection and data analysis method were considered through this chapter.

3.2 Research design

Based on the research objectives and questions this research used descriptive research design. Because the objective was to assess the profitability of motor insurance business in Berhan Insurance company for the past five years of operations and potential remedial actions that could be tested to address the problems. The reliance of this descriptive study was on qualitative techniques and in-depth interviews with insurance professionals.

3.3 Population, sample size and sampling technique

The total populations from whom the data obtained were twenty four underwriters of city branches in Addis Ababa and eight head quarter motor claims employees of Berhan insurance company i.e. the total population was thirty two employees.

The sample size of the stud: out of the total twenty four underwriters of all city branches twenty employees from different branches in Addis Ababa who have more than one year experience and out of eight claims department employees six of them who have more than one year experience were selected purposefully in order to respond to the questionnaire of the researcher. They were selected based on their experience in the company & in the department, accessibility, willingness to respond and convenience.

For this study, a non-probability sampling technique was adopted and followed by purposive sampling which was also used to obtain responses from different groups or departments of Berhan Insurance company branch’s in Addis Ababa and, employees and managers of different departments at head office.

3.4 Types of data and tools

For this research work both primary and secondary data were used collected by using different tools of data collection. Primary data was collected through questionnaires and in –depth interview methods. The questionnaires were addressed to branch employees at head office. Furthermore, data were also obtained from NBE, federal police commission Federal Transport Authority and insurance fund office In-depth interview with prominent and experienced department managers at Berhan Insurance head office will be also conducted.

The questionnaires were structured as it only allowed a limited response options for the respondents. However, it was contain option for respondents that want to provide additional narrative for the respective questions. The questionnaires were circulated to branch managers, branch employees, and claims department employees to obtain response from different perspectives,

Secondary data were also gathered from different respective departments of the company and from the books of account of the insurer annual reports, pamphlets, business plan and performance documents, audit reports, government offices mainly from the National Bank of Ethiopia, Road Transports Authority, Federal police Commission and Insurance Fund Office.

The data of insurer for the past five years on motor insurance business were employed to look into the contribution of motor insurance .The total premium, the premium from motor class of business, the claims on motor class of business, losses and expenses, as well as other pertinent quantitative data of insurers for the past five year were reviewed to assess the financial benefit of motor insurance business in Berhan insurance company.

Berhan Insurance Company Quantitative data on the motor insurance business of insurer and share of other non-motor insurance business portfolios were also considered .Furthermore, data on vehicles registration and motor vehicle accidents for the past five years were also acquired from the relevant institution. These data were help to investigate the relationship between number of vehicles insured and magnitude of motor vehicle accidents in term of its contribution on the insurance company financial performance.

3.5 Procedures of data collection

Primary data were collected through questionnaires and in-depth interview professionals of Berhan insurance company. Secondary data were collected by using documentary method i.e. proceedings, reports, internets. Besides, the template forms with specific fields were employed to relevant quantitative data from Government institutions such as the National Bank of Ethiopia, Federal Transport Authority, and insurance fund office.

3.6 Methods of data analysis

Regarding data analysis, descriptive statistics such as proportion (percentage), tabulation, narrative, scale and trends were employed to analyzes and interpret the data obtained on motor insurance business.

In the descriptive statistics, the basic summary features in the data that depict the nature of the variables were employed. Intervals and ratios used after the tabulation of data. Then, interpretations were made based on the data analysis in order to arrive at managerial implications.

3.7 Ethical Considerations

The consideration of these issues is necessary for the purpose of ensuring the privacy as well as the security of the participants, so the responses of the participants are confidential. These issues were identified in advance so as to prevent future problems that were rise during the research process. St Mary's university provides official letters to all candidates to get permission to fill the data. Among the significant issues that were considered includes consent, confidentiality and data protection. People who were participated in the research were given an ample time to respond to the questions posed on them to avoid errors and inaccuracies in their answers. The data were not made available to third party without permission from study participants.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings results based on the data collected to assess the profitability of motor insurance business of Berhan insurance company for the period of 2011/12 to 2015/16. The investigation was done analyzing the factors that affect underwriting/ operational performance o Berhan insurance company with regard to motor class of business. Therefore, this chapter provides the results from the analysis of data and its interpretation. It is divided in to six sections. The first and the second section provides the registered motor accident data in Ethiopia; the third section presents insurance business portfolios and operational performance of motor insurance in Ethiopia; the fourth section presents descriptive analysis of Berhan insurance Company's business; portfolios, insured motor data, registered motor claims and data on losses and expenses of motor insurance; the fifth section of the response of questionnaire, interview question, and the final section of this chapter presents discussion of the finding response of questionnaire and interview question.

4.2 Registered data of motor in Ethiopia

According to the data obtained from federal transport authority, the number of registered motor vehicles in Ethiopia as at June 2016 were estimated to be more than 760,000 including three wheelers and motor cycles. The average growth in the number of vehicles based on the forecast of Federal Transport Authority is 5%. This means that on average there are more than 20,000 vehicles added on Ethiopian roads annually. The establishment of local vehicle manufacturing plants, economic growth of the country, the increment of foreign investors in the sector from time to time, and the increase in rode network etc were among the main contributor to the growth of motor vehicles in Ethiopia.

From the total registered motors 760,000 in Ethiopia, about 359,000 vehicles were used for transporting peoples from one place to another place. These vehicles were categorized as taxis; Private use vehicles; commercial use vehicle; mass organization owned vehicles; diplomatic vehicles; vehicles of aid organizations; government owned vehicles; and other vehicles.

This category of vehicles constitutes about 47 percent of the total registered vehicles in Ethiopia. From this we can infer that more these vehicles engaged in accident, there is high possibility of deaths and bodily injuries to the person.

Furthermore, the data also shows that the remaining vehicles about more than 400 thousand vehicle were categorized as dry cargo vehicles, Liquid cargo vehicles, motor cycles as well as dry cargo and liquid cargo trailers.

However, according to the annual report of Ethiopia insurance fund office, as at June 30th 2015 only about 92 percent of the registered motor vehicles were insurance against the third party compulsory insurance (IFO,2015). Similarly, on the other hand the motor vehicle insured on compressive basis were not more than 35 percent of the registered motor in Ethiopia (IFO, 2015).

From these data that about 8 percent and 65 percent of registered motor vehicle in Ethiopia have not insured for compulsory third party insurance and comprehensive basis respectively. As indicated in the literature part of this study, as the operation of insurance risks have been based on the law of large numbers i.e. if sufficient number of similar risks should not be pooled together to spread the risk it will have a negative impact on the revenue account of the insurer.

