Internal factors influencing dividend payout of Ethiopian insurance companies

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Declaration

I, Henok Tefera, hereby declare that the thesis work entitled "Internal factors influencing dividend payout of Ethiopian insurance companies" submitted by me for the award of the degree of Master of Accounting and Finance of Addis Ababa University at Addis Ababa Ethiopia, is original work and it hasn't been presented for the award of any other Degree, Diploma, Fellowship or other similar titles of any other university or institution.

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This is to certify that the thesis prepared by Henok Tefera entitles: ***Internal factors influencing dividend payout of Ethiopian insurance companies*** and submitted in partial fulfillment of the requirements for the degree of masters of Science in accounting and finance compiles with the regulations of the university and meets the accepted standards with respect to originality and quality.

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Abstract

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Dividend policy decision has a great influence on financial structure, flows of funds and corporate liquidity. However it's yet unresolved puzzle. This paper is an effort to reveal the insight dynamics that determine dividend payout with reference to Ethiopian insurance companies on basis of data covers eight years (2007-2014) period. In light of prior literature, key explanatory variables were identified to disclose their relationship and influence on dividend payout. These variables are profitability, liquidity, leverage, firm's size, growth opportunity, lagged dividend payout ratio and business risk. The assumptions needed to be fulfilled for OLS were tested; the residual was found homoscedastic, free of multicollinearity, free of autocorrelation and normally distributed. Result using random effect panel least square regression exhibited that profitability, liquidity, growth opportunity and lagged dividend payout ratio has a significant relationship with dividend payout ratio. Also the study found that leverage, firm size and business risk were found to be insignificant in dividend payout decision of Ethiopian insurance companies. while designing their dividend payout policy board of directors and managers of insurance companies need to consider the company's profitability as it creates more cash inflow potential, company's liquidity position as inefficiency on it leads to decrease in profitability, the company's growth opportunity so as to be competent in the arena and the company's past year dividend payment as dividend is the only means of return from investment and liquidity option for shareholders in the absence of secondary stock market. On the same token investors need to consider profitability, liquidity, growth opportunity and previous year dividend in their investment decisions on Ethiopian insurance companies and to set their expectations.

Key Words: *dividend policy; dividend payout; insurance companies*

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List of acronyms

CLRM - Classical Linear Regression Model

DPR - Dividend Payout Ratio

DW - Dublin Watson

EIC - Ethiopian Insurance Corporation

LDPR - Lagged Dividend Payout Ratio

LOG - Logarithm

FEM - Fixed Effect Model

GRO - Growth opportunity

HP - Hypothesis

ISD - Insurance Supervision Directorate

LEV - Leverage

LIQ - Liquidity

NBE - National Bank of Ethiopia

NPV - Net Present Value

OLS - Ordinary List Square

PRO - Profitability

REM - Random Effect Model

RISK - Business Risk

ROE- Return on Equity

RQ - Research Question

SIZE- Firm's Size

SSA - Sub Saharan African

CHAPTER ONE

Introduction

1.1 Background of the study

Academician and researchers have developed many theoretical models describing the factors that managers of the corporate firms should consider while taking dividend policy decision. Against this background, this study makes an attempt to identify the major factors that influence the dividend payout and measure their relative significance on Ethiopian insurance companies.

Brealey and Myers, (2005) stated the dividend policy as one of the top ten most difficult unsolved problems in financial economics. This description is consistent with Black, (1976) who stated that "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don't fit together". It's the pivotal decision of choosing between distributions of profit to shareholders or investing them back into the business. Dividend decision is one of the major decisions of managerial finance and has a great influence on financial structure, flows of funds and corporate liquidity. Al-Malkawi, (2010), described that, the Relationship between dividend and the value of the share is not yet a clear cut.

Financial manager must understand the various conflicting factors which influence the dividend policy before deciding the allocation of its company's earnings into dividends and retain earnings. When the firm retains the earning; its impact can be seen in many factors such as decreased leverage ratio, expansion of activities and increase in profit in succeeding years. Whereas if firm pays dividend, it may need to raise capital, that will effect on risk characteristics of the firm Higgins, (1972). Therefore there are many dimensions to be considered on dividend theories, policies and practices. One way to enhance our understanding in the subject matter is to examine the factors that influence dividend payout decisions. However, the differences in research findings makes dividend decision still a fundamental as well as controversial area of managerial finance. Researchers like Linter, (1956); Rozeff, (1982) and Christopher, (2014) provided important insights into the different factors that affect dividend payout.

Different theories have been developed to describe dividend payout policy and its factors, such as; agency, dividend irrelevance, pecking order, signaling, bird-in-the-hand and tax preference theories. As per the model of Miller and Modigliani, (1961) dividend policy is irrelevant under perfect capital market because it has no effect on either the price of firm's stock or its cost of capital. The presence of market imperfections, such as taxes, asymmetric information, agency costs, and transaction costs means that we cannot dismiss the proposition that dividend policy is relevant to the firm's value (Shubiri, 2011).

Even-if it is controversial and the findings are inconclusive, there exist numerous researches on the issue of dividend in developed and emerging market economies. Most of the argument and controversy on dividend subject matter is pointed out from feasibility of market efficiency angle. However, for the countries like Ethiopia without active secondary market, there is no doubt for the relevance of the dividend policy. From the few researches of factors of dividend policy in Ethiopia, most of them focused on the banking sector (Dagnaw, 2009), (Kinfe, 2011) and (Simegn, 2013). As far as the researcher knowledge is concerned, except a single study by (Nuredin, 2012), which uses mixed approach to investigate the determinant factors of dividend in Ethiopian insurance companies in Ethiopia, the researcher couldn't find additional research on influential factors for divided in Ethiopian insurance companies. This shows that the research conducted in this topic is very limited in Ethiopia.

Following to a new insurance proclamation "Licensing and Supervision of Insurance", No. 86/1994, in 1994, the insurance industry of Ethiopia is characterized by private sector participation (Mihretu, 2010). At the present, there are seventeen insurance companies in operation and EIC is the only state owned company. Investment on insurance companies share is increasing and the total number of branches of insurance companies reached 332 in 2015. Moreover the total capital of the insurance companies grew considerably and reached birr 8.1 billion in 2015 (NBE, 2015). Therefore, the researcher is interested to exert maximum effort on investigation of influential factors of the dividend payout in Ethiopian private insurance companies, where there are no secondary markets that could help investors to convert their stock easily in to cash.

1.2 Overview of Ethiopian insurance companies

(Schaefer, 1992) in his study into the politics of Banking wrote that "Evolution of modern institutionalized financial system in Ethiopia started in 1905 following the establishment of the first bank by the name of Bank of Abyssinia. The bank began to transact fire and marine insurance as an agent of a foreign insurance company" (Schaefer, 1992, cited in (Nuredin, 2012).

The number of insurance companies increased significantly and reached 33 in 1960. At that time insurance business like any business undertaking was classified as trade and was administered by the provisions of the commercial code. The military government that came to power in 1974 put an end to all private entrepreneurship. Then all insurance companies operating were nationalized and from January 1, 1975. Onwards the government took over the ownership and control of these companies & merged them into a single unit called Ethiopian Insurance Corporation.

The nationalization of private insurance companies, the restrictions imposed on private business ventures, and management of the insurance sector had significant adverse impact on the development and growth of Ethiopian insurance industry (Hailu, 2007). However, following the change in the political environment in 1991, the proclamation for the licensing and supervision of insurance business No. 86/1994 heralded the beginning of a new era. Immediately after the enactment of the proclamation private insurance companies began to flourish. According to the directive of ISB/34/2014, any insurance company required to be a domestic company whose share capital (fully subscribed) not less than Ethiopian Birr 60 million for a general insurance business and Ethiopian Birr 15 million in the case of long term (life) insurance business and Ethiopian Birr 75 million to do both long term & general insurance business. (See appendix E for detail information on Insurance Companies in Ethiopia).

In recent years Ethiopia's insurance sector has shown strong resilience to a challenging macroeconomic environment and global development. The new economic policy has contributed to the rise of private sector market share in the banking and insurance business.

The new comers privately owned insurance companies have penetrated the financial market and reduced the market share of the public insurance company to 57% (NBE, 2015).

The insurance industry of Ethiopia signaled the increasing trends of competiveness of the private sector over the recent years. The gross premium of sector reached 5 billion in 2014, which is increasing 8% from previous year total premium of the sector i.e. 4.6 billion and also total number of branches also reached to 332. Moreover, in which non-life business represents 95% of the total size of capital as at June 30 2014, reached Birr 8.1billion showed a 32% growth rate over the preceding year owing to considerable improvements in capital injections and investment returns (NBE, 2015).

1.3 Statement of the problem

Dividend policy has been analyzed for many decades, but no universally accepted explanation for companies' observed dividend behavior has been established. Following the publication of the dividend irrelevance hypothesis of Miller and Modigliani, (1961) the literature on dividend policy has produced a large body of theoretical and empirical research. However, No general consensus has yet emerged. After several decades of investigation, scholars also disagree even about the same empirical evidences Al-Malkawi, (2010). M&M asserted that in perfect capital markets the value of a firm is independent of its dividend policy. However, the fallacy of their assumption can be explained by various market imperfections (taxes, transaction costs, information asymmetry, agency problems). Hence, these market imperfections have provided the basis for the development of various theories of dividend policy including tax-preference, clientele effects, signaling, and agency costs.

Adjacent to the controversy, researchers have developed and empirically tested various models to explain dividend behavior. For instance Rozeff, (1982) Found that a negative relationship between dividend payout ratio and the factors such as the growth rate of sales, insider ownership, and the beta of the firm. Contradictory of this, Crutchley and Hansen, (1989) suggested that the greater the size of firm, the greater the risk of firm's operation, and the lower the costs of capital has positive relationship with the greater dividend payout ratio of the firm.

Moreover, studies that have been conducted on dividend policy in the SSA region have mostly concentrated on the link between dividends and particular variables of interest. For instance, Nnadi & Akpomi, (2008) study the interrelationship between dividends, profits and taxes of Nigerian banks; Abor & Bokpin, (2010) look at the interaction between investment opportunities sets, dividend payout and corporate finance; while Abor & Fiador, (2010) focus on the link between dividend payout and corporate governance.

The difference in researches findings, while on the same topic, justified by (Al-Malkawi, 2007) that, dividend payment patterns of firms are a cultural phenomenon, influenced by customs, beliefs, regulations, public opinions, perceptions and panic, general economic conditions and several other factors, all in perpetual change, impacting different firms differently, hence the researchers couldn't have a uniform policy for all firms at all times. Furthermore Ross. et al., (2002) stated that, the important elements are not difficult to identify but the interactions between those elements are complex and no easy answer exists.

Furthermore, researchers have primarily focused influential factors of dividend policy on developed and emerging markets, while the study in the countries like Ethiopia without active secondary market is not extensively researched. As a result, the subject is not well established in the financial literature. Dividend policy in country without active secondary market is often very different in its nature and characteristics from that of developed and emerging markets. This particular study takes into account the insurance companies in Ethiopia to identify factors who influence dividend payout.

In Ethiopia as far as the knowledge of the researcher is concerned, there are very few researches conducted about dividend policy. Dagnaw, (2009), Kinfe, (2011) and Simegn, (2013) all conducted a study on determinants of dividend payment in Ethiopian private banks. As all of the three researches are on banking sector, this research quite different in its industry selection and incorporate the business risk variable.

A single study corresponding with this research is that, the research conducted by Nuredin, (2012) on determinants of dividend policy of insurance companies in Ethiopia from year 2003 to 2011 using mixed research approach (in depth interview and multiple regression technique). Nuredin have used five independent variables; profitability, growth, liquidity,

size and leverage of the firm and dividend policy as dependent variable. However, it couldn't assess the effect of lagged dividend and business risk on dividend payout decision of Ethiopian insurance companies. Hence, this research incorporates these two important variables.

Investors need to know factors that affect dividend policy thus research needs to be conducted so as to managers and investors make careful decisions. Therefore, the aim of this study is to fill this research gap by incorporating a more complete list of variables in determining the factors that affect dividend policy on two dimensions the decision to pay or not to pay dividend.

1.4 Research questions

Base on the above statement of the problems the researcher develops the following research question.

- What are firm specific factors that influence the dividend payout of Ethiopian insurance companies?

1.5 Objectives of the study

The general objective of this study is to examine internal factors influencing dividend payout of Ethiopian insurance companies. Specifically;

- To examine the effect of profitability on dividend payout of Ethiopian insurance companies.
- To examine the effect of liquidity on dividend payout of Ethiopian insurance companies.
- To examine the effect of leverage on dividend payout of Ethiopian insurance companies.
- To examine the effect of growth opportunity on dividend payout of Ethiopian insurance companies.

- To examine the effect of firm's size on dividend payout of Ethiopian insurance companies.
- To examine the effect of lagged dividend on dividend payout of Ethiopian insurance companies.
- To examine the effect of business risk on dividend payout of Ethiopian insurance companies.

1.6 Research hypothesis

The study was done based on the following research hypothesizes which were derived from the specific objectives and tested throughout the analysis of the study:

Hypothesis 1: *Profitability has a positive effect on dividend payout of Ethiopian insurance companies.*

Hypothesis 2: *Liquidity has a positive effect on dividend payout of Ethiopian insurance companies.*

Hypothesis 3: *Leverage has a negative effect on dividend payout of Ethiopian insurance companies.*

Hypothesis 4: *Growth opportunity has a negative effect on dividend payout of Ethiopian insurance companies.*

Hypothesis 5: *Firm size has a positive effect on dividend payout of Ethiopian insurance companies.*

Hypothesis 6: *Lagged dividend payout ratio has a positive effect on dividend payout of Ethiopian insurance companies.*

Hypothesis 7: *Business risk has a negative effect on dividend payout of Ethiopian insurance companies.*

1.7 Scope of the study

This study was delimited to:

Topic: The topic of this study was delimited to examining internal factors influencing dividend payout of Ethiopian insurance companies.

Variables Used: The variables used were delimited to one dependent and seven independent variables i.e. the dependent variable was dividend payout ratio and seven explanatory variables were profitability, liquidity, leverage, growth opportunity, firm's size, lagged dividend payout ratio and business risk.

Study Area and Study Duration: The area of this study was delimited to the only Ethiopian insurance companies for the period of 2007-2014.

Methodology Used: the methodology is delimited only to descriptive, correlation and panel least square regression analysis.

1.8 Significance of the study

The research work is expected to provide importance to board of directors, insurance companies managers, investors' and policy makers, thus; the study mainly have the following importance:

- Since this study aim at investigation of internal factors influencing dividend payout of Ethiopian insurance companies, would help the board of directors and management team of Ethiopian insurance companies in the new formulation of their dividend payout policy and/or to take corrective actions on their existing one.
- The current investors could also benefit from this study to look at the factors that determine dividend payout and to predict the pattern of dividend payment expected from their investment and to manage their investments. In addition this study helps the new investors to be aware of the possible factors that influence dividend payout in Ethiopian. This information would help them in their investment decisions too.

- As the adverse effect of the absence of secondary markets in the country on liquidity option for investors and practicability of the modern financial concepts reconfirmed in this study too. This study helps the concerned parties to work on the quick way out on the mater.
- The study may fill the gap on existing literature and provides evidence whether factors identified by previous studies in other countries researches are the same as the ones found in Ethiopia.
- The study may also open the issue of dividend payout in Ethiopian insurance industry for further and detail investigation for researchers.

1.9 Limitation of the study

- Secondary data for eight years (2007-2014) collected from sampled eight Ethiopian insurance companies. In addition, the study focus on firm specific variables only, the industry specific as well as macroeconomic variables are not included under this study. Thus, the primary limitations are the scope and sample size.
- The analysis and its derived conclusions based on the secondary data sources (i.e. mainly on published annual reports), both the dependent and independent variables proxied by numbers from this past data sources. Hence, the historical data may not reflect the current and future economic situation.
- Inapplicability of important proxies in similar other studies that were conducted in other countries, due to unavailability of stock market in the country, limit the study to focus on few applicable variables only.

1.10 Outline of the study

The study is organized in five chapters, chapter one discussed the introduction part Chapter two contains conceptual and theoretical framework and detailed discussions of empirical studies on dividend. Chapter three discussed about the research methodology adopted in this study; Chapter four discussed about the data analysis and interpretation of the out puts. The final chapter (chapter five) present conclusion, recommendations and farther research suggestions.

CHAPTER TWO

Literature review

In this chapter, literature on dividend and related aspects will reviewed. The views of other authors and previous researches on dividend will discussed. The first sub part discussed about the theoretical framework so as to have greater understanding on aspects of dividend. The second sub part present review of empirical studies. The third part discussed the firm specific factors that identified as influential factors of dividend payout. The gaps in existing literature described in the fourth part and the conceptual framework pictorially depicted in the final sixth part.

2.1 Theoretical framework

2.1.1 Meaning of dividend

Even if they are not alike in their research output on the dividend policy decision, the term dividend and dividend policy defined in different ways but almost in a similar meaning by numerous scholars. Davies and Pain, (2002), Defined dividend as, the amount payable to shareholders from profit or distributable reserves.

