ASSESSMENT OF CAPITAL STRUCTURE IN ETHIOPIAN INSURANCE COMPANY

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Abstract

The main objective of this study is to examine the determinants of capital structure of selected insurance companies in Ethiopia. To achieve the objective, researcher used only secondary data obtained from the annual financial statement of selected insurance companies. To achieve stated objective, the researcher used descriptive research methods. Descriptive research designs focus on describing situation at set of circumstance by observing to give scientific description.

The data was organized by using tables and figures to make it ready for processing. And the tabulated data would be analysed by using descriptive statistical analysis and it would be presented using graphs, table and percentage. Finally, Even if the ELIC has good position to covers the claims of creditors by using only its asset, these trends should continue unless it will affect Ethiopian insurance company in the long run. Even debt to total asset is in good position that more asset than liabilities and can meet its obligations, should continue in this trend for long term

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Acronym

ELIC: Ethiopian Life Insurance Company

ENIC: Ethiopian None Life Insurance Company

TLTA: Total Liability to Total asset

GDP: Gross domestic product

CHAPTER ONE

INTRODUCTION

1.1Background of the Study

Modern forms of insurance service were introduced in Ethiopia by Europeans since 19905. Bank of Abyssinia which was owned by foreigners was the first provider of modern insurance services in Ethiopia. The Imperial Insurance Company, the first domestic insurer, was established in 1951 with a share capital of Eth Birr1,000, 000. During this period, insurance business (except marine insurance) was classified as any trade undertaking and was administered by the provisions of the commercial code. The minimum paid-up capital required to establish an insurance company was as little as 12,500 Ethiopian Birr as stipulated in the commercial code. There was no restriction on foreign insurers. The maritime code of Ethiopia was issued to govern the operations of maritime business and the related marine insurance (*Abate, (2012)*

According to Zeleke (2007) the first notable event that the Ethiopian insurance market witnessed was the promulgation of proclamation No. 281/1970. This proclamation was issued to provide for the control & regulation of insurance business in Ethiopia. It created an Insurance Council and an Insurance Controller's Office. The law required an insurer to be a domestic company whose share capital (fully subscribed) to be not less than Ethiopian Birr 400,000 for a general insurance business, Ethiopian Birr 600,000 in the case of long-term insurance business and Ethiopian Birr1,000,000 to do both long-term & general insurance business.

Capital Structure (CS) is mix of a company's long-term debt, specific short-term debt, common equity and preferred equity. The capital structure shows how a firm finances its overall operations and growth by using different sources of funds. Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

An optimum capital structure is a critical decision for any business organization. The decision is important not only because of the need to maximize returns to the shareholders, but it is also important because of the impact of such decision on an organization's ability to deal with its competitive environment (Simerly and Li, 2002). The last number of decades has witnessed a continuous development of new theories and empirical findings on the capital structure of a firm to maximize its value. These theories suggest that firms select capital structure depending on attributes that determine the various costs and benefits associated with debt and equity financing. The first milestone on the issue was set by Modigliani and Miller (1958), whose model argued on the Irrelevance of the capital structure in determining firms' value and future performance. The researcher intends to assess the capital structure of insurance company in Ethiopian firms.

1.2 Statement of the problem

An insurance company is in the business of transferring risk. It does this by accepting premium from policyholders and paying claims. It can happen that the premium collected is less than the total amount paid for claims. If this is the case, the insurer is expected to pay for the claims from the capital of the insurance company. It is for this reason that the insurance regulator has a prime concern in the capital that the insurer has maintained. The regulator concern is to maintain the safety and soundness of insurance companies so that they can fulfil their obligations to the policyholders. Whereas, the owners of (or investors) the insurance company are concerned with the return and the safety of their investment.

The National Bank of Ethiopia (NBE), which is the regulatory authority of all financial institutions, has issued a directive that requires insurance companies to have a minimum paid-up capital of 60million Birr for general insurance and 15million Birr for Life insurance, effective April 2013. This is a twentyfold increment from the previous requirement of 3million Br in case of general insurance. The ground for this increment was to require companies to maintain adequate capital that can reduce risk by cushioning the volatility of earnings, increase the premium growth (as the amount of gross premium written is linked to the capital level maintained by the company to the extent that can run up to 7 times of its capital), and lowering the probability of insurance failure.

Some of the insurance officials argue that increasing paid up capital reduces expected returns to shareholders, as equity financing is more expensive than debt and cannot be raised easily from the public market. One of the issues of their argument is that many of the companies' return on equity has been declining since the past two or three operating years as this declining was attributed to the massive increase in paid-up capital (Fortune,2014). From regulatory perspective, insurers need to estimate the capital they need, and then effectively manage their capital to maximize the company's value and shareholder returns considering the minimum required regulatory capital. On the other hand considerable debate is happening among the industry officials regarding the level of capital required to support their business operation and maximize return to the shareholders. Their argument goes with the trade-off postulates that increasing of profitability is possible when the proportion of debt to equity is increased and when Companies get more leveraged.

The studies were conducted on assessment of capital structure by using asset tangibility, liquidity, profitability and macro economic factors. Most of earlier researchers were conducted the study by using as GDP growth rate and inflation rate. Therefore the researcher intends to assess capital structure level of Ethiopian insurance company by using such as debt to asset ratio

1.3 Research questions

This study was try to address the following research questions:

1. What is the Total debt to total equity ratio of life Insurance companies?
2. What is the Total debt to total equity ratio of non-life Insurance companies?
3. What is the Total debt to total Asset ratio of life Insurance companies?
4. What is the Total debt to total Asset ratio of non-life Insurance companies?

1.4 Objective of the study

1.4.1The general objective

The general objective of this study is to assess the capital structure level of Ethiopian insurance company

1.4.2 The specific objectives are:

- ✓ To assess the total debt to total equity ratio of life insurance companies
- ✓ To assess the Total debt to total equity ratio of non-life Insurance companies
- ✓ To assess the Total debt to total Asset ratio of life Insurance companies
- ✓ To assess the Total debt to total Asset ratio of non-life Insurance companies

1.5 significance of the study

The study have significance for researcher, for other researcher and for insurance company of Ethiopia.This study used to researcher to increases thinking capacity in related to capital structure, the study also provided recommendations to the regulator of insurance companies in Ethiopia; the National Bank of Ethiopia, what level of equity capital is needed to maintain the soundness and healthy operation of Insurance Companies. Other interested parties are also being expected to benefit from this study like other potential researchers may get encouraged to conduct related research in the insurance sector.