4.3 Motor accident data in Ethiopia

The data on motor vehicle accidents is summarized for the period from 2011/12 to 2015/16 as follow:

Table 4.1: Motor vehicles accident data for the period 2011/12 to 2015/16

S/N	Year	Deaths	Bodily injury		Property damage (number of accidents)	Property damage estimated (birr in millions)
			Major	Minor		
1	2011/12	2613	4177	4332	15695	184
2	2012/13	2121	2789	3655	13677	326
3	2013/14	2541	3545	4570	18469	159
4	2014/15	3117	4206	4916	21532	448
5	2015/16	3362	4963	5875	25517	527

Source; Federal Transport Authority report

According to WHO data, road crashes are the 9th biggest case of death, killing 1.2 million people annually, and projection is made this could rise to 2.4 million by 2020, with 85 percent of this increase being in low-and middle income countries. It also costs developing countries a

Staggering 1-2 percent of their gross domestic product. Data on Ethiopia shows that road traffic accidents cause deaths reached 22,786 per year or 2.77 percent of the total deaths in the nation. The age adjusted death rate of Ethiopia is 37.83 per 100,000 and Ethiopia rank 12th globally in this regard (world health ranking, 2012).

The data of federal police report shows that fatal and injury crashes 67,115 over a five year period (July 2010- Jun 2015). The composition of fatalities and injuries was 22%and 78% respectively. Fatalities in terms of road users (drivers, Passengers, and pedestrians) were 7.36%, 39.21%, and 53.43% respectively.

Failing to observe the priority of pedestrians and speeding were the major cause of crashes attributed by police. Commercial vehicles, minibuses and buses were involved in the majority of crashes, while automobiles (small vehicles) were less involved in crashes to other vehicle types, partially because small vehicles tend to be driven fewer kilometers per annum. According to the data, commercial vehicles were involved in 38.45 of fatalities and 37.85 of injuries in the five- year period. Minibus taxis and buses were also involved in 34.5% of fatalities. However, track and buses currently make up only 18.22% and 12.49% respective of the vehicle population in the country.

The highest number of crashes (fatal, injury and property damage) involved drivers in the 18-30 year age group (45%) and in the 31-50 year age group (35%). The drivers in the age group 18-30 were involved in more accidents, followed by the age group 31-50 (federal police commission, 2015).

On the other hand, according to the Federal Transport Authority report of august 2015, study was conducted to register rode accident fatalities on Addis – Adama Street from 2010 to 2015. In the period, 1264 accidents caused the deaths of 566 persons. From this 188 deaths fatalities were caused by 305 minibuses; 139 deaths fatalities were caused by 294 light tracks; 59 deaths fatalities were caused by 142 automobiles; 50 deaths fatalities were caused by 120 pike up vehicles; 80 deaths fatalities were caused by 237 heavy trucks; and 50 deaths fatalities were caused by 166 trucks and trailers.

As per the study conducted by federal transportation authority in march 2015, from the total 1500 accidents, 300 accidental or 20% were caused by failure to give-way to pedestrians; 300 accidents or 20% were caused due to over-speed driving; 225 accidents or 15% were the result of failure to maintain required distance from the other vehicle; 120 accidents or 8% were the result of improper overtaking; and 555 accidents or 37% were cased due to other reasons than those mentioned above (Federal Transport Autority,2015).

Both the above data indicated most of the motor accident in Ethiopia result from the negligence of road users/ human factors to abide by the road traffic regulations.

The national data at the federal transport authority affirms that more than 2200 deaths, more than 8000 bodily injuries and more than birr 500 million of property damage occur annually in Ethiopia (Federal Transport Authority, 2015).

4.4 Business portfolio of insurance industry in Ethiopia

Data on the portfolio of insurance in Ethiopia for the past five years from 2011/12 to 2015/16 in terms of GWP is data compiled from NBE and summarized in the table below.

Table 4.2: insurance business portfolios in Ethiopia for the period 2011/12 to 2015/16

S/N	Class of business	Years of operations				
		2011/12	2012/13	2013/14	2014/15	2015/16
1	Fire & Lightning insurance production (in millions)	197	230	281	309	384
2	Marine insurance production (in millions)	577	532	537	490	503
3	Motor insurance production (in millions)	1,861	2,102	2,422	2,831	3,489
4	Workmen's Compensation insurance production (in millions)	65	53	58	70	65
5	Other class of business production (in millions)	770	1,326	1,118	1,228	1,198
	Total	3,470	4,243	4,416	4,928	5,639

Source: From NBE annual reports

As we can see from the above table, the average annual growth of general insurance business from 2011/12 to 2015/16 was 13.10 Percent. While the average annual growth rate of motor insurance production from 2011/12 to 2015/16 was 17.10 percent. It is clear that the contribution of motor insurance to the insurers production portfolio for the year from 2011/12 to 2015/16 account in average 55.60 percent.

4.4.1 Motor insurance gross written and net earned premiums

Data on motor insurance gross and net written premium of insurers in Ethiopia for the past five years from 2011/12 to 2015/16 is compiled from NBE and summarized in the table below.

Table 4.3: Motor insurance written premiums in Ethiopia for the period 2011/12 to 2015/16

S/N	Year	Motor insurance gross written premium (million Birr)	Motor insurance net premium earned (million birr)	Motor insurance ratio of Net to Gross premium
1	2011/12	1861	1434	77%
2	2012/13	2102	1858	88%
3	2013/14	2422	2129	88%
4	2014/15	2831	2460	87%
5	2015/16	2489	2910	83%

Source: From NBE annual reports

Gross written premium are the gross amount payable by the insured to which the insurer is contractually bound with the accounting period regardless of the period of cover.

Net premium earned refers to the net premium for which cover has been provided in a given period. It is the result obtained after deductions of premium ceded and unearned premium for unexpired risks plus change in provision for earned premium for the expired risks at the end of the period.

4.4.2 Motor insurance claims incurred and loss ratio

Data on motor insurance net premium written, net claims incurred and loss ratio of insurers in Ethiopia for the past five years from 2011/12 to 2015/16 is data compiled from NBE and summarized in the table below.

S/N	Year	Motor insurance net premium(Inmillion Birr)	Motor insurance net claim insurance (In million birr)	Motor insurance loss ratio (ratio % from Net motor premium)
1	2011/12	1434	1243	87
2	2012/13	1858	1528	82
3	2013/14	2129	1722	81
4	2014/15	2460	1860	76
5	2015/16	2910	2425	83

Source: From NBE annual reports and own computation

The trend of claims incurred and loss ratio from motor insurance business at industry level as indicated for the five years was on average 82%. It is to be noted here that this loss ratio is only the average as compared for the five years taken and it appears that closer look of the motor insurance in terms of the volume of business and the administrative expense allotted to motor claims would be at a higher percentage than the average 82% had insurers have mechanism of specifically keeping the expenses incurred for managing motor claims.