2.1.2 Meaning of dividend policy

Rozeff, (1982), Defined dividend policy as, the policy followed by the firm regarding the dividend versus retention decision. Dividend policy refers to the issue of how much of the total profit a firm should pay to its stockholders and how much to retain for investment so that the combined present and future benefits maximize the wealth of stockholders. However, not only specifies the amount of dividend, but also form of dividend, payment procedure etc. Dividend policy determines the decision of earnings between payment to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flow that accrues to stockholders Weston and Copeland, (1991).

Linter, (1956) Suggests that dividend depends in part on the firm's current earnings and in part on the dividend for the previous year. He found that major changes in earnings with

existing dividend rates were the most important determinants of the firm's dividend policy. He also found that firms tended to make periodic partial adjustments toward a target payout ratio rather than dramatic changes in payout. Fama and Babiak, (1968), support Lintner's argument that managers increase dividends only after they are reasonably sure that they can permanently maintain them at the new level.

Miller and Modigliani, (1961), suggested that, in a world without taxes, transaction costs, or other market imperfections, dividend policy is irrelevant to the value of the firm. They also suggested that dividend is determined residually; that is dividends are paid from the money left after investing in positive NPV projects. However, dividends may be relevant, given the fact that markets are not totally perfect.

An essential assumption of MM's dividend irrelevance theory is that investors and managers have identical information with regard to the company's future earnings and dividend. In reality, however, managers have better information about future prospects than investors. Empirical studies have observed that an increase in dividend leads to an increase in share price, while a decrease in dividend leads to a decrease in the price. MM also observed that companies are hesitant to dividends' decrease and do not increase dividends unless they expect better future earnings. It follows that investors might be attracted by the signal conveyed about future profits rather than the high rates of dividend payout (Brealey and Myers, 2005).

The literature also recognizes the fact that groups of investors have an incentive to pursue low-payout stocks, while other groups have an incentive to pursue high payout stocks and these groups are called clienteles Pettit, (1977). The clientele-effect argument states that dividend policy responds to the needs of stockholders. MM and several studies suggest that there is in fact a clientele-effect and which is also a value-relevant determinant of dividend policy. Also Al-Deehani, (2003) stated that, motives of a clientele-effect nature include meeting shareholders requirement for income, maintaining their loyalty, and supporting share price to maximize their wealth. There are motives, however, that don't relate to clientele-effect/signaling. Examples of such motives include the lack of profitable investments and the desire to reduce surplus liquid assets. These motives form a value-irrelevant group (Al-Deehani, 2003).

2.1.3 Historical Background of corporate dividend policy

As (Frankfurter & Wood, 1997) observed, the issue of corporate dividends has a long history and is bound up with the development of the corporate form itself. Corporate dividends date back at least to the early sixteenth century in Holland and Great Britain when the captains of sixteenth century sailing ships started selling financial claims to investors, which entitled them to share in the proceeds, if any, of the voyages. At the end of each voyage, the profits and the capital were distributed to investors, liquidating and ending the venture's life. By the end of the sixteenth century, these financial claims began to be traded on open markets in Amsterdam and were gradually replaced by shares of ownership.

The successes of the ventures increased their credibility and shareholders became more confident in their management (captains), and this was accomplished by, among other things, the payment of "generous dividends" Baskin, (1988). As a result, these companies began trading as going concern entities, and distributing only the profits rather than the entire invested capital. The emergence of firms as a "going concern" initiated the fundamental practice of firms to decide what proportion of the firms' income (rather than assets) to return to investors and produced the first dividend payment regulations (Frankfurter & Wood, 1997). Gradually, corporate charters began to restrict the payments of dividends to the profits only.

In the early stages of corporate history, managers realized the importance of high and stable dividend payments. In some ways, this was due to the analogy investors made with the other form of financial security then traded. Bonds paid a regular and stable interest payment, and corporate managers found that investors preferred shares that performed like bonds. "Paying consistent dividends a remained of paramount importance to managers during the first half of the 19th century" (Frankfurter & Wood, 1997).

In addition to the importance placed by investors on dividend stability, another issue of modern corporate dividend policy to emerge early in the nineteenth century was that dividends came to be seen as an important form of information. The scarcity and

unreliability of financial data often resulted in investors making their assessments of corporations through their dividend payments rather than reported earnings.

In short, investors were often faced with inaccurate information about the performance of a firm, and used dividend policy as a way of judging what management's views about future performance might be. Consequently, an increase in divided payments tended to be reflected in rising stock prices. As corporations became aware of this phenomenon, it raised the possibility that managers of companies could use dividends to signal strong earnings prospects and/or to support a company's share price because investors may read dividend announcements as a proxy for earnings growth (Frankfurter & Wood, 1997).

2.1.4 Dividend policy theories

Three main contradictory theories of dividends can be identified. Some argue that increasing dividend payments increases a firm's value. Another view claims that high dividend payouts have the opposite effect on a firm's value; that is, it reduces firm value. The third theoretical approach asserts that dividends should be irrelevant and all effort spent on the dividend decision is wasted. These views are embodied in three theories of dividend policy: high dividends increase share value theory (or the so-called 'bird-in-the-hand' argument), low dividends increase share value theory (the tax-preference argument), and the dividend irrelevance hypothesis. Dividend debate is not limited to these three approaches. Several other theories of dividend policy have been presented, which further increases the complexity of the dividend puzzle. Some of the more popular of these arguments include the information content of dividends (signaling), the clientele effects, and the agency cost hypotheses. These are discussed in turn below:-

2.1.4.1 Dividend Irrelevance Hypothesis

The seminal work of Miller and Modigliani, (1961), discussed that, Given that in a perfect market dividend policy has no effect on either the price of a firm's stock or its cost of capital, shareholders wealth is not affected by the dividend decision and therefore they would be indifferent between dividends and capital gains. The reason for their indifference is that shareholder wealth is affected by the income generated by the investment decisions

a firm makes, not by how it distributes that income. Therefore, in M&M's world, dividends are irrelevant. M&M argued that regardless of how the firm distributes its income, its value is determined by its basic earning power and its investment decisions. They stated that "given a firm's investment policy, the dividend payout policy it chooses to follow will affect neither the current price of its shares nor the total returns to shareholders".

In other words, investors calculate the value of companies based on the capitalized value of their future earnings, and this is not affected by whether firms pay dividends or not and how firms set their dividend policies. M&M go further and suggest that, to an investor, all dividend policies are effectively the same since investors can create "***homemade***" dividends by adjusting their portfolios in a way that matches their preferences.

M&M based their argument upon idealistic assumptions of a perfect capital market and rational investors. The assumptions of a perfect capital market necessary for the dividend irrelevancy hypothesis can be summarized as follows:

1) No differences between taxes on dividends and capital gains;
2) No transaction and flotation costs incurred when securities are traded;
3) All market participants have free and equal access to the same information (symmetrical and costless information);
4) No conflicts of interests between managers and security holders (i.e. no agency problem); and
5) All participants in the market are price takers. Given the importance of M&M's argument in the dividend policy debate, the following section provides their proof of irrelevancy.

2.1.4.2 High Dividends Increase Stock Value (Bird-In-The-Hand HP)

One alternative and older view about the effect of dividend policy on a firm's value is that dividends increase firm value. In a world of uncertainty and imperfect information, dividends are valued differently to retained earnings (or capital gains). Investors prefer the "bird in the hand" of cash dividends rather than the "two in the bush" of future capital gains. Increasing dividend payments, ceteris paribus, may then be associated with increases

in firm value. As a higher current dividend reduces uncertainty about future cash flows, a high payout ratio will reduce the cost of capital, and hence increase share value (Gordon and Shapiro, 1956).

Miller and Modigliani, (1961) Have criticized the bird in the hand hypothesis and argued that the firm's risk is determined by the riskiness of its operating cash flows, not by the way it distributes its earnings. Consequently, M&M called this argument the bird-in-the-hand fallacy. Further, Bhattacharya, (1979) suggested that the reasoning underlying the Bird in the hand hypothesis is fallacious. Moreover, he suggested that the firm's risk affects the level of dividend not the other way around. That is, the riskiness of a firm's cash flow influences its dividend, but increases in dividends will not reduce the risk of the firm.

2.1.4.3 Low Dividends Increase Stock Value (Tax-Effect HP)

The tax-effect hypothesis suggests that low dividend payout ratios lower the cost of capital and increase the stock price. In other words low dividend payout ratios contribute to maximizing the firm's value. This argument is based on the assumption that dividends are taxed at higher rates than capital gains. In addition, dividends are taxed immediately, while taxes on capital gains are deferred until the stock is actually sold. These tax advantages of capital gains over dividends tend to predispose investors, who have favorable tax treatment on capital gains, to prefer companies that retain most of their earnings rather than pay them out as dividends, and are willing to pay a premium for low-payout companies. Therefore, a low dividend will lower the cost of equity and increases the stock price (Brennan, 1970).

In many countries a higher tax rate is applied to dividends as compared to capital gains taxes. Therefore, investors in high tax brackets might require higher pre-tax risk-adjusted returns to hold stocks with higher dividend yield. This relationship between pre-tax returns on stocks and dividend yields is the basis of a posited tax-effect hypothesis.

2.1.4.4 Clientele Effects of Dividends Hypothesis

Miller and Modigliani, (1961) in their seminal paper noted that the pre-existing dividend clientele effect hypothesis might play a role in dividend policy under certain conditions. They pointed out that the portfolio choices of individual investors might be influenced by

certain market imperfections such as transaction costs and differential tax rates to prefer different mixes of capital gains and dividends. M&M argued that these imperfections might cause investors to choose securities that reduce these costs. M&M termed the tendency of investors to be attracted to a certain type of dividend-paying stocks a "dividend clientele effect". Nonetheless, M&M maintained that even though the clientele effect might change a firm's dividend policy to attract certain clienteles, in a perfect market each clientele is "as good as another"; hence the firm valuation is not affected; that is, dividend policy remains irrelevant.

In practice, investors often face different tax treatments for dividend income and capital gains, and incur costs when they trade securities in the form of transaction costs and inconvenience. For these reasons and based on different investors' situations, taxes and transaction costs may create investor clienteles, such as tax minimization induced clientele and transaction cost minimization induced clientele respectively. These clienteles will be attracted to firms that follow dividend policies that best suit their particular situations. Similarly, firms may tend to attract different clienteles by their dividend policies.

Allen, Bernardo and Welch, (2000) suggest that clienteles such as institutional investors tend to be attracted to invest in dividend-paying stocks because they have relative tax advantages over individual investors. These institutions are also often subject to restrictions in institutional charters (such as the "prudent man rule"), which, to some extent, prevent them from investing in non-paying or low-dividend stocks. Similarly, good quality firms prefer to attract institutional clienteles (by paying dividends) because institutions are better informed than retail investors and have more ability to monitor or detect firm quality.

- ♠ **Tax-Induced Clientele-Effects**

Since most of the investors are interested in after-tax returns, the different tax treatment of dividends and capital gains might influence their preference for dividends versus capital gains. This is the essence of the tax-induced dividend clientele effect hypothesis (Al-Malkawi et al., 2007).

- **Transaction Cost-Induced Clientele**

Al-Malkawi, (2010), another argument of the dividend clientele effect hypothesis is based on the proposition that dividend policy may influence different clienteles to shift their portfolio allocation, resulting in transaction costs. Transforming one financial asset to another, transaction costs need to be incurred. That is, M&M's notion of homemade dividends is not costless and the existence of such costs may make dividend policy not irrelevant.

The other effect of transaction costs on dividend policy is related to the fact that firms may need to restore cash paid out as dividends with new equity issues (or debt financing) to take advantage of new investment opportunities. If issuing costs are significant, then firms are most likely to rely on retained earnings rather than external financing. This is reinforced by the empirical fact that retained earnings constitute the major source of firm finance not just in developing but also even in developed capital markets (Al-Malkawi, 2010).

An important implication of the dividend clientele effect hypothesis is that, by changing its dividend policy, a firm's ownership structure might also change. Another implication of clientele theory is that firms should attempt to adopt a stable dividend policy to avoid inducing shareholders to modify their portfolios, entailing transaction costs (Scholz, 1992).

2.1.4.5 The Information Content of Dividends (Signaling) HP

Another hypothesis for why M&M's dividend irrelevance hypothesis is inadequate as an explanation of financial market practice is the existence of asymmetric information between insiders (managers and directors) and outsiders (shareholders). But managers who look after the firm usually possess information about its current and future prospects that is not available to outsiders. This informational gap between insiders and outsiders may cause the true intrinsic value of the firm to be unavailable to the market. If so, share price may not always be an accurate measure of the firm's value. In an attempt to close this gap, managers may need to share their knowledge with outsiders so they can more accurately understand the real value of the firm (Al-Malkawi, 2010).

Many academics and financial practitioners also suggest that dividends might have implicit information about a firm's prospects. Even (Miller and Modigliani, 1961) suggest that when markets are imperfect share prices may respond to changes in dividends. In other words, dividend announcements may be seen to convey implicit information about the firm's future earnings potential. This proposition has since become known as the "information content of dividends" or signaling hypothesis. However, M&M dismissed the possibility that this occurred by suggesting that the empirical evidence does not support the notion that investors prefer dividends to retained earnings (Al-Malkawi, 2010).

Accordingly, it would not be surprising to find that managers are reluctant to announce a reduction in dividends. (Linter, 1956) Argued that, firms tend to increase dividend when managers believe earnings have permanently will increase. This suggests that dividend increases imply long-run sustainable earnings. This prediction is also consistent with what is known as the "dividend-smoothing hypothesis". That is, managers will endeavor to smooth dividends over time and not make substantial increases in dividends unless they can maintain the increased dividends in the foreseeable future (Al-Malkawi et al., 2007).

2.1.4.6 Agency Costs and Free Cash Flow Hypothesis

One of the assumptions of Miller and Modigliani, (1961) perfect capital market is that there are no conflicts of interests between managers and shareholders. In practice, however, this assumption is questionable where the owners of the firm are distinct from its management. In these cases managers are always imperfect agents of shareholders (principals). This is because managers' interests are not necessarily the same as shareholders' interests, and they might conduct actions that are costly to shareholders, such as consuming excessive perquisites or over-investing in managerially rewarding but unprofitable activities.

Shareholders therefore incur (agency) costs associated with monitoring managers' behavior, and these agency costs are an implicit cost resulting from the potential conflict of interest among shareholders and corporate managers. The payment of dividends might serve to align the interests and mitigate the agency problems between managers and shareholders, by reducing the discretionary funds available to managers (Rozeff, 1982).

Another source of the agency costs problem that may be influenced by dividend policy is the potential conflict between shareholders and bondholders. Shareholders are considered as the agents of bondholders' funds. In this case, excess dividend payments to shareholders may be taken as shareholders expropriating wealth from bondholders (Jensen and Meckling, 1976).

As noted earlier, M&M suggested that a firm's dividend policy is independent of its investment policy. By contrast, the free cash flow hypothesis implies that dividend policy and the investment decision are interrelated. It is argued that an increase in dividend payments will reduce the "overinvestment" problem, which will have a positive impact on the market value of the firm, ceteris paribus (Lang and Litzenberger, 1989).

However, accepting the notion that increasing dividends will reduce the funds available to managers and force them to be in the market to acquire funds means that shareholders should be willing to tolerate the risk of the firm being more indebted and also accept paying higher personal tax rates on dividends. In other words, shareholders have to tradeoff between the costs and benefits of acquiring more dividends (Al-Malkawi, 2010).

2.1.5 Types of Dividend Policy

2.1.5.1 Fixed Percentage Payout Ratio Policy

In this policy the company pays out a fixed percentage of annual profits as dividends, i.e. it maintains a constant payout ratio. The advantages of this policy from companies' point of view are that it is relatively easy to operate and sends a clear signal to investors about the level of the company's performance. The disadvantage for a company is that it imposes a constraint on the amount of funds it is able to retain for reinvestment. This dividend policy is unsuitable for companies with volatile profits which have shareholders requiring a stable dividend payment existence (Watson & Head, 2010).

2.1.5.2 Zero Dividend Policy

A company could decide to pay no dividend at all. Such an extreme policy is likely to be highly beneficial to a small minority of investors while being totally unacceptable to the majority. Such a policy is easy to operate and will not incur the administration costs

associated with paying dividends. A zero dividend policy will allow the company to reinvest all of its profits and so will be attractive to investors who, from a personal tax perspective, prefer capital gains to dividends. Given that the majority of ordinary shareholders are institutional investors who rely on dividend payments for income, a zero dividend policy is hardly likely to be acceptable on an ongoing basis. A zero dividend policy, however, is often adopted by new companies which require large amounts of reinvestment in the first few years of their existence (Watson & Head, 2010).

2.1.5.3 Constant or Steadily Increasing Dividend

A company may choose to pay a constant or steadily increasing dividend in either money terms or in real terms. A constant or increasing dividend in money terms may result in a declining or increasing dividend in real terms, depending on the level of inflation/ deflation. A constant or increasing dividend in real terms will usually result in an increasing dividend in money terms. In both policies, dividend increases are kept in line with long-term sustainable earnings. It is important for a company to avoid volatility in dividend payments as doing so can help to maintain a stable share price. Cuts in dividends, however well signaled or justified to the markets, are usually taken to mean financial weakness and result in downward pressure on a company's share price (Watson & Head, 2010).