1.6 Scope of the study

Conceptually, this was to assess capital structure of Ethiopian Insurance companies from the years 2011 to 2018 GC. Geographically the study was delaminated in the case of Ethiopian insurance company. Methodologically, the study has been used descriptive type of research design. The scope of study focused insurance companies and their financial data of 8 operating years.

1.7 Limitation of study

This research was up to insurance company that means this research would be limited only to a specific organization.

The researcher would make descriptive research; it describes the state of view as it exists at present, but it did not establish a cause and effect relationship

1.8 organization of the study

The research proposal was organized in three chapters; the first chapter was deals with introduction, background of the study, statement of the problem, research question, and objective of the study, significance of the study, scope of the study and organization of the paper. Chapter two was deals with related reviews of literature. The third chapter present the methodologies that the researcher was used to conduct the study.

CHAPTER TWO

LITERATURE REVIEW

2.1. Theoretical Framework of Capital Structure

Since the publication of the Modigliani and Miller's (1958) "irrelevance theory of capital structure", the theory of corporate capital structure has been a study of interest to many researchers and scholars. Over the years, major theories of capital structure emerged which diverge from the assumption of perfect capital markets under which the "irrelevance model" is working. The first is the trade-off theory which assumes that firms trade off the benefits and costs of debt and equity financing and find an optimal capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. The second is the pecking order theory (Myers, 1984) that argues that firms follow a financing hierarchy to minimize the problem of information asymmetry between the firm's managers-insiders and the outsiders' shareholders.

2.1.1. Static trade-off theory

The static trade-off theory is about act of balancing costs and benefits of leverage so that the value of the firm is maximized. Practically, the factors determining the target leverage ratio will not be constant. Fluctuations of these will cause the optimal leverage to change over time. Moreover, the firm's actual capital structure is not stable either. Regular leverage adjustments are hence necessary if the firm wishes to stay at its optimum. Some persistence of shocks to the capital structure can be expected. At a certain point, of course, the firm will eventually move towards the target optimum leverage margin. When and how this happens depends on the structure of the adjustment costs. In this connection, Leary and Roberts (2005) indicate that with a variable transaction cost function firms adjust continually, whereas fixed or proportional costs induce less frequent adjustments. The trade-off theory takes these inter-temporal factors explicitly into account (Frank & Goyal, 2007).

Kraus and Litzenberger (1973) develops the theory of optimal leverage ratio in which the trade-off between costs and benefits of taxes when decision of debt financing is considered. Their proposition disregards the M&M theorem (1963) that refers the optimal capital structure is 100% debt as interest on debt is a deductible expense, creating a tax shield for the firm. The basis of their argument states that, borrowing saves the firm money on its corporate taxes, but the more it borrows, the more likely it will go bankrupt. At the relatively low debt levels, the probability of bankruptcy and financial distress is low; hence the benefits of tax shield from debt may outweigh the costs. Nonetheless, at the very high debt level, tax advantage of debts may be offset by the bankruptcy costs. This is the main idea of static trade-off theory of capital structure, saying that firms borrow up to the point where marginal benefits of tax shield should be higher than marginal bankruptcy costs.

2.1.2. Pecking Order Theory

The pecking order theory illustrates that companies prefer internal financing to external financing and, when external funds are needed, debt is preferred to equity (Myers, 1984). This order of decision taking comes from asymmetric information between managers and outside investors about the value of the firm's current assets and growth opportunities (Myers and Majluf, 1984). When managers reach to a decision to issue new shares, potential investors have to estimate their true values. In doing so they take into account that managers, which are assumed to maximize the wealth of the current shareholders, are more likely to issue shares when the firm's stocks are overvalued in the market than when they are undervalued. Assume that a firm eyes a potential investment project with a high NPV and that it can only finance this project by selling shares. Because of the dynamics outlined above, it can be expected that the shares can only be sold at a discount to their true value. If this discount is sufficiently large, management will decide to drop the investment as the value loss to existing shareholders due to the discount will offset the value generated by the project.

Managers are expected to increase internal capital at the time of there is a financial surplus in a given year. This way they try to prevent ending up in the situation where the firm must forgo a profitable project because it has to rely solely on selling shares to the public. When the reserves of retained earnings fail to cover investments, a firm will first issue debt before moving to the last resort of raising capital. As the value of debt is less sensitive to inside information than the value of equity, debt can be assumed to rank between equity capital and retained earnings (Myers, 1984).

In comparison with the trade-off theory, the pecking order theory does not assume a target capital structure. Instead, it predicts that leverage changes can be explained by the financing deficit, which is defined as the difference between the external and internal cash flow. In this case, external cash flow is assumed to comprise the sum of dividends, net investments and changes in working capital, where as internal cash flow assumes to hold the operating cash flow after net of interest payments and taxes (Frank & Goyal, 2003). When internal cash flow exceeds external cash flow, the pecking order theory predicts that firms build up financial slack, leading to a decrease in leverage. On the contrary, when internal cash flow is less than the external ones, this would induce firms to increase their leverage. In the latter, firms would either use part of the financial resources retained in the past, or, when that option is used up, they would borrow from an external source of financing. At the last, when the limits of their borrowing capacity get limited, they tend to issue new shares (Lemmon &Zender, 2010). The latter would, however, only happen infrequently and under rather extreme conditions (Fama& French, 2005).

2.1.3. Financial Theories from insurance perspective

For insurance companies, the trade-off and pecking order theory can be applied in case of financing decisions of insurance operations. As has been already discussed earlier, premiums received for services of insurance covers are the main source of finance for insurance companies, with the outstanding claims and unearned premiums as the corresponding liabilities. In lines with capital structure, insurance policies take some characteristics with debt instruments such as bonds. The customer of insurance company pays a certain amount to the insurer, either at once or periodically, in exchange for the promise that a sum of money will be paid out as compensation in accordance with the terms of the policy agreement. This implies that, as if the insurer borrows money from the policyholders Staking &Babbel, (1995). That means the policyholders act as the lenders, the insurer acts as the borrowing entity, the premiums paid constitute the amount lend by the policyholders and the claim payments are comparable to the refund of the principal plus the coupon payments. It should be stressed that we refer to the policyholders as a whole, not individual policyholders Therefore, we will treat an increase in policies, which should eventually translate into larger technical provisions, as an increase in leverage. Insurance policies still differ significantly from debt instruments. Most prominently, while for debt securities the principal is a fixed amount to be paid at a predetermined date, for an insurance policy it is highly uncertain whether the contractual conditions for a pay-out will be met. Moreover, in the latter case the size and the timing of the potential payment are uncertain. Another crucial difference is that insurance policies are not only a source of financing. Underwriting insurance contracts is the focus of the sector and can generate earnings for the companies. Debt financing, in contrast, is in itself not profitable. We will now interpret the two major capital structure theories, allowing for the fact that the main source of leverage is now the issuance of insurance policies rather than debt.

