Assessment of Performance of Motor Insurance: A Case of Ethiopian Insurance Corporation

BY

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As member of the Board of Examiners we have read and examined the thesis prepared by Mergia Gagni Regassa and We agreed that it is accepted as fulfilling the thesis requirement for the Master of Business Administration.
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ACRONYMS/ABBREVIATIONS

EIC: Ethiopian Insurance Corporation
NBE: National Bank of Ethiopia
GDP: Gross Domestic Product
CTP: Compulsory Third Party
USD: United States Dollar
RII: Relative Importance Index
WHO: World Health Organizations
FDRE: Federal Democratic Republic of Ethiopia
CCE: Commercial Code of Ethics
IFAA: Insurance Fund Administration Authority
SGS: School of Graduate Studies
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Abstract

The business world without insurance is unsustainable. At the same time, an Insurance companies’ ability to continue to cover risk in the economy hinges on their capacity to create profit or value for their shareholders. It is in the interest of every insurer to identify the critical factors that determine business and product performance. This research set out with an objective of identifying factors that affect the performance of one of the products, namely motor insurance, at Ethiopian Insurance Corporation. The research was designed as an explanatory sequential mixed method where a quantitative phase utilized one sample t-test and relative importance index to identify factors affecting the performance of motor insurance at EIC. This was followed by an interview to further explain the findings of the quantitative phase. Accordingly, the findings indicate that even though motor insurance is doing well in terms of gross premium collection, it has a high loss ratio and is not contributing well to the underwriting surplus. Factors affecting the performance of motor insurance at the firm level in the order of their relative importance were identified as product/policy features; service quality, marketing and sales activities, use of technology as well as infrastructure.

**Key Words:** Performance of Motor Insurance, Product/Policy Features, Service Quality, Marketing, Sales, Technology, Infrastructure
CHAPTER ONE
INTRODUCTION

This chapter introduces the concept of insurance and a specific insurance product, motor insurance. After discussing some prominent research work in the area and introducing the insurance company, EIC, the problem to be explored, the objectives as well as the significance of conducting this research are given.

1.1 Background of the Study

The insurance market is a substantial market. All over the world, there are thousands of insurance companies with large volumes of capitalization and funds employing very large numbers of employees on one hand, and much larger numbers of people and business organizations which are covered by insurance benefits on the other (Ibrahim, 2013). The risk absorption role of insurers promotes financial stability in the financial markets and provides a “sense of peace” to economic entities. The business world without insurance is unsustainable since risky business may not have the capacity to retain all kinds of risks in this ever-changing and uncertain global economy (Ahmed et al., 2011). Insurance companies’ ability to continue to cover risk in the economy hinges on their capacity to create profit or value for their shareholders (Akotey, et al., 2013).

Currently, the insurance business in Ethiopia has moved beyond its state monopoly days to include multiple private companies. The history of modern insurance refers to the development of the modern business. Accordingly, structured insurance service was introduced in Ethiopia as far back as 1905 following the establishment of the first bank, Bank of Abyssinia, that begin to transact fire and marine insurance as an agent of the foreign insurance company (Zeleke, 2007).

Although there are about seventeen insurance companies in Ethiopia providing a range of products across life and non-life insurance products and have surpassed a premium of ETB 6.4 Billion in the 2015/16 financial year, the industry is still under-developed representing merely 0.79% of GDP (NBE, 2017). Ethiopian Insurance Corporation (EIC) in particular, was established in 1976 by proclamation No.68/1975. The Corporation
came into existence by taking over all the assets and liabilities of the thirteen nationalized private insurance companies, with Birr 11 million (USD 1.29 million) paid up capital with an aim of providing all classes of insurance business in Ethiopia to the broad mass of the people. After nineteen years of the protected monopolistic system as state owned-sole insurer, it was re-established as a public enterprise under proclamation number 201/94 with Birr 61 million (USD 7.13 million) paid up capital. The company at the moment offers more than 60 products in both life and non-life insurance services.

Motor insurance has been offered as a service by many companies in Ethiopia. However, due the importance of the transport sector, particularly vehicular transport, for the country’s economy, and the escalating volume of accidents in the country, Proclamation No. 559/2008 was the enacted after long wait and CTP motor insurance has been considered as a landmark and an important development in Ethiopia (Demiss, 2009). The enforcement of the Proclamation was expected to minimize problem posed by motor accident. Like most other insurers, motor insurance is a major part of EIC’s portfolio.

Identifying the key success indicators of insurance companies facilitates the design of policies that may improve the profitability of the insurance industry and the companies in particular. Akotey, et al. (2013) claims that insurers’ profitability is influenced by both internal and external factors. Whereas internal factors focus on an insurer’s specific characteristics, the external factors concern both industry features and macroeconomic variables (Dorofti and Jakubik, 2015). The profitability of insurance companies can also be appraised at the micro, meso and macro levels of the economy. The meso and macro levels refer to the influence of support-institutions and macroeconomic factors respectively (Akotey, et al. 2013). On the other side, the micro level refers to how firm-specific factors such as size, capital, efficiency, age, ownership structure, claims, premiums, etc… At the micro level, profit is the essential pre-requisite for the survival, growth, and competitiveness of insurance firms and the cheapest source of funds (Buyinza et al., 2010).

Derbali(2014)examined the impact of firm-specific characteristics (size, leverage, tangibility, risk, growth, liquidity and age) on the performance of life insurance companies in Tunisia and found out that height and age of policyholders, as well as premium growth, are the most important determinants of profitability. Pervan et al
(2012) cited on Akotey, et al. (2013) also investigated the underlying factors of Bosnia and Herzegovina insurance industry’s profitability. Their findings indicated a strong negative influence of claims ratio on profitability.

Another set of firm-level studies that look outside the financial statements of the insurance company to analyze performance do so from an operational perspective. Such studies look at the operationalization of service and communication/marketing perspectives. For example, Mathur and Tripathi (2014) identified factors like amount of premium (pricing), influential marketing campaign, the reputation of the company, service quality, number and reach of branches as determinants of insurance performance. Similarly, price of insurance (Swiss Re, 1993), income (Feyen, Lester and Roche, 2011), education and product design (Vincent, 1998), physical equipment, communication devices, agents and brokers and policy design (Ebitu, Ibok, and Mbum, 2012), claims management process (Nwankwo and Durowoju, 2011) have all been identified as factors affecting the performance of an insurance.

Thus, it is in the interest of every insurer to identify the critical factors that determine business and product performance. Despite this however, studies into the performance of specific insurance product or a policy are limited. Accordingly, this research paper seeks to assess the performance of motor insurance in the case of EIC and identify factors key to its performance using firm-level factors from an operational perspective.

1.2 Definition of Key Terms

**Insurance Policy:** is a formal contract-document issued by an insurance company to an insured (Rubin, 2008).

**Premium:** the amount paid to an insurance company, sometimes in regular installments or as per the agreement with the insurer for the insurance policy (Rubin, 2008).

**Claim:** is a formal request that’s made either by a plan participant or his or her healthcare provider to the insurance company, asking for payment for a procedure the member received (Rubin, 2008).
**Underwriting:** the process of selecting risks for insurance and classifying them according to their degrees of insurability so that the appropriate rates may be assigned (Rubin, 2008).

**Underwriting Surplus:** is the excess of the total premium contributions paid by policyholders during the financial period over the total indemnities paid in respect of claims incurred during the period (Rubin, 2008).

**Underwriting Profit:** it consists of the earned premium remaining after losses have been paid and administrative expenses have been deducted (EIC Annual Report).

### 1.3 Statement of the Problem

The subject of performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organizations since positive performance has implications for organization’s health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of company’s resources and this, in turn, contributes to the country’s economy at large (Naser, and Mokhtar (2004) on Sisay (2015).

Various factors affect the overall profitability of insurance companies. With regard to a specific product, however, firm-specific factors coupled with external factors could play a crucial role in influencing the performance of the product and the companies’ profitability.

Insurance companies in Ethiopia indicate that motor insurance is not performing well. One popular reason commonly mentioned is the very high level of road accidents in the country. According to the World Health Organization’s (WHO) road safety report (2015), traffic accidents in Ethiopia account for the deaths of 25.80 persons per 100,000. This is 2.77pc of the total deaths in the country, placing Ethiopia 12th in the world. The report further puts the estimated GDP lost due to road traffic crashes in the range of 0.8–0.9% of the GDP. NBE 2015/16 reports also shows that out of an overall 3.1 billion insurance claims across the industry, motor insurance took the largest share of claims with 79% (NBE, 2017). On top of this, however, the performance of motor insurance is also affected by factors under the control of the insurance company itself.
To the best of the researcher’s knowledge, researchs conducted to identify firm-level factors affecting the performance of an individual insurance product like motor insurance in general as well as in an Ethiopian context, in particular, are almost non-existent.

With this in mind and taking EIC as a case, conducting a research in this area will be very crucial to address practical shortcomings and knowledge gaps both at firm and industry level. Hence, this research will make a critical analysis of the performance of motor insurance and identify firm-level factors affecting its performance at EIC.

1.4 Research Questions

The research was undertaken to answer the following testable questions:

1. How is motor insurance performing at EIC?
2. What are the factors that are affecting the performance of motor insurance in EIC?
3. What is the relative importance of different factors affecting the performance of motor insurance at EIC?

1.5 Objectives of the Study

1.5.1 General Objective

The overall objective of this study is to assess the performance of motor insurance and identify firm-level factors affecting its performance at EIC.