2.1.5.4 Residual Policy

Dividends are just what are left after the company determines the retained profits required for future investment. This policy gives preference to its positive NPV (Net Present Value) projects and paying out dividends if there are still left over funds available. Dividend becomes a circumstantial payment paid only when the investment policy is satisfied. Firms adopts this type of policy because they more rely on internally generated funds and are not willing to raise new capital for saving floatation and other costs associated with issuing debt and the managers think that high retention cause more growth to the company. There is a tendency therefore, that this type of policy could give rise to a zero dividend structure. Firms may need to modify this policy to ensure that investors of the different clienteles are not chased out by a strict application of the policy (Kolb and Rodriguez, 1996).

2.1.5.5 Smoothed Residual Dividend Policy

This policy suggests dividend fluctuations should be kept to a minimum. Dividend policy changes tend to lag behind earnings fluctuations. Dividends are set equal to the long-run residual between forecasted earnings and investment requirements. Dividend changes, in turn, are made only when this long run residual is expected to change; earnings fluctuations believed to be temporary are ignored in setting dividend payments. The clear preference is for a stable, but increasing, dividend per share (Shapiro, 1990).

As per Linter, (1956) it is many management's belief that most stockholders prefer a reasonably stable rate and that the market puts a premium on stability or gradual growth in rate were strong enough that most managements sought to avoid making changes in their dividend rates that might have to be reversed within a year or so.

2.1.5.6 Alternative Policies to Paying Cash

In order to give shareholders a choice between dividends or new shares, the firm might choose to buy back shares. This is share or stock repurchase. This has a significant advantage in terms of tax to the shareholders. While the dividend is fully taxed just as ordinary income, the stock repurchase or buyback is not taxed until the shares are sold and the shareholder makes a profit or capital gain (Ross et. al., 2002)

2.1.6 Types of dividend

2.1.6.1 Cash dividend

The most common way to pay dividend is in the form of cash. A company should have enough cash in its bank account when cash dividends are declared. If the company doesn't have enough cash at the time of paying cash dividend, arrangement should be made to borrow funds. Payment of cash dividend shouldn't lead to liquidity problem for the company. Both the total assets and the net worth of the company are reduced by the distribution of cash dividend. Beside the market price of the share affected in most cases by the amount of cash dividend distributed. Cash dividend has the direct impact on the shareholders. The volume of the cash dividend depends upon earnings of the firm and on

the management attitude or policy. Cash dividend has psychological value for stockholders. Cash dividend is not only a way to earnings distribution but also a way of perception improvement in the capital market (Brigham & Houston, 2004).

2.1.6.2 Stock dividend/bonus share

A stock dividend occurs when the board of directors authorizes a distribution of common stock to existing shareholders. Stock dividend increases the number of outstanding shares of the firm's stock. Although stock dividend does not have a real value, firms pay stock dividend as a replacement for a supplement to cash dividend. Under stock dividend, shareholders receive additional shares of the company in lieu of cash dividends. Stock dividend requires an accounting entry transfer from the retained earnings account to the common stock and paid in capital accounts. This has the effect of increasing the number of outstanding shares of the company as a result the decrease in earnings per share which effect the reduction in the market price of the share. Since the shares are distributed proportionately, shareholders retain his proportionate ownership of the company (Brigham & Houston, 2004).

2.1.6.3 Scrip dividend

A scrip dividend is a distribution of surplus to the stockholders in the form of notes or promises to pay the amount of dividend at a certain time. The notes are called dividend certificates or scrip. Sometime companies need cash generated by business earning to meet business requirements or with-hold the payment of cash dividend because of temporary shortage of cash. In such circumstance the company may issue scrip dividend payable at future dates (Brigham & Houston, 2004).

2.1.6.4 Bond dividend

With the theory and concept of scrip dividend, if dividends are paid in the form of bond (to shareholders), promising that it will mature in future date is known as bond dividend. Therefore the intention and purpose of bond dividend is also the postponement of dividend

payment for some time. The difference between bond and scrip dividend is that bond carries relatively longer maturity date than scrip dividend. Bonds used to pay carry interest and it means that the company assumes the fixed obligation of interest payment annually and principal amount of bond at maturity date (Brigham & Houston, 2004).

2.1.6.5 Stock split and reserve split

This is a method that is commonly used to lower the market price of a firm's stock by increasing the number of shares belonging to each shareholder. The effect of a stock split is an increase in the number of shares outstanding and a reduction in the par, or stated, value of shares. The total net worth of the firm remains unchanged. The stock split does not involve any cash payment, only additional certificates representing new shares. A method that is used to raises the market price of a firm's stock by exchanging certain number outstanding shares for one new share of stock (Brigham & Houston, 2004).

The effect of a reverse split is a decrease in the number of shares outstanding and an increase in the par, or stated, value of shares. The total net worth of the firm remains unchanged. The reverse split does not involve any cash payment, only additional certificates representing new shares. When the market price of share of a company is falling gradually, the company may adopt reserve split which may increase the market price of share and help to maintain efficient situation of the company (Brigham & Houston, 2004).

2.1.6.6 Stock repurchase

It is the process of repurchasing back outstanding share of any company. A corporation's repurchase of its stock can serve as a tax advantages substitute for dividend payout. Repurchase have the effect of raising share prices so that shareholders can be taxes at the capital gain rate instead of ordinary dividend rate on cash dividend. Stock is repurchased specially when the firm has abnormally high profits and is not in a position to effectively utilize surpluses (Weston and Copeland, 1991).

2.2 Review of empirical studies

2.2.1 Studies in developed and emerging market countries

(Dickens et al., 2002), Conducted a study to identify factors that explain dividend policy of United States banks from 1998 to 2000 using Tobit regression method. They used investment opportunity, capital adequacy, future earnings, Size, inside ownership, dividend history and risk as independent variables. The finding indicated that negative relationship exists between dividend payments and investment opportunities, signaling, ownership, and risk and a positive relationship to size and dividend history. But risk and capital adequacy proxied by earning volatility and capital-to-asset ratio respectively has no statistically significant effect on dividend yield, the rest of the variables have statistically significant effect on dividend yield.

(Al-Malkawi et al., 2007), Examines the determinants of corporate dividend policy in Jordan. The study was used a firm-level panel data set of all publicly traded firms on the Amman Stock Exchange between 1989 and 2000. The study was developed eight research hypotheses, which was used to represent the main theories of corporate dividends. The results also suggested that the proportion of stocks held by insiders and state ownership significantly affect the amount of dividends paid. Size, age, and profitability of the firm also found that determinant factors of corporate dividend policy in Jordan. The findings provided support for the agency costs hypothesis and are broadly consistent with the pecking order hypothesis. The result was not provided support for the signaling hypothesis.

(Lee, 2009), conducted a study to examine what factors significantly affect the dividend policy of Korean banks from 1994 to 2009 using multiple regression technique. The factors used are profit and risk, risk is measured by three variables, capital to asset ratio of the banks, loan to asset ratio of the banks, and non-performing loans to asset ratio of the banks. The finding indicated that the banks with higher profitability or performance pay more dividends. Furthermore, the finding showed strong significant and consistent evidences that the safer banks pay more dividends.

(Gupta and Banga, 2010), Investigated the determinants of corporate dividend policy of Indian companies. The study was re-examined various factors that ware a bearing on the dividend decision of a firm by using a two-step multivariate procedure. First factor analysis was performed on the data to extract prominent factors from various variables and then multiple regressions conducted on the factors. Results of factor analysis indicated that leverage, liquidity, profitability, growth and ownership structure are the major factors. Regression on these factors showed that leverage and liquidity to be the determinants of the dividend policy for Indian companies.

(Imran, 2011), empirically investigated the factors affecting the dividend payout decisions of Pakistan engineering sector using the data of 36 listed firms during 1996–2008. Using various panel data techniques, he found that the dividend payout was positively affected by last year's dividend, earning per share, profitability, sales growth and the size of the firm, whereas it was negatively affected by the cash flow.

(Rehman and Takumi, 2012), conducted a study on determinants of dividend payout ratio of Pakistani companies listed on Karachi Stock Exchange for the year 2009 using multiple regression technique. The study used dividend payout ratio as dependent variable and debt to equity ratio, profitability, cash flow, market to book value ratio, current ratio and corporate tax. The finding showed that profitability, debt to equity and market to book value ratio have significant positive impact on dividend payout ratio, the rest of the variables are insignificant.

(Saeed et al, 2014), Conduct an empirical analysis of determinants of dividend payouts of financial sector firms of Pakistan listed at Karachi Stock Exchange. The study was applied a panel data methodology and takes Profitability, Liquidity, Size, Cash Flow, Asset tangibility and Earnings per share as an independent variables and their impact was analyzed on the dividend payouts of the firm. Results showed that cash flow have significant negative relationship and earnings per share have a significant positive association with the dividend payout of the company, while asset tangibility, profitability and size have in-significant negative relationship and liquidity has insignificant positive relationship with dividend payouts.

(Christopher, 2014) Empirically test the Determinants of the Dividend Policy of Lebanese listed banks. The study considered the impact of seven variables, namely, profitability, liquidity, leverage, firm size, growth, firm risk and previous year's dividend payout on the dividend payout ratios by using an unbalanced panel dataset of listed banks between the years of 2005 and 2011. Empirical results showed that the dividend payout policies are positively affected by the firm size, risk and previous year's dividends, but are negatively affected by the opportunity growth and profitability.

(Khan & Asharaf, 2014) Carried out a research entitled "In Pakistani Service Industry: Dividend Payout Ratio as Function of some Factors". The explained variable of the study was that dividend payout ratio and the explanatory variables were of Corporate Profitability, Cash flow, tax, Sales Growth and Debt to Equity ratio. The result of the study showed that dividend payout ratio is not the function of Corporate Profitability, Cash Flow, Tax, and growth opportunity except Debt to Equity ratio.

2.2.2 Studies in Sub-Saharan African countries

(Abor and Amidu, 2006) Conducted a study on the determinants of dividend payout ratios in Ghana during a six-year period. Using an Ordinary Least Squares model, the results showed positive relationships between dividend payout ratios and profitability, cash flow, and tax. The results also showed negative associations between dividend payout and risk, institutional holding, growth and market-to-book value. However, the significant variables in the results were only profitability, cash flow, sales growth and market-to book value.

(Nyor & Adekunle, 2013) Conducted a study in Nigerian banking industry to ascertain what accounts for dividend payout from year 2001 to 2010 using multiple regression technique. Profit after tax, shareholders fund and liquidity was included as independent factor and dividend payout as dependent factor. The finding showed that profit after tax, shareholders fund and liquidity have no statistically significant effect on dividend payout at Nigerian banks.

(Maniagi et.al., 2013) Examines determinants among dividend payout of non-financial firms listed on Nairobi Securities Exchange using descriptive statistics and multiple regressions. The researchers used Dividend payout ratio as a dependent variable while

profitability, Growth, current earnings, and liquidity as independent variables and size and business risk was taken as moderating variables. The result showed that Current earnings, profitability Growth opportunities GO firm‘s size SZ and business risk BR are the main determinants of dividend payout for non- financial firms on NSE.

(Badu, 2013), examined the determinants of dividend payout policy of listed financial institutions in Ghana from year 2005 to 2009 using panel data regression technique. The factors used in the study are profit, growth, age, liquidity and collateral. The result shows statistically significant and positive relationship between age and liquidity with dividend payment, but statistically insignificant relationship between profitability, collateral and growth with dividend payment. Therefore, the major determinants of dividend policy of financial institutions in Ghana are age of the firm and liquidity.

2.2.3 Studies in Ethiopia

(Dagnaw, 2009), Conducted a study on determinants of dividend payment in Ethiopian private banks using multiple regression technique from 1999/2000 to 2007/08. The author used four independent variables; earning per share (EPS), debt ratio, equity ratio, liquidity ratio and one dependent variable, dividend per share. The result showed that earning per share (EPS) and debt ratio (Leverage) have positive strong relationship with dividend per share while the rest have no significant relationship with dividend per share.

(Kinfe, 2011), conducted a study on determinants of dividend payout in Ethiopian banking industry from 2006 to 2010 using multiple regression technique. The author has identified six independent variables; profitability, liquidity, leverage, firm size, growth, and lagged dividend and dividend payout as dependent variable. The finding showed that firm size, lagged dividend and liquidity have significant effect on dividend payout of Ethiopian banking industry with a sign of positive for firm size and lagged dividend and negative for liquidity, the rest of the variables have no significant effect on dividend payout of Ethiopian banking industry.

(Nuredin, 2012), conducted a study on determinants of dividend policy in Ethiopian insurance companies from year 2003 to 2011 using multiple regression technique. The author have used five independent variables; profitability, growth, liquidity, size and leverage of the firm and dividend policy as dependent variable. The finding showed that profitability, liquidity and growth have a strong relationship with dividend policy of Ethiopian insurance companies with positive, positive and negative signs respectively. The rest variables has no relationship with dividend policy of Ethiopian insurance companies.

(Simegn, 2013), Researched the determinants of dividend policy of banks in Ethiopia using multiple regression technique from 2002-2011. The researcher included; current earning, previous year's dividend, liquidity, leverage, loan loss provision and bank's age are as explanatory variables for the dividend policy of Ethiopian banks. The regression result shows that current earning, previous year's dividend, bank's age and loan –loss provisions have positive and statistically significant impact on the banks dividend payments whereas liquidity has negative impacts and leverage is not an important variable for the banks dividend decision.

2.3 Factors influencing Dividend Policy

a) Profitability

The significant effect of profitability in dividend payout ratio decisions evident by previous research works of (Abor and Amidu A. M., 2006), (Al-Malkawi et al., 2007), (Al-Najjar and Hussainey, 2009), (Gupta and Banga, 2010), (Kinfe, 2011), (Nuredin, 2012), (Christopher, 2014). The results on relationship of profitability and dividend payout have been mixed. As per the pecking order theory discussed in the previous part, the firms will prefer to rely more on internal funds or retained earnings, as a result the firms will have a tendency of paying less dividend and having more retained earnings. However, (Abor and Amidu A. M., 2006) Found that profit negatively associated with the dividend payout, which shows that the firms invest in their assets rather than paying dividends to shareholders.

(Pruitt and Gitman, 1991), surveyed financial managers of the 1,000 largest US firms about the interplay among the investment, financing, and dividend decisions in their firms. Their evidence suggested that important influences on the amount of dividends paid were current and past years' profits, the year-to-year variability of earnings, and the growth in earnings. (Baker and Powell, 2000) Found support for their hypothesis that the most important factors influencing a firm's dividend policy are the level of current and expected future earnings and the pattern or continuity of past dividends.

(Baker & Gandhi, 2007) Have found that the higher the return on equity, the greater is the firms retained earnings for reinvestment or the lower is the dividend payout. (Anupam, 2012), studied UAE companies for the years 2005 to 2009 and concluded that the profitability of the firms as measured by ROE has negative relationship with dividend payout, which indicates that the more profitable firms pay less dividends. Contrary to it, there are many. (Aivazian et. al., 2003), (Al-Malkawi et al., 2007), (Lee, 2009), (Kinfe, 2011), (Nuredin, 2012) have maintained that firms are more likely to raise their dividends if they are large and profitable. Their studies proved that the profitability is positively related to the dividend payout ratio.

(Al-Malkawi et al., 2007) Found out that the firm profitability ratio appeared to be a very strong and statistically significant determinant of the dividend payout ratio and this is consistent with the observation that firms normally pay a higher dividend ratio when there is a rise in firm profitability. Also (Nuredin, 2012), in his study on determinant of dividend policy of Ethiopian insurance companies asserted that profitability has a significant and positive relationship. However, the research result of (Kinfe, 2011) on determinant of dividend payout of Ethiopian banking industry found that there is no relationship between payout ratio and profitability.

b) Liquidity

(Ho, 2003), (Al-Najjar & Hussainey, 2009), (Ahmed and Javid, 2009), (Gupta & Banga 2010), (Kinfe, 2011), (Trang, 2012), (Nuredin, 2012), (Saeed et. al, 2014) and (Christopher, 2014) found in their study that, liquidity is one of the major influential factor in dividend payout decision.

(Ho, 2003) Found that the more liquid firms in Japan have higher dividend payouts. However, a few years later, (Al-Najja and Hussainey, 2009) proved that paying lower or higher dividends does not depend on a good or bad liquidity position.

(Mohamed et al., 2006), Empirically analyzed the determinants of dividend payment for the top 200 companies in terms of market capitalization, listed on the Malaysian share market. The findings showed that firms paid out on average, about 40 percent of their earnings as dividends. Furthermore, a quarter of their operating cash flow was used to pay dividend. Lastly, the study confirms the fact that liquidity was important determinants of dividend payment.

(Ahmed and Javid, 2009) Asserts that liquidity position is an important determinant of dividend payouts, Firms with more liquidity are likely to pay dividends as compared to the firms that have liquidity problems. In addition to this, (Maniagi et.al., 2013) stated that, cash Payments of dividend depend more on cash flows which reflect the company‘s ability to pay dividends. A poor liquidity position means fewer dividends due to shortage of funds.