According to the study done earlier on motor risks and current status of motor insurance in Ethiopia, motor insurance was the largest contribution to the portfolio of insurers in Ethiopia and the performance of the motor class of business was loss making (NBE, 2014).

4.5 Motor insurance performance in BIC

Motor insurance in Berhan insurance company is the largest class of business with a premium volume of more than birr 154 million for the five year 2011/12 to 2015/16. In the following sections the performance of motor class of business in relation with other portfolio of BIC has been presented as follows.

4.5.1 Premium by class of business

Data on the portfolio of Berhan Insurance Company for the past five year from 2011/12 to 2015/16 in terms of GWP is compiled from BIC and summarized in the table below.

Table 4.5: Business portfolio of Berhan insurance company for the period 2011/12 to 2015/16

S/N	Class of Business	Years of Operation					Total
		2011/12	2012/13	2013/14	2014/15	2015/16	
1	Fire & Lightning insurance production (in millions) of birr	1.96	2.54	3.08	3.38	3.47	14.43
2	Marine insurance production (in millions)	3.17	5.32	4.40	4.03	4.95	21.87
3	Motor insurance production (in millions)	17.28	27.32	26.13	32.87	50.65	154.25
4	Workmen's Compensation insurance production (in millions)	0.42	1.07	1.07	1.30	1.22	5.08
5	Other class of business production (in millions birr)	13.71	17.17	18.99	23.33	25.27	98.47
	Total (in millions birr)	36.54	53.42	53.69	64.91	85.46	294.02

Source: From BIC annual report and finance department sources

As we can see from the above table annual growth rate of Berhan insurance company was about 25% for the past five years of operations. The average annual growth rate by class of business for the past five years was 16%, 17%, 34%, 42% and 20% for fire, marine, motor, workmen's compensation and other class of businesses respectively. On the other hand the average contribution of each class of businesses to the total GWP for the past five year was 5%, 8%, 58%, 2% and 27% for fire, marine, motor, workmen's compensation and other class

of business respectively. We can easily understand from the data that motor class of business was take the lion share in contributing to the GWP of Berhan insurance company. It contribution in average was about 58% of the total production of Berhan insurance company for the past five years of operation. It contribution was above the industry average of 55.6 percent for the past five years. Using graphs, the above data can be presented as follows:

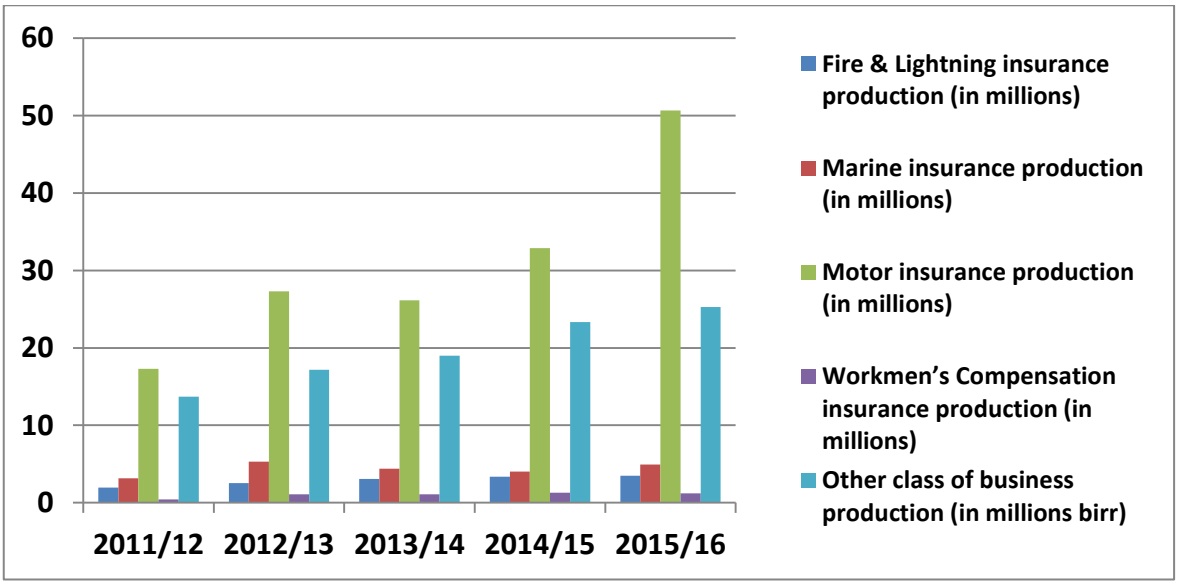

Figure 4.1; Bar Graph showing GWP of all types of insurance of BIC, in millions Birr from 2011/12 to 2015/16

The above figure clearly shows that motor insurance production has the dominant position to the Berhan insurance portfolio and the increasing trend of motor insurance production is quite noticeable.

4.5.2 Claims incurred by class of business

Data of incurred in million by class of business of Berhan insurance company for the past five year from 2011/12 to 2015/16 is compiled from BIC and summarized in the table below.

Table 4.6: Net claim incurred of Berhan insurance company for the period 2011/12 to 2015/16

S/N	Class of Business	Years of Operation					Total
		2011/12	2012/13	2013/14	2014/15	2015/16	
1	Fire & Lightning insurance	0.01	0.08	0.01	0.06	0.10	0.26
2	Marine insurance	0.62	0.64	0.31	1.02	0.86	3.45
3	Motor insurance	8.41	20.79	23.77	24.51	35.89	113.37
4	Workmen's compensation insurance	0.01	0.01	0.60	0.15	0.43	1.20
5	Other class of insurance	0.76	0.88	3.51	5.59	5.24	15.98
	Total	**9.81**	**22.40**	**28.20**	**31.33**	**42.52**	**134.26**

Source: From BIC annual report finance department sources

4.5.3 Motor insurance written premium and claim incurred

The data of Berhan insurance company regarding the ratio of motor gross written premium and gross claims incurred as well as net earned premium and claims incurred for the study period has been presented as follows:

Table 4.7: Motor insurance written premium and incurred claims of BIC, for the period 2011/12 to 2015/16

S/N	Year	Motor insurance			Motor insurance		
		Gross written premium (million birr)	Gross claims insurance (million birr)	Gross Claims ratio (%)	Net Earned premium (million birr)	Net claims insurance (millionbirr)	Net claims / loss ratio (%)
1	2011/12	17.27	8.41	49 %	7.16	7.64	107 %
2	2012/13	27.32	20.79	76 %	20.90	20.65	99 %
3	2013/14	26.13	23.77	91 %	23.81	22.97	96 %
4	2014/15	32.87	24.51	75 %	25.93	21.93	85 %
5	2015/16	50.65	42.90	85 %	33.00	35.89	109 %

Source: From BIC finance department and own computation

It is clear from the above data that the average net claims ratio of motor class of business was about 99 % of the net earned premium for the past five years of operations and it is too high.