2.1.3.1. Trade-off Theory from insurer perspective

From the perspective of general version of the trade-off theory, the focus is on costs and benefits of leverage and weighs them against each other. The fact that insurance policies can lead to an underwriting profit is clearly an important benefit in comparison with equity capital. Plus to this, the tax shelter provided by increased leverage applies to insurance liabilities as well. Paying out claims or reserving funds for future claim settlements reduces the taxable profit. Furthermore, an additional benefit of the increased use of policies as a source of funding is that this way the insurer can exploit the law of large numbers to a greater extent and that it can further diversify its risks. The law of large numbers is stating that when an experiment is repeated a larger number of times, the average of the results will approach the expected value more and more. Consequently, when an insurer issues more policies, it will be able to predict the total future claim payments more accurately. As a result, the level of premiums needed can be determined more precisely This allows the insurer to estimate the required premium level more accurately and decrease the overall risk level of the insurer's portfolio, resulting in more profitable operations in the long run, (Nissim, 2010)

Also in line with the general explanation in the first section, when leverage increases, or equivalently, the surplus shrinks in relative terms, the risk of financial distress increases. The negative effect of this risk on the insurer's value can, however, is expected to be more severe than for firms in most other, non- financial industries. In insurance and by extension in financial industries in general, trust in the solvency of the institution is of major importance. It has been shown that default risk is negatively correlated with insurance prices, Cummins &Danzon, (1997). Also, when the surplus of an insurer relative to its total assets is reduced below a certain level, regulatory action will be triggered. In that case, some constraints will usually be imposed on the firm which might reduce the value of the company by limiting its discretion. The threat of insolvency could also necessitate some emergency measures such as selling off investments before maturity at a value below par or raising capital at a low issue price.Considering the agency conflict considerations, the conflict of interest between the manager of the company and the shareholders can be recognized in the same way as in the general trade off case. Given the time lag between collection of premiums and payment of claims, we know that insurance managers always have significant amounts of cash they have to invest. Therefore, we could expect that they are, compared to their peers in other industries, better able to maximize their personal utility through the choice of investments. However, matching assets to liabilities plays an important role for insurers. The degree to which managers have the ability to choose assets according to their personal preference is thus not necessarily greater than in other industries. Of course, many other possibilities exist for management to optimize their own situation while not necessarily acting in the best interest of shareholders, (Garven, 1987)

Identical to what was written above, shareholders can expect to incur some agency costs resulting from the conflict. Whereas an increase in debt clearly reduces these costs, the effect of more insurance liabilities is ambiguous. More policies will lead to greater claim expenses in the future, which one could interpret as reducing the cash available for discretionary spending by managers. Nevertheless, if an insurer is able to gain an underwriting profit on the additional policies, i.e. the premium revenue exceeds the claim expenses, and then its profit would increase. Consequently, managers could actually have more funds available to spend. Mayers and Smith (1994) argue that the manager-shareholder conflict is more severe for firms active in lines of insurance that require significant managerial discretion. This is typically the case when policies are non-standardized and premium rates are of haphazardly set. It can also be expected that, the policyholders, will find it more difficult to mitigate this agency conflict because they usually have less control over their risk managers' behavior, Mayers& Smith, (1994).

Insurers' use of pure debt is minimal. Accordingly, although still valid, the agency conflict between shareholders and bondholders is of little importance. Yet, a very similar, but much more important, kind of agency conflict exists between shareholders and policyholders. Shareholders have a residual claim on the firm, i.e. they have a claim on the value of the firm that remains after policyholders (and debt holders) have been paid. Therefore, the argument of the preceding section

still holds. Under certain circumstances it will be optimal for the shareholders to increase the risk of the firm's activities or investments after insurance policies have been issued. Stepping up the level of risk can, for instance, be achieved by engaging in more risky lines of insurance, investing the premiums in speculative assets or using less reinsurance. Potential policyholders will take this possibility into account when they choose an insurance provider because it would increase the risk of their claims not being paid. This will translate into lower prices for those insurers which are expected to change their risk level, such that the owners of the firm bear the costs of this agency conflict. By holding more capital the insurer can reduce its incentives to shift risks ex-post, thereby reducing the agency costs Cummins &Nini, (2002);

2.1.3.2. Pecking Order Theory from insurer perspective

The pecking order theory focuses on the analysis of asymmetric information. Thus, in order to properly apply this theory to insurers, it is obvious to take this aspect into account. Both premiums from policyholders and funds obtained through other liabilities clearly are forms of external financing. In this sense, the pecking order theory shows us that external premium financing are more expensive than internal funds because external parties do not have full knowledge about the insurer's situation. In particular, potential policyholders are uncertain about the future ability of the insurer to cover their claims. As outsiders, it is generally very difficult for them to judge the adequacy of the technical provisions and the capital buffer. Insurers do not disclose detailed information about the risks they are covering and policyholders usually lack the technical knowledge of calculated risks of the company, Cheng and Weiss (2012). Insurance liabilities have legal priority over debt. In case of bankruptcy or liquidation, the latter will only be paid after all insurance liabilities have been settled. As a result, investors holding debt should be more interested in the fundamental value of the insurer than policyholders. The pecking order theory would thus state that debt instruments are more expensive sources of funds than insurance policies, because of their greater sensitivity to inside information. For stock insurers another possibility to gain financing is issuing new shares. However, according to the pecking order theory, insurers would prefer the previous two possibilities, as the residual nature of equity holders' claims results in the largest information sensitivity, Miller (1989)

In summary, the pecking order theory proposes that insurers will build up financial slack whenever they can. When, on the contrary, they face a financing deficit, they will first use the internal funds available to them. Then, they would turn to external financing. First, by underwriting insurance policies next,by issuing (subordinated) debt and, finally by issuing new shares