1.5.2 Specific Objectives

In line with the general objective, this research specifically attempts to:

- assess the performance motor insurance at EIC
- identify factors affecting performance of motor insurance at EIC
- recognize the relative importance of different factors affecting performance of motor insurance at EIC
1.6 **Significance of the Research**

As stated above in the research introduction and statement of the problem, besides taking the lives of many, traffic accidents are costing insurance companies a significant amount of money and impacting their performance. Undertaking this research, therefore:

- Provides useful understanding of factors affecting performance of motor insurance.
- The results of the study and recommendations are likely to be beneficial to other researchers, policy makers, development agencies (actors), and entrepreneurs who would like to venture into the insurance industry.
- Helps business practitioners, Government, Donors, Ngo’s, insurers, reinsurers, insured and intermediaries to understand and have advanced knowledge and information on the constraints that they are likely to face and what they have to do in order to grow through the use of insurance services.
- Supports EIC to tackle the influential factors and improve performance of motor insurance specifically.

1.7 **Scope of the Study**

The focus of this research is limited to factors that affect the performance of a particular insurance product, specifically motor insurance. Other factors related to the broader economy such as GDP growth, inflation rate, interest rate, the regulatory environment as well as investment structure are not covered in this study. The study is conducted in branches of EIC found in Addis Ababa including main office. It uses explanatory sequential mixed method to investigate the potential factors influencing the performance of motor insurance in EIC. The research is supported with historical performance data of five years starting from 2012 to 2016.

1.8 **To Limitation of the Study**

Regarding limitations the study limits itself to the time taken in data collection, analysis and compilation for publication. It is quite obvious that much time is required to come with genuine finding of subject matter in question. Therefore, time and financial constraints may affect the study. Although the outcome shades light onto the
performance of motor insurance in general, its generalizability suffers from the limited sampling. Further, the outcomes of this research are only as good as the availability and quality of secondary data sources in the form of reports for the particular product of motor insurance at EIC which are not published for the public.

1.9 Organization of the Study

This research is organized into five chapters. The first chapter introduces the research topic and the problem followed by the second chapter where related theoretical and empirical literature is reviewed. The methodology of the study is presented in chapter three. The presentation of the findings and discussion is given in chapter four. Chapters five summarized the findings, draw conclusions and presented the recommendations based on the findings.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

A literature review is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Accordingly, this chapter introduces the basics concepts in the related to insurance, describes prominent theories and canvases empirical research undertaken in the area. Based on the theories discussed and empirical research discussed, a research framework that will help guide this research will be presented.

2.1 Theoretical Literature

2.1.1 Definition and Role of Insurance

Insurance is a contract in which the insured transfers risk of potential loss to the insurer who promises to compensate the former upon suffering loss. The insured then pay an agreed fee called a premium in consideration for this promise. The promissory is called the insurer and the promise is called the insured (Lowe, 1999). The insurance premium is the monetary consideration paid by the insured to the insurer for the cover granted by the insurance policy. The Insurer takes on a number of clients (Insured) who pay small premiums that form an aggregate fund called the premium fund (Norman, 2000). The likelihood of an event or loss may be mathematically calculated or it may be based on the statistical results of past experience in order to determine the amount of premiums that would be required to accumulate a common fund or pool, to meet the losses upon their arising (Grose, 1992).

The term insurance defined by referring two important schools of thoughts: i) transfer school and ii) pooling school Insurance operates on the principle of pooling risks where the people contribute to a common fund in form of premiums and where the lucky ones who do not suffer loss help the unlucky ones who suffer loss during a defined insurance period (Irukwu, 1994). Article 654(2) of the Commercial Code of Ethiopia (CCE) provides a legal definition as “an insurance policy is a contract whereby a person called
the insurer undertakes against payment of one or more premiums to pay a person, called the beneficiary, a sum of money where a specified risk materializes” (CCE, 1960).

The insurance sector plays a critical role in financial and economic development. By introducing risk pooling and reducing the impact of large losses on firms and households, the sector reduces the amount of capital that would be needed to cover these losses individually, encouraging additional output, investment, innovation, and competition (Erik et al. 2011). According to Skipper (1998), the services offered by insurance companies have a significant impact on a country’s, economic growth through the following channels: Firstly, insurance companies promote financial stability and anxiety reduction through the indemnification of risk at the individual, societal, corporate and national level.

Secondly, insurance companies are viable substitutes for costly government social security programs. Thirdly, insurance companies facilitate trade and commerce at both the domestic and international level. Moreover, insurance also facilitates innovation by offering to underwrite new risk, especially in new growth areas. Fourthly, an insurance company mobilizes savings on a contractual basis and transforms the short-term nature of retail savings to a longer-term basis, whilst maintaining liquidity for claims. Fifth, and perhaps the key role of insurance companies is the enhancement of risk management through effective risk pricing, transformation, and pooling. Sixth, insurance companies encourage loss mitigation by the insured through efficient pricing and insurance availability. Finally, insurance companies foster a more efficient capital allocation through its prudent investment activities.

2.1.2 Insurance in Ethiopia

The emergence of modern insurance in Ethiopia is traced to the Bank of Abyssinia which was established in 1905 as the first Ethiopian Bank. The bank had been acting as agent for a foreign insurance company to underwrite fire and marine policies (Zeleke, 2007). However, like many African countries whose financial systems are reflective of the country's political and economic history, insurance in Ethiopia has also experienced the same fate. In this regard, from its introduction up until now, the insurance industry in Ethiopia has passed through three distinct trends.
The first domestic insurance company established in 1951 G.C was The Imperial Insurance Company of Ethiopia Limited. Until the enactment of the Commercial Code of Ethiopia and the Maritime Code of Ethiopia in conjunction with the Ethiopian Civil Code (all enacted in 1960) insurance continued to grow in an unregulated environment. Although the act brought some substance and direction to Ethiopian insurance business in Ethiopia, it was the 1970 G.C. Insurance Proclamation that legally created the Office of the Controller of Insurance that introduced framework and facilitated the growth of domestic insurance (Zeleke, 2007).

In 1975, following the government centrally planned economic system the financial institution and other means of private ownership were decided to be “nationalized”. In 1976, following the nationalization and proclamation No.68/1975, Ethiopia Insurance Corporation (EIC) was set up as a single government-owned insurance company by taking over all the assets and liabilities of the thirteen nationalized private insurance companies, with Birr 11 million (USD 1.29 million) paid up capital (EIC Company profile, n.d.). The industry remained a state monopoly up until 1994 till the overthrow of the Derg regime.

After the re-emergence of the free market economy in 1994, the government issued proclamation No.86/1994-licensing and supervision of insurance business which allowed Ethiopians and enterprises fully owned by Ethiopians to invest in and establish insurance companies (Zeleke, 2007). Effective 1994, EIC ceased to be the only monopoly in the insurance industry in Ethiopia and since then, sixteen privately owned insurance companies have been established and operating in Ethiopian insurance market along with formerly government-owned insurance company. Hence, currently, there are about seventeen insurance companies in Ethiopia providing a range of products across life and non-life insurance products and have surpassed a gross premium of ETB 6.4 Billion in the 2015/16 financial year (NBE, 2017).

Ethiopian Insurance Corporation (EIC) was established in 1976 by proclamation No.68/1975 with an aim of providing all classes of insurance business in Ethiopia to the broad mass of the people. After nineteen years of the protected monopolistic system as state owned-sole insurer, it was re-established as a public enterprise under proclamation number 201/94 with Birr 61 million (USD 7.13 million) paid up capital. The company at
the moment offers more than 60 products in both life and non-life insurance services (Company profile, n.d.).

2.1.3 Development of Motor Vehicle and Associated Risk

“Motor vehicle” as defined on Vehicle Insurance against Third Party Risks Act 799/2013, is “any mechanical or electrical power propelled vehicle moving on roads.” Motor vehicles made their first spluttering appearance at the turn of the 20th century. At that time they were much slower and so cumbersome than the common horse and carriage. As a result, during the early years of motoring, there seemed little need to consider the implications and requirements of insurance. By the time of the First World War, a motor vehicle was developed and improved with the change in technology and to comply with considerable interest for the motor car (Talk Once, 2010). In the process of building an affluent society, a car has changed from luxury consumer goods to ordinary merchandise which as a result is causing frequent traffic accidents. Accidents arise from poor standards of driving skills, little road discipline as well as technical challenges (Bao and Gu, 2014).

In Ethiopia, until 1950, motor vehicle insurance cover was categorized along with general accident insurance. But now a day as the number, type and use of vehicles increased, motor insurance cover is treated as a separate class of business (IFAA, 2010). Motor insurance is generally measured non-life insurers’ strongest class of business in terms of premium volume and promotion tool. According to NBE report, motor insurance constitutes 49.4% of the insurance industry’s premium and 37.5% of EIC’s premium volume for the years from 2012-2016 (NBE, 2017).

In 2008, citing the rising volume of accidents in Ethiopia, a mandatory third party insurance was introduced to the pull of motor insurance by Proclamation No. 559/2008. A few years later, a dedicated entity, Insurance Fund Administration Agency (IFAA), was established following the Regulation No. 30012013 by the Council of Ministers. The Federal Democratic Republic of Ethiopia (FDRE) Insurance Fund Administration Agency (IFAA) is an executive government body established under Ministry of Transport with a responsibility to oversee the enforcement of mandatory third-party insurance all over the country, to ensure all motor vehicle accident victims can receive medical treatment without any precondition and provide compensation to victims for the
extent of damage (IFAA, 2010). The premium tariff applicable to vehicle insurance policy against third-party risks is determined by the Council of Ministers based on the study carried out and submitted by the Insurance Fund Administration Agency. The premium tariff applicable to vehicle insurance policy against third-party risks is determined by the Council of Ministers based on the study carried out and submitted by the Insurance Fund Administration Agency.