4.5.4 Performance of motor insurance/combined ratio

In order to measure the performance of this class of business and draw the right conclusion, we must consider the expenses and commissions paid as well since the performance of insurance companies is measured by Examining their underwriting results being net earned premiums less claim incurred, less expenses and Commissions paid. It has been further analyzed in table below:

Table 4.8: Combined ratio of motor insurance of BIC, 2011/12 to 2015/16

S/N	Descriptions	Year of operation					
		2011/12	2012/13	2013/14	2014/15	2015/16	Total
1	Net Earned premium	7.16	20.90	23.81	25.93	33.00	110.80
2	Net Claims incurred	7.64	20.65	22.97	21.93	35.89	109.08
3	Brokerage commission	0.86	1.88	1.55	1.71	2.62	8.62
4	Operating expense	2.03	3.57	4.40	6.00	8.85	24.85
5	Total outgo	10.53	26.10	28.92	29.64	47.36	142.55
6	Underwriting Surplus	(2.93)	(5.20)	(5.11)	(3.71)	(14.36)	(31.75)
7	Administrative expense	0.87	1.58	1.88	2.57	3.81	10.71
8	Profit from motor insurance business	(3.80)	(6.78)	(6.99)	(6.28)	(18.17)	(42.46)
	Combine Ratio	**159 %**	**132%**	**129 %**	**124 %**	**155 %**	**138 %**

Source: From BIC finance department and own computation

As we can see from the above table the average combined ratio of Berhan insurance for the past five years was more than 100%. To get the combined ratio in the above table we add 5 and 7 then dived to 1. This indicates that the company was made an underwriting loss from motor insurance businesses. The combined ratio of more than 100% has not been acceptable by all insurers. An alternative way to measure profits is through overall results from operations. Overall operating performance (Gain or loss from operations) and gain/ loss from investment of Berhan insurance company also reveals that losses incurred from underwriting activities could not be offset by the investment income Generated from this class of business. This was due to the fact that there was no available cash from motor class of business to earn investment income. Generally, investment income generated from this class of business could not help the company to offset underwriting losses.

The combined ratio measures operational underwriting profitability and allows the sources of profitability to be highlighted. An improvement in the combined ratio can be due to higher premiums. Better cost control and/or more rigorous management of risk covered in insurance classes. Typically a combined ratio of more than 100 percent represents an underwriting loss for the motor class of insurance.

4.6 Responses on questionnaire and interview question

4.6.1 Responses on questionnaires

The questionnaire has three sections: the first section presents profile about general information, the second section provides information regarding motor insurance underwriting, the third section presents motor insurance claims management, and its problem, specific statements were provided under each section to obtain responses from the sampled respondents of branch and claim department employees of Berhan insurance company that are selected on the basis of experience and convenience. The statements were positively stated so that the responses were assigned 1,2,3,4, and 5 on the level of agreement from strongly disagree to strongly agree by using the liker scale. This method is employed measures the attitude of the respondents in two categories i.e. motor underwriting and claim management category.

In the first category, response rate was twenty out of twenty respondents to motor underwriting branch's (100%) and the responses are usable. In the second category, all the six sampled claims department employees provided response to the survey. From the respondents in the first category (branch employee), 14 respondents were having more than four years of

experience and the remaining 6 respondents have experience of not less than two years. In the second category (claims department), thee employees have more than four years experience in the sector while the remaining three respondents have two years of experience. The data is presented after undertaking the reverse coding of the Liker Scale from strongly agree with five marks while strongly disagree has one mark.

Summary of the responses from branch and claims department employees of BIC has been summarized as follows:

Table 4.9 Responses on underwriting (motor insurance premium rating)

S/N	Item	Total number of response	SA (5)		A(4)		N(3)		D(2)		SD(1)	
			N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	Motor insurance premium rate determination should regularly consider the impact it has on the business of the insures	20	6	30	12	60			2	10		
2	Motor insurance policies are preferable to be drive based than vehicle based	20	12	60	5	25	3	15				
3	Environmental and traffic places be considered in determining premium rate	20	4	20	10	50	6	30				
4	policy cancellation is allowed in case of drivers conviction for driving under the influence of alcohol	20	5	25	11	55	2	10			2	10
5	It is appropriate if insurers are allowed to increase premium after a road crash resulting from drivers violation of records	20	7	35	10	50	1	5	2	10		
6	It is appropriate to adjust motor insurance premium based on the loss ratio of the insured	20	12	60	8	40						
7	NCD allowed to the insured helps to build safer driving behaviors	20	15	75	5	25						
8	In my branch driver violation records be considered the higher rate in determination of insurance premiums at policy renewal	20					5	25	6	30	9	45
9	CMTP insurance premium is adequate to deal with the cost of the common pool	20			10	50			3	15	7	35
	Total	180	61	34	71	40	17	9	13	7	18	10

Source: Summery of questionnaire responses of BIC underwriters

The result of responses on the data presented in the above table tell us that: about 34% were strongly agreed, 40% agreed, 9% neutral, 7% disagree and 10% strongly disagree about questionnaires regarding motor insurance premium setting/underwriting motor insurance in Berhan insurance company. We can again summarize these data as about 74% of the respondents were agreed, 9% neither agreed nor disagreed to the statement (neutral), and about 17% of the respondents were disagreed to the statements.

Finding from the responses on the questionnaire of motor claims department employees are summarized in table 4.10, 4.11, 4.12 and 4.13 as follows.

Table 4.10 Summery of responses on motor claims performance in general

S/N	Item	Total number of responses	SA (5)		A (4)		N (3)		D (2)		SD (1)	
			N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	Motor claims represent the largest share in terms of severity of losses	6	4	67	2	33						
2	Motor insurance is unprofitable and risky business in insurance companies	6	2	33	3	50	1	17				
	Total	12	6	50	5	42	1	8				

The result of responses on the data presented in the above table tells us that: 50% of the respondents were strongly agreed, 42% agreed, and 8% neutral to the statement. We can again summarize these data as about 92% of the respondents were agreed that motor insurance is a risky business and savior losses in Berhan insurance company, and only 8% neither agreed nor disagreed to the statements.

S/N	Item	Total number of responses	SA (5)		A (4)		N (3)		D (2)		SD (1)	
			N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	Road related factors is estimated to take the highest contributors of all cause of traffic accidents	6	2	33	3	50	1	17				
2	Poor road design and maintenance and the traffic mix on road are other factors for high rate of motor accidents	6	1	17	5	83						
	Total	12	3	25	8	67	1	6				

Table 4.11 Responses on effective road related/environmental factors to motor accidents

The result of responses on the data presented in the above table tell us that: 25% were strongly agreed and 67% agreed and only 8% are neutral to the statements of effective

road/environmental related factors to motor accident reported to Berhan insurance company. We can again summarize these data as about 92% of all respondents agreed that road/environmental related factors are the main cause of motor accidents reports to Berhan insurance company.