2.1.4. Other financial theories

2.1.4.1. Signalling Theory

In the pecking order model, good quality firms have to use internal funds to avoid adverse selection problems and losing value. These firms cannot signal their quality by changing their capital structure. In signalling theory capital structure serves as a signal of private information (Ross, 1977). The main prediction of this theory is that the market reaction on debt issues (more generally, on leverage-increasing transactions such as issuing convertible debt, repurchasing shares, and debt for equity swaps) is positive. Similarly, the market reaction on equity issues (or leverage-decreasing transactions) is negative. Leland and Pyle (1977) obtain the same results byusing managerial risk-aversion instead of a bankruptcy penalty. A negative share price reaction on the announcement of equity issues is usually consistent with empirical evidence, (similar for leverage-decreasing transactions). Evidence on the positive market reaction on leverageincreasing transactions (with the exception of debt issues) also supports signaling theory (Masulis, 1980)

2.1.4.2. Market Timing

Theory Market timing has great importance in determining firm's capital structure To put it in a different way, the financial preferences of the firms indicate the results of precedent modifications of their stock prices plus the aspiration to time the market. Certainly, managers seize the benefit of the circumstances to issue shares to alleviate the pressure of debt constrictions and in that way amplify the opportunity of its entrenchment; throughout the phase of market expansion and affluence. When the environment is an unpromising financial market that matches a stringent control implemented by the mass of shareholders, managers of firms are limited towards requirements as well as restrictions forced by means of the market; in search of issuing less risky debt. Business executives seem to vigorously employ their financing decisions with market timing. Many of the business executives have the same opinion that the quantity through which stock is overvalued or undervalued was an essential concern in the decisions of equity issue; Graham and Harvey (2001)

2.1.5 Ratio Analysis

Ratio analysis is a powerful tool of a financial analysis. It is used as index for evaluating the financial position and performance of the firm. It represents an attempt to standardize financial information to facilitate meaningful comparison (Pandey, 1981). The ability to analyze and understand financial statement is as much art as it is an application of several techniques. The technical side of financial analysis is straight forward. We calculate a vanity of common financial rations to provide in sight in to the financing condition of company (Simon and Schuster).

2.1.5.1 Types of Financial Ratios

There are five basic categories of financial ratios. Each represents important aspects of the firms financial condition. The categories consists of liquidity, activities, leverage, profitability and market value rations. (Antench G. and Kenenis L; P:19).

2.1.5..2 Liquidity Rations

Liquidity refers to, the ability of a firm to meet its short –term financial obligations when and as they fall due. Liquidity ratio provides the basis for answering the question does the firm have sufficient cash and near cash assets to pay its bills on time?

Current liabilities represent the firms maturing financial obligation. The firms current asset are the primary source of funds needed to repay current and maturing financial obligation. Lack of liquidity implies inability to meet its current obligation leading to lack of credibility among supplies and creditors. (Anteneh G. and Kenenisa L; P: 21).

Current Ratio – Measures a firms ability to satisfy or cover the claims of short term solvency or liquidity.

The current ratio is calculated by dividing current assets to current liabilities

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The unit of measurement is either birr or times. An ideal current ratio is 2:1 or more. This is because event if the value of firms current asset is reduced by half, it can still meet its obligation. However between two firms with the same current ratio, the one with higher proportion of current asset in the form of cash and account receivable in more liquid than the one with those in the form of inventories.

A very high current ratio than the standard may indicate excessive cash due to poor cash management, excessive accounts receivable due to poor credit management , excessive inventories due to poor inventory management or a firm is not making full use of its current borrowing capacity. A very low current ratio than the standard may indicate difficulty in paying its short term obligations, under stocking that may course customer dissatisfaction.

Quick (A cid- test) ratio – measure the short term liquidity by removing the least liquid asset such as inventories (Antench G. and Kenenisa L.; P:22)

$$\text{Quick ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

2.1.5.3 Activity Ratio

This ration shows the intensity with which a firm uses its asset in generating sales. They are employed to evaluate the efficiency of the firm in managing and utilizing its assets. The better the management of asset, the larger the amount of sales will (Pand y ; 2000:130).

Inventory Turnover Ratio

Measures the effectiveness or efficiency with which a firm is managing its investment in inventories is reflected in the number of times that its inventories are turnover during the year. An inventory turnover significantly higher than the industry average indicate superior selling practice (Anteneh G. and Keneisa L; P:24)

$$\text{Inventory turnover} = \frac{\text{Cost of Good Sold}}{\text{Average Inventories}}$$

Fixed Asset Turnover (FATO)

It measures the efficiency with which the firm uses its fixed asset to generate sales. It indicates management efficiency in managing its fixed assets.

It is computed as follows (Panday; 2000:130).

$$\text{FATO} = \frac{\text{Net Sales}}{\text{Net Fixed Asset}}$$

Total Asset Turnover(TATO)

It measures the managements efficiency in managing its total assets to generate sales. It is calculated as follows. (Pandy; 2000:130).

$$\text{Total asset turnover} = \frac{\text{Net Sales}}{\text{Total Assets}}$$

2.1.5.4 Leverage Ratio

Financial leverage is the magnification of risk and return introduced through the use of fixed cost financing such as debt and preferred stock there are two general types of debt measures: Measure of the degree of indebtedness and measure of the ability to service debts. Degree of indebtedness measures amount of debt relative to other balance sheet amounts. Two most commonly used measures are debt ratio and debt equity ratio.

The ability to service debts, refers to firms ability to make the contractual payments required on scheduled basis over the life of a debt (Gitman, 8th ed P-13).

Debt Ratio- Measure the proportion of total asset financed by the firms creditors.

The higher ratio the greater the amount of other people's money being used in an attempt to general profits. The ratio is calculated as follows.

$$\text{Debt ratio} = \frac{\text{Total Liabilities}}{\text{Total Asset}}$$

Debt Equity Ratio

Indicate the relationship between the long term funds provided by creditors and those provided by the firms owners. It is commonly used to measure the degree of finanial leverage of firm and it calculated as follows

$$\text{Debt equity ratio} = \frac{\text{Long term debt}}{\text{Stock holders equity}}$$

2.1.5.5 Profitability Ratio

Measures the firms earning with respect to a given level of sales, a certain level of assets, the owners investment or share value. (Gitman, 8th ed P:136).