2.1.4 Determinants of Insurance Performance

This topic explains prominent factors affecting the performance of an insurance business in general and a typical class of insurance like motor class of insurance both at an industry level and firm level. It describes the factors affecting the performance of insurance at macro, meso and micro levels. The factors range from financial performance of the industry up to operational perspectives at the firm.

A. Macro Level Determinants

A lot of macroeconomic indicators are usually considered as determinants of profitability. The most frequent drivers mentioned in the literature are interest rates, competition in the industry and GDP growth.

**Interest Rate:** is the cost of borrowing money (Sisay, 2015). Since insurance companies make their promises or commitments to insurant at the time of the sale of policies to the latter, they are not free to adjust the rates fixed or agreed in the sale subsequently depending on circumstance. This feature of insurance exposes them directly to the risks associated with changes in interest rates. Insurance companies invest much of the collected premiums, so the income generated through investing activities is highly dependent on interest rates. Declining interest rates usually equate to slower investment income growth impacting on the insurance company’s financial performance (Staking & Babbel, 1995).

However, Schich (2008) contends that insurance companies may also benefit from rising interest rates because much of their profit is earned on the float, the period between when premiums are collected and claims paid out. During this time, insurers invest the premium. Rising interest rates imply a higher return on bonds, one kind of investment, although higher rates lower the value of bonds currently in their portfolio.
It is argued that a continuing decline in market interest rates tends to make it more difficult for insurance companies to provide high-interest rates for their customers or insurant and as a result-to maintain hence high levels of profitability. Flannery’s (1981) model was used to examine the relations between changes in market interest rate and the profitability in Taiwan. The result suggests that the effects of changes in interest rates on insurance company profitability depend on how profits are measured. Yang (2007) also argues that the extent of the fluctuations in interest rates does not have an obvious impact on the income, cost, operating profit, or the assets return rate, net return rate, operating profit margin, operating profit rate and net profit rate of the sample of insurance companies he studied.

**Competition:** globally, one of the most significant trends in the insurance industry is the prevalence of mergers and acquisitions among insurance carriers and agencies (Schich & Kikuchi, 2004). Due to strong investment returns, record profits have allowed many carriers to amass substantial "war chests" earmarked for acquisition. As a result, the large insurance companies are getting larger and smaller agencies are being forced to band together in "clusters". In addition, networks have become more competitive in an effort to improve their bargaining position with carriers whose demands for profitable premium growth have steadily increased. All of these have a major impact on consumers.

Over time economists have approached the measurement of competition in industries in a variety of ways. The earliest studies attempted to infer the competitive conduct and performance of firms from the market structure of the industry. This approach is mainly associated with Bain’s approach (Hochhauser, 2004). The number of firms and any concentration of market share is believed to determine the competitive conduct. Fewer firms with more concentrated market shares are more likely to engage in anticompetitive behavior than when the industry is populated by numerous small firms.

Alternatively, a small number of large companies may form a cartel and dictate prices and conditions. Furthermore, one or two dominant firms may act as price setters while the many smaller peripheral firms accept the former’s price leadership. This structure conduct-performance approach provides regulators with a convenient yardstick when they rule on the competitive impact of mergers.
Growth in the gross domestic product: the use of GDP growth as a variable does not feature extensively in the literature. It is argued that higher economic growth leads to a greater demand for both interest bearing and non-interest bearing financial services sector Athanasoglou (2005) cited on Sisay (2015). Feyen et al (2011) cited on Doroftiand Jakubik (2015) have investigated determinants of insurance growth using penetration ratios as dependent variables to proxy insurance demand and found out a positive correlation with GDP.

B. Firm-level factors

Broadly speaking, firm-level factors have been studied from two contrasting perspectives. The first level of factors studied look at secondary data across a period of time and develop a predictive model of financial factors observed in the financial statements and reports on financial performance, particularly profitability.

Historic Profitability: As with any company, profitability is a key determinant for deciding whether to invest. For an insurance company, there are two components of profits that we must consider: premium/underwriting income and investment income (Santomero & Babel (1997) on Omasete(2012)). Underwriting income is the revenue derived from issuing insurance policies. A company with historically growing premium income might be tempted to increase its growth by accepting high-risk clients while on the contrary, a company whose premium income is growing at a slower rate might be too picky losing an opportunity growth.

Santomero and Babbel (1997) cited on Omasete(2012) argues that the second area of profitability that should be included in the analysis is investment income. In most cases, a greater proportion of an insurer's income comes from investments. This would require looking at the company's asset allocation strategy.

Size of the company: Company size could be measured using variables like total assets, net premium, etc… Company size has also been shown to be related to industry- sunk costs, concentration, vertical integration and overall industry profitability (Sisay, 2015). Size has a significant impact on the performance of an insurance company. Large firms have more resources, more staff and sophisticated systems (Dey,Adhikari and
However, for firms that become extremely large, the effect of size could be negative due to bureaucratic and other reasons (Yuqi Li, 2007).

**Tangibility**: tangibility of assets in insurance companies in most studies is measured by the ratio of fixed assets to total assets. Tangible assets are considered to have an impact on performance because a firm with a large portion of fixed assets can easily raise funds at a nominal rate of interest and utilize these funds to raise amore new business. Malik (2011) found that there exists a positive and significant relationship between tangibility of assets and profitability of insurance companies and argued that the highest the level of fixed assets formation, the older and larger the insurance company is.

**Liquidity**: liquidity from the context of insurance companies is the probability of an insurer to pay liabilities which include operating expenses and payments for losses/benefits under insurance policies when due then shows us that more current assets are held and idle if the ratio becomes more which could be invested in profitable investments. For an insurer, cash flow (mainly premium and investment income) and liquidation of assets are the main sources of liquidity (Chen and Wong (2004). Empirical evidence with regard to liquidity revealed almost inconsistent results. For instance, Ahmed et.al. (2011) in his investigation in Pakistan found that ROA has a statistically insignificant relationship with liquidity. Similarly, several other studies also have been conducted to measure the performance of the insurance companies. In contrast, Chen and Wong (2004) examined that, liquidity is the important determinants of financial health of insurance companies with a negative relationship.

**Leverage**: firm leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity. With a high degree of financial leverage come high-interest payments. According to Jensen (1986) as well as Jensen and Meckling (1976), the trade-off between agency costs of debt and equity; the limited liability effect of debt; and the disciplining effect of debt suggest a positive effect of leverage on performance. The trade-off theory suggests a positive relationship between profitability and leverage ratio and justified by taxes, agency costs and bankruptcy costs push more profitable firms towards higher leverage. Hence more profitable firms should prefer debt financing to get benefit from tax shield.
On the other hand, this pecking order theory of capital structure is designed to minimize the inefficiencies in the firms’ investment decisions. Due to asymmetric information cost, firms prefer internal finance to external finance and, when outside financing is necessary, firms prefer debt to equity because of the lower information costs. The pecking order theory states that there is no optimal capital structure since debt ratio occurs as a result of cumulative external financing requirements. Insurance leverage could be defined as reserves to surplus or debt to equity. The risk of an insurer may increase when it increases its leverage. Literature in capital structure confirms that a firm’s value will increase up to the optimum point as leverage increases and then declines if leverage is further increased beyond that optimum level.

**Non-financial factors:** the second set of studies on the other side look at performance from the non-financial, qualitative or operational perspective and look at factors like service delivery and marketing perspectives. For example, Krishnamurthy, et al. (2005) claimed that penetration of insurance largely depends on insurance awareness and quality of services among other things. Alexandra (2003) cited on Mathur and Tripathi (2014) also asserted that insurers have increased and implemented better sales programs to meet their customers’ demand. Their study, for example, revealed that insurers’ efficiency depends on how well they have met their customer expectation and change their perception of insurable risk. Similarly, Mathur and Tripathi (2014) identified factors like amount of premium, influential marketing campaign, the reputation of the company, service quality, number and reach of branches as determinants of insurance products performance.

Abassand Oyetayo(2016) also claim that one of the biggest challenges the insurance industry faces is meeting customer’s expectation for faster, better service in the face of rising loss cost and increasing price competition. From the perspective of the insured (customer), the demand for insurance is a function of the quality of services rendered by the insurance industry (Abassand Oyetayo, 2016). The offering of insurance service requires exhibiting trust and integrity which will apparently bring about the high quality of services like prompt claims settlement and positive staff attitude. Service quality can serve as a great differentiator and the most powerful competitive weapon to many leading service organizations.
The transfer or acceptance of risk is dependent on some factors which include price of insurance (Swiss Re, 1993), income (Feyen, Lester and Roche, 2011), education and product design (Vincent, 1998), physical equipment, communication devices, agents and brokers and policy design (Ebitu, Ibok, and Mbum, 2012) and claims management process (Nwankwo and Durowoju, 2011). Abassand Oyetayo (2016) also agree that advertisement, the premium charged, financial incentives, premises, associations with other organization, caring for customers and deployment of technology affect the performance of an insurance product.