Table 4.12 Responses on effective vehicle related factors to motor accident

S/N	Item	Total no of responses	SA(5)		A (4)		N (3)		D(2)		SD(1)	
			N	%	N	%	N	%	N	%	N	%
1	Vehicle related factors is estimated to take the highest contributor of all cause of traffic accidents reported to the company	6	2	33	2	33	1	17	1	17		
2	High prevalence of old vehicles that often carry many more people than they are designed to carry are other factors that contribute to high reate of motor accident in my company	6	1	17	4	66	1	17				
3	Lack of safety belt and helmet use are also factors that contribute to the high rate of motor accident	6	1	17	2	33	3	50				
4	The higher the engine power of the vehicle the higher frequency in involving to an accidents	6	1	17	2	33	2	33	1	17		
5	The higher the engine power the higher severity in term of damage	6	1	17	1	17	3	66	1	17		
6	Latest model vehicle are frequently involved in accident than old model	6			1	17	2	33	3	50		
7	Latest model vehicle have high severity than old model vehicles	6					1	17	5	53		
8	Private use vehicle are frequently involved in accident than commercial use vehicle	6					2	33	4	67		
9	Private use vehicle have high severity than commercial use vehicles	6					1	17	5	83		
10	familiar brand vehicles are frequently involved in accident than unfamiliar brand vehicles	6			3	50	1	17	2	33		
11	familiar brand vehicles have high severity than unfamiliar brand vehicles	6			3	50	1	17	2	33		
12	existence of old and non-standard car, particular old heavy vehicles are one of the reason of high losses caused by motor insurance	6	1	17	4	66	1	17				
	Total	**72**	**7**	**10**	**22**	**31**	**19**	**26**	**24**	**33**		

Source: Summery of questionnaire responses of BIC claims department employees

The results of responses on the data presented in the above table tell us that: 10% were strongly agreed, 31% agreed, 26% neutral, and 33% disagreed about effective vehicle related factors to motor accident reported to Berhan insurance company. We can again summarize these data about 41% of the respondents were agreed that vehicle factors are the main causes of motor accidents reported to the company: 26% neither agreed nor disagreed to the statement, and about 33% of the respondents were disagreed to the statement.

Table 4.13 Responses on effective human factors to motor accidents

S/N	Item	Total number of responses	SA(5)		A (4)		N(3)		D(2)		S(1)	
			N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	human error is estimated to take the highest contributor of traffic accident	6	2	33	4	67						
2	the causes of most accidents could be recklessness on the part of driver, ignorance of high way codes, over speeding etc.	6	1	17	4	66	1	17				
3	the main causes of accidents was due to bad traffic situation because	6			5	83	1	17				
4	Alcohol and use of chat causes many accidents	6	1	17	4	66	1	17				
5	Driver licensing needs to be investigated, as not only are there many bogus licensees but also a very poor test procedure carried out in many regions	6	3	50	3	50						
6	failure to observe the user type of vehicle by the insured is one of the causes of motor accidents	6	2	33	4	67						
7	there is a significant relationship between different age group of driver and a possibility of loss	6	2	33	4	67						
8	Women are more carefully in driving and their accidents severity is less than men	6	2	33	4	67						
9	speed and illegal overtaking, not to observe minimum distance to the vehicle et are the main causes for claim	6	2	33	4	67						
10	Driving when tired and aggressive conditions are effective human factor on accidents	6	1	17	5	83						
11	incorrect look at surrounding, level of consciousness confusion, low											

	concentration and traffic mistake are the main causes of motor accidents	6	1	17	4	66	1	17				
12	Reduction of drivers physical and mental power due to drug abuse, are the major factors for motor accidents	6	2	33	4	67						
	Total	72	19	26	49	68	4	6				

The result of responses on the data presented in the above table tells us that: about 26% were strongly agreed, 68% agreed and 6% were neutral to the response of effective human related factors to motor accident reported to Berhan insurance company. We can again summarized these data as about 94% of the respondents were agreed that human related factors are the main causes of motor accidents reported to the company and the remaining 6% neither agreed nor disagreed to the statements.

4.7 Discussion of the finding

The finding from the questionnaire reveals that motor claims represent the largest share of losses. The premium collected from the insured could not cover related losses and expenses of this class of business. So it was performing under losses. This could have a negative impact on the financial performance of the company. The main component of the losses arise from motor class of business was high claim costs due to high accident rate of the vehicle and these costs represent about 65 % of the total costs for the past five years of operation. We can group effective factors for motor accidents as vehicle factors, human factors, and environmental/road related factors, and review according to their features to relative justice and efficiency on determining insurance premium.

Classifying the vehicles in country based on engine power, year of make, type of use, type of vehicle (private car, truck, etc), and the maximum number of group and categories is the common method in determining the premium. This will help insurance companies to charge appropriate level of premium and consequently minimize losses arise from accident of the car.

In this regard, it is necessary that an insurance company should give adequate attention to assess the technical specification of the car because speeds can be greatly influencing factors in determining the premium paid.

Application of driver features in determining and issuing insurance policy that most of these features can be cited factors such as gender, age, occupation; experience of accidents, driving crimes etc. for instance, when several people use a car, the problem is how this car can be

insured whereas the probable risk in different people is varied. It seems that young people should be pay premium more than middle-aged people. Because evidence shows that there is significant relationship between different age groups as a possibility of loss and young drivers have risky behavior compared to older middle –aged drivers.

Paying premium based on job classification also will be somewhat helpful. It should be noted that the type of job and the job culture has effect on quality and type of driving and their accidents severity is less therefore should be pay premiums less than men.

It is necessary that traffic record diving crime and driving and information to provide insurance according to the driver violation records be considered the higher rate in determination of insurance premiums and for driver with good records, deduction for the premiums was considered as good discount on premium.

Involving environmental factor and driving place is another important issue that can be considered in time of issuing insurance policy and determining premiums of insurance companies. Therefore according to significant relations between driving environmental and the possibility of an accident it is necessary that driving environment should be considered in premium setting. cooperation and coordination between relevant agencies, such as traffic, law enforcement authorities, medical examiners, hospitals, insurance fund administration agency, court and tribunals can prevent from losses and particularly unrealistic losses and collusion aroused from third party insurance claims creating common site among all insurance companies and organization referred to above personal record and records for traffic violation will reduce loss and prevent right violation of insurance companies.