Gross profit Margin

Measures the percentage of each sales dollar remaining after the firm has paid for its goods. The higher the gross profit margin, the better and the lower the relative cost or merchandise sold.

$$\text{Gross profit margin} = \frac{\text{Gross profits}}{\text{Sales}}$$

Operating Profit Margin

Mesure the percentage of each sales dollar remaining after all cost and expense other than interes and taxes are deducted; the pure profit earned on each sales dollar.

$$\text{Operating Profit Margin} = \frac{\text{Operating profits}}{\text{Sales}}$$

Net Profit Margin

Measures the percentage of each sales dollar remaining after all costs and expenses, including interest and taxes, have been deducted.

$$\text{Net Profit Margin} = \frac{\text{Net Profits After taxes}}{\text{Total Assets}}$$

Return on Asset (ROA)

Which is often called the firms return on investment (ROI), measures the over all effectiveness of management in generating profits with its available asset

$$\text{Return on asset} = \frac{\text{Net Profit Aftertax}}{\text{Total Assets}}$$

Return on Equity (ROE)

Measures the return earned on the owners (both preferred and common stock holders) investment in the firm.

$$\text{Return on Equity} = \frac{\text{Net profit after tax}}{\text{Stock holders equity}}$$

2.1.6 Overview of Financial Statement

Financial statement is a formal record of the financial activities of a business, person or other entry. For a business enterprise all relevant financial information presented in structured manner and in a form easy to understand are called financial statement. They are typically included for basic financial statements. Statement of financial position, statement of comprehensive income, statement of changes in equity and statement of cash flow (Wikipedia, the free encyclopaedia).

Statement of financial position is called a balance sheet is a summary of the financial balances of a sole proprietorship, a business partnership or a company asset, liabilities and owners equity are listed as of specific date, such as end of physical year. A Balance sheet is of ten described as ' snap shot of a company financial condition' of the four basic financial statement, the balance sheet is the only statement which applies to a single point in time of business calendar year. A standard balance sheet has three parts. Assets, liabilities and ownership equity. The main categories of assets are usually listed first, and typically in order of liquidity. Assets are followed by liability and equity. The difference between the assets and the liabilities is known as Equity (Wikepedia, the free encyclopaedia).

Statement of comprehensive income (Income statement) also referred to as profit and loss statement is acompany financial statement that indicates how the revenue is transformed in to net income it displays the revenue recognized for specific period and the cost and expenses charged against these revenue, including write offs (e.g. depreciation and Amortization of various assets). The purpose of the income statement is to show managers and investors whether the company made or lost money during period being reported. It represents a period of time. (Wikipedia, the free encyclopaedia)

Statement of change in equity explains the changes of the companies' equity through the reporting period. Statement of cash flow reports on a company's cash flow activities, particularly its operating, investing and financing activities. (Wikipedia,thefreeencyclopedia)

2.1.6.1 Users of financial statement

The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to wide range of users in making economic decisions. Financial statements should be understandable, relevant, reliable and comparable. Financial statements are intended to be understandable by readers who have "a reasonable knowledge of business and economic activities and accounting who are willing to study the information diligently" (Wikipedia, the free encyclopaedia).

Financial statement may be used by users for different purposes owners and managers require financial statements to make important business decisions that affect continued operations. Financial analysis is then performed on these statements to provide management with a more detailed understanding of the figures. Prospective investors make use of financial statements to assess the viability of investing in a business. Financial institutions use them to decide we withered to grant a company with fresh working capital or extend debt securities to finance expansion and other significant expenditures (Wikipedia, the free encyclopaedia).

2.2 Empirical studies

Daniel (2015) examined determinants of capital structure (Profitability, asset tangibility, growth, business risk, size of the firm and liquidity) of insurance companies in Ethiopia. The study employed panel regression of eight insurance companies covering the period of ten consecutive years, 2005-2014 using STATA. The results show that pecking order, the static trade-off and agency cost theories are important in explaining the capital structure of insurance companies in

Ethiopia, even if the Pecking order theory appears to be dominant. Profitability, asset tangibility, growth and liquidity were found to be significant in relation to leverage. The study reveals that there is a negative relationship between profitability, liquidity and asset tangibility with leverage. However, growth opportunity of the firm had a positive relationship with debt ratio. The other hypothesized firm level variables, business risk and size of the firm were insignificant. Bayeh (2011) on his study for insurance sector of Ethiopia from the period 2004-2010, took seven factors of profitability, liquidity, growth, age, risk, tangibility, and size as independent variables and regressed them against dependent variable as represented by three models namely; total debt ratio, long term debt ratio, and debt to equity ratio. The results of the study showed that firm's growth opportunity, profitability, age, liquidity and risk found to have a significant impact on capital structure measured by long term debt and total debt ratios. The results also suggested that liquidity have a significant positive impact on long term debt and debt to equity ratios while business risk appeared a significant positive impact on debt to equity and debt ratio. On the hand, growth has a significant negative impact on long term debt and total debt ratios while profitability appear a significant negative impact on long term debt ratio and significant direct impact on total debt ratio. Furthermore, the researcher emphasized a positive and significant impact of age on all the three dependent variable proxies. Solomon (2012) on his study in case of Ethiopian insurance sector, took firm specific factors of profitability, size, liquidity, growth, non-debt tax shield, dividend payout, age, size, and tangibility as independent variables and regressed them against the dependent variable of leverage. The results of the study implied size, growth, business risk and non-debt tax shield have a significant positive impact on leverage of insurance companies in Ethiopia. On the other hand, the study revealed that profitability, liquidity, tangibility, firm age and dividend payout had no any significant relationship with capital structure of firms in Ethiopian insurance sector. Mohammed (2014) investigated empirically firm specific factors such as, firm leverage, growth opportunities, size, risk, tangibility and liquidity were impacts on capital structure and performance of Ethiopian insurance industry from 2004-2013 by using only secondary data. The results show that firm leverage, Size, tangibility and business risk were significant impact on performance of Ethiopian insurance companies. A significant negative relationship is established between leverage and performance. While firm growth and liquidity were not clear and statistical proved relationship obtained from the regression analysis. The results provide strong evidence in support of the pecking order theory of capital structure which asserts that leverage was a significant determinant of firms' performance. From the above, even if, there are some common factors identified by several researchers that significantly affects capital structure and profitability of insurance industry, the researchers observe that the results of the studies differ significantly due to variation of the socio-economic environment of various countries and the type of data they included in the analysis