2.1.5 Measure of performance

Various studies have used Return on Asset (ROA) as a measure of financial performance of insurance companies (Derbali, (2014); Sisay (2015) and Ahmed et.al.(2011). ROA defined as the before-tax profits divided by total assets is a key indicator of a firm’s profitability. According to Swiss Re (2008) cited on Sisay (2015), profits are determined first by underwriting performance (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 and asset management as well as asset leverage. Looking at particular product within the portfolio of an insurer like motor insurance, however, using ROA as a measure of performance is not practical due to its companywide nature.

Performance is an association between operational efficiency and strategic effectiveness. The former has as objective to improve products, services, production processes and marketing management and human resources while the latter precedes the competition by positioning itself into a fully growing market (Berteji and Hammami, 2016). Calandro and Flynn (2005) argued the absence of any practical measure at the business unit level and go on to suggest underwriting profit as a measure of performance. Since the underwriting profit is the difference between gross premium and payout, both can be used to measure performance. Further, it is possible to use the contribution of the business unit or product level underwriting profit to the overall profitability of the company to evaluate its performance within the overall portfolio of the company.
2.2 Empirical Review

A study by Ahmed et al. (2011) investigates the impact of firm-level characteristics on performance of the life insurance sector of Pakistan over the period of seven years. Size, historic profitability, age, risk, growth, and tangibility were selected as explanatory variables while ROA was taken as dependent variable. The results of Ordinary Least Square (OLS) regression analysis revealed that leverage, size, and risk are a most important determinant of performance of life insurance sector whereas ROA has statistically more of insignificant relationship with, the tangibility of assets.

Derbali (2014) in his study of ‘Determinants of performance of insurance companies in Tunisia: the case of life insurance’ has examined the impact of firm-specific characteristics (size, leverage, tangibility, risk, growth, liquidity and age) on the performance of eight insurance companies in Tunisia a period of 8 years (2005-2012). His analysis has shown that the variables height, age, and premium growth are the most important determinants of the performance of insurance companies measured by ROA ratio (Return on Asset) while his findings do not find variables like leverage, tangibility, liquidity, and risk not statistically significant.

Sisay (2015) also looked at determinants of profitability in her thesis “The Determinants of Profitability on Insurance Sector: Evidence from Insurance Companies in Ethiopia”. She assessed the impact of the Ethiopian insurance companies’ characteristics on their performance. Using a sample of 9 insurance companies using a panel data technique and data from 2005–2010, she concluded that company size, loss ratio, tangibility, and leverage represent important determinants of insurers’ performance. On the other side, the growth of gross written premiums, age, and liquidity have an insignificant statistical influence.

Here one can observe that the analysis of the predictive powers of those factors using comprehensive firm-level secondary data like financial statements on a postmortem approach presents difficulty to evaluate the performance of a specific product within the insurance company. First, those secondary data are aggregated at the company level and hence identifying a single product category’s share or contribution are not clear. Second, the factors identified are more of an investment and investment structure (portfolio
structure) and hence are not operational factors that can be easily introduced into an everyday operation of the insurance company. Third, customer perspectives on the performance and the insurance companies service delivery practices are totally absent from those studies.

On the other hand, non-financial or operational perspectives were used to measure factors affecting performance. One such example is the study of “Factors Influencing Customer’s Choice For Insurance Companies” by Mathur and Tripathi (2014). Mathur and Tripathi (2014) in their study have used a survey of 120 respondents to understand the factors that influence the insurance companies. Their study used 29 potential factors extracted from the literature and personal interview. The findings revealed that the most important factors that influence customers’ choice of an insurance company were computerization and online transactions, connectivity with a bank, speed and efficiency in transactions, clear communication. Factors ranked low were an influential marketing campaign, free gifts for customers, peer group impression etc…

In line with the above, studies have explored and concluded that factors like quality of services, claims management process and employee attitude (Nwankwo and Durowoju (2011) and Krishnamurthy, et. al. (2005)); better sales programs, communication, insurance awareness, image and meeting customer expectation (Krishnamurthy, et. al. (2005) and Alexandra (2003)); pricing of insurance (Swiss Re, 1993), demographic variables like income and education (Feyen, Lester and Roche, 2011) are determinates of performance at various degrees.
2.3 Conceptual Framework

In light of the above discussion and owing to the fact that non-financial factors are suitable for measuring the performance of product level performance (since financial factors are only found as an aggregate or company-wide data), this study will make use of those factors to measure the performance of motor insurance at EIC and factors influencing its performance. The diagram below (Fig. 1) depicts the conceptual framework that guided this research.

![Figure 1: Research framework developed based on empirical review](image)

*Figure 1: Research framework developed based on empirical review*
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

This chapter provides the details of the research strategies adopted to address the research questions identified in chapter one. Specifically, this chapter will cover, design and approach, sampling method, data collection method and data analysis techniques.

3.1. Research Design and Approach

Research design constitutes the blueprint for the collection, measurement, and analysis of data (Cooper and Schindler, 2014). This research intends to explain factors influencing the performance of motor insurance at EIC. In order to better understand and explain the factors, an explanatory sequential mixed-methods design is used.

The explanatory sequential mixed-methods design consists of two distinct phases: quantitative followed by qualitative (Creswell et al. 2003). In this design, a researcher first collects and analyzes the quantitative data. The qualitative data were collected and analyzed second in the sequence and help explain, or elaborate on, the quantitative results obtained in the first phase. Although the research has a casualty element, the lack of research into firm-level factors affecting the performance of a particular insurance product like motor insurance led to a choice of a mixed method approach.

Accordingly, the researcher’s intent in using of the mixed methods study was to use the qualitative interviews to “explore and make sense” of the quantitative findings. The integration of the quantitative and qualitative findings at the interpretation stage of the study.

In line with the explanatory sequential mixed-methods design, the researcher conducted a quantitative phase first, designing an instrument, collecting data and analyzing the results. Based on the outcome of the first phase, a qualitative phase commenced by designing interview questions that were aimed at explaining the findings of the first phase. The details of each are given in the subsequent sections below.
3.2. Population, Sample Size, and Sampling Techniques

3.2.1. Research Population

A good research requires identifying participants that have relevance to the topic under study. To this end, this research targeted EIC’s employees within motor insurance departments of branches in Addis Ababa. For the qualitative phase of the research, those who were thought to be better informed about motor insurance, top managers in charge of operations, marketing and finance at branches located in Addis Ababa were targeted.

3.2.2. Sample Size

As pointed out in the research design section above, the researched involved quantitative and qualitative phases. For the quantitative phase, Salant and Dillman (1994) cited on Chuan (2007) point out that three of the most common factors influencing the size of the sample are the size of the population, tolerable sampling error, and variation of the variable of interest within the population. Using a confidence level of 90%, the margin of error 5% and an alpha level of 0.05 which are common in exploratory management studies, a sample of 269 was selected as per Krejcie and Morgan (1970) table for this phase.

For the qualitative phase, the sequential nature of the research allows for multilevel sampling (different group of participants). Although qualitative studies could also benefit from as large a sample size as possible, it should not also suffer from an inability to undertake a deeper analysis due to bigger sample size. Guest, Bunce, and Johnson (2006) therefore recommend 12 participants for an interview in mixed methods design. This research, therefore, followed their recommendation and used twelve top managers across the operation, marketing, and finance department from four branches for the interview.

3.2.3. Sampling Techniques

Quantitative Phase: although a sampling frame (a list of employees and customers) is available, a use of probability sampling will necessitate the identification participants from the frame and reaching out to each employee and customer. In addition to extensive
time requirement, this process will require a significant amount of fund and could lead to a poor rate of response. Accordingly, a non-probability sampling technique of Convenience Sampling (also known as availability sampling) was used. This basically implied going to each branch offices and collecting data from participants that are available at the branches and willing to participate.

**Qualitative Phase:** a purposive sampling method was considered to select the interview participation. The twelve participants, top managers from the operation, marketing, and finance department were selected for their experience and knowledge. Their availability and willingness to conduct the interview was also a factor.

### 3.3. Source of Data

The quantitative phase of the analysis considered both primary and secondary data. For the purpose of identifying firm level factor affecting the performance of motor insurance at EIC, primary data was collected from participants using a five-point Likert scale instrument. Primary data was also collected through an interview with selected participants. A five-year secondary data regarding the performance of motor insurance was also obtained from EIC’s annual reports.

### 3.4. Data Collection Instruments

For the quantitative phase, a survey instrument was developed comprising firm-level factors that could potentially influence the performance of motor insurance. The survey instrument developed contained two parts. The first part contained five questions related to the demography of participants. The second part contained 26 items classified into the five potential factors were developed based on analysis of the related empirical literature (Nwankwo and Durowoju 2011; Krishnamurthy et al. 2005; Alexandra 2003; Swiss Re 1993; Feyen, Lester and Roche 2011; Mathur and Tripathi 2014). The instrument was set up as a five-point Likert scale with replies ranging from ‘strongly disagree’ to ‘strongly agree’.

Further, in a sequential explanatory design, qualitative data is collected seeking for the contextual field-based explanation of the statistical results (Creswell et al. 2003). Hence, interview questions were developed following the quantitative phase. Here, six questions were used to conduct a semi-structured interview with the participants.
3.5. Procedures for Data Collection

As per a sequential explanatory mixed methods design, first data was collected from 269 participants in motor insurance departments of EIC across branches in Addis Ababa. The questionnaire collected was examined for completeness and usability before coding analysis. Out of the 269 questionnaires filed 191 were found to be complete. The data were then coded and analyzed using SPSS 23.0. Following the outcomes of this phase, an interview was conducted using a semi-structured interview question for the qualitative phase. The transcripts of the interviews were reviewed, keywords and phrases identified for interpretation.