There is no doubt that motor insurance is the most important class of business since on average it represents more than 58% of the gross volume of premiums written in the past five years. It is also clear that motor insurance has negative profitability margin. In an effort to identify the reason behind this negative underwriting result of motor insurance. I have discussed the issue with claims department manager and operations department managers and claim officers of Berhan Insurance Company. Based on the discussion the following points have been identified as the main causes for negative underwriting result of motor insurance:

- Increased cost of claim due to increase cost of spare parts, increased cost of labor increased cost of medical expense, increased cost of legal expenses, increased court award, increased number of fraudulent claim, and VAT
- Although the level of the cost of claim is continuously increasing due high accident rate, premium level in respect of motor competition have not yet shown increase rather

is was still declining with only price based competition of the market and the price of compulsory Motor third party (CMTP) cover was based on the tariff set by law.

- The other most important expenses are the operating costs, brokerage commission rates paid to the brokers and agents who introduce the business to insurance companies and indirect admission costs.
- Inadequate investment income due to limited investment options and limited availability of cash.

The factors which affect the profitability financial performance of the company have been further analyzed in terms of underwriting performance and investment as follows:

I. Underwriting performance

- Premium Rating

According to the chartered insurance institute the price of insurance is important for different reasons ,first it has a direct impact on the amount of revenue the insurer earns, second it affects the volume of polices the insurer sold and finally the premium must cover anticipated claims and other expenses (Morley,2009)

Therefore the premium charged to the insured must represent the risk introduces to the insurance company and allow an acceptable level of profit margin. However, in a competitive market such as motor insurance, the action of competitors plays an important role as well.

In an Ethiopian motor insurance market, the premium rate for comprehensive motor insurance cover was varying from company to company. The insurance sector in Ethiopian has been characterized by strong price based competition. Most of motor insurance sectors in Ethiopians have been characterized by strong price based competition. Most of motor insurance customer's Ethiopian has also been price sensitive. As we have seen in the literature part of this study, insurance is based on the law of large number and the actuaries has been considered the total population of the property to be insured while fixing the premium rate. However, according to the study of Ethiopian insurance fund office, the total numbers of insured vehicle on comprehensive basis in Ethiopia was about 35 % of the registered vehicle. This implies 65% of the registered vehicles have not been insured motor comprehensive coverage. Therefore the premium charged for motor comprehensive coverage was unfair and it could not cover the expected losses and expenses, consequently it will have a negative impact on the profitability of the insurance company. On the other hand, third party motor legislation.

The rate set by the tariff were the maximum that could be charged by insurance companies and were considered low for types of vehicles ,especially private cars and minibus taxis.

The main reason for charging an equitable level of motor insurance premium in respect of comprehensive cover is the possible reaction company's fear they will face from competition and insured's alike. In addition, the absence of statistical information and qualified personnel which would guide the market in calculating the correct premium to be charged made companies more apprehensive.

In order to improve the profitability performance of motor class of business in the Ethiopians insurance industry, following the general actuarial finding a more specific study should be initiated by each company to take a step further in creating and strictly following its own rating structure in a professional manner so that the sector will be developed and contributed its share to the development of the country in general and attract investor and talents to the sector in particular.

- Claims

The cost of claims the main outflow of cash from insurance companies and as such it is one of the main components of premium rating. Adding the projected cost of claim to the premium is one way of taking into consideration the effect of claims on the premium structure. However as we have seen above it is not always possible to do so in competitive market based on price only. It is therefore imperative to find ways of reducing the cost of claims and for this to be successful we have to identify the causes behind them. Components of cost of motor claim relate to bodily injuries, deaths and property damages are; labor cost, vehicle and spare parts, medical cost, court awards, tax, and administration cost in handling claims.

The main factor affecting the cost of claims is the most obvious factor, which can be controlled and improved internally by the insurance company. These costs are the cost of collecting the information in respect of an accident, cost of processing the information, cost of investigating the claim, cost of evaluating the damages, and cost of handling the payments of claim.

The main factor affecting the cost of claim can be grouped into different categories such as: those which can be controlled and improved internally, those which can be influenced by the market, and the economy as a whole.

The administration cost of handling claims is the most obvious factor, which can be controlled and improved internally by the insurance company. These costs are the cost of collecting the

information in respect of an accident, cost of processing the information, cost of investigating the claim, cost of evaluating the damages, and cost of handling the payment of claim.

These procedures can be simplified and help insurance companies to save costs through; internal reorganization by investing in information technology for example, if, Berhan insurance company digitalize its operation by investing in information technology helps the company to save costs; actions taken by companies internally and which relate to the training of employees in enabling them to investigate claims more efficiently and identify cases of fraudulent claims, recognize cases where costs charges to the company are above normal and reduce claims handling time; and finally outsourcing the handling and investigation of claim to specialized professional may also help companies somewhat. Although this may be successful in cost reduction it may lead to loss of internal expertise and the loss of personal contact with the insured, which is very important in the retention of insurance business.

Trying to settle claim out of court to avoid protracted and costly legal action is also one way of reducing claim costs. In order to succeed in this, insurance companies need qualified and well trained personnel who can evaluate the cost of claims, whether this is injuries or loss of life and agree with the claimants to a just settlement without resource to courts.

The second other main factor which affect the cost of claim is those which can be influenced by the market in general, the market can also assist in the reduction of the cost of claims by concerted action taken aiming at the reduction for fraudulent claims. Such action can take the form of a centralized register in which all claims in excess of a certain amount are input and to which all members can have access to. In addition a separate register of fraudulent or suspicious claims can be created. The market can also get in touch with other bodies or authorizes which can assist, such as the police force and seek assistance in combating fraudulent claim or improve the safety on the roads. This can take the form of increased police patrols on the roads especially on highways, the imposition of higher penalties for traffic offences, more frequent checks on the use of safety belts whilst driving and compliance with speed limits. Also breath analyzer tests which recently started in Addis Ababa roads will help in the reduction of driving under the influence of alcohol and other drugs like chat.

In addition to the above, the market may coordinate with the ministry of transport and road authority to improve and maintain the condition of the roads regularly as well as the condition of the motor vehicles circulating in the country. Recent legislation in Ethiopians has made the use of safety belts compulsory for driver of motor vehicles and the mobile phones prohibited whilst driving.

The third main factor affecting the cost of claims are those costs which can be influenced by the economy as a whole. These factors cannot be controlled by insurance companies or the market as they depend on the economy as a whole. Such factors relate to the level of inflation, indirect taxation, such as VAT and the economic situation in general. For example in conditions of economic recession fraudulent claims tend to increase.

- Administration costs

Reduction of administration costs in underwriting can be by simplifying procedures, investing in information technology and training personnel. Cost reduction can be achieved by way of simplified procedures leading to reduced working time and paper work. The GIIS underwriting software developed by other insurance companies like Nile, Awash and Africa insurance companies has been help in this regards. Call centers are also leads to cost reduction as all information is gathered by phone and logs in the computer directly thus avoiding the need to keep physical file, checking whether the proposal foms have been correctly completed, communicate with the proposer and /or the agent if information is incomplete, and to check the manual calculation of premium done by the agent to ensure its accuracy. Direct selling through the internet has an additional advantage in that the proposal form is completed directly by the proposer thus reducing further the need for clerical staff and consequently to reduced payroll.