(Kinfe, 2011), in his study on determinant factors of dividend payout on Ethiopian banking industry, found that liquidity has a negative relationship. However, the research result of (Nuredin, 2012) on determinant of dividend policy of Ethiopian insurance companies showed that there exist a positive and significant relationship between dividend policy and liquidity.

c) Leverage

Previous researchers have found size as one of the most important determinants of dividend payout policy (Abor and Amidu A. M., 2006), (Al-Malkawi et al., 2007), (Gupta and Banga, 2010), (Shubiri, 2011), (Kinfe, 2011), (Rehman and Takumi, 2012), (Nuredin, 2012), and (Christopher, 2014). The results on relationship of firm size and dividend payout have been mixed as well.

A growing number of studies have found that the level of financial leverage negatively affects dividend policy (Rozeff, 1982), (Jensen M. S., 1992) and (Al-Malkawi et al., 2007)

are among others. Their studies inferred that highly levered firms look forward to maintaining their internal cash flow to fulfill duties, instead of distributing available cash to shareholders and protect their creditors. However, (Al-Taleb, 2012) stated his disagreement as the debt benefits and efficiency ignored by mangers and it's called 'controlled hypotheses' further he discussed that Free cash flow can be increased for dividend payouts or repurchasing of stock and thereby payout current cash which would otherwise be invested in low returning projects or wasted by firms. The leverage structure totally depends on firm's decision and it brings positive influence on dividend payouts.

(Rozeff, 1982) Points out that, firms with high financial leverage tend to have low payouts ratios to reduce the transaction costs associated with external financing. (Lloyd et.al., 1985)Found statistically significant and negative relationship between firm's risk and the dividend payout ratios. Their findings suggest that firms having a higher level of risk will pay out dividends at lower rate. Contrary to this, (Mohamed et al., 2006) examined an emerging market and found a direct relationship between financial leverage and debt-burden level that increases transaction costs. Thus, firms with high leverage ratios have high transaction costs, and are in a weak position to pay higher dividends to avoid the cost of external financing. In addition (Dhillon, 1986), however, found conflicting evidence for the relationship between dividend payout ratios and leverage. In some industries payout and leverage ratios are positively related while in other industries the relationship is negative.

Furthermore, as argued by (Jensen M. C., 1986), debt can serve as a substitute device for dividends in reducing the agency costs of free cash flow. That is, when a firm obtains debt, it makes a fixed commitment to creditors, which reduces the discretionary funds available to managers and subjects them to the scrutiny of debt-suppliers. This suggests that, highly levered firms are expected to have low dividend payouts.

In Ethiopia, (Kinfe, 2011), in his study on determinant factors of dividend payout of Ethiopian banking industry Found that leverage has no relationship with dividend payout. In addition, the research result of (Nuredin, 2012)on determinant of dividend policy of Ethiopian insurance companies showed that leverage is statistically insignificant in determining the dividend policy.

d) Firm's size

The research results of (Naceur et al, 2006) shows firm's size is one of the major influential factor in dividend payout ratio of the companies. This result is similarly supported by other researches (Al-Malkawi et al., 2007), (Hafeez and Attiya, 2008), (Al-Najjar and Hussainey, 2009), (Shubiri, 2011), (Kinfe, 2011), (Trang, 2012), (Nuredin, 2012), (Saeed et al, 2014) and (Christopher, 2014). However, the results on relationship of firm size and dividend payout have been mixed.

(Lloyd et.al., 1985), Was among the first to modify Rozeff's model by adding "firm size" as an additional variable. They considered it an important explanatory variable, as large companies are more likely to increase their dividend payouts to decrease agency costs. Their findings support (Jensen M. S., 1992)argument, that agency costs are associated with firm size. They were of the view that for large firms, widely spread ownership has a greater bargaining control, which, in turn, increases agency costs.

The research Result of (Naceur et al, 2006), based on 48 listed companies on the Tunisian Stock Exchange between from 1996 to 2002 showed that, smaller corporations want to disburse more dividends as they can catch the attention of potential investors to lessen their inherent risks. Furthermore (Hafeez and Attiya, 2008), studied on the determinants of dividend policy in Pakistan the results show that there is a negative and significant relationship between dividend Payout and size. This result shows that large-sized firms prefer to pay low dividend.

In contrary to this, (Shubiri, 2011) researched on companies listed on Amman Stock Exchange for the period of 2005-2009, he found out that there is strong significant positive relationship between firm size and dividend payment decision. This means that large Jordanian firms tend to be more diversified than smaller firms and hence less likely to be susceptible to financial distress, and more able to pay dividends to the shareholders. This is consistent with the research works of (Al-Malkawi et al., 2007). This relation is supported by the transaction cost theory of dividend policy.

(Anupam, 2012) Studied UAE Companies for the years 2005 to 2009 and concluded that the Size of the firm is significantly and positively related to the dividend payout of the firm in the UAE. Like earlier studies, this research also concludes that the larger size firms pay out more dividends as compared to firms with smaller size. Large companies have easier access to the capital market and hence are less dependent on the internal funds, leading to more capability to pay the dividends.

In Ethiopia, (Kinfe, 2011),in his study on determinant factors of dividend payout of Ethiopian banking industry Found that firm Size has a positive relationship. However, the research result of (Nuredin, 2012)on determinant of dividend policy of Ethiopian insurance companies showed that liquidity statistically insignificant but has a negative relationship with dividend policy.

e) Growth opportunities

Also the significant effect of profitability in dividend payout ratio decisions evident by previous research works of (Al-Najjar and Hussainey, 2009), (Gupta and Banga, 2010), (Amarjit et. al., 2010), (Shubiri, 2011), (Kinfe, 2011), (Trang, 2012), (Nuredin, 2012), (Christopher, 2014) and (Khan and Asharaf, 2014).

As dividends and investments are competing for limited and low-cost internal funds (Elston J. , 1996), the relationship of growth opportunity and dividend policies can be seen from two perspectives. Firstly, by paying dividends a firm is forgoing a relatively cheap source of financing i.e. retained earnings, as compared to debt and new equity issues. Secondly, dividend payments reduce the firm's available funds for investment activities (Kinfe, 2011). (Higgins R. , 1981), Shows a direct link between growth and financing needs of a firm. Rapidly growing firms require external financing because working capital needs normally exceed the incremental cash flows from new sales. (Rozeff, 1982), (Lloyd et.al., 1985) and recently (Abor and Amidu A. M., 2006), all show a significantly negative relationship between historical growth opportunity and dividend payout. (Chang & Rhee, 2003) Found that the higher the firm’s growth opportunities, the more the need for funds

to finance expansion, and the more likely the firm is to retain earnings than pay them as dividends.

(Elston J. , 1996), described that, firms with high growth and investment opportunities will need the internally generated funds to finance those investments, and thus tend to pay little or no dividends. In contrast, firms with slow growth and fewer investment opportunities are likely to pay more dividends. Note that this prediction is consistent with the free cash flow hypothesis. That is, companies with low investment opportunities are likely to have an overinvestment problem; hence by paying dividends companies can limit management's policy of overinvesting (Jensen M. C., 1986)**.**

Furthermore, the negative relationship between firms' growth opportunities and dividend payouts is consistent with the pecking order theory of (Kanwal and Sujata, 2008) and they suggested that firms experiencing high growth opportunities will have low payout ratios. (Rozeff, 1982), (Jensen M. S., 1992) and (Mohamed et al., 2006) have found a significant negative relationship between dividends and firms' investment opportunities. (Al-Malkawi et al., 2007) Document that, investment opportunities are a significant determinant of corporate dividend policy.

In Ethiopia, (Kinfe, 2011), in his study on determinant factors of dividend payout of Ethiopian banking industry found that growth has no relationship with dividend payout. However, the research result of (Nuredin, 2012)on determinant of dividend policy of Ethiopian insurance companies showed that growth has a statistically significant and negative relationship with dividend policy.

f) Lagged dividend payout ratio

Similarly previous researchers have found Lagged dividend payout ratio is one of the most important determinants of dividend payout policy (Linter, 1956), (Fama and Babiak, 1968), (Ahmed and javid, 2009), (Kinfe, 2011), and (Christopher, 2014) are among others.

(Linter, 1956), Showed that historical dividends are essential in determining current dividends. The model was tested and reaffirmed by (Fama and Babiak, 1968) and (Ahmed and javid, 2009) who concluded that the previous year’s dividends positively affect the

current dividend payout ratio of a company. Furthermore (Christopher, 2014) stated that, in the real world, it is often believed that companies pay a steady stream of dividends because investors perceive firms with stable dividends as stronger and more valuable.

In Pakistan, (Ahmed and Javid, 2009) examined the dynamics and determinants of dividend payout policy of 320 non-financial firms listed in Karachi Stock Exchange during the period of 2001 to 2006. The results consistently support that Pakistani listed non-financial firms rely on both current earnings per share and past dividend per share to set their dividend payments. However, dividend tends to be more sensitive to current earnings than prior dividends. The listed non- financial firms having high speed of adjustment and low target payout ratio shows instability in smoothing their dividend payments.

(Okpara, 2010), analyzed the determents of divided pay out for Nigerian firms. A factor analysis approach was used in order to investigate the critical factors that had effect on dividend payout policy of firms in Nigeria. The result founded that three factors; earnings, current ratio and last year's dividends impact significantly on the dividend payout and dividend yield in Nigeria and Earnings exert a negative impact on the payout ratio.

(Al-Ajmi and Abu Hussein, 2011), analyzed a sample of 54 Saudi- listed firms during 1990 and 2006. The result contradict to Linter's stability model; Firms have more flexible dividend policies since they are willing to cut or skip dividends when profit declines and pay no dividends when losses are reported. The authors concluded that, Lagged dividend payments, profitability, cash flows, and life cycle are determinants of dividend payments.

In Ethiopia, (Kinfe, 2011) found that Lagged dividend payout ratio is among statistically significant influential factor of dividend payout in Ethiopian banking industry.

g) Business risk

The research results of (Jensen M. C., 1986), (Mollah S. K., 2002), (Ho, 2003), (Amidu & Abor, 2006), (Al-Malkawi & Aldin, 2008), (Shubiri, 2011) and (Trang, 2012) depicted the influence of business risk in dividend payout decision. However, the result has mixed. (Shubiri, 2011), stated that, a firm with stable earnings can predict its future earnings with a greater accuracy. Thus, such a firm can commit to paying larger proportion of its earnings

as dividends with less risk of cutting its dividends in the future. In addition, (Amidu & Abor, 2006) mentioned the lower dividend payments in high-risk firms.

Firms experiencing earning volatility find it difficult to pay dividend, such firms would therefore, pay less or no dividend. On the other hand, firms with relatively stable earnings are often able to predict approximately what its future earnings will be and therefore, are more likely to pay out a higher percentage of its earnings as dividend. In addition, according to the pecking order theory and the trade-off theory, business risk negatively affects the firm's leverage and thus its dividend payout ratio. Moreover, these theories also argue that firms that are highly risky also experience high cash flow volatility as a result firms will be forced to decrease dividend payment (Al-Malkawi & Aldin, 2008).

In contrast, (Mollah S. K., 2002), found that firms listed on the Dhaka Stock Exchange paid a large dividend, even though the beta for their stock was high. He then argued that in an emerging stock exchange, the dividend might not be the most appropriate tool to convey correct information about transaction costs to the market. In contrast, According to (Jensen M. C., 1986), the greater the systematic risk for any company, the greater the level of uncertainty between the current and expected future profits. Thus, firms tend to avoid paying large dividends as their profit uncertainty increases. This shows that an inverse relationship exists between business risk and dividend ratio. Empirical studies showed a negative relationship between risk and dividend payment (Ho, 2003) and (Trang, 2012).

All of the available previous research works on dividend characteristics in Ethiopia i.e. (Dagnaw, 2009), (Kinfe, 2011), (Nuredin, 2012) and (Simegn, 2013) couldn't include business risk variable. However, as (Taher, 2012) findings from several empirical studies suggests that risk is among the most influential factor in determination of dividend payout for firms. Therefore, this study included the business risk variable proxied by earning volatility, so as to look its influence on dividend payout of Ethiopian insurance companies.

2.4 Gaps in literature

There exist enormous verge of research on influential factors of dividend payout or policies in developed countries and emerging market countries (Lee, 2009), (Victor A. Puleo Jr,

2009), (Gupta and Banga, 2010), (Amarjit et. al., 2010), (Shubiri, 2011), (Rehman and Takumi, 2012), (Trang, 2012), (Saeed et al, 2014), (Christopher and Rim, 2014) and (Khan & Asharaf, 2014) are among others. However, their corporate characteristic is quite different from developing countries (Badu, 2013). Differences in culture, corporate governance, tax, information asymmetry, investors' attitude, and ownership structure are the differences mentioned by (Al-Malkawi et al., 2007). As far as the researcher knowledge is concerned, few studies are conducted on the determinants of dividend payout in Ethiopia like (Dagnaw, 2009), (Kinfe, 2011), (Nuredin, 2012) and (Simegn, 2013). This shows that the research conducted in the topic of influential factors of dividend payout is very limited in Ethiopia. Therefore, this study would help to obtain recent information about influential factor of dividend payout in Ethiopian insurance companies.

This study used panel data regression technique to analyze the data. Panel data involves the pooling of observations on a cross section of units over several time periods and provides results that are simply not detectable in pure cross sections or pure time series studies Brooks, (2008). However, the researcher conducted by (Dagnaw, 2009) and (Kinfe, 2011) on determinants of dividend payout in Ethiopian banks used multiple regression technique as a data analysis technique while the data they collected have had cross-sectional and time-series characteristics, it was more appropriate to use panel regression technique. Also (Simegn, 2013) conduct a research entitled determinants of dividend policy of banks in Ethiopia on dividend using panel data regression. However, this research varied in industry selection and incorporates additional variables.

Similarly to this study (Nuredin, 2012) conducted a study on determinants of dividend payout in Ethiopian nine insurance companies from 2003 to 2011 and used panel data technique to analyze the collected data. However as the researcher include only five form specific variables and recommend the rest variables for further research area, this study come up with inclusion of Lagged dividend payout ratio and risk variables which is found to be significant influence in other similar studies.

Various research findings on dividend payout reviled that business risk is statistically significant variable on dividend payout decision (Dickens, 2002), (Abor and Amidu, 2006),

(Lee, 2009), (Shubiri, 2011), (Mehta, 2012), (Gul S. et.al., 2012), and (Christopher, 2014). However, all available previous studies conducted in Ethiopia not incorporate this variable on their research. Risk measured in the stock Beta (Rozeff, 1982) or Price earnings ratio (Sheikh Taher, 2012). However, risk alternatively can be measure in earning volatility as measured by log of standard deviation of revenue (Dickens, 2002) & (Mehta et. al., 2014). This measure is a best fit for the Ethiopian companies as there is no stock market in the country. Hence, this study incorporated the risk variable.

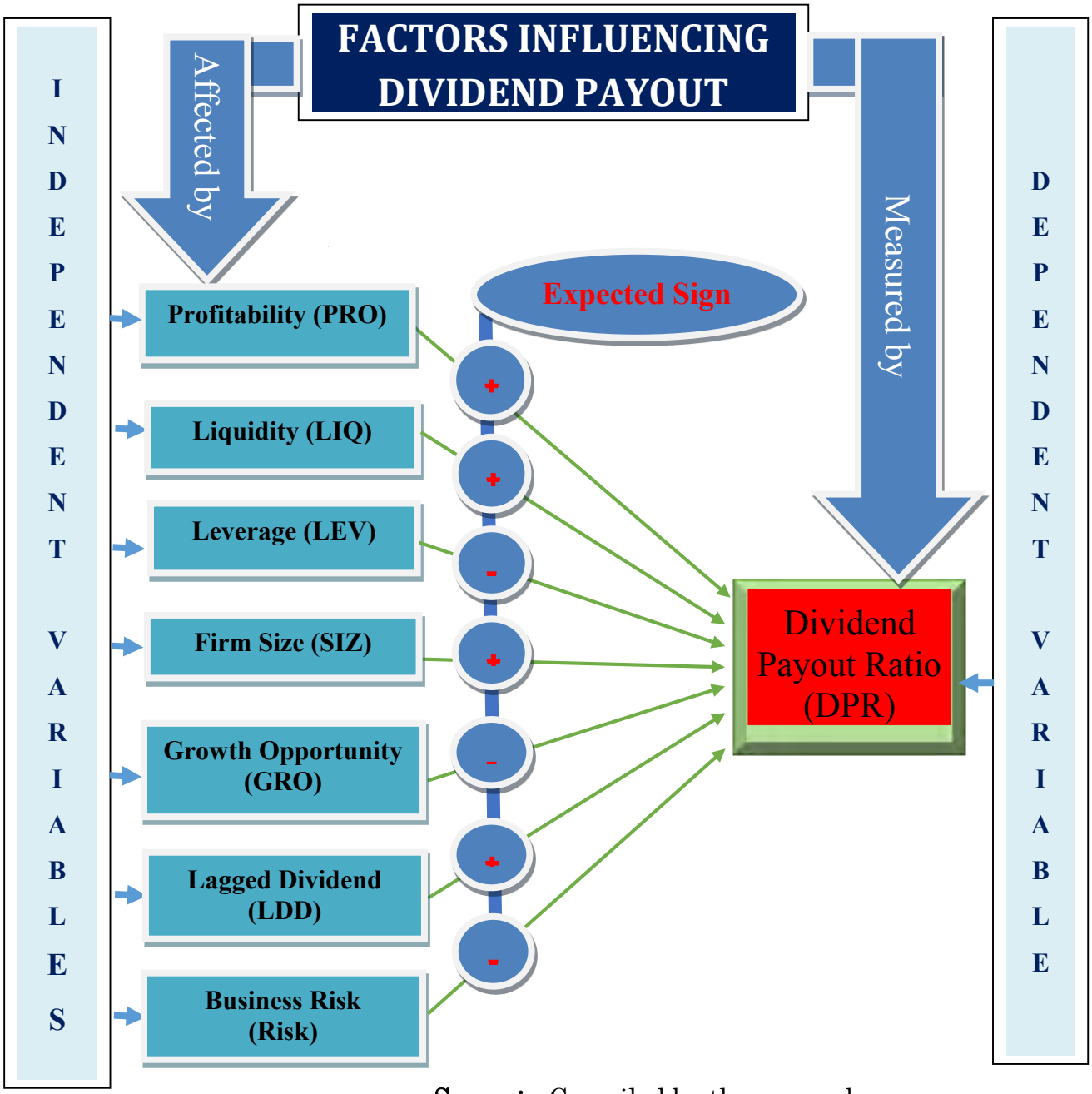
Furthermore, previous studies conducted on the topic of influential factors of dividend payout in other countries identified some other variables in their finding. (Amarjit et. al., 2010), (Rehman and Takumi, 2012), and (Gill A. et. al., 2010) found that book to market ratio is the significant variable in the determination of dividend payout ratio, However, this variable is not applicable in the absence of stock market. Moreover, (Amarjit et. al., 2010), (Shubiri, 2011), (Rehman and Takumi, 2012), (Saeed et al, 2014) and (Khan & Asharaf, 2014) in their study found that cash flow is the most significant determinant of dividend payout. But the researcher couldn't incorporate this variable because the cash flow of the insurance companies is not found in the data base of National Bank of Ethiopia as well as inability to get a data on all study periods published as well as.