3.6. Pilot Testing

The development of a questionnaire raises the issue of validity and reliability. Validity in general looks as if the instrument has measured what it set out to measure. The fact that the questionnaire was developed based on empirical literature as well as the pilot test conducted using ten participants prior to employing the instrument addressed the issue of validity.

Reliability, on the other hand, is concerned in the instrument’s ability to produce a consistent outcome in measurement. According to Polit and Hungler (1999) reliability refers to the degree of consistency with which the instrument measures an attribute. One way of assuring the reliability of the instrument is using Cronbach’s Alpha. The survey questionnaire developed included 26 items classified into five variables. The Cronbach’s Alpha calculated for the instrument was 0.915 indicating the reliability of the instrument used hence further analysis is possible. Johnson and Christensen (2010) suggest that the coefficient of alpha should be at minimum 0.70 or more indicating an excellent reliability for the instrument used in this research.

<table>
<thead>
<tr>
<th>Case Processing Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Cases</td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td>Excludeda</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

a. Listwise deletion based on all variables in the procedure.
<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.915</td>
</tr>
</tbody>
</table>

Table 1: Cronbach’s Test Results from SPSS

3.7. Method of Data Analysis

Descriptive statistics are used to assess the performance of motor insurance at EIC based on a five year (2012 - 2016) secondary data. Regarding the analysis of demographic information, frequency count, tables, and charts are used to present the observations. The primary analysis of identifying factors affecting the performance of motor insurance was done by two techniques, hypothesis testing, and relative importance index.

First, hypothesis testing was utilized to check whether the influence of potential factors identified was not happening by chance and is statistically significant. By testing hypothesis, a researcher seeks to evaluate whether the observed difference, similarities or associations is so large that it could not have occurred by chance (Nachmias and Nachmia, 1987). Hypothesis testing also allows a test of a tentative statement about the expected relationship or population character from a single survey sample avoiding the need to have both dependent and independent variables measured on the same instrument (Nachmias and Nachmia, 1987).

At this point, it should be noted that the objective at this point is to identify factors with a significant influence on the performance of motor insurance as opposed to measuring their impact or developing a predictive model. A one-sample t-test was therefore used to examine the influence of the selected factors on motor insurance performance was statistically significant. According to Chernick (2007), One-Sample T-Test is better used to determine whether some obtained value is statistically different from a neutral value. Further, One-Sample t-test was preferred as it allowed compensation for the lack of information about the population standard deviation.

Second, the ranking or prioritizing the relative influence of each factor on the performance of motor insurance as indicated by the participants was done using Relative
Importance Index (RII). According to Aibinu and Jagboro (2002), the Relative Importance Index (RII) is a favorite method for ranking potential factors rated in a survey. The following formula is used to calculate the RII:

\[
RII = \frac{\sum W}{(A \cdot N)}
\]

Where:
- \( RII \) = relative importance index
- \( W \) = weight given to each factor by respondents (ranging from 1 to 5)
- \( A \) = highest weight (i.e., 5 in this case); and
- \( N \) = total number of respondents.

The choice of one sample t-test and relative importance index over commonly used methods like regression and correlation analysis emanates from a conscious consideration of three reasons. First, as indicated in the introductory section, research looking at the relationship between firm-level factors considered in this study and performance is very much limited. On the other hand, Turin (2012), recommends that the best regression model is based on a strong theoretical and empirical foundation that demonstrates not just variables are related, but also why they are related. With this in mind, this research is aimed at identifying those factors rather than building a predictive regression model.

Second, even though statistically possible, doing correlation and regression using a longitudinal data (performance of motor insurance) with a cross-sectional likert scale data measuring independent variables will not result in a statistically consistent outcome.

3.8. Ethical Considerations

During the course of administering the questionnaires, names and any identifying remarks were not used. The confidentiality of the responses collected will also kept. Departmental reports used as a secondary data sources will also be used only for the purpose intended and will not be shared outside. The data used were based on the questionnaires and interview of respondents and by no means involved the researcher opinion and input. Hence, any result or meaning arrived at is solely based on the data gathered. All sources and references are dully acknowledged.
CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION

This chapter presents the data collected and the analysis carried out based on the methodology described in chapter three. The results are presented sequentially starting with the quantitative phase and moving on to the qualitative phase. The quantitative phase first looked at the result of the survey questionnaire identifying factors influencing the performance of motor insurance at EIC and goes on to the performance of motor insurance at EIC based on the secondary data covering five years (2012-2016).

The identification of factors affecting the performance of motor insurance was undertaken using a survey questionnaire developed based on the empirical review. A total of 269 questionnaires were distributed however 191 completed questionnaires were returned back resulting in a 71% response rate. The collected data are analyzed and describe in the tables as indicated in this chapter.

4.1 Demographic Variables of the Respondents

Before analyzing the collected data, it is found desirable to discuss the demographic variables of respondents such as gender, age etc.

Table 2 below shows that the majority of respondents (82.2%) were male while females were only 17.8%. Regarding Age, ‘the above 40’ group was the largest with 27.2% followed by the age group 31-35 with 25.1%. The data shows that participants were fairly distributed across all age groups. Degree holders comprise the majority of the participants with 74.9% while diploma holders were 14.7% and postgraduates 10.5%.
Table 2: Demographic variables of respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>157</td>
<td>82.2</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>17.8</td>
</tr>
<tr>
<td><strong>2 Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 25</td>
<td>34</td>
<td>17.8</td>
</tr>
<tr>
<td>26 – 30</td>
<td>24</td>
<td>12.6</td>
</tr>
<tr>
<td>31 – 35</td>
<td>48</td>
<td>25.1</td>
</tr>
<tr>
<td>36 – 40</td>
<td>33</td>
<td>17.3</td>
</tr>
<tr>
<td>Above 40</td>
<td>52</td>
<td>27.2</td>
</tr>
<tr>
<td><strong>3 Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Certificate</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diploma</td>
<td>28</td>
<td>14.7</td>
</tr>
<tr>
<td>Degree</td>
<td>143</td>
<td>74.9</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>20</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>4 Work Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than five year</td>
<td>58</td>
<td>30.4</td>
</tr>
<tr>
<td>6 – 10 years</td>
<td>11</td>
<td>5.8</td>
</tr>
<tr>
<td>11 – 15 years</td>
<td>67</td>
<td>35.1</td>
</tr>
<tr>
<td>16 – 20 years</td>
<td>38</td>
<td>19.9</td>
</tr>
<tr>
<td>Above 20 years</td>
<td>17</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>5 Current Position of Participants at EIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer</td>
<td>53</td>
<td>27.7</td>
</tr>
<tr>
<td>Senior Officer</td>
<td>42</td>
<td>22.0</td>
</tr>
<tr>
<td>Principal customer care</td>
<td>22</td>
<td>11.5</td>
</tr>
<tr>
<td>Senior surveyor</td>
<td>43</td>
<td>22.5</td>
</tr>
<tr>
<td>Principal Engineer</td>
<td>9</td>
<td>4.7</td>
</tr>
<tr>
<td>Team Leader</td>
<td>11</td>
<td>5.8</td>
</tr>
<tr>
<td>Director</td>
<td>11</td>
<td>5.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>191</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Survey data 2017

The respondents work experience shows more than 60% have a work experience of more than ten years, particularly 35.1% worked between 11 – 15 years, 19.9% between 16 – 20 years and 8.50% above 20 years. It is also possible to see 30.4% have worked less than five years. The current position of participants at EIC can be seen on table 2 above distributed among seven positions. The “Officer” position has dominated with 27.7%
followed by 22.5% ‘senior surveyors’ and 22.0% senior officers. Hence it is concluded that the survey is obtained from chief experienced workers that results in good findings.

4.2 Data Analysis Pertaining to the Study

In this section the result of the questionnaire aimed at the identification of factors affecting motor insurance at EIC is presented. As previously mentioned, the instrument contained 26 items classified into the five potential factors addressing service quality, facility and infrastructure, use of technology, marketing and sales activities, as well as product/policy features. The participants’ responses are first presented under each sub-factor before presenting the result of the hypothesis testing and relative importance index.

4.2.1. Factors Affecting performance

Service Quality: respondents were asked to indicate their level of agreement with the statement that “The factor indicated affects the performance of Motor Insurance at EIC”. Out of the five items in service quality, ‘prompt claim handling’ received 57.1% ‘agree’ and 20.9% ‘strongly agree’. The mean score was 3.95 with an sd of 0.745. ‘Proper guidance and complain handling’ was the item rated list with a mean score of 3.61 with sd = 1.164. Ands of more than one shows a bigger difference in rating by participants which is also visible in the rating of 38.2% ‘agree’ closely followed by 24.1% ‘strongly agree’ and 17.8% ‘neither agree nor disagree’.