- Acquisition cost

The cost of acquiring business depends very much on the way business is sourced to the companies. According to the data of BIC, more than 45% of the GWP of motor insurance business is generated through agent and/or brokers who remunerated by way of commissions at least 7.5% or at high 17.5%, which is considered high.

Introducing new method of selling in the market such as direct selling and internet selling, which lead to increased direct sourcing of business and consequently reduced acquisition costs?

II. Investment performance

The important of cash availability for investment as a source of additional income is obvious in the insurance sector. Availability of cash is the most important factor for the viability of an insurance company in addition to the reduction of claim and other costs. New legislation no premium no cove number 746/2012 which was legislated by National Bank of Ethiopia prohibited credit sales of all type of insurance policies except for nonprofit making

government organizations. In this respect insurance companies can be benefited by immediate premium collection and investing it. It is to be clear that in addition to cash availability of investments option to the insurance industry could determine the result of their performance.

In many parts of the world, majority of the insurer's income has been generated from investments performance due to available investment opportunities. The loss incurred from underwriting result has been subsidized by the significant proportion of income generated from investment activates.

The available investment opportunities for Ethiopians insurers includes: share, real estate, bond, time deposit, and opening vehicle repair center in connection with the business of the insurer. Most of the insurers in Ethiopia invest their money in buying shares from Ethiopian Banks up to the limit allowed by the NBE directive and generating an average return on investments up to 30% of their shares, from this Berhan insurance company had been invested in Berhan bank share. The other option used was time deposit saving at an average negative real interest rate of 9%. This option was not a good investments opportunity for insurers because it generates only an accounting profit not an economic profit due high inflation rate of the country. The third option used by some insurer was real estate which has been generated short and long term profits to the insurers. Diversifying the investments opportunity is very important to the insurers however due the shortage of capital many of the insurers have a financial constraint to invest in the long term, investments. The absence of stock market in Ethiopians has also limited the investments option of the insurers.

The environment in which insurance companies operate in Ethiopian is very competitive and care must be taken to ensure that insurance companies run their business prudently so as to avoid financial difficulties. The insurance supervision department of the NBE exists to supervise and control the operation of insurance companies and ensure that they are solvent, thus protecting the interests of the insured's/ policy holders.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of major findings

- The main problem associated with motor insurance is increased rate of motor accidents due to human error (recklessness on the part of driver), vehicle factor (prevalence of old vehicle & other technical problems), and environmental factors like poor road design and maintenance, and the traffic mix on the road are effective factors for motor accidents;
- Motor insurance has a negative impact on the financial performance of Berhan insurance company;
- The major factor that made motor insurance loss leader among other products of the insurance company was low premium charged, inefficiency in risk assessment, increased rate of vehicle accident, increased losses and expenses, low public awareness about the benefit drawn from insurance service;
- BIC portfolio was highly dependent on motor class of business
- No investments income was generated from motor class of business hence there is no cash left from this class of business.

5.2 Conclusions

The study aimed at assessing the financial performance of motor insurance business on profitability of Berhan insurance company and to suggest way of improving its performance so that contribution of motor class of businesses will be improved in the future.

Generally, insurance business in Ethiopian is not well developed. According to the report of center for financial regulation and inclusion the overall premium income from the sector represents only about 0.2% of the GDP in 2007, while in Kenya and Namibia premiums represent 2.5% and 8.1% of their GDP respectively. Lack of public awareness about the benefit drawn from insurance, unfair market competition, underdeveloped domestic market, lack of experience and insurance technique, and absence of domestic actuarial service are some of the reasons.

Motor insurance is the largest sector in Berhan insurance company's portfolio over the past five years on average by contributing about 58% of the total gross written premium. Despite its largest contribution to the premium income, motor insurance business in Berhan insurance

company has consistently operating at a negative result and it has been subsidized by profit from other class of business & other investment opportunities. Low premium rate charges due to stiff market competition, increased cost of claims due to increased rate of motor vehicle accidents, increase administration and acquisition costs, and inadequate investment income are some of the reason for negative result.

5.3 Recommendations

In order to improve the adverse impact of motor insurance, the following possible solution was suggested:

Premium rating

- Amend premium rates: insurance companies to change in premium rates commensurate to the risks covered. Based on the statistical information to be collected and analyzed by each insurance company the AEI should have assist the companies to maintain certain level premium rate to be charged;
- Making awareness to the public to insure/attract the required level/number of similar exposure units
- Strictly following underwriting factors to be considered in risk assessment and risk selection and revise periodically the rates according to the findings;
- Young drivers should be charged more premium than older middle aged driver due to their risky behavior in driving;
- Insurers should work in partnership with federal transport Authority and police authorities and other law enforcements organs for the establishment of roads safety and motor vehicle accidents information system that give access to insures and law enforcement organs. Such information system can help to take preventive measures and it Facilitates the aggregation process of demerit point for violation of the road safety legislations;
- Insurance companies should plan their marketing strategies aiming at changing the attitude of the public towards competing on provision of efficient claim services rather than price based competition;
- A Concerted action should be taken by all companies to charge equitable level of premium to turn motors class of business to positive result in particular and to develop the sector in general;

Claim costs

- Reduce claim costs- company can reduce claim costs by of employing and training competent employees to handle claims more efficiently and be able to identify cases of claims leakage, overcharging, or fraudulent claims;
- Claims database should be maintained by insurers centrally and it helps the insurance company to identify the history of the proposer so as to charge equitable level of premium;
- Lobby policy makers to revise the procedures for training, testing and licensing the drivers;
- Establishment of own garages, making backward and forward linkages with spare part dealers and garages that helps to reduce cost of operating;

Acquisition and Administration Costs

- Reduce acquisition costs- devising the alternative way of selling insurance for example through alternative channels such as directly over the telephone and selling through internet may lead to reduced acquisition costs.
- Reduce administration cost- investing in new technology or implementing more

Investment performance

- Improve cash flow- using different types of long term and short term investment opportunities, the availability of funds to be invested and consequently the ability to pay claim without resorting to borrowing;
- The government should give more attention for the development of capital market in order to encourage the insurance market by creating opportunity for investments.

Generally, the regulatory body should give due emphasis to build the capacity of domestic insurers towards international competitiveness because the sector might open for wider international market when Ethiopians become a member of WTO which has been under progress.

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APPENDIX A

1. Questionnaire to be filled by Berhan Insurance Branch underwriters

Dear Respondents,

This questionnaire is part of MBA thesis research project to assess the profitability of motor insurance in Berhan insurance company. Your responses are important in enabling me to obtain as full understanding as possible of this topical issue.