In addition because of the unavailability and confidentiality of the information's the other statistically significant variable in dividend studies, (Ahmed and Javid, 2009) and (Al-Malkawi et al., 2007), Institutional ownership measured by the number of shares owned by institutional investors also not investigated in this study. Previous studies conducted on the topic of determinants of dividend payout were focused mainly in those countries that established secondary markets. Therefore, this study would fill the above stated gaps by providing evidence from Ethiopian insurance companies.

2.5 Conceptual Frame Work/Model of the Study

From the theoretical and emperical literature reviews, the following conceptual framework of the study is developed by the researcher.

Figure 2.1 the conceptual framework or model of the study



Source: - Compiled by the researcher

CHAPTER THREE

Methodology

This chapter deals with research design and methodology used to carry out the research. The chapter is organized in nine sub sections. In its introduction part highlight the research paradigms. Then the chapter concisely present study design, data type, data collection & sampling technique, data analysis and model specification. The final two sub parts present variables definition & Hypothesis development and operationalization of study variables.

3.1 Introduction

There are three main research paradigms; quantitative research method, qualitative research method and mixed approach Creswell, (2009). The quantitative research is objective in nature that involves analysis of numerical data by applying statistical tests. But the qualitative research is much more subjective in nature, concerned with understanding of applicable knowledge and can be generalized in understanding of the phenomenon Collis and Hussey, (2003). The mixed approach is in which the researcher tends to base knowledge claims on pragmatic grounds and it employs strategies of inquiry that involve collecting data either concurrently or sequentially to best understand research problem Creswell, (2009).

The aim in this study is to measure the responsiveness of dividend payouts to firm specific elements. The authors collected numeric data of variables from financial reports of eight consecutive years from eight Ethiopian insurance companies. The study followed a quantitative approach method so as to analyze those characteristics of a company that appear to affect the dividend payout decision, EViews 8 statistical software and panel least square regression method has used to analyze the data.

3.2 Study design

This study presented an empirical analysis of influential factors of dividend payout for Ethiopian insurance companies. It is an explanatory research determining the relationship between dependent variable (Dividend Payout Ratio) with firm specific independent

variables (profitability, liquidity, leverage, growth opportunity, firm size, lagged dividend payout ratio and business risk). The study also explained the results by comparing with empirical evidences. Hypotheses were formulated and tested on the basis of empirical reviews on similar subject matter.

3.3 Data type

The type of data used in this study is quantitative in nature and can be best fit to the panel data analysis. The Panel data involves the pooling of observations on a cross section of units over several time periods and provides results that are simply not detectable in pure cross sections or pure time series studies Brooks, (2008). In addition Hsiao, (2003) described panel or a longitudinal data set is one that follows a given sample of individuals over time, and thus provides multiple observations on each individual in the sample.

Brooks, (2008), states that, panel date set has two major advantages; first, it can address a broader range of issue and tackle more complex problem than pure time series or pure cross-sectional data alone, and by structuring the model in appropriate way, the researcher can remove the impact of certain forms of omitted variable bias in the regression result. Second, it is often examined how the relationships between variables change. Hence, by combining cross-sectional data and time series data, the researcher can increase the number of degree of freedom, and thus the power of test, by employing information on the dynamic behavior of a large number of entities at same time.

3.4 Data collection and sampling technique

3.4.1 Data collection

The researcher collected secondary data from National Bank of Ethiopia and published annual reports of eight Ethiopian insurance companies included in the sample for the period of eight years (2007-2014). The expected total number of observation 64 (8*8). However, the absence of dividend in the middle years and the dropout of outlier figures from the regression by researcher so as to keep the normal distribution of the data set, leads the total number of observation decrease into 51 only. Hence, in the same taken the data also become unbalanced panel.

3.4.2 Population and sampling technique

Currently there exists sixteen private insurance companies (Africa Insurance company S.C, Awash insurance company S.C, National Insurance co. of Ethiopia S.C, Nyala Insurance company S.C, Nile Insurance company S.C, The United Insurance S.C, Global Insurance Company S.C, Nib Insurance Company S.C, Lion Insurance Company S.C, Oromia Insurance Company S.C, Abay Insurance Company S.C, Berhan Insurance Company S.C, Tsehay Insurance Company S.C, Ethio life & General Insurance Co S.C, Lucy Insurance Company S.C and Bunna Insurance Company S.C) and one public insurance company (Ethiopian Insurance Corporation) operated in Ethiopia (NBE, 2015).

To make inference about the population a large sample size is important. Hence, out of the currently operational seventeen insurance companies in Ethiopia the researcher select eight insurance companies. The sampled insurance companies existence in both macro and micro environmental change of the country is the basic sample selection criteria (For instance (some of insurance companies started operation recently like Berhan Insurance Company Share Company in the year 2011, Tsehay Insurance Company Share Company in the year 2012, Lucy Insurance Company Share Company in the year 2012 and Bunna Insurance Company Share Company in the year 2013). In addition inclusion of other companies leads to a decrease in number of observations. Hence, the researcher selected eight insurance companies based on the under listed criteria's;

- Ownership:- only private insurance companies are included as they are expected to pay dividend to shareholders),
- Operation period:- only insurances' who have fully served for more than the past eight years in the insurance industry)
- Representativeness to the population: - sampled insurance companies represent 80% of the private insurance companies' total asset and 46% of the insurance industry total assets. In addition, they also reported 80% and 83 % of total private insurance companies revenue and net profit of the year 2014 respectively (NBE, 2015).

Therefore, insurance companies' fitting the above selection criteria's are as follows;

- Africa Insurance Company share company;

- Awash Insurance Company share company;
- National Insurance Company of Ethiopia share company;
- Nyala Insurance Company share company;
- Nile Insurance Company share company;
- United Insurance Company Share Company;
- Global Insurance Company Share Company and
- Nib Insurance Company Share Company.

3.5 Data analysis

To comply with the objective of this research, the paper is primarily based on quantitative research, which adopted an econometric model to identify and measure the factors influence dividend payout of Ethiopian insurance companies. The researcher adopted multiple linear regression model to identify and measure possible factors that could affect the Dividend Payout as measured by Dividend Payout Ratio (DPR). Furthermore, descriptive analysis, diagnostics test, the Pearson correlation matrix analysis, F-test and the regression analysis were conducted.

Regression is concerned with describing and evaluating the relationship between a given variable (usually called the dependent variable) and one or more other variables (usually known as the independent variables) Brooks, (2008).

Descriptive statistics including minimum, mean, maximum and standard deviation is used to describe and provide detailed information about selected variables; diagnostics tests of CLRM assumptions including Muliticollinearity, Hetroskadasticity and autocorrelation tests were conducted to ensure safe application of least square method; this study also conducted correlation analysis, specifically Pearson correlation to measure the degree of association between the variables under considerations; F-test is used to test more than one coefficient simultaneously different from zero and to check the significance level of all explanatory variables in this research models; and panel data regression analysis (panel least square method) is used to examine the relationship between dependent and independent variables in order to conclude based on the collected data about the influential factors in

dividend payout in Ethiopian insurance companies; the P-value was used to determine the significance of the constant term and the coefficients terms for the regressions. The importance of each of the regressions was determined by carrying out the F-test at 95% confidence level. The coefficient of determination R^2 was used to measure the strength to which independent variables explain the variations in the dependent variables.

The data collected for the study has the dimension of both time series and cross sections. Therefore, panel data regression technique is used to conduct the analysis and EViews 8 statistical software has employed.

3.6 Model specification

A regression with only one independent and one dependent variable is a simple linear regression model, used to identify whether the independent variable has an effect on dependent variable. Whereas, If there are more than one independent variables, the model appropriate to test the significance of these variables to explain about the change on dependent variable would be multiple linear regression model Brooks, (2008)

The literature reviewed in the previous chapter identified the main factors influencing dividend payout decision. This chapter presents a framework of analysis on the basis of these studies, and involves adopting a model that would help demonstrate the responsiveness of certain key variables that influence dividend payout in Ethiopia.

Although the data consists of both cross sectional and time series information, it does not contain equal information of all insurance companies in the sample for the entire period. Therefore, unbalanced panel estimation techniques are used in this study. Panel techniques take into account the heterogeneity present among individual insurance companies, and allow the study of the impact of all factors with less collinearity among variables, more degree of freedom and greater efficiency (Christopher and Rim, 2014).

The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships Brooks, (2008).

According to Brooks, (2008), the general multivariate regression model with K independent variables can be written as follows:-

$$\mathbf{Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + \beta_k X_{ki} + \varepsilon_i \ (i\ 1,2,3\ldots,n)}$$

Where Y_i is the i^{th} observation of the dependent variable, $X_{1i},\ldots,X_{ki}$ are the i^{th} observation of the independent variables, $\beta_0,\ldots,\beta_k$ are the regression coefficients, ε_i is the i^{th} observation of the stochastic error term, and n is the number of observations. Hence, the determinant of dividend payout Ratio (DPR) can be modeled as described below:-

$$\boldsymbol{DPR = \beta_0 + \beta_1 PRO_{i,t} + \beta_2 LIQ_{i,t} + \beta_3 LEV_{i,t} + \beta_4 GRO_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 LDPR_{i,t} + \beta_7 RISK_{i,t} + \epsilon_{i,t}}$$

Where;-

DPR = Dividend Payout Ratio = Dividend / Net Profit

PRO = Profitability = Net Profit / Shareholder's equity

LIQ = Liquidity = Current Assets/ Current Liability

LEV = Financial Leverage = Total Debt/ Total assets

GRO = Growth Opportunity = (Current Rev. - previous Rev.)/ Previous Rev.

SIZE = Firm's Size = Natural logarithm of total assets

LDPR = Lagged Dividend Payout Ratio = (last year Dividend Payout Ratio)

RISK = Business Risk = Natural logarithmic of the standard deviation of revenue

β_o = Constant term

$\beta_{1, 2, 3, \ldots.7}$ are parameters to be estimated;

ϵ = is the error component for company i at time t assumed to have mean zero E [ϵ_{it}] = 0

i = Insurance company i = 1, . . . , 8; and

t = the index of time periods and t = 1, . . . ,8

3.7 Variables definition and Hypothesis development

According to Creswell, (2009), to make it is clear to readers what groups are receiving the experimental treatment and what outcomes are being measured, the variables need to be specified in quantitative researches.

3.7.1 Dependent variable

In line with previous studies that examined the main determinants of dividend payment, the dependent variable used in this study is the dividend payout ratio (DPR), defined as the dividend paid divided by net income (Rozeff, 1982); (Lloyd, 1985); (Amidu & Abor, 2006). This variable measures the percentage of the company's earning distributed to shareholders (Christopher and Rim, 2014). Payout ratio is calculated by dividing the total dividend to net profit of every stock. one have calculated net profit and dividends of each company individually for every year in order to control the problem of extreme values in individual year that lead the results to low or negative net income (Rozeff, 1982).

Most of the previous studies employed dividend payout ratios as a determinant of dividend in lieu of dividend per share and dividend yield (Rozeff, 1982) & (Lloyd, 1985). The dividend payout ratio is also used in this research, rather than dividend per share and dividend yield, for two reasons. Firstly, the dividend payout ratio takes into consideration both dividend payout and dividend retention. Secondly, dividend per share and dividend yield was considered unsuitable, because neither takes into account the dividend paid in relation to the income level (Lloyd, 1985).

3.7.2 Independent variables

Among numerous potential determinants of dividend decisions identified in previous similar studies; profitability, liquidity, leverage, growth opportunity, firm size, lagged dividend payout and business risk are included in this study.

a) Profitability

Profitability, in this study, is measured as Return on Equity or Net income divided by Total equity (Christopher, 2014); (Freeman et al., 1982). It has been found as one of the most essential determinants of dividend payout policy (Linter, 1956), (Amidu & Abor, 2006) (Kinfe, 2011); (Rehman and Takumi, 2012) and (Christopher and Rim, 2014). According to the signaling theory of dividend policy, profitable firms are willing to pay higher amounts of dividends to convey their good financial performance (Chang & Rhee, 2003). In addition both the available previous works on dividend in Ethiopia, (Kinfe, 2011) and

(Nuredin, 2012) confirms this positive association. Therefore, a positive relationship is expected between firm's profitability and dividend payments. As a result, the researcher formulate its HP 1 as follows:-

H_0 1: *Profitability has a positive and significant effect on dividend payout of insurance companies in Ethiopia.*

b) Liquidity

Liquidity measures the extent to which a firm is able to meet its payment obligations (Rozeff, 1982). Measured by the current ratio (Al-Malkawi et al., 2007). Firm's liquidity is an important factor that affects the firm decision to pay cash dividends (Christopher and Rim, 2014). High-liquidity firms pay higher dividends to shareholders than those with insufficient cash (Al-Malkawi et al., 2007). This positive association between liquidity and cash dividend payout is supported by prior literature (Al-Najjar and Hussainey, 2009), (Kinfe, 2011), (Trang, 2012), (Nuredin, 2012), and (Christopher, 2014). According to the signaling theory, firms with higher cash accessibility are able to pay higher dividends than firms with insufficient cash (Gupta & Banga A. G., 2010). Furthermore, according to the agency theory of cash flow, (Jensen M. C., 1986), firms with high cash flows pay higher dividends to diminish the agency conflict. As a result, the researcher formulate its HP 2 as follows:-

H_0 2: *Liquidity has a positive and significant effect on dividend payout of insurance companies in Ethiopia.*

c) Leverage

To analyze the extent to which debt can affect dividend payouts, the ratio of total debt (both short-term and long term debts) to total assets is used as a proxy for leverage. The empirical evidence regarding the effect of leverage on dividend payout is mixed. Some studies found that firms with high debt ratios are willing to pay fewer dividends (Jensen M. S., 1992); (Al-Malkawi et al., 2007) since they are committed to fixed payments to service their debt, which restrict the distribution of dividends. Furthermore, banks with higher leverage ratio are under regulatory pressure which puts a restriction on paying high dividends (Dickens

et al., 2002). However, (Kania & Bacon, 2005) have found a significant positive relationship, concluding that firms might use debt funds to pay dividends. As a result, the researcher formulate its HP 3 as follows:-

H_0 3: *leverage has a negative and significant effect on dividend payout of insurance companies in Ethiopia.*

d) Growth opportunities

The change in revenues (interest and non-interest revenues) is used as a proxy for growth opportunities. If a firm is growing rapidly, the more is the need for funds to finance the expansion, and the more likely the firm is to retain earning rather than to pay them as dividends (Chang & Rhee, 2003). Consequently, firms with higher growth opportunities are likely to retain a greater portion of their earning, resulting in lower dividend payout ratio (Rozeff, 1982); (Jensen M. S., 1992); (Alli et al, 1993). The findings of these studies support the negative association between dividends and growth opportunities. As a result, the researcher formulate its HP 4 as follows:-