Table 3: Participants response on service quality items

<table>
<thead>
<tr>
<th>No</th>
<th>Sub-items</th>
<th>Responses</th>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither disagree or agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>M</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prompt claim handling</td>
<td>f</td>
<td>-</td>
<td>8</td>
<td>34</td>
<td>109</td>
<td>40</td>
<td></td>
<td>3.95</td>
<td>0.745</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>-</td>
<td>4.20</td>
<td>17.8</td>
<td>57.1</td>
<td>20.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Speed and efficiency of transactions</td>
<td>f</td>
<td>-</td>
<td>7</td>
<td>58.00</td>
<td>90</td>
<td>36</td>
<td></td>
<td>3.81</td>
<td>0.778</td>
</tr>
</tbody>
</table>
Source: Questionnaire results

**Facility and infrastructure:** this factor included five items such as the number and location of branches, office layout, availability of restrooms as well as the availability of professional staff. This item has showed a relatively lower score across all items compared to other factors. However, the item ‘convenience of branch locations’ was the highest rated item from the sub-group with a mean of 3.85 and sd=1.09. Two items namely, ‘Office layouts and attractive arrangements’ and ‘Availability of restroom and seat’ scored mean values very close to the value 3 which is neutral. Both also have a standard deviation slightly more than one suggesting a higher variation in rating of this two items.

**Table 4: Participants response on Facility and Infrastructure Items**

<table>
<thead>
<tr>
<th>No</th>
<th>Sub-items</th>
<th>Responses</th>
<th>M</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Convenience of branch locations</td>
<td>Strongly Disagree</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>28</td>
<td>14.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither disagree or agree</td>
<td>9</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>93</td>
<td>48.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>55</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.85</td>
<td>1.09</td>
</tr>
<tr>
<td>2</td>
<td>Number of branches across the city</td>
<td>Strongly Disagree</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>31</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither disagree or agree</td>
<td>44</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>81</td>
<td>42.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>30</td>
<td>15.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.52</td>
<td>1.025</td>
</tr>
</tbody>
</table>
Source: Questionnaire Results

**Technology:** here use of technology and mode equipment in various operations and communication activates was considered. Mean score of all the six factors by participants ranged from 3.32 to 3.66 with standard deviations more than one. This shows that participants rating of technology factors had a bigger variability as well as a relatively lower mean score suggesting that participants’ perception to use of technology is very different. The highest ranking technology item was ‘Use of technology in operations’ with mean 3.66 closely followed by ‘Use of modern advertising system’ with mean 3.65.

**Table 5: Participants response on Technology Items**
Marketing and Sales: this factor included six items. The highest ranked item was ‘Reputation of insurance company’ which received a mean score of 3.88 and sd=0.838. This item received an ‘agree’ rating by 53.9% of the participants followed by a ‘strongly agree’ rating by 20.9%. The second ranked item was ‘Influential marketing campaign’ with a mean score of 3.72 and sd = 0.719. ‘Availability of agents and brokers’ was ranked third with mean 3.69 and sd = 0.812. Out of the six factors, ‘Frequent contact with customers with update and offer’ was placed second from the bottom, however, its sd of 1.220 shows participants have a varying opinion about this item. The item ranked the least was ‘Cross selling of new policy to existing policy holders’ which received a mean score of 3.34 and an sd of 0.936. This suggests that participants do not give selling of one policy to another policy holder as an important marketing and sales activity.

Table 6: Participants response on Marketing and Sales Items

<table>
<thead>
<tr>
<th>No</th>
<th>Sub-items</th>
<th>Responses</th>
<th>M</th>
<th>Sd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither disagree or agree</td>
</tr>
<tr>
<td>1</td>
<td>Reputation of insurance company</td>
<td>F</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>1.6</td>
<td>4.2</td>
</tr>
<tr>
<td>2</td>
<td>Influential marketing campaign</td>
<td>F</td>
<td>10</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>5.2</td>
<td>27.7</td>
</tr>
<tr>
<td>3</td>
<td>Free gifts for customers</td>
<td>f</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>2.6</td>
<td>12.6</td>
</tr>
<tr>
<td>4</td>
<td>Frequent contact with customers with update</td>
<td>f</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>and offer</td>
<td>%</td>
<td>5.8</td>
<td>20.9</td>
</tr>
<tr>
<td>5</td>
<td>Cross selling</td>
<td>f</td>
<td>3</td>
<td>35</td>
</tr>
</tbody>
</table>
Product/policy features: here four items characterizing the policy such as its premium/price, range of coverage, its flexibility in terms and conditions and availability of credit facility were considered. Relatively items in the product/policy features factor were rated higher than the rest. For example, ‘Premium/price’ was ranked first as a factor affecting performance with mean score of 4.23 and sd of 0.701. Range of incidents covered by the policy’ was ranked second with mean score of 4.03 and sd of 0.714. ‘Rigidity of policy terms and conditions’ was ranked third with mean 3.80 and sd of 0.835. ‘Credit facility available’ was the least ranked factor within this factor receiving a mean 3.42. This item also showed relatively bigger difference in opinion between participants with sd of 1.157.

Table 7: Participants’ response on product/policy feature items

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-items</th>
<th>Responses</th>
<th>M</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither disagree or agree</td>
</tr>
<tr>
<td>1</td>
<td>Premium/price</td>
<td>f</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>-</td>
<td>0.5</td>
</tr>
<tr>
<td>2</td>
<td>Range of incidents covered by the policy</td>
<td>f</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>-</td>
<td>3.1</td>
</tr>
<tr>
<td>3</td>
<td>Credit facility available</td>
<td>f</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>7.9</td>
<td>14.1</td>
</tr>
<tr>
<td>4</td>
<td>Rigidity of policy terms</td>
<td>f</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>-</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Source: Questionnaire Results
To summarize each of the five factors, mean value and standard deviation calculated from the sub-items is given below (see table 8). The summary indicates that all five factors have a mean value of more than 3.38 with a standard deviation less than one which suggests that all the five factors do affect the performance of motor insurance at EIC. Such assertion however calls for checking the statistical significance of each which is presented next.

**Table 8: Summarized mean and sd for the five factors**

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Service Quality</td>
<td>191</td>
<td>3.787</td>
<td>0.562</td>
</tr>
<tr>
<td>2</td>
<td>Facility and Infrastructure</td>
<td>191</td>
<td>3.380</td>
<td>0.774</td>
</tr>
<tr>
<td>3</td>
<td>Technology</td>
<td>191</td>
<td>3.535</td>
<td>0.882</td>
</tr>
<tr>
<td>4</td>
<td>Marketing and Sales</td>
<td>191</td>
<td>3.572</td>
<td>0.533</td>
</tr>
<tr>
<td>5</td>
<td>Product/policy Features</td>
<td>191</td>
<td>3.868</td>
<td>0.552</td>
</tr>
</tbody>
</table>

Source: Questionnaire results

**4.2.2. RII for factors affecting performance of Motor Insurance**

Relative importance index was also calculated for each of the 26 items and summarized using average RII into the five classifications as service quality, facility, and infrastructure, use of technology, marketing and sales as well as product features. Table 9 shows the average RII score of the five variables.

**Table 9: Average RII score of factors**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Relative Importance Index (RII)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>0.757</td>
<td>2</td>
</tr>
<tr>
<td>Facility and Infrastructure</td>
<td>0.676</td>
<td>5</td>
</tr>
</tbody>
</table>
The result of the average RII value for the five factors shows that the product (policy) features were ranked first with an RII of 0.774 followed by service quality which scored 0.757. Marketing and sales were third scoring an RII of 0.714. Technology and facility/Infrastructure were placed fourth and fifth with respective RII of 0.707 and 0.676.

### Table 10: Result of RII for all Items

<table>
<thead>
<tr>
<th>Service Quality</th>
<th>RII</th>
<th>Mean RII</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Prompt claim handling</td>
<td>0.790</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2 Speed and efficiency of transactions</td>
<td>0.762</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3 Staff courtesy and positive attitude</td>
<td>0.759</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 Company opening/operating hours</td>
<td>0.755</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>5 Proper guidance and complain handling</td>
<td>0.721</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Facility and Infrastructure</strong></td>
<td></td>
<td>0.757</td>
<td></td>
</tr>
<tr>
<td>1 Convenience of branch locations</td>
<td>0.771</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2 Number of branches across the city</td>
<td>0.705</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 Availability of professional staff</td>
<td>0.721</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>4 Office layouts and attractive arrangements</td>
<td>0.604</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>5 Availability of restroom and seat</td>
<td>0.579</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td>0.676</td>
<td></td>
</tr>
<tr>
<td>1 Use of modern equipment</td>
<td>0.706</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2 Use of technology in operations</td>
<td>0.733</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3 Update of existing systems</td>
<td>0.713</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 Use of modern communications tools</td>
<td>0.697</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>5 Use of modern banking system</td>
<td>0.664</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>6 Use of modern advertising system</td>
<td>0.730</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Marketing and Sales</strong></td>
<td></td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Reputation of insurance company</td>
<td>0.777</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Influential marketing campaign</td>
<td>0.745</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Free gifts for customers</td>
<td>0.674</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Frequent contact with customers with update and offer</td>
<td>0.686</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Cross selling of new policy to existing policy holder</td>
<td>0.667</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Availability of agents and brokers</td>
<td>0.737</td>
<td>3</td>
</tr>
</tbody>
</table>

**Product Features**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Premium/price</td>
<td>0.845</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Range of incidents covered by the policy</td>
<td>0.805</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Credit facility available</td>
<td>0.684</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Rigidity of policy terms and conditions</td>
<td>0.760</td>
<td>3</td>
</tr>
</tbody>
</table>

**Source:** Survey data 2017

### 4.2.3. Qualitative Data Analysis

Interview questions forwarded for top management of EIC are discussed and analyzed based on thematic areas as indicated below:

**Quality of Insurer**

Qualitative data, in the sequential explanatory design, is collected seeking for the contextual field-based explanation of the statistical results (Creswell et al. 2003). Accordingly, the semi-structured interview question was prepared to understand if participants accept the outcomes of the quantitative phase and understand their reasons. The researcher used a semi-structured interview with the participants along with interview notes.