The questionnaire should take you few minutes to complete. Please answer the questions in the spaces provided. If you wish to add further comments, please feel to do so. The information you provide will be treated in the strictest confidence. You will notice that you are not asked to include your name and address anywhere on the questionnaire.

The finding from your questionnaire and others will be used as the main data set for my thesis for my post graduate studies in Masters of Business Administration at Saint Marry University.

Please return the completed questionnaire to me, Hailye Gerawork Before March 22, 2017. If you have any queries or would like further information, please feel free to contact me on 0913 17 66 02

Thank you for your help

Hailye Gerawork

Section A. General Information

Gender: _____Age: _____

Higher educational qualification:_____

Year of experience:_____

Current position: _____

Section B

In answering the questions in this section, please use the scale insuch a way that:

1 = strongly Disagree 4= Agree

2= Disagree5= Strongly Agree

3= neutral/undecided

No	Statements	5	4	3	2	1
1	Motor insurance premium rate determination should regularly consider the impact it has on the business of the insurer					
2	Motor insurance policies are preferable to be driver based than vehicle based (so that drivers feature such as gender, age, occupation, experience of accidents, driving crimes etc. be considered during premium setting).					
3	It is appropriate if the environmental and traffic places be considered in determining motor insurance premium rate					
4	It is appropriate if insurance policy cancellation is allowed in case of drivers conviction for driving under the influence of alcohol and use of drug, and causing fatal accidents as a result of over speeding					
5	It is appropriate if insurers are allowed to increase premium after a road crash resulting from drivers violation of traffic rules					
6	It is appropriate to adjust motor insurance premium based on the loss ratio of the insured					
7	No claim discount allowed to the insured helps to build safer driving behaviors					
8	In my branch/company driver violation records are considered to increase the rate in determination of insurance premiums at policy renewal					
9	Commercial third party insurance premium is adequate to deal with the total cost of the common pool					

APPENDIX B

2. Questionnaire for Claims department employees

Section A. General Information

Gender: _____Age: _____

Higher educational qualification:_____

Year of experience:_____

Current position: _____

Section B

In answering the questions in this section, please use the scale in such a way that:

1 = strongly Disagree 4= Agree

2= Disagree 5= Strongly Agree

3= Neutral/undecided

No	Statements	5	4	3	2	1
1	In my department, motor claims represents the largest share in terms of severity of losses					
2	Road related factor is estimated to take the highest contributor of all causes of traffic accidents reported to the company					
3	Vehicle related factor is estimated to take the highest contributor of all causes of traffic accidents reported to the company					
4	Human error is estimated to take the highest contributor of all causes of traffic crashes reported to the company					
5	A high prevalence of old vehicles that often carry many more people than they are designed to carry are other factors that contribute to high rate of motor accident in my company					
6	Lack of safety belt helmet use are also factors that contribute to the high rate of motor accident					
7	Poor road design and maintenance and the traffic mix on roads are other factors that contribute to the high rate of motor accident					
8	The causes of most motor insurance accidents reported to the company could be attributed ignorance of high way codes and over speeding etc.					
9	The main causes of most of the motor insurance accident was					

	due to bad traffic situation because of the absence of effective planning, vehicle-misuse, poor management, inadequate street parking, traffic congestion and delays among other contributory factors					
10	Alcohol and use of chat causes many accidents reported to my company					
11	Driver licensing needs to be investigated, as not only are there many bogus licenses but also a very poor test procedure carried out in many regions					
12	The higher the engine power of the vehicle the higher frequency in involving to an accident					
13	The higher the engine power the higher severity in terms of damage					
14	Latest model vehicles are frequently involved in accident than old model					
15	Latest model vehicles have high severity than old model vehicles					
16	Private use vehicles are frequently involved in accident than commercial use vehicles					
17	Private use vehicles have high severity than commercial use vehicles					
18	Familiar brand vehicles are frequently involved in accident than unfamiliar brand vehicles					
19	Familiar brand vehicles have high severity than unfamiliar brand vehicles					
20	In my company failure to observe the user type of vehicle by the insured is one of the causes of motor accidents					
21	Existence of old and non-standard cars, particularly old heavy vehicles is one of the reasons of high losses caused by third-party insurance					
22	There is a significant relationship between different age group of driver and a possibility of loss and young drivers have risky behavior compared to older middle-aged drivers					
23	Women are more carefully in driving and their accidents severity is less than men					
24	Behaviors such as speed and illegal overtaking, not to observe minimum distance to the vehicle in front, left shift, disregard for other vehicles and traffic lines and signs, are the main causes for motor insurance claim reported to my company					
25	Driving when tired and aggressive conditions towards others or a gaucherie due to improper training, inexperience, bad decisions are effective human factor on motor accidents					

26	Incorrect look at surroundings, level of consciousness, confusion, low concentration and traffic mistakes are the main causes of motor accident					
27	Reduction of driver's physical and mental power due to drug abuse, certain medications, illness and so on are the major factors for motor accidents in my company					
28	Third party insurance is unprofitable and risky business in insurance companies					

APPENDIX C

Interview Question for Operations Department Manager

1. Would you state how many years do you have served the company and your current position?
2. Would you state the types of insurance policy available for market in your company?
3. When motor insurance was made mandatory and what are current requirements?
4. Which ministry/department supervises the insurance industry? What information is required to be provided to the regulatory body?
5. How is the industry structure, i.e. how many private sector companies and how large is the public sector share? Do government vehicles have to beinsured?
6. What is the basic consideration for accepting the risk of motor insurance?
7. What are the pricing objectives of motor insurance in your company?

10 How is motor insurance coverage promoted?

11 Who sets premium rate for motor comprehensive? Is it based on according to the result of actuaries' findings or the market condition?

12 Who sets commercial motor third party (CMTP) premium tariffs? What is the role of the insurance companies/association?

13 Is motor insurance vehicle or driver based, i.e. does the premium vary by the age or experience of the driver, or his/her previous driving record?

14 What is the contribution of motor insurance premium to gross written premium (GWP) among all service of the insurance company?

15 What is the growth rate of motor insurance for the past five years?

16 How would you evaluate the success of motor insurance in the industry in general and your company in particular for the past five years?

17 What type of risk minimization technique/tools that are used by your company in order to minimize the cost of motor ins

APPENDIX D

Interview Question for Claims Department Manager

1. Would you state how many years do you have served the company and your current position?
2. What is the effect of motor insurance on your companies claims performance?
3. Among other services of the insurance company, how do you evaluate the frequency and severity of motor insurance claims and its associated problems?
4. What are the types of costs incurred due to the accident of motor insurance?
5. Do you state the impact of motor insurance claims on the other class of business?
6. What are the main causes of motor accident reported to your company? Please specify according to their degree of severity of damage
7. How do you evaluate the overall traffic situation in Ethiopia?