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FACTORS AFFECTING DIVIDEND PAYOUT POLICY: IN CASE OF ETHIOPIAN INSURANCE COMPANIES

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Abstract

Dividend policy decision is essential and has a great influence on financial structure, flows of funds and corporate liquidity. Even if several studies have been done by different researchers it still remains unsolved. This research work tried to explore the determinants of corporate dividend payout in Ethiopian insurance companies on basis of data covers eleven years (2007-2017) period. Key explanatory variables were identified and these variables are asset structure, firm size, growth in revenue, leverage, liquidity, profitability, previous year dividend, GDP and inflation. Random effect model is used to identify the most significant variable. The result of the study shows that growth opportunity, liquidity, profitability, previous year dividend and inflation have found to have statistically significant relation with the dividend payout. While the remaining variables found to have statistically insignificant relation with the dividend payout in Ethiopian insurance industry. When designing dividend payout policy mangers of Ethiopian insurance companies need to consider the major factors in setting/revising their dividend payout policy as profitability creates more cash inflow potential, to be competent in the arena the company's growth opportunity needs to be considered, as dividend is the only means of return from investment past year dividend payment should be also be considered and liquidity option for shareholders in the absence of secondary stock market. On the same token investors need to consider the significant factors profitability, liquidity, growth opportunity, previous year dividend and inflation in their investment decisions on Ethiopian insurance companies..

Key words: Dividend policy; Dividend payout; Insurance Companies

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List of Acronyms

ASST	Asset Structure
CLRM	Classical Linear Regression Model
DPO	Dividend Payout Ratio
FEM	Fixed Effect Model
FS	Firm's Size
GDP	Real gross domestic product
GRO	Growth opportunity
INFG	General level inflation
LEV	Leverage
LIQ	Liquidity
NBE	National Bank of Ethiopia
OLS	Ordinary least square
PDPO	Previous Year Dividend Payout Ratio
REM	Random Effect Model
ROA	Return on asset
EPS	Earnings per share
+NPV	Positive net present value

Chapter one

Introduction

1.1. Background of the Study

A dividend is a portion of a company's profits that the company may decide to distribute to its shareholders. Firms are faced with the dilemma of distributing income to shareholders or investing back their earnings in operating assets, securities or used to retire bonds to foster further growth of the business. Academicians and researchers have developed many theoretical models describing the factors that managers of corporate firms should consider while taking dividend policy decisions. Marfo-Yiadom and Agyei, (2011) discussed dividend policy as one of the major decisions in corporate finance of the firm regarding how much earnings could be paid out as dividends and how much could be retained.

Dividend is listed as one of the top ten important unresolved issues in the field of advanced corporate finance by (Brealey and Myers, 2003). This description is consistent with Black, (1976) who stated that dividend becomes a puzzle the harder you look at the dividend picture; the more it seems like a puzzle, with pieces that don't fit together. To help explain this puzzle, academicians developed various theories; such as; agency, dividend irrelevance, pecking order, signaling, bird-in-the-hand, and tax preference theories.

A dividend payout is defined as the size and pattern of cash distribution to shareholders over time. Profits and revenues have long been regarded as the primary indicator of the firm's capacity to pay dividends. Solving the dividend puzzle is impossible as stated by (Statman, 1997); he contends that while ignoring the patterns of normal investor behavior dividend puzzle becomes impossible to solve. Higgins, (1972); Mc Cabe, (1979); and Rozeff (1982) all explore leverage as a significant variable that affects the dividend to be paid. Belanes et al., 2007, found a significant relationship between return on assets and liquidity with the dividend payout. Barclay et al., (1995) and Husam-Aldin Nizar Al-Malkawi (2007) also found a significant relation of age and size on the dividend payout.

Shareholders and investors have their interest on the dividend payout which can significantly affect the dividend decision such as the clientele's effect by Miller and Modigliani (1961), agency problem founded by (Jensen and Meckling, 1976 and Rozeff's, 1982), signaling effect explored by Kale & Noe (1990), However, these determinants vary within different developed countries and industries which resulted in a large number of conflicting hypotheses, theories, and explanations because it makes the corporate dividend payout decision a puzzle.