**Categories of Performance of Motor Insurance**

the respondents categorize the performance of motor insurance at EIC is not as expected due to high loss ratio among the other classes of business.

**Factors Affecting Motor Insurance**

. The participants, in general, indicated their agreement in the order of factors influencing the performance of motor insurance in the quantitative phase. The similarity of motor insurance policy across many insurance companies was repetitively mentioned as a
reason for the high influence of product (policy) features. Respondents indicate that since motor insurance product is almost a standard product across the industry, customers are sensitive to price variations and any deviation in the range of incidents covered by the policy. Further participants also indicated that high level of accidents in the city could imply the need for revising prices/premiums which is very sensitive and could highly influence the performance of motor insurance.

Participants also indicated that once customers have bought the policy, their satisfaction and repeat business, as well as further recommendation to others, depends on the service quality aspect, primarily prompt claim handling. Participants indicated that the way “customers feeling” after receiving the service is very vital for determining if they consider other motor insurance products, come back again or refer the service to others.

Regarding marketing and sales activities, participants believe that it is very important however without having the right product and the ability to provide the service properly, marketing and sales activities might only raise customers’ expectation. The interviewees also said that EIC has a strong reputation which limits the need for much marketing and sales activities. Participants further indicated ‘agents and brokers’ are the primary instruments used to achieve sales goals.

Participants believe the use of technology in insurance perspective is an internal efficiency issue rather than related to customers. Some mentioned that technology could significantly improve internal challenges with operational processes like document management hence improve customer service; however, participants do not believe technology is the pressing issue at the moment.

In similar fashion with the previous, interviewees agreed that facility/infrastructure was the least influential among the five factors. Participants also believe that ‘branch location’ is the prominent element of facility and infrastructure issues. However, in light of its impact on customer’s perception of the company and the service as well as internal staff’s convenience and satisfaction, participants indicated the importance of facilities and infrastructure.
Secondary Data Analysis

The performance of motor insurance at EIC, as discussed in the literature, is better measured using financial data from EIC. Indicators such as the number of policies, market share, premium growth, loss ratio, and underwriting surplus are presented.

**The number of policies:** motor insurance at EIC offers eight types of policies. The number of policies sold shows a steady growth from 2012 to 2016 (except 2013) with an average of 8.3%.

<table>
<thead>
<tr>
<th>Period</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Policies</td>
<td>48,846</td>
<td>41,748</td>
<td>50,707</td>
<td>58,644</td>
<td>64,952</td>
<td></td>
</tr>
<tr>
<td>Growth rate</td>
<td>-14.5%</td>
<td>21.5%</td>
<td>15.7%</td>
<td>10.8%</td>
<td>8.3%</td>
<td></td>
</tr>
</tbody>
</table>

Source: EIC annual report

**Market share and growth rate:** the market share of EIC for motor insurance for the five years between 2012 and 2016 is 29.0% for 2012, 30.9% for 2013, 31.9% for 2014, 29.2% for 2015 and 30.0% for 2016. EIC’s motor insurance share compared to the industry stands at about a steady 30%.
The growth of motor insurance gross premium collected for EIC averages at 31.6% for the five years which is slightly better than the industry average growth rate of 28.1%. In terms of pattern, however, the growth has fluctuated significantly above and below the industry average.

The premium share of Motor Insurance for EIC: from 2012 to 2016, motor insurance has contributed an average of 37.2% of the total premium collected for EIC (see table 12). This shows that motor insurance represents a significant portion of premium collections for EIC.
Table 12: Percentage share of motor insurance premium at EIC

<table>
<thead>
<tr>
<th>Period</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Insurance</td>
<td>539,377</td>
<td>648,552</td>
<td>758,023</td>
<td>827,210</td>
<td>1,045,067</td>
<td></td>
</tr>
<tr>
<td>EIC Total</td>
<td>1,640,279</td>
<td>2,168,217</td>
<td>1,982,536</td>
<td>2,095,964</td>
<td>2,298,151</td>
<td></td>
</tr>
<tr>
<td>%age share of</td>
<td>32.9%</td>
<td>29.9%</td>
<td>38.2%</td>
<td>39.5%</td>
<td>45.5%</td>
<td>37.2%</td>
</tr>
<tr>
<td>motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EIC annual report

Loss Ratio: EIC’s average loss ratio for the five years between 2012 and 2016, resides between the ranges of 95.3% in 2015 to 78.8% in 2014. A range of about 17% shows the variability of the loss ratio across the five years. The loss ratio compared to the industry average is only slightly better in 2013 and 2014, while it is much worse than the industry in 2012, 2015 and 2016 by a margin of more than 5%.

EIC’s average loss ratio for the all its products averages at 57.9% for the five years while the average loss ratio for motor insurance is 86.5% for the five years. Compared to the company’s total loss ratio for all products, motor insurance has a much higher loss ratio.

Table 13: Loss ration per year

<table>
<thead>
<tr>
<th>Period</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIC</td>
<td>91.6</td>
<td>81.2</td>
<td>78.8</td>
<td>95.3</td>
<td>86.5</td>
<td>86.5</td>
</tr>
<tr>
<td>Industry</td>
<td>86.7</td>
<td>82.3</td>
<td>80.9</td>
<td>83.3</td>
<td>78.5</td>
<td>82.3</td>
</tr>
<tr>
<td>Total EIC</td>
<td>58.2</td>
<td>53.7</td>
<td>57.6</td>
<td>59.8</td>
<td>60</td>
<td>57.9</td>
</tr>
</tbody>
</table>

Source: EIC annual report

Underwriting Surplus: Figure 4 shows that the contribution of motor insurance to the corporate underwriting surplus, which is the difference between premiums collected and indemnities paid, is very small. In the years 2012 and 2015, motor insurance contributed only about 0.3% each year. Relatively, the underwriting surplus contribution of motor insurance was better in 2014, making 20.4% contribution followed by a 12.8% contribution in 2016 resulting in a five year average of 9.86%.
4.3 Discussion of findings

As per the findings presented above, it can be seen that motor insurance is an integral part EIC’s product portfolio with a steady growth. In motor insurance, EIC has managed to maintain an average of 30% market share from the industry despite the growing number of insurance companies. This, however, could present uncertainty given the fact that third-party vehicle insurance which is a standard product across the industry represents the majority of its motor insurance portfolio. This standard product subjects EIC to stiff competition from other companies.

Another concerning observation is the dynamics between the share of total premium of motor insurance, its loss ratio and its contribution to underwriting surplus. While motor insurance constitutes a substantial portion of the total premium collected (an average of 37.2% for the five years), it shows a very high loss ratio (an average of 86.5% for the five years) which is much higher than the total loss ratio of EIC (an average of 57.9% for
the five years). This is further justified in the contribution of motor insurance to underwriting surplus which ranges from a mere percentage of 0.3% to 20%. This shows that while motor insurance appears to collect a big portion of the premium for EIC, it might not actually be contributing to performance measures like profit.

Coming to the identification of factors affecting the performance of motor insurance, all the five factors identified had mean values of 3.38 and above suggesting that all of them can affect the performance of motor insurance at EIC. The result of the t-test indicated that the positive effect of all the five factors is statistically significant at 99% level of significance.

The findings of the relative importance index also indicate that product (policy) feature as the highest ranking factor with an RII of 0.774. This suggests that participants believe the product/policy features such as its premium price and the range of incidents covered by the policy are very much important to the performance of motor insurance. This is in agreement with the idea that a product (policy) should first satisfy its customers’ expectation in terms of the coverage it provides and the fairness of its price. Interview participants also indicated that in an industry where motor insurance products are very similar, product (policy) features like price are very influential.

Service quality was found to be the second influential factor with an RII of 0.757. The interview participants also highlighted the importance of service quality for cross-selling of policies to existing customers, renewal of policies and their further recommendation to others. This finding is in agreement with similar research. Prompt claim handling which is an element of service quality has been identified as an important determinant of customers satisfaction in Poland (Przybytniowski, 2015), in India (Mathur and Tripathi, 2014), in Nigeria (Nwankwo and Durowoju, 2011).

Regarding, marketing and sales activities, the findings indicate that marketing and sales activities are placed in the middle at the third place with an RII of 0.714. The perception that EIC has a strong reputation has limited the need and influence of marketing and sales activities. Other studies have also found out that marketing activities have the least impact (Mathur and Tripathi (2014).
The use of technology was ranked fourth with an RII of 0.707. Even though, the interview participants suggested technology is an internal concern which is not a priority. This finding is in contradiction with other research placing technology at a higher position (Mathur and Tripathi, 2014).

Facility and infrastructure was the least ranked factor with an RII of 0.676. Off all the items in this dimension, the location of branches was the standout item. The convenience of branch location was identified as one of the top ten factors in Mathur and Tripathi (2014) study out of 29 factors.

CHAPTER FIVE
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of major findings and conclusions made as per the findings of the research. Recommendations are also given subsequently.

5.1 Summary of Major Findings

With respect to the performance of motor insurance at EIC, the analysis of the secondary data between 2012 and 2016 showed that:

- Motor insurance at EIC has grown with an average of 8.3% from 2012 to 2016 (except 2013) indicating a continuous positive performance in terms of growth.
- The share of premium collected motor insurance gross premium collected for EIC averages at 31.6% for the five years which is slightly better than the industry average growth rate of 28.1%. In comparison to other products, motor insurance has contributed an average of 37.2% of the total premium
collected for EIC. This showed that motor insurance constitutes a significant portion of EIC’s portfolio which implies that its performance is vital to EIC.