H_0 4: *Growth opportunity has a negative and significant effect on dividend payout of insurance companies in Ethiopia.*

e) Firm size

The size of the firms is measured by the natural logarithm of total assets as used by (Christopher, 2014) and is included to account for size variability. Large companies tend to be more competitive, with access to capital, better credit rating, and more customers, which will enhance their profitability and increase their ability to pay higher dividends (Dickens et al., 2002). Supporting this logic, (Lloyd, 1985), (Jensen M. S., 1992) and (Fama, E., & French, K, 2001), found a positive relationship between dividend payout policy and firm size. As a result, the researcher formulate its HP 5 as follows:-

H_0 5: *Firm size has a positive and significant effect on dividend payout of insurance companies in Ethiopia.*

f) lagged dividend payout ratio

In the real world, it is often believed that companies pay a steady stream of dividends because investors perceive firms with stable dividends as stronger and more valuable. (Linter, 1956) Showed that historical dividends are essential in determining current dividends. The model was tested and reaffirmed by (Fama and Babiak, 1968), who concluded that the Lagged dividend payout ratios positively affect the current dividend payout ratio of a company. In this study, the last year‘s dividends payout is used as a proxy variable for historical dividends. As a result, the researcher formulate its HP 7 as follows:-

H_0 6: *Lagged dividend payout ratio has a Positive and significant effect on dividend payout of insurance companies in Ethiopia.*

g) Business risk

Basil Al-Najjar & Khaled Hussainey , (2009) Defined business risk as the probability of decrease in returns on investment owing to exceptional circumstances. Under transaction cost theory, (Rozeff, 1982) suggested that the transaction costs of external financing will be higher when the firm has higher operating and financial leverage. Thus, a lower dividend policy seems to be applied to riskier companies in order to lessen the transaction expenses from outside finance. Additionally, (Chang & Rhee, 2003) suggested the reason for this negative relationship is that a firm with lower risk or more stability of earnings has more capacity for remaining or paying more dividends in the future. (Li, K. and Zhao, X., 2008), suggest that the lower the business risk the greater the dividends shelled out. As a result, the researcher formulate its HP 9 as follows:-

H_0 7: *Business Risk has a negative and significant effect on dividend policy of insurance companies in Ethiopia.*

3.8 Operationalization of study variables

Table 3.1 Definition, notation and expected sign of the study variables

	Variables	Notation	Measure	Used By (Source)	Expected Result
Dependent Variables	Dividend Payout Ratio	DPR	Dividend / Net Profit	(Amidu & Abor, 2006).	
Independent Variables	Profitability	PRO	Net Profit / Shareholder's equity	(Freeman et. al., 1982).	+
	Liquidity	LIQ	Current Assets/ Current Liability	(Ahmed and Javid, 2009).	+
	Leverage	LEV	Total Debt/ Total assets	(Nuredin, 2012)	-
	Growth Opportunities	GRO	(Current Revenue - previous Revenue)/ previous sales	(Kinfe, 2011).	-
	Firm Size	SZ	Natural logarithm of total assets	(Saeed et al, 2014)	+
	Lagged dividend Payout ratio	LDPR	Lagged dividend payout ratio Payout	(Christopher, 2014)	+
	Business Risk	RISK	Natural logarithmic of the standard deviation of revenue	(Mehta et. al., 2014).	-

Source: Compiled by researcher

CHAPTER FOUR

Data analysis and interpretation

This chapter deals with the results and analysis of the findings. The chapter and contains three sections. The first section presents descriptive analysis on variables of the study; the second section; presents the result of the fulfillment of the classical linear regression model (CLRM) assumptions; the third section lays down the results of regression analysis that constitute the main findings of this study.

4.1 Descriptive statistics

Table 4.1 provides a summary of the descriptive statistics of the dependent and independent variables for eight insurance companies from the year 2007 to 2014 with a total of 51 observations. The table shows the mean, minimum, maximum, standard deviation and number of observations for the dependent variable dividend payout ratio (DPR) and independent variables (profitability (ROE), liquidity (LIQ), leverage (LEV), growth opportunities (GRO), firm size (SIZE), lagged dividend payout ratio (LDPR) and business risk (RISK).

Table 4.1 Descriptive statistics

	Minimum	Mean	Maximum	Std. Dev.	Observations
DPR	0.00000	0.52641	0.92530	0.21795	64
PRO	-0.05390	0.18956	0.34804	0.08988	64
LIQ	0.54818	1.05909	1.54321	0.17459	64
LEV	0.36939	0.62893	0.78691	0.08089	64
GRO	-0.46044	0.38951	1.87351	0.98406	64
SIZE	8.83157	19.2334	20.3684	1.43230	64
LDPR	0.00000	0.51038	1.00391	0.23826	64
RISK	6.93850	7.30179	7.62150	0.23527	64

Source: EViews output

Table 4.1 shows the average indicators of variables computed from the financial statements

and the standard deviation that shows how much dispersion exists from the average value. According to Brooks, (2008), a low standard deviation indicates that the data point tend to be very close to the mean, whereas high standard deviation indicates that the data point are spread out over a large range of values.

As can be presented in the table 4.1 in previous page that, the mean values of all the variables ranges from minimum of 0.1895 for profitability (PRO) measured by ROE to a maximum of 19.46 for SIZE measured by natural logarithmic of total asset. Also the table shows that the mean value for DPR is 0.5264 indicating that on average Ethiopian insurance companies paid 53% their income as dividend. The standard deviation is 0.2179. This implies that the volatility of dividend payout ratio varies from the mean by 22%.

In this study the average profitability of Ethiopian insurance companies during the study period is 0.1895. This implies that Ethiopian insurance companies have generated on average 18.95% profit on equity committed in the company. The most profitable insurance company have generated 34% profit from investment on equity. Also the table provide the evidence for a 5% loss on equity committed in the business as a minimum for in Ethiopian insurance companies. The value of the standard deviation for ROE is 0.08988. This implies that the profitability of Ethiopian insurance companies varies from the mean by 8.9%.

It is believed a company is solvent if it has a minimum of one to one proportion between current asset and current liability Brealey and Myers, (2005). The average liquidity position of Ethiopian insurance companies' as shown in table 4.1 is 105% as measured by current asset divided by current liability. This implied that for a one birr current liability there is an available 1.05 birr on average on current assets, a maximum liquidity position of 154% and minimum of 54.82% with a dispersion of 17.45% ups and downs. Thus, it can be said that, Ethiopian insurance companies are solvent.

Ethiopian insurance companies have on average 62% leverage ratio, in this study leverage proxied by debt ratio (total debt divided by total asset) in their asset composition, mainly from provision for unearned premiums and outstanding claims, with 8% variability ups and downs. A maximum and minimum debt ratios are 77% and 37% respectively.

The average value of growth is 0.3895 with a standard deviation of 98%. This implies that on average, the insurance companies' sales increased by 38.95% over the study period. This result indicates that on average Ethiopian insurance industry is in a rapid growth stage in terms of revenue. The maximum value of growth for the study period was 187% and a minimum value of -46%.

The mean value of size of Ethiopian insurance companies included in this study is 19.2334. The minimum and maximum value of size is 8.8315 and 20.3684 respectively. Furthermore, lagged dividend paid by Ethiopian insurance companies shows average value of 51% with a volatility of 23.82% ups and downs. The maximum value of lagged dividend payout ratio for the study period is 100.39% and a minimum value of 0.00%. Finally, the average value of risk is 7.30% which means that Ethiopian insurance companies' revenue has shown a volatility rate of 7.30% in the last eight years period (2007-2014) with a variability of 23.57% ups and downs. The maximum and minimum value of risk is 7.6215 and 6.9385 respectively.

4.2 Correlation Analysis

Table 4.2 Correlation Analysis of Variables

Correlation Probability	DPR	PRO	LIQ	LEV	GRO	SIZE	LDPR	RISK
DPR	1.000000							
PRO	0.483308	1.000000						
LIQ	-0.320464	0.047573	1.000000					
LEV	-0.265499	0.052376	-0.160517	1.000000				
GRO	-0.395083	0.180633	0.029606	0.096391	1.000000			
SIZE	0.050056	0.208171	-0.233114	0.183540	0.067684	1.000000		
LDPR	0.552438	-0.048002	0.092863	0.343007	0.040835	0.157530	1.000000	
RISK	-0.039172	0.472367	-0.279659	0.141461	0.048407	0.461861	0.151412	1.000000

Source: EViews output

The most widely-used type of correlation coefficient is Pearson r, also called linear or product-moment correlation. The significance level calculated for each correlation is a primary source of information about the reliability of the correlation. The significance of a correlation coefficient of a particular magnitude will change depending on the size of the sample from which it was computed. The values of the correlation coefficient are always

between -1 and +1. A correlation coefficient of +1 indicates that the two variables are perfectly related positively; while a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense. A correlation coefficient of 0, on the other hand indicates that there is no linear relationship between two variables (Gujarati, 2004).

The correlation result in Table 4.2 shows that liquidity (LIQ), leverage (LEV), growth opportunity (GRO) and business risk (RISK) are negatively related to dividend payout ratio of Ethiopian insurance companies. Meaning that when the increase in these factors leads in the decrease in dividend payout. Moreover, the coefficient estimates of correlation in the above table shows -0.320464, -0.265499, -0.395083 -0.050056 and -0.039172 for liquidity, leverage, growth opportunity, firm's size and business risk respectively. These implies that the correlation in these independent variables with the dependent variable is low. While profitability as measured by return on equity and lagged dividend payout ratio are positively related with dividend payout. Meaning that when the increase in these factors also leads to an increase in dividend payout of Ethiopian insurance companies in this study.

As recalled from the chapter three, there are seven research hypotheses that postulate the relationship between the dependent variable of dividend payout ratio and the independent variables. The research hypothesis predicts that there is a positive correlation between dividend payout ratio and profitability, liquidity, firm's size and Lagged dividend payout ratio. At the same time the hypothesis anticipates a negative relationship with the rest variables i.e. leverage, growth opportunity and business risk.

In line with the research hypothesis, the correlation matrix in Table 4.2 produced statistical evidence that dividend payout ratio is positively correlated with profitability, and lagged dividend payout ratio with correlation coefficient of 0.483308 and 0.552438 respectively. Also in contrary to the research hypothesis, the result of the correlation matrix in Table 4.2 above indicates that dividend payout ratio is negative correlation with liquidity and firm's size with a coefficient of -0.320464 and -0.050056 respectively.

In general, even though the correlation analysis shows the direction and degree of associations between variables, it does not allow the researcher to make cause and effect inferences regarding the relationship between the identified variables. Thus, in examining

the effects of selected independent variables on dividend payout ratio, the econometric regression analysis which is discussed in the forthcoming section of the paper gives assurance to overcome the shortcomings of correlation analysis.

4.3 Regression model tests

For valid hypothesis testing and to make data available for reliable results, the test of assumption of regression model is required. Accordingly, the study has gone through the most critical regression diagnostic tests consisting of Normality, Multicollinearity, heteroskedasticity, autocorrelation and model specification accordingly.

4.3.1 CLRM assumptions

To maintain the data validity and robustness of the regressed result of the research, the basic classical linear regression model (CRLM) assumptions must be tested for identifying any misspecification and correcting them so as to augment the research quality Brooks, (2008). There are different CLRM assumptions that need to be satisfied and that are tested in this study, which are: errors equal zero mean test, normality, homoscedasticity, autocorrelation, and multicollinearity.

4.3.1.1 Test for heteroskedasticity assumption ($\underline{var(ut) = \sigma 2 < \infty)}$

The condition of classic linear regression model implies that there should be homoskedasticity between variables. This means that the variance should be constant and same. Variance of residuals should be constant otherwise, the condition for existence of regression, homoskedasticity, would be violated and the data would be heteroskedastic Brooks, (2008). To check for this, Breusch-Pagan-Godfrey test were applied. The Breusch-pagan tests of the null hypothesis that the error variances are all equal versus the alternative that the error variance are a multiplicative function of one or more variables.

Hence, following the general null hypothesis of Breusch-pagan tests, the researcher develops the following hypothesis to check the presence of heteroskedasticity:

- *H0: homoskedastic error term*
- *H1: heteroskedasticity error term*

Table 4.3: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.433277	Prob. F(7,43)	0.2172
Obs*R-squared	9.648343	Prob. Chi-Square(7)	0.2094
Scaled explained SS	6.956618	Prob. Chi-Square(7)	0.4334

Source: EViews output

Both F-statistic and chi-square (χ^2) tests statistic were used. As can be presented in the above Heteroskedasticity test both the *F*- and χ^2 -test statistic give the same conclusion that there is no significant evidence for the presence of Heteroskedasticity. Since the *p*-values in all of the cases were above 0.05, the null hypothesis of homoskedasticity is failed to reject at 5 percent of significant level. This implying that there is no significant evidence for the presence of heteroskedasticity in these research models. The third version of the test statistic, "scaled explained SS", which as the name suggests is based on a normalized version of the explained sum of squares from the auxiliary regression, also give the same conclusion. (See Appendix A for detail).

4.3.1.2 Test for absence of autocorrelation assumption

$$(\underline{cov(u_i, u_j) = 0 \text{ for } i \_= j})$$

Another basic assumption of regression model says that the covariance between error terms should be zero. This means that error term should be random and it should not exhibit any kind of pattern. If there exists covariance between the residuals and it is non-zero, this phenomenon is called autocorrelation Brooks, (2008). To test for autocorrelation, three methods can be used. The researcher apply all three here.

Breusch–Godfrey Serial Correlation LM test

The Breusch–Godfrey serial correlation LM test was run. Breusch–Godfrey tests area joint test for autocorrelation that will allow examination of the relationship between uˆ t and several of its lagged values at the same time. According to Brooks (2008), The Breusch--Godfrey test is a more general test for autocorrelation up to the r^{th} order.

Hypothesis of this test are:-

Following the general null hypothesis of Breusch–Godfrey serial correlation LM test, the researcher develops the following hypothesis to check the absence of autocorrelation:

H0 = No autocorrelations errors

H1 = Autocorrelations errors

Table 4.4: Breusch-Godfrey Serial Correlation LM Test:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.220573	Prob. F(2,41)	0.8030
Obs*R-squared	0.542901	Prob. Chi-Square(2)	0.7623

Source: EViews output

As can be seen in the above table 4.4, F test result and the P value of F-statistic 0.8030 which is way beyond the significance level of 5%. Hence, the null hypothesis of no autocorrelation is failed to reject at 5 percent of significant level. This implying that there is no significant evidence for the presence of autocorrelation in this model. The Chi-Square P-value of the model also support the absence of autocorrelation. (See Appendix B for detail). Therefore, can be concluded that, the covariance between residuals is zero, data is normal and absence of autocorrelation problem was found conclusively from the LM test.

4.3.1.3 Test of normality ($ut \sim N(0, \sigma 2)$)

Normality test was applied to determine whether a data is well-modelled by a normal distribution or not, and to compute how likely an underlying random variable is to be normally distributed. If the residuals are normally distributed, the histogram should be bell-shaped and the Jarque-Bera statistic would not be significant. This means that the p-value given at the bottom of the normality test screen should be greater than 0.05 to support the null hypothesis of presence of normal distribution at the 5% level.

Theoretically, if the test is not significant, then the data are normal, so any value above 0.05 indicates normality. Jarque-Bera formalizes this by testing the residuals for normality and testing whether the coefficient of skeweness and kurtosis close are zero and three respectively. Skewness refers to how symmetric the residuals are around zero. Perfectly

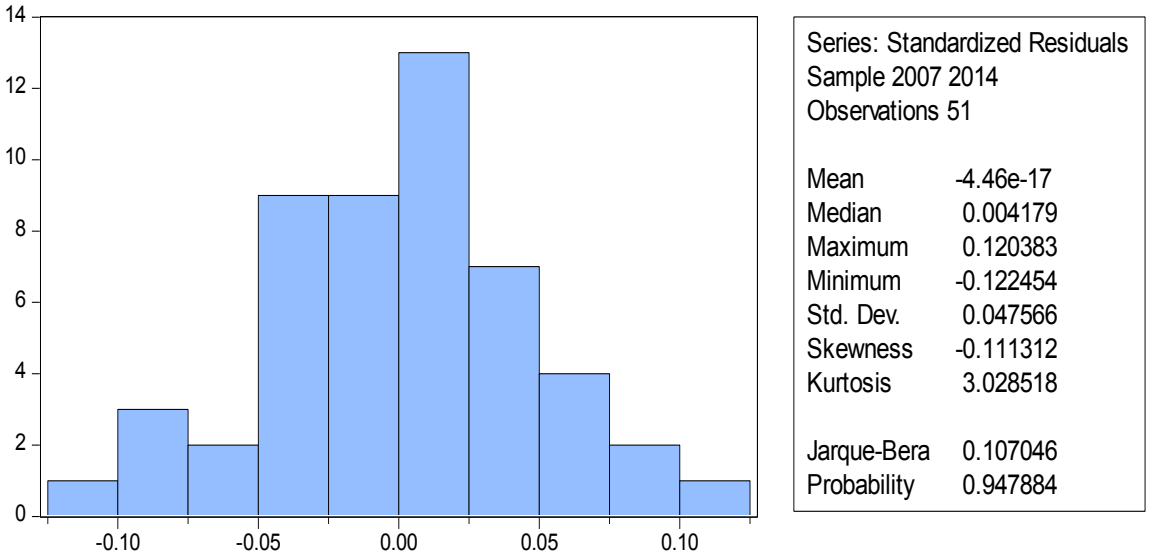
symmetric residuals will have a skewness of zero. Skewness measures the extent to which a distribution is not symmetric about its mean value. Kurtosis refers to the ‘‘peakedness’’ of the distribution. For a normal distribution the kurtosis value is 3. Kurtosis measures how fat the tails of the distribution are, the Jarque–Bera test for normality is based on two measures, skewness and kurtosis. The Jarque-Bera probability statistics/P-value is also expected not to be significant even at 10% significant level Brooks (2008).