2.3. Knowledge Gap.

Most capital structure studies made to date are based on data from developed countries which almost on nonfinancial firms. To mention some, research made on firms in the United States which was carried out by Titman and Wessels (1988) and others made later by Rajan and Zingales (1995) on G7 countries, which based empirical analysis to determine the capital structure of firms, were focused on non-financial firms. Moreover, these researchers used internal and external firm specific factors for their analysis. The macroeconomic variables and other external factors such as GDP growth rate and inflation rate considered. Therefore the aim of this study was to assess capital structure level of insurance company of Ethiopian insurance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methods and techniques the researcher used when conducting the study. The methods such as research design, source and collection techniques, population, and methods of data analysis

3.1. Research Design

To achieve stated objective, the researcher used descriptive research methods. Descriptive research designs focus on describing situation at set of circumstance by observing to give scientific description.

3.2. Source of Data and data collection techniques

The researcher used secondary source of data for this study. The data on insurance companies was taken from annual reports of NBE, information related to Ethiopian insurance companies capital structure.

3.3. Target population

While the target population for this particular study were all the insurance companies, currently operating in the country, a sample of 8 insurance companies (EIC, Nice, Awash, Africa, Nile, Nyala, Global and Nib) were taken. The procedure used for drawing the sample from the available lists is the insurance service year profile, for the reason that the study intended to use document sources. Therefore, sample size is decided based on the availability of operating data in the insurance operating in Ethiopia. Therefore, the researcher was used census method to conduct the study because the number of populations is small.

3.4 Method of data analysis and presentation

After the collection of the necessary data, the data was organized by using tables and figures to make it ready for processing. And the tabulated data would be analysed by using descriptive statistical analysis and it would be presented using graphs, table and percentage.

3.5 Definitions of key terms

Total debt to total equity ratio: Debt to equity ratio also referred to as leverage ratio is a commen measure of an organization capital strength or adequacy at a particular point in time. The formula: Debt/ Equity= Liability/Equity

Total debt to total Asset ratio:is an indicator of a company's financial leverage.

Formula to calculate: current asset net fixed asset and divide total liability

CHAPTER FOUR

4 Data Analysis, Interpretation and Presentation

4.1. Introduction

This chapter presents the discussions and analysis of the feedbacks gathered from secondary source of the Annual audited financial statement of Ethiopian life and none life insurance Company (2011-2018). The study assessed capital structure of Ethiopian insurance company during year 2011-2018. The sample of nine insurance companies such as EIC, awash, Nile, Nice, Nyala, Oromia, Global, Africa and Nib were used by the researcher. In this chapter the major findings of the study were analysed and discussed in line with the stated specific objectives that lead to draw conclusions and recommendations.

Debt to Equity Ratio: - Reflects the relative claims of creditors and shareholders against the assets of the firms.

Table 4.1.1 Debt to Equity Ratio of Life Insurance Company

Year	2011	2012	2013	2014	2015	2016	2017	2018
Total liability (‘000,000)	54.4	481.5	98.1	106	170.7	238.8	197,	8
Total Equity	507	256	834	1,013	1,117	1,148	1,148	14004
Debt to equity ratio	0.1	1.87	0.12	0.1	0.15	0.2	0.17	0.005
Average	0.33							

Source: Annual audited financial statements (2011-2018)

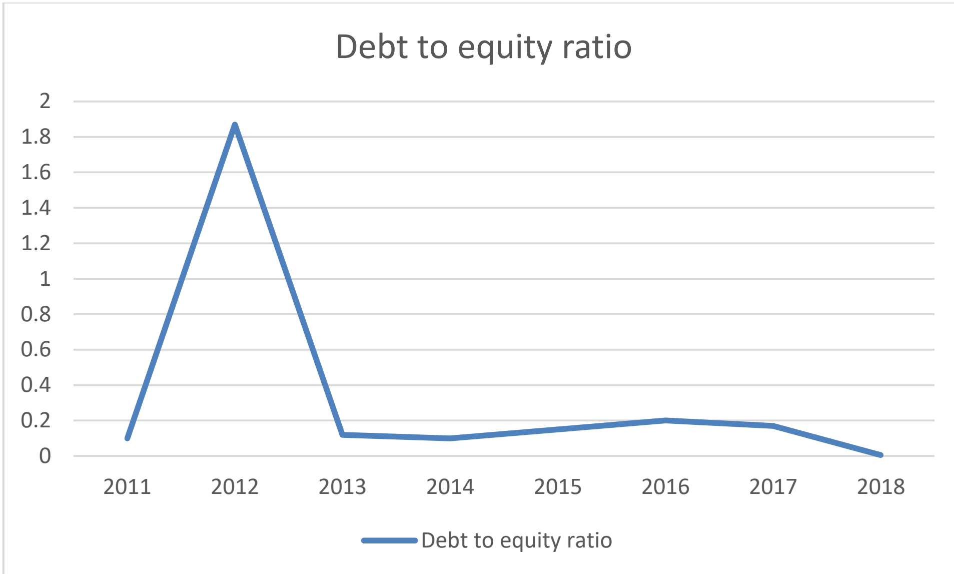

Fig. 4.1 debt equity ratio

As shown in the above table 4.1.1 Ethiopian life insurance company (ELIC) has 0.1 birr debt to equity ratio in 2011 fiscal year, 1.87 birr debt to equity ratio in 2012, 0.12 in 2013, 0.1 in 2014, 0.15 in 2015, 0.2 in 2016, 0.17 in 2017 and 0.005 in 2018.