- The average loss ratio for motor insurance for the five years stands at 86.5% which is much higher than all other products which average at 57.9%. Further, its contribution to underwriting surplus for the five years is average of only 9.86%. This in contrast to the share of motor insurance premium represents a poor contribution to the performance of motor insurance.

Further, the one sample t-test have confirmed a statistically significant positive effect of factors affecting the performance. Their relative importance ranked using RII shows in order of importance; product/policy features, service quality, marketing, and sales activities, use of technology and facilities/infrastructure affect the performance of motor insurance at EIC.

### 5.2 Conclusions

This research set out with an objective of answering four basis questions. The first was to assess how motor insurance was performing at EIC. Looking at EIC’s five-year performance data between 2012 and 2016, one can conclude that the performance of motor insurance in terms of total premium collected is in fact growing. This, however, needs a cautious interpretation. Since specific motor insurance policies like compulsory third party vehicle insurance have become mandatory by low, the increase in the total number of customers and total premium might be a result of the introduction of the low by the government rather than a concerted effort by EIC. The implication of this is that once vehicle owners get compulsory third party insurance the growth could stagnate.

Another important observation regarding performance of motor insurance is that even though motor insurance constitutes a significant portion of the company’s total premium collected (a five year average of 37.2%), it has a higher average loss ratio (a five year average of 86.5% in contrast to 57.9% for other products). This is further evidenced by motor insurance’s very low contribution to underwriting surplus (a five year average of 9.86%). The implication of this is that the pricing of policies or appraisal of the risk involved might be problematic.
The second research question was asked what were the firm level factors/variables/ that affected the performance of motor insurance at EIC. Factors identified based on empirical research service quality, facility and infrastructure, use of technology, marketing and sales activities and product/policy features were also identified as firm level factor that affecting the performance of motor insurance by participants. This result was statistically significant at 99% level of significance.

The third research question aimed at identifying the relative importance (rank) of the firm-level factors affecting the performance of motor insurance. AS per the result of the RII, product (policy) features were the highest ranked factor. Price (premium) and the range of incidents covered by the policy were seen to be the prominent features. Service quality was ranked second influential factor with prompt claim handling the standout element of service quality. Marketing and sales activities were ranked third. Here, the reputation of EIC was considered enough limiting the need for further marketing and sales efforts. The use of agents and brokers was considered a major sales event. The use of technology was ranked fourth influential factor. Technology which could possibly have an all-rounded impact from efficiency to customer satisfaction is given less importance. Facility/infrastructure was the least ranking factor. The prominent element of this factor was convenient branch location.

5.3 Recommendations

In this section, recommendations are given based on the findings and literature review conducted.

Practical Implications

- The five year (2012 - 2016) motor insurance performance data, indicated a growing total premium collection with a very high loss ratio and very low contribution to underwriting surplus. EIC should therefore, closely monitor the performance of motor insurance to measure its contribution to the company’s bottom-line.

- Product (policy) features were identified as the highest ranked firm level factor to the performance of motor insurance. This coupled with the fact that motor insurance currently has a very higher loss ratio and low contribution to underwriting surplus, a closer look at policy designs elements like premiums
(prices) should be conducted. Thus, EIC should consider introducing new policies that are appealing and affordable to customers. Clubbing of policies with other popular products could also improve cross-selling.

- Service quality was identified as the second highest firm level factor affecting the performance of Motor insurance. Hence; EIC should design mechanisms to continuously measure and improve its service quality. EIC should design efficient processes supported by automated systems as well as professional employees. Continuous training and development of service standards could also help in improving its service quality.

- The performance data shows EIC has a bigger market share in the industry. Further, participants also placed marketing activities as the third important firm level factor affecting performance of motor insurance. This suggests a tendency to assume EIC is already the market leader in motor insurance which lead to complacency diminishing marketing and sales efforts. In a market like Ethiopia where only a small porting on the potential market is reached, strong marketing and sales effort should be implemented to grow the market size.

- Use of technology was considered an internal operation concern by participants and was also placed fourth in the relative importance index. Technology, however, could have across-cutting impact on multiple factors. Identification and introduction of appropriate technology could help EIC improve its performance. Further, EIC should ready itself for technological advances in the banking and finance industry that is already shifting customer expectations.

**Future research**

Expanding the scope in terms of population can help confirm or improve on the findings of this study. Further, looking at the identified factors from customer’s perspective to compliment on the findings in this study as well as evaluating how the insurance company is performing against identified factors could help improve the practice.
REFERENCES


Creswell, J. W., V. L. Plano Clark, M. Gutmann, and W. Hanson. 2003. Advanced mixed methods research designs. In Handbook on mixed methods in the behavioral and


Yuqi Li (2007). *Determinants of Banks’ Profitability and Its Implication on Risk Management Practices: Panel Evidence from the UK*, the University of Nottingham

APPENDIX
St. Mary University  
School of Graduate Studies  
Post Graduate Program in Business Administration  

A. Survey Questionnaire

Dear respondents,

My name is Mergia Gagni. I am a student undertaking a Master of Business Administration Degree at St. Mary’s University, Department of Business Administration. To fulfill the completion of this course, I am carrying out a study in title “Factors Affecting Performance of Motor Insurance: A Case of Ethiopian Insurance Corporation”. I am inviting you to participate in this research study by completing the attached questionnaire by making a symbol “√” on your level of agreement.

Since it is intended for academic purposes only, please answer all questions as honestly as possible. The information collected will remain confidential. As a participant you are not required to include your name.

Thank You In advance for you cooperation.

For any question please contact me at: 0923780134
Section I: Demographic Information

1. What is your Gender?
   - Male  □
   - Female  □

2. What is Your Age
   - 18 – 25  □
   - 26 – 30  □
   - 31 – 35  □
   - 36 – 40  □
   - More than 40  □

3. Indicate your Level of Education
   - High school  □
   - Certificate  □
   - Diploma  □
   - Degree  □
   - Post Graduate  □

4. What is your Work experience?
   - Less than five years  □
   - 6 – 10 years  □
   - 11 – 15 years  □
   - 16 – 20 years  □
   - Above 20 years  □

5. Indicate your current position
   - Officer  □
   - Senior Officer  □
   - Principal customer care  □
   - Senior surveyor  □
   - Principal Engineer  □
   - Team Leader  □
   - Director  □
Section II: Factors affecting the performance of motor insurance

For each operational factor listed below, please indicate your rating for the statement “The factor indicated below affect the performance of Motor Insurance at EIC”

1=Strongly Disagree; 2= Disagree; 3=neither agree nor disagree; 4=Agree; and 5=Strongly Agree

<table>
<thead>
<tr>
<th>Factors</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
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<td><strong>Service Quality</strong></td>
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<td>1.   Prompt claim handling</td>
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<td>2.   Speed and efficiency of transactions</td>
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<td>3.   Proper guidance and complain handling</td>
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<td>4.   Company opening/operating hours</td>
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<td>5.   Staff courtesy and positive attitude</td>
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<td><strong>Infrastructure</strong></td>
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<td>1.   Convenience of branch locations</td>
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<td>2.   Number of branches across the city</td>
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<td>3.   Availability of Professional staff</td>
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<td>4.   Office layouts and attractive arrangements</td>
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<td>5.   Availability of restroom and seat</td>
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<td><strong>Technology</strong></td>
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<td>1.   Use of modern equipment</td>
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<td>2.   Use of technology in operations</td>
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<td>3.   Update of existing systems</td>
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<td>4.   Use of modern communications tools</td>
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<td>5.   Use of modern banking system</td>
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<td>6.   Use of modern advertising system</td>
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<td><strong>Marketing and sales</strong></td>
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<tr>
<td>1.   Reputation of insurance company</td>
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<td>2.   Influential marketing campaign</td>
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<td></td>
<td>Free gifts for customers</td>
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<td>4.</td>
<td>Frequent contact with customers with update and offer</td>
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<td>5.</td>
<td>Cross selling of new policy to existing policy holder</td>
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<tr>
<td>6.</td>
<td>Availability of agents and brokers</td>
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</tbody>
</table>

**Product /Policy features**

<table>
<thead>
<tr>
<th></th>
<th>Premium/price</th>
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<tbody>
<tr>
<td>2.</td>
<td>Range of incidents covered by the policy</td>
</tr>
<tr>
<td>3.</td>
<td>Credit facility available</td>
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<tr>
<td>4.</td>
<td>Rigidity of policy terms and conditions</td>
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</tbody>
</table>
Interview Questions for top management

1. What are the first five qualities that come into your mind when you think of qualities an insurer shall possess to sell insurance policy?

____________________________________________________________________________________________________________________

2. Does your company possess those qualities mentioned above in number one?

____________________________________________________________________________________________________________________

3. Where do you categorize your company’s performance of motor insurance? (Poor, ok, great) why?

____________________________________________________________________________________________________________________

4. Do you agree in the ranking of factors influencing motor insurance in order of product features, service quality, marketing and sales, technology and facility/infrastructure?

____________________________________________________________________________________________________________________

5. Can you please give your reasons for agreeing with the order of importance given in question number four?

____________________________________________________________________________________________________________________

6. Any additional points to add regarding performance of motor insurance.

____________________________________________________________________________________________________________________