The hypothesis of normality distribution is:

H0= residuals follows a normal distribution

H1 = residuals do not follows a normal distribution

Figure 4.1 Normality test for residuals



Source: EViews output

As shown in the histogram above in the figure 4.3 kurtosis close to 3 (i.e. 3.028518) and skewness approaches to 0 (i.e.-0.11312). The Jarque-Bera statistics was not significant even at 10% level of significance as per the P-values shown in the histogram (i.e. 0.947884). Hence, null hypothesis of the residuals follows a normal distribution is failed to reject at 5 percent of significant level. Hence, it seems that the error term in all of the cases follows the normal distribution and it implies that the inferences made about the population parameters from the samples tend to be valid.

4.3.1.4 Test for multicollinearity

Multicollinearity indicates a linear relationship between explanatory variables which may cause the regression model biased (Gujarati, 2004). If an independent variable is an exact linear combination of the other independent variables, then we say the model suffers from perfect collinearity, and it cannot be estimated by OLS Brooks (2008). When independent variables are multicollinear, there is overlap or sharing of predictive power. This may lead to the paradoxical effect, whereby the regression model fits the data well, but none of the explanatory variables (individually) has a significant impact in predicting the dependent variable Gujarati, (2004). According to Lewis-Beck, (1993) suggestion in order to find out the multicollinearity problem, the bivariate correlations among the independent variables should be examined and the existence of correlation of about 0.8 or larger indicates a problem of multicollinearity. Also, Cooper and Schendlar, (2003) suggested that a correlation above 0.8 should be corrected.

Table 4.5: Correlations matrix of explanatory variables

	PRO	LIQ	LEV	GRO	SIZE	LDPR	RISK
PRO	1.00000						
LIQ	0.06010	1.00000					
LEV	-0.06496	-0.13532	1.00000				
GRO	0.31745	0.02907	-0.01722	1.00000			
SIZE	0.34438	-0.15251	0.12819	0.14999	1.00000		
LDPR	-0.17084	0.07868	0.31989	-0.02593	0.06982	1.00000	
RISK	0.48742	-0.26614	0.11547	0.12691	0.70320	0.10026	1.00000

Source: EViews output

The Pearson correlation, which varies between -1 and 1, if the p-value is 0, there is no linear correlation, and if the p-value is -1 or 1 we have a perfectly negative or positive relationship between the variables. According to Pallant (2005), the results in the above correlation matrix table 4.5 show that the highest correlation of 0.70320 which is between risk and size. Since there is no correlation above 0.8 in this study according to Cooper and

Schendlar (2003) and Lewis-Beck (1993), it can be concluded in this study that there is no problem of multicollinearity, thus enhanced the reliability for regression analysis.

4.1.1 Choosing Random effect (RE) Vs. fixed effect (FE) models

The results so far indicate that all CRLM assumptions are not violated, so the ordinary least square regression can be safely applied. However, since this study uses a panel data, there are two types of panel estimator approaches that can be employed, namely: fixed effects models (FEM) and random effects models (REM) Brooks, (2008).

The simplest types of fixed effects models allow the intercept in the regression model to differ cross-sectionally but not over time, while all of the slope estimates are fixed both cross-sectionally and over time. The random effects approach proposes different intercept terms for each entity and again these intercepts are constant over time, with the relationships between the explanatory and explained variables assumed to be the same both cross-sectionally and temporally Brooks, (2008). To examine whether individual effects are fixed or random, a Hausman specification test was conducted providing evidence in favor of the REM model Baltagi (2005). The null hypothesis for this test is that unobservable heterogeneity term is not correlated or random effect model is appropriate, with the independent variables. If the null hypothesis is rejected then we employ Fixed Effects method. Brooks, (2008).

The Hausman test hypothesis is

H_0= Random effect model is appropriate

H_1= Fixed effect model is appropriate

Table 4.6 Hausman test

Correlated Random Effects - Hausman Test

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.247614	7	0.6298

Source: EViews output

Table 4.6 above shows Hausman specification test, the P-value of a models is 0.6298, which is more than 5% level of significance. Hence, the null hypothesis of the random effect model is appropriate is failed to reject at 5 percent of significant level. This implying that, random effect model is more appropriate than fixed effect model and gives more comfort that random effects model results are valid (see Appendix C for detail).

4.4 Regression analysis results

EViews regression output is divided into three panels. The top panel summarizes the input to the regression, the middle panel gives information about each regression coefficient, and the bottom panel provides summary statistics about the whole regression equation. The two most important numbers, "R-squared" (the one who answered how much percent of the variance in the dependent variable in the regression accounted for) and "S.E. of regression." and the one that shows how far is the estimated standard deviation of the error term. Five other elements, "Sum squared residuals," "Log likelihood," "Akaike info criterion," "Schwarz criterion," and "Hannan-Quinn criter." are used for making statistical comparisons between two different regressions. The next two numbers, "Mean dependent var" and "S.D. dependent var," report the sample mean and standard deviation of the left hand side variable Brooks, (2008).

"Adjusted R-squared" makes an adjustment to the plain-old to take account of the number of right hand side variables in the regression. Measures what fraction of the variation in the left hand side variable is explained by the regression. The adjusted, sometimes written, subtracts a small penalty for each additional variable added.

"F-statistic" and "Prob (F-statistic)" come as a pair and are used to test the hypothesis that none of the explanatory variables actually explain anything. Put more formally, the "*F*-statistic" computes the standard *F*-test of the joint hypothesis that all the coefficients, except the intercept, equal zero. "Prob (F-statistic)" displays the *p*-value corresponding to the reported *F*-statistic.

The final summary statistic is the "Durbin-Watson," the classic test statistic for serial correlation. A Durbin-Watson close to 2.0 is consistent with no serial correlation, while a number closer to 0 means there probably is serial correlation Brooks, (2008). Hence, as

concluded in the Hausman test (Table 4.6) above the random effects model is appropriate regression analysis to this study.

4.4.1 Operational model

The operational panel regression model used to find the significant factors of dividend payout of Ethiopian insurance companies measured by dividend payout ratio (DPR) was:

$$\boldsymbol{DPR = \beta_0 + \beta_1 PRO_{i,t} + \beta_2 LIQ_{i,t} + \beta_3 LEV_{i,t} + \beta_4 GRO_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 LDPR_{i,t} + \beta_7 RISK_{i,t} + \epsilon_{i,t}}$$

Table 4.7 Random effects model regression results

Dependent Variable: DPR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.733685	0.309724	2.368834	0.0224*
PRO	0.509506	0.136492	3.732850	0.0006**
LIQ	-0.141391	0.034908	-4.050421	0.0002**
LEV	-0.097147	0.108742	-0.893374	0.3766
GRO	-0.096500	0.021971	-4.392229	0.0001**
SIZE	-0.000168	0.022325	-0.007532	0.9940
LDPR	0.366690	0.056000	6.548059	0.0000**
RISK	-0.017661	0.057802	-0.305538	0.7614
R-squared	0.754637	Mean dependent var		0.580878
Adjusted R-squared	0.714695	S.D. dependent var		0.096026
S.E. of regression	0.051291	Sum squared resid		0.113124
F-statistic	18.89297	Durbin-Watson stat		2.026701
Prob(F-statistic)	0.000000			

*correlation coefficient significant at 5% and ** correlation coefficient significant at 1% significance level respectively.

Source: EViews output

DPR = 0.733685 + 0.509506*ROE - 0.141391*LIQ - 0.097147*LEV - 0.096500*GRO - 0.000168*SIZE + 0.366690*LDPR - 0.017661*RISK

4.4.2 Interpretations on regression results

This section discusses in detail the analysis of the results for each explanatory variable and their importance in determining dividend payout in Ethiopian insurance companies. Furthermore, the discussion analyzes the statistical findings of the study in relation to the previous empirical evidences. Hence, the following discussions present the interpretation on the Random effects model regression results and relationship between explanatory variables and dividend payout.

The estimation results reported in Table 4.7 also depicted that, The R-squared and Adjusted R-squared values of 0.75 and 0.71 respectively is an indication that the model is a good fit. This means more than 71% of variations in dividend payout ratio of Ethiopian insurance companies were explained by independent variables included in the model. However, the remaining 29% changes in dividend payout ratio of Ethiopian insurance companies are caused by other factors that are not included in the model. Furthermore, the F-statistic was 18.89 and the probability of not rejecting the null hypothesis that there is no statistically significant relationship existing between the dependent variable (DPR) and the independent variables, is 0.000000 indicates that the overall model is highly significant at 1% and that all the independent variables are jointly significant in causing variation in dividend payout.

The panel random effect estimation regression result in the above table 4.7 shows that, coefficient intercept (α) is 0.733685. This means, when all explanatory variables took a value of zero, the average value DPR would be take 0.733685 unit and statistically significant at 5% level of significance.

4.4.2.1 Profitability (PRO) and Dividend payout Ratio (DPR)

As the above random effect regression output table 4.7 presented that, the coefficient of profitability (PRO) measured by return on equity is 0.509506 and its P-value is 0.0006. Holding other independent variables constant at their average value, when profitability (ROE) increase by one percent, dividend payout ratio (DPR) of sampled Ethiopian insurance companies will increase by 51% and statistically significant at 1% of significant level. Therefore, the researcher failed to reject the null hypothesis that profitability has a

positive effect on dividend payout. This means, there is no sufficient evidence to support the negative relationship between dividend payout ratio and profitability.

The relationship is positive as expected and this positive relationship between profitability and dividend payout could be attributed to the fact that more profitable firms tend to pay more dividend. This finding is similar to the finding of (Pruitt and Gitman, 1991), (Baker and Powell, 2000), (Amidu & Abor, 2006) (Al-Malkawi et al., 2007) and (Nuredin, 2012). However; it contradict with the finding of (Anupam, 2012), (Baker & Gandhi, 2007) and (Christopher and Rim, 2014). For instance, (Nuredin, 2012) conducted a study on Ethiopian insurance companies to identify determinant of dividend payout and he found significant and positive relationship between profitability and dividend payout.

The possible reason for the significant positive relationship could be the lack of profitable investment opportunity in the country for Ethiopian insurance companies and the restrictions on investable fund for the sector. In addition the finding is consistent with the agency cost and free cash flow hypothesis, managers want to minimize the agency cost of shareholders. This may suggests that Ethiopian insurance companies pay dividend by considering the level of profit.

4.4.2.2 Liquidity (LIQ) and Dividend payout Ratio (DPR)

Table 4.7 also presented that, the coefficient of liquidity (LIQ) measured by current ratio is -0.141391 and its P-value is 0.0002. Holding other independent variables constant at their average value, when liquidity (LIQ) increased by one percent, dividend payout ratio (DPR) of sampled Ethiopian insurance companies would be decreased by 14 percent and statistically significant at 1% level of significant. Therefore, the researcher reject the null hypothesis that liquidity has a positive impact on dividend payout. The sign differs from the initial assumption. This means, there is no sufficient evidence to support the positive relationship between dividend payout ratio and profitability.

Against all odds, liquidity displays a negative sign. This negative association between liquidity and dividend payout is supported by prior literature in Ethiopia (Kinfe, 2011) and (Simegn, 2013). However, it is in contrary to (Gupta & Banga A. G., 2010) who stated that firms with higher cash accessibility are able to pay higher dividends than firms with

insufficient cash. Also according to the agency theory of cash flow, (Jensen M. C., 1986) argued that firms with high cash flows pay higher dividends in order to diminish the agency conflict between their managers and shareholders. Furthermore, the findings are contradicted the concluding remark by (Al-Najja and Hussainey, 2009) that, paying lower or higher dividends does not depend on a good or bad liquidity position.

This negative association between liquidity and dividend payout could be attributed to the fact that, due to absence of capital market in the country managers of Ethiopian insurance companies obliged to hold excess amount of current assets which eventually lead to decrease in profit as well as dividend payout. Besides, Insurance companies by their nature requires to maintain high liquidity (current asset) in order to avoid insolvency problem on claim settlement.

4.4.2.3 Leverage (LEV) and Dividend payout Ratio (DPR)

As can be seen in the above table 4.7, the coefficient of leverage (LEV) measured by debt to total asset ratio is 0.097147 and its P-value is 0.3766. Holding other independent variables constant at their average value, when leverage (LEV) increased by one percent, dividend payout ratio (DPR) of sampled Ethiopian insurance companies would be increased by 9.7 percent but statistically insignificant at 5% level of significance. Therefore, the researcher reject the null hypothesis that there is negative relationship between dividend payout ratio and leverage. This means, there is no sufficient evidence to support the negative relationship between dividend payout ratio and leverage.

This negative relationship is in line with the agency theory and could be explained in a way that insurance companies with low debt ratio tend to pay high dividends and increasing leverage is associated with decrease in dividend payout. In addition (Aivazian et. al., 2003) reported that, “Firms with relatively less debt and more tangible assets have greater financial slack and more able to pay and maintain their dividends”. In this study, leverage is insignificant, suggesting that this variable is not an essential factor in influencing dividend payments in Ethiopian insurance companies’ case. The result support the research results of (Kinfe, 2011), (Nuredin, 2012) and (Simegn, 2013). However, contradict with the finding of (Dagnaw, 2009).

This negative association between leverage and dividend payout could be attributed to the fact that, Ethiopian insurance companies not allowed to hold long term debt so as to avoid insolvency problem upon claim settlement.

4.4.2.4 Growth opportunity (GRO) and Dividend payout Ratio (DPR)

As it presented Table 4.7 above, the coefficient of growth opportunity (GRO) measured by change in revenue is -0.096500 and its P-value is 0.0001. Holding other independent variables constant at their average value, when Growth opportunity (GRO) increased by one birr, dividend payout ratio (DPR) of sampled Ethiopian insurance companies would be decreased by 9.6% and statistically significant at 1% level of significant. Therefore, the researcher failed to reject the null hypothesis that there is negative relationship between growth opportunity and dividend payout ratio. This means, there is no sufficient evidence to support the positive relationship between dividend payout ratio and growth opportunity.

As expected, the relationship between growth opportunity and dividend payout of Ethiopian insurance companies is negative. The result of the regression output supported by the previous works of (Ho, 2003), (Abor and Amidu A. M., 2006), (Al-Malkawi et al., 2007) and (Nuredin, 2012). Hence, the result is in line with the agency and pecking order theories, that stats companies with high growth opportunities tend to pay fewer dividends. This view is supported by (Higgins R. , 1972) who noticed that payout ratio is negatively related to a firms need for funds to finance growth opportunity. In contrary to the research findings by (Kinfe, 2011), who stated that, growth opportunity is irrelevant factor in dividend payout decision of Ethiopian banks, the finding of this study shows that, growth opportunity is a significant factor of dividend payout decision on Ethiopian insurance companies.

This negative association between growth opportunity and dividend payout could be attributed to the fact that, Ethiopian insurance industry is on the growth stage and companies under growing sector requires an additional investable fund to survive in the competition. As (Chang & Rhee, 2003) stated that the higher the growth opportunities, the more the need for funds to finance expansion, and the more likely the firm is to retain earnings than pay them as dividends.

4.4.2.5 Firm's size (SIZE) and Dividend payout Ratio (DPR)

Table 4.7 above depicted that, the coefficient of firm's size (SIZE) measured by natural logarithmic of total asset is -0.000168 and its P-value is 0.9940. Holding other independent variables constant at their average value, when firm's size (SIZE) increased by one birr, dividend payout ratio (DPR) of sampled Ethiopian insurance companies would be decreased by 0.0168%, but statistically insignificant at 5% of significance level. In other words, there is insignificant negative relationship between firm's size and dividend payout ratio of Ethiopian insurance companies. Therefore, the researcher reject the null hypothesis that there is positive relationship between firm's size and dividend payout ratio. This means, there is no sufficient evidence to support the positive relationship between dividend payout ratio and firm's size.

In contrary to the hypothesis of this research, Firm's size shows a negative relationship with dividend payout of Ethiopian insurance companies. The research finding is consistent with the findings of (Naceur and Goaied, 2006), (Ahmed and Javid, 2009) and (Nuredin, 2012). However, contradict to the findings of (Fama, E., & French, K, 2001) who conclude that, the probability of paying dividends increases with firm size. Furthermore, (Rozeff, 1982) concluded that, larger firms pay higher cash dividends to minimize agency costs.

The negative association between firm's size and dividend payout could be attributed to the fact that, Ethiopian insurance industry is in growth stage and the big companies are tend to invest their profit on expansion rather than paying dividend so as to increase their market share or to maintain their current status. The insignificant relationship also attributable to the fact that, there exist a high difference in their size, whereas there is relatively closeness in Dividend payout ratio of Ethiopia insurance companies.