This indicates that creditors of ELIC provided a birr in financing net assets of the company for every one birr contributed by ELIC. ELIC, Average debt to equity ratio for all year was 0.33 as compared with these results the ELIC asset was financed or funded by equity relative to debt for year 2011 - 2018. In all years under consideration generally ELIC has been used lower than Average debt to equity ratio of company except for year 2012

Table 4.1.2 Debt to asset ratio of Life Insurance Company

Year	2011	2012	2013	2014	2015	2016	2017	2018
Total liability	54,434,976.56	481,507,579.74	98,162,950.49	106,044,969.02	170,721,973.27	238,808,381.01	197,086,376.77	8255475
Total asset	562,066,468.40	737,957,196.50	925534041.69	1111750983.5	1282865464.72	1,386,846,923.92	1,597,585,569.16	962230

								7
Debt to total Asset	0.09	0.65	0.10	0.09	0.13	0.17	0.12	0.85
Average	0.31							

Source: Annual audited financial statements (2011-2018)

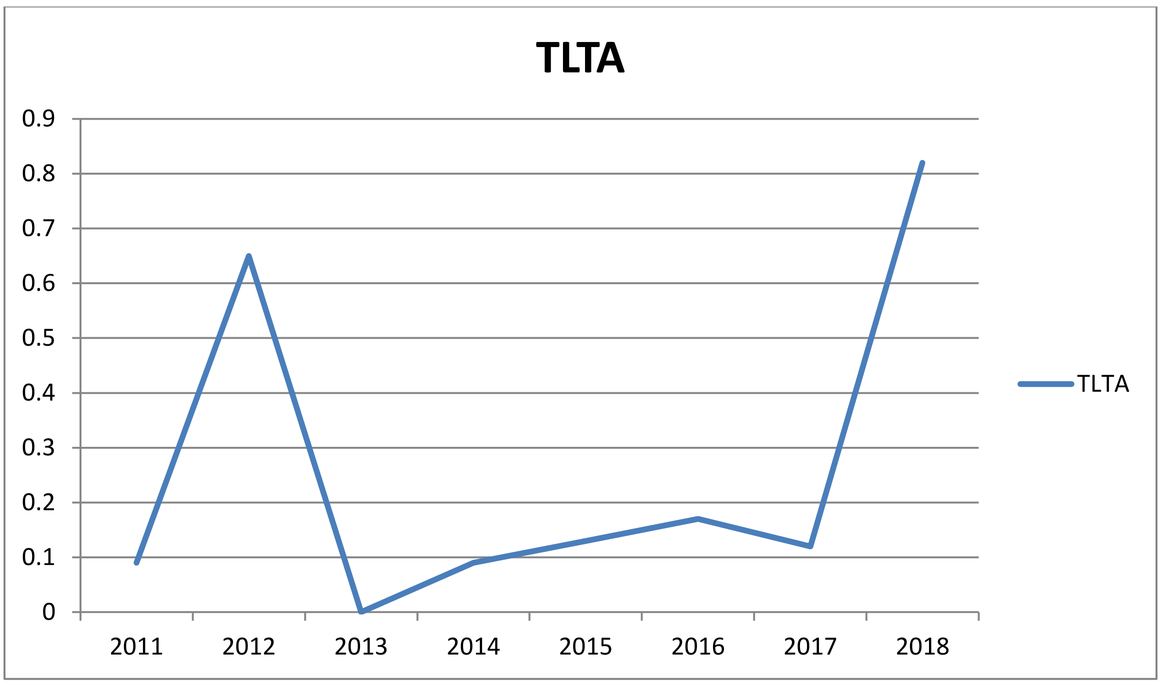

Figure 4.2 debt to asset ratio

As show on table 4.1.2, during the year 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018 ELIC has debt to Asset ratio of 0.09, 0.65, 0.10, 0.09, 0.13, 0.17, 0.12 and 0.85 respectively. ELIC Average debt ratio of 31% this indicates that the ELIC has financed 31% of its assets with debt. ELIC is less leveraged from year 2011-2018 indicates that the company was more less liability in all years under study. Generally, ELIC was less leveraged and it may not face difficulty in raising additional debt as creditors required a higher interest rate for taking higher risk.

Table 4.1.3 Total debt to total equity ratio of non-life Insurance companies

Year	2011	2012	2013	2014	2015	2016	2017	2018
Total liability	2324953 554	3350609 989	3870110 32	4341 3314 27	4845004184	53916 91732	556319 7315.3 5	81228 31
Total Equity	7590020 42	7964905 1	1235160 524	1370 8701 72	1890818346	23853 0376	255760 1542	43492 49
Debt to equity ratio	3.06	3.4	16.45	3.16	256.2	22.60	2.17	1.86
Average	38.6							

Source: Annual audited financial statements (2011-2018)

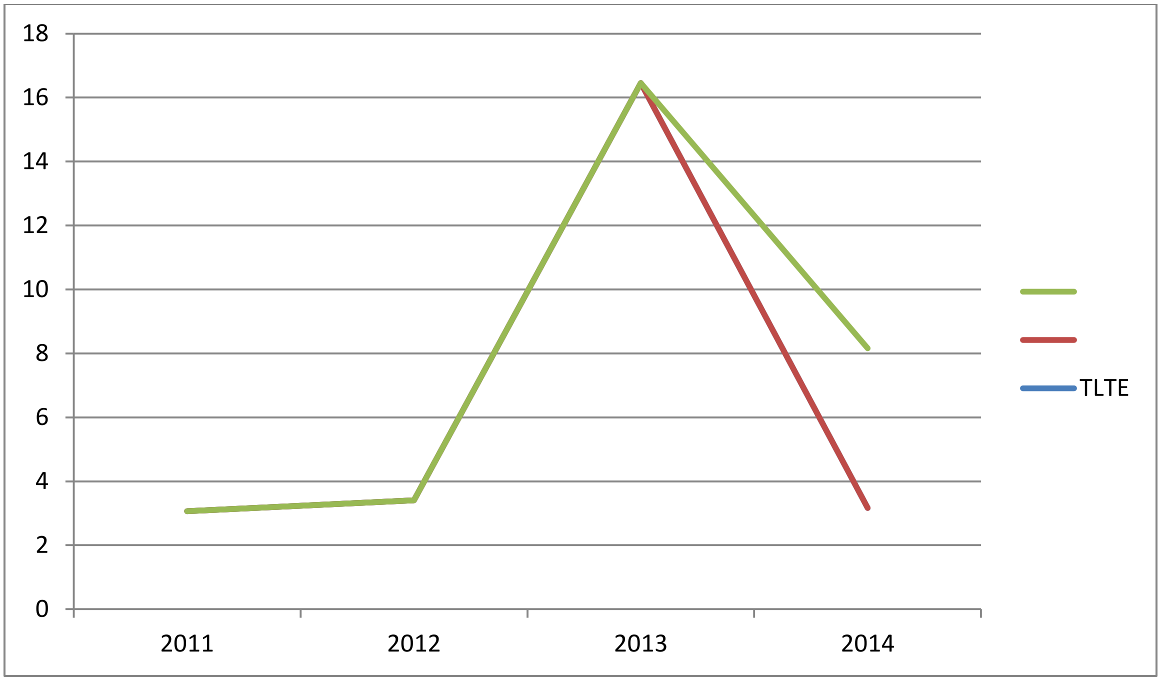

Fig 4.3 debt to total equity rato

As indicated in the above table 4.1.3 total debt to total equity ratio of Ethiopian non-life insurance company(ENIC) during the year 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018, was 3.06, 3.4, 16.45, 3.16, 256.2, 22.60, 2.17 and 1.86 respectively. The largest debt to equity which is 256.2 was in 2015 and followed by 2013 (16.45).