In the world of academia the reason for dividend payment is still debatable across researchers. In the world of perfect markets, the dividend policy of firms is irrelevant (Miller and Modigliani, 1961). On the other hand, Gordon (2004) and Lintner (1956) believe stockholders prefer current dividends, and that this causes a positive relationship between dividends and market value of firms

For countries like Ethiopia without an active secondary market, the relevance of the dividend policy is very important. Even if there have been several studies on determinants of dividend payout in Ethiopian banks and insurance companies such as (Dagnaw, 2009; Kinfe; 2011 and Simegn, 2013) focused on the banking sector while (Henok, 2016; Temesgen, 2016; Niway, 2019 and Nuredin, 2012) focused on the insurance sector, which mostly considered the internal factors affecting dividend payout policy. The main objective of this study is to examine factors affecting dividend payout policy including macroeconomic variables like GDP and inflation by taking evidence from Ethiopian private insurance companies.

1.2. Overview of Ethiopian insurance companies

World Vision Ethiopia (2014) stipulated the Ethiopian financial sector in the rural area consists of formal, semi-formal and informal financial service providers. Formal providers include commercial banks and microfinance institutions (MFIs) while semi-formal providers are saving and credit cooperatives. Informal providers consist of social groups that provide savings and lending functions, private money lenders, friends, and relatives as well as trade partners. Modern institutionalized financial service provision in Ethiopia has a very short history.

Insurance in its modern form was first started in Ethiopia as far back as 1905 when the bank of Abyssinia which was owned by the bank of Egypt began to transact insurance as an agent of a

foreign insurance company began to underwrite fire and marine insurance policy. In 1923, the Swiss insurer Balois set up a Branch office in Addis Ababa and soon followed by other foreign companies working on an agency basis (Kahase, 2018).

The insurance market was governed like any commercial goods and service by Civil Code 1960 from the year1950s up to 1960s insurance companies has increased to 33. In 1974 the military government that came to power put an end to all private entrepreneurship and all insurance companies operating were nationalized. The government took control and the ownership of these companies from January 1, 1975 & they were merged to form a single unit called Ethiopian Insurance Corporation.

The nationalization of private insurance companies, the restrictions imposed on private business ventures, and the management of the insurance sector had a significant adverse impact on the development and growth of the Ethiopian insurance industry (Hailu, 2007). However, the 1991change in the political environment, the beginning of a new era comes by the proclamation No. 86/1994 for the licensing and supervision of insurance business and 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) and local insurers are required with a minimum subscribed capital requirement of birr 2 billion of which 50% of the subscribed is paid-up capital. The local Re-insurance establishment directive no SIB/44/2016 issued by the national bank of Ethiopia (Belay, 2001). Moreover, the non-life business represents 95% of the total size of capital as on 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

A dividend is a portion of a company's profits that the company may decide to distribute to its shareholders. Simon, (2016) defines dividend payout ratio as dividends are usually a percentage of a company's earnings.

The dividend policy of a company refers to the proposition by which a company distributes cash to its shareholders through either cash dividends or share repurchases. The type of arrangement through which shareholders receive the return on their investment is affected by the dividend policy and also dividend policy is an integral decision of a company's board of directors. Payout decisions, along with financing decisions regarding the capital structure of the company, generally involve decision making by the board of directors and senior-level management and are closely watched by investors and analysts.

Researchers have primarily focused on influential factors of dividend policy on developed and emerging markets, (Kumar (2003); Ho (2003); Baker et al. (2006); Ahmed & Javid (2009); Hosain (2016); Sangeetha (2018)). Even though, many research has been conducted on dividend policy; gaps still exist from both theoretical and empirical perspectives. The dividend puzzle results from the existence of dividend policy in a real-world that is multivariate and complicated (DeAngelo et al., 2008).

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 researcher 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.

While the studies in the country like Ethiopia without an active secondary market, dividend policy is often very different in its nature and characteristics from that of developed and emerging markets. Even if there have been several studies on determinants of dividend payout in Ethiopian Banks and insurance companies such as (Dagnaw, 2009; Kinfe, 2011 and Simegn, 2013) focused on the banking sector while (Henok, 