4.4.2.6 Lagged dividend payout ratio (LDPR) and Dividend payout Ratio (DPR)

As the above random effect regression output table 4.7 presented that, the coefficient of lagged dividend payout ratio (LDPR) is 0.366690 and its P-value is 0.0000. Holding other independent variables constant at their average value, when lagged dividend payout ratio (LDPR) increased by one percent, dividend payout ratio (DPR) of sampled Ethiopian insurance companies would be increased by 37% percent and statistically significant at 1%

level of significant. Therefore, the researcher failed to reject the null hypothesis that there is positive relationship between lagged dividend payout ratio and dividend payout ratio. This means, there is no sufficient evidence to support the negative relationship between dividend payout ratio and lagged dividend payout ratio.

As expected, the relationship between lagged dividend payout ratio and dividend payout of Ethiopian insurance companies is positive. The result of the regression output adhered to numerous studies on determinants of dividend payout. (Linter, 1956), (Ahmed and Javid, 2009) and (Kinfe, 2011). Hence, the result support the dividend stability model proposed by (Linter, 1956). Lagged dividend payout ratio payout shown to be statistically significant at 1% significance level in explaining the variation of dividend payout in Ethiopian insurance companies case. Furthermore, the finding of this research supports the signaling theory that states, companies wants to give a positive signal to the market that the company is in good condition continue paying dividends.

The positive association between lagged dividend payout ratio and dividend payout ratio could be attributed to the fact that, in the absence of capital market that gives a liquidity option for shareholders in the country and high inflation that deteriorate the purchasing power of money may leads insurance companies managers to pay better dividend in every year on basis of the previous year dividend.

4.4.2.7 Business risk (RISK) and Dividend payout Ratio (DPR)

Table 4.7 above depicted that, the coefficient of business risk (RISK) measured natural logarithmic of the standard deviation of revenue is -0.017661 and its P-value is 0.7614. Holding other independent variables constant at their average value, when business risk (RISK) increased by 1%, dividend payout ratio (DPR) of sampled Ethiopian insurance companies would be decreased by 1.76% but statistically insignificant at 5% of significance level. Therefore, the researcher failed to reject the null hypothesis that there is negative relationship between business risk and dividend payout ratio. This means, there is no sufficient evidence to support the positive relationship between dividend payout ratio and business risk.

As expected, business risk has a negative relationship with dividend payout in Ethiopian insurance companies' case. The result support the research results of (Ho, 2003), (Abor and Amidu A. M., 2006), (Al-Malkawi et al., 2007) and (Shubiri, 2011). (Abor and Amidu A. M., 2006), stated that high-risk firms pay lower dividends to their shareholders. Furthermore, according to the pecking order theory and the trade-off theory, business risk negatively affects the firm's leverage and thus its dividend payout ratio. Moreover, these theories also argue that firms that are highly risky also experience high cash flow volatility (Al-Malkawi et al., 2007). However, the finding contradict the research result of (Mollah S. K., 2002) .

This insignificant negative association between business risk and dividend payout could be attributed to the fact that the volatility in Ethiopian insurance companies but stability in dividend payment to shoulders. The higher the business risk is the more the likelihood that the firm will be bankrupted and hence the lower the possibility for firms to pay dividends. This result is also consistent with agency theory of dividend policy.

Table 4.8 Comparison of test result with expectation

Independent Variables	Expected Relationships with DPR	Actual result	Statistical Significance test	Hypothesis Status
Profitability	+	+	Significant at 1%	Failed to Reject
Liquidity	+	-	Significant at 1%	Reject
Leverage	-	+	insignificant	Reject
Growth Opportunities	-	-	Significant at 1%	Failed to Reject
Firm Size	+	-	insignificant	Reject
Lagged Dividend payout ratio	+	+	Significant at 1%	Failed to Reject
Business risk	-	-	insignificant	Failed to Reject

CHAPTER FIVE

Conclusion and recommendation

The basic intent of this chapter is to present the overall overviews of the research by summing the main findings of the analysis part and give future research directions. Accordingly, the chapter starts with its discussion by briefly sum up the overviews of the study and its main findings. In section two based on the study finding the researcher highlight some recommendations for the target populations the study pivoting on and at last highlight further research directions.

5.1 Conclusion

Based on the regression analysis findings outlined in the previous sections, the researcher conclude with some recommendations to provide insight on influential factors of dividend payout in Ethiopian insurance companies. However, it should be emphasized again that the limited research on this specific topic in addition to the absence of active secondary stock market in the country limit the scope of the study. Therefore, as the concept of dividend is a relatively broad and one of controversial area in finance, the research finding in somehow different from other developed and emerging market countries case.

This study has explored the influential factors of dividend payout of insurance companies in Ethiopia over the period 2007 to 2014.The aim was to identify influential factors that significantly influence dividend payout. There existed the knowledge gap that was not reached by other researchers in the country. Empirical literature identified many variables as an influential factor of dividend payout. Against this background, this study test the relationship and their relative importance in dividend payout decision of Ethiopian insurance companies. The researcher selected eight insurance companies out of currently operational seventeen companies and collected secondary data from National Bank of Ethiopian and annual published report of Ethiopian insurance companies.

The study variables included in this study are profitability, liquidity, financial leverage, growth opportunity, firm's size, lagged dividend payout ratio and business risk as an independent variable and dividend payout ratio as independent variable. The analysis was conducted using panel data estimation technique of common, fixed and random effect

model using EViews 8 statistical software. The study goes through all diagnostic test, including multicollinearity, hetroscadacity, normality and autocorrelation. Some important factors but impractical here in Ethiopia, such as the book to market ratio and market risk, found as a significant determinant in other similar studies were not included in this study.

Regression Analysis was identified as the most appropriate tool for econometric analysis of the data. The descriptive statistics revealed the data to be normal. Also the assumptions needed to be fulfilled for OLS were tested, the data was found to be homoskedastic, free of autocorrelation free of Multi-collinearity and normally distributed. Results shows that Profitability, liquidity, growth opportunity and lagged dividend payout ratio had a significant relationship with Dividend Payout. The rests three explanatory variables i.e. Leverage, firm's size and business risk were found to be insignificant in context of Ethiopian insurance companies. In addition the study has showed positive coefficient for profitability, leverage and lagged dividend payout ratio. While liquidity, growth opportunity, firm's size and business risk have negative coefficient. Also the coefficient of determination (R^2) is 0.714695 which indicates that the explanatory variables were able to account 71% of the total variations of the dependent variable dividend payout ratio. The value of Durbin-Watson statistics (DW) shows that there was no presence of auto correlation; hence, the model produced a generous result.

Profitability found to have significant and positive relationship with dividend payout of Ethiopian insurance companies. The results suggested that, profitable insurance companies tend to pay high dividend. This result was in line with the pecking order and signaling theories of the dividend. Liquidity is also found to have significant and negative relationship with dividend payout of Ethiopian insurance companies. A negative relationship between dividend payout and liquidity is against agency theory. Theory of agency states companies that have high free cash flow have high dividend payout ratio to prevent managers from engaging in excessive spending if they have excess free cash flow at their disposal. The implication of this negative relationship is that the existence of inefficiency problem in insurance companies.

Leverage is also found to have insignificant and positive relationship with dividend payout in Ethiopian insurance companies. The increase or decrease in leverage has no significant

impact on dividend payout in Ethiopian insurance companies. Insurance companies by their very nature are highly levered firms. They extend borrowers mainly from the deposit they collected from the public.

Growth has shown a significant and negative relationship with dividend payout. This finding supports the pecking order theory which says that the companies should use first internal sources to fund different projects and to keep the company growth. Therefore, firms with high growth or investment opportunities tend to retain their income to finance their investments, thus paying less or no dividends. Insurance companies in this study is in growth stage and insurance companies require further investments to fund the growth. Thus, the best alternative for financing this with low cost of capital is to use the profit they generating than distributing it as a dividend. This implies that growth and dividend payout has an inverse relationship.

The firm size is negative and insignificant relationship with dividend payout and it contradict the idea that larger firms have easier access to fund and are able to distribute dividends to shareholders better than smaller firms. The results also suggest that large insurance companies choose to pay few dividends to support the growth of the company.

Lagged dividend paid has a significant and positive impact on dividend payout. Insurance companies that pay a high dividend in previous years have a tendency to pay a higher dividend on the coming years holding other things constant, which indicates lagged dividend paid has a positive impact on current year's dividend payout. Moreover, profitability along with the Lagged dividend payout ratio payout was the most essential variable that affected dividend payout ratio of the insurance companies, which means that last year's dividends affect today's dividend payout and insurance companies in this study follow stable dividend policy.

Business risk has shown insignificant and negative relationship with dividend payout of Ethiopian insurance companies. The finding showed that the increase in risk will lead to the decrease in dividend; the insignificance of this variable could be due to the fact that the insurance companies are the volatility of insurance companies' revenue and relatively stability in dividend payout.

5.2 Recommendation

Based on the research findings conclusions above, the following are recommended for stakeholders;

- For investors, understanding the determinants of dividend policy has significant implication on investors. Investors who want to select the dividend paying firms might have to look into the variables mentioned as influential factors on this study before selecting the investee.
- For the managers, it's a serious implication that, Managers of Ethiopian insurance companies should give consideration to profitability, liquidity and business risk when they set dividend policy as they are found to be the most significant variables that affect dividend policy of insurance companies. This will help them to make their dividend payout decision efficient, effective and reasonable which in the long run will help them to achieve their objective of maximizing shareholders wealth.
- The implications for Ethiopian government from this study is that, as Ethiopian insurance is a dividend payer sector should get supports through positive appreciations towards the new companies establishments and in tackling current operational problem so as to increase the government income and provide profitable investment opportunity to investors.

5.3 Farther research suggestion

This research is an important contribution to the literature on top of its findings of value to managers, investors and government. However, isn't beyond limitations, the first limitation is the short time frame with a small sample size, second, even though this research has a panel data, some of the financial data collected were missing resulting in an unbalanced data, thirdly, only seven internal factors were examined in this research. It is possible that other factors might have a greater impact on the dividend payout ratio than the ones included in the research. Due to its conflicting research findings, dividend is one of the controversial area of researches in finance. Therefore, other researchers are suggested to assess the influential factors of dividend payout by broadening its base and updated situations. Furthermore, the inclusion of macroeconomic variables would be another potential extension of this research.

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Appendices

Appendix A: - Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.433277	Prob. F(7,43)	0.2172
Obs*R-squared	9.648343	Prob. Chi-Square(7)	0.2094
Scaled explained SS	6.956618	Prob. Chi-Square(7)	0.4334

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 01/17/16 Time: 01:11
Sample: 3 64
Included observations: 51

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.018334	0.018322	-1.000649	0.3226
ROE	-0.010001	0.008075	-1.238579	0.2222
LIQ	0.000802	0.002065	0.388414	0.6996
LEV	-0.005789	0.006433	-0.899957	0.3732
GRO	-0.002454	0.001300	-1.888130	0.0658
SIZE	0.001181	0.001321	0.894257	0.3762
LDPR	-0.002840	0.003313	-0.857224	0.3961
RISK	0.000657	0.003419	0.192005	0.8486

R-squared	0.189183	Mean dependent var	0.002218
Adjusted R-squared	0.057190	S.D. dependent var	0.003191
S.E. of regression	0.003098	Akaike info criterion	-8.572990
Sum squared resid	0.000413	Schwarz criterion	-8.269958
Log likelihood	226.6112	Hannan-Quinn criter.	-8.457192
F-statistic	1.433277	Durbin-Watson stat	2.016542
Prob(F-statistic)	0.217181		

Appendix B: - Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.220573	Prob. F(2,41)	0.8030
Obs*R-squared	0.542901	Prob. Chi-Square(2)	0.7623

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 12/26/15 Time: 11:38

Sample: 3 64

Included observations: 51

Presample and interior missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.027055	0.311729	-0.086791	0.9313
ROE	0.012804	0.138365	0.092537	0.9267
LIQ	-0.002404	0.035134	-0.068436	0.9458
LEV	0.020652	0.112919	0.182889	0.8558
GRO	0.001428	0.022118	0.064556	0.9488
SIZE	-0.001251	0.022398	-0.055849	0.9557
LDPR	0.003693	0.056160	0.065767	0.9479
RISK	0.004845	0.058292	0.083107	0.9342
RESID(-1)	-0.098975	0.184773	-0.535656	0.5951
RESID(-2)	-0.088615	0.208870	-0.424262	0.6736

R-squared	0.010645	Mean dependent var	1.19E-16
Adjusted R-squared	-0.206530	S.D. dependent var	0.047566
S.E. of regression	0.052247	Akaike info criterion	-2.891761
Sum squared resid	0.111920	Schwarz criterion	-2.512971
Log likelihood	83.73989	Hannan-Quinn criter.	-2.747014
F-statistic	0.049016	Durbin-Watson stat	1.872018
Prob(F-statistic)	0.999975		

Appendix C: - Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.247614	7	0.6298

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
ROE	-0.614379	-0.509506	0.027325	0.5258
LIQ	-0.126553	-0.141391	0.000400	0.4580
LEV	0.018806	0.097147	0.036779	0.6829
GRO	-0.098044	-0.096500	0.000088	0.8691
SIZE	-0.015164	-0.000168	0.000808	0.5978
LDPR	0.341850	0.366690	0.001161	0.4660
RISK	0.026192	-0.017661	0.005639	0.5592

Cross-section random effects test equation:

Dependent Variable: DPR Method: Panel Least Squares

Date: 12/26/15 Time: 11:42 Sample 2007 – 2014

Periods included: 8 Cross-sections included: 8

Total panel (unbalanced) observations: 51

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.772015	0.381998	2.020990	0.0508
ROE	0.614379	0.214370	2.865969	0.0069
LIQ	-0.126553	0.040229	-3.145795	0.0033
LEV	0.018806	0.220464	0.085303	0.9325
GRO	-0.098044	0.023885	-4.104925	0.0002
SIZE	-0.015164	0.036145	-0.419521	0.6773
LDPR	0.341850	0.065553	5.214823	0.0000
RISK	0.026192	0.094764	0.276390	0.7838

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.785853	Mean dependent var	0.580878
Adjusted R-squared	0.702574	S.D. dependent var	0.096026
S.E. of regression	0.052370	Akaike info criterion	-2.821054
Sum squared resid	0.098733	Schwarz criterion	-2.252870
Log likelihood	86.93688	Hannan-Quinn criter.	-2.603934
F-statistic	9.436341	Durbin-Watson stat	2.226209
Prob(F-statistic)	0.000000		

Appendix D: - Random Effects test result

Dependent Variable: DPR

Method: Panel EGLS (Cross-section random effects)

Date: 12/25/15 Time: 22:26

Sample: 2007 2014

Periods included: 8

Cross-sections included: 8

Total panel (unbalanced) observations: 51

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.733685	0.309724	2.368834	0.0224
ROE	0.509506	0.136492	3.732850	0.0006
LIQ	-0.141391	0.034908	-4.050421	0.0002
LEV	0.097147	0.108742	0.893374	0.3766
GRO	-0.096500	0.021971	-4.392229	0.0001
SIZE	-0.000168	0.022325	-0.007532	0.9940
LDPR	0.366690	0.056000	6.548059	0.0000
RISK	-0.017661	0.057802	-0.305538	0.7614

Effects Specification

	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	0.052370	1.0000

Weighted Statistics

R-squared	0.754637	Mean dependent var	0.580878
Adjusted R-squared	0.714695	S.D. dependent var	0.096026
S.E. of regression	0.051291	Sum squared resid	0.113124
F-statistic	18.89297	Durbin-Watson stat	2.026701
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.754637	Mean dependent var	0.580878
Sum squared resid	0.113124	Durbin-Watson stat	2.026701

Appendix E: - Insurance Companies in Ethiopia

S/N	Name	Established Date	Type	Ownership
1	Ethiopian Insurance Corporation	1975	General	Governmental
2	Africa Insurance company S.C	01/12/1994	General	Private
3	Awash insurance company S.C	01/10/1994	General	>>
4	National Insurance co. of Ethiopia S.C	23/09/1994	General	>>
5	Nyala Insurance company S.C	06/01/1995	General	>>
6	Nile Insurance company S.C	11/04/1995	General	>>
7	The United Insurance S.C	01/04/1997	General	>>
8	Global Insurance Company S.C	11/01/1997	General	>>
9	Nib Insurance Company S.C	01/05/2002	General	>>
10	Lion Insurance Company S.C	01/07/2007	General	>>
11	Oromia Insurance Company S.C	26/01/2009	General	>>
12	Abay Insurance Company S.C	06/07/2010	General	>>
13	Berhan Insurance Company S.C	24/05/2011	General	>>
14	Tsehay Insurance Company S.C	08/03/2012	General	>>
15	Ethio life & General Insurance Co. S.C	23/10/2008	life & General	>>
16	Lucy Insurance Company S.C	01/10/2012	General	>>
17	Bunna Insurance Company S.C	21/05/2013	General	>>

Source: http://www.nbe.gov.et/financial/insurer.htm accessed May 6, 2015