ENIC, Average debt to equity ratio for all year was 38.6 this result shows that ENIC asset was funded by creditors relative to company for year 2011 - 2018. In all years under consideration generally ENIC has been used higher than average debt to equity ratio of company.

Table 4.1.4 total debt to total asset of non-life insurance company

Year	2011	2012	2013	2014	2015	2016	2017	2018
Total liability	2324953554	3350609989	387011032	4341331427	4845004184	5391691732	5563197315.35	8122831
Total asset	3083955593	4330259019	5105270684	5890319428	6735597443	6912785109	9126665363	121472081

Debt to total Asset	0.75	0.77	0.075	0.73	0.71	0.77	0.60	0.006
Average	0.55							

Source: Annual audited financial statements (2011-2018)

As indicated on the above table 4.1.4, the total debt to total asset of non-life insurance company during the year 2011was 0.75, during the year 2012 was (0.77), in 2013 (0.075), in 2014 (0.73), in 2015 (0.71), in 2016(0.77), in 2017(0.60) and in 2018(0.006). A ratio of less than one means the company owns more asset than liabilities and can meet its obligations by selling its asset if needed. Therefore, ENIC Average debt ratio was 55% during the year 2011-2018, this indicates that the ENIC has financed 55% of its assets with debt.

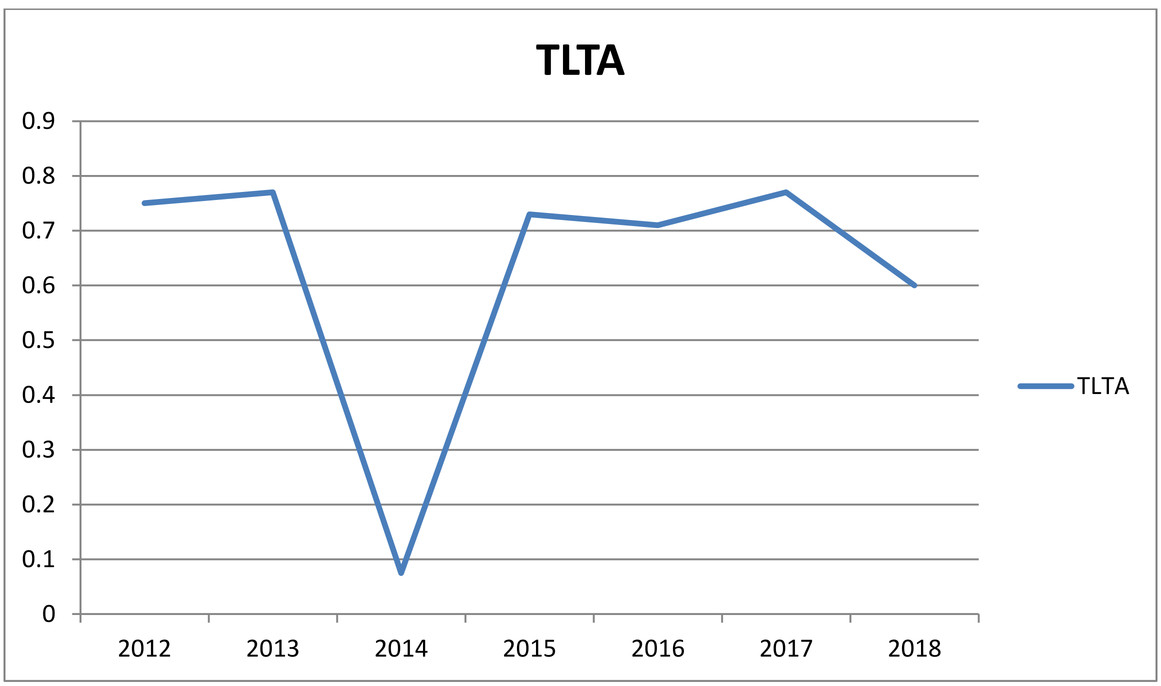

Fig 4.4 total liability to total asset ratio

CHAPTER FIVE

Conclusion and Recommendation

5.1 Conclusion

Under this chapter, the researcher drew conclusions and recommendations based on the objectives of the research as follows;

The findings indicated that debt to equity ratio of Ethiopian life insurance Company in all eight years under study showed it meets its current obligation; this implies that ELIC has been in good position cover the claims of creditors by using only its asset.

Concerning Debt to total asset ratio, ELIC is less leveraged from year 2011-2018 indicates company has less liability in all years under study and it might not face difficulty in raising additional debt as creditors required a higher interest rate for taking higher risk.

Debt to equity ratio of ENIC, Average debt to equity ratio for all year was 38.6. This result shows that ENIC has not been in good position and cannot cover the claims of creditors by using only its asset.

Debt to total asset of ENIC, average debt to asset ratio for year 2011-2018 was 55%. Therefore, the company owns more asset than liabilities and can meet its obligations by selling its asset.

To sum up:

- ELIC, have sufficient Assets to meet its obligation.
- But ELIC inefficient for the year 2012 because the ratio of debt to total equity is greater than one which is 1.87.
- ENIC, have no sufficient shareholders equity because its assets are more funded by debt in all years.

5.2 Recommendation

- Even if the ELIC has good position to covers the claims of creditors by using only its asset, these trends should continue unless it will affect ELIC in the long run.
- There was also inconsistency of debt to equity and total asset in Ethiopian Life Insurance Company during some years under study. But ELIC, liquidity position is appreciable and have continued in their trend.
- On the other hand, Ethiopian non-life insurance company should fund from shareholders asset not only from debt. Because it has not been in good position and cannot cover the claims of creditors by using only debt.
- Even debt to total asset is in good position that more asset than liabilities and can meet its obligations, should continue in this trend for long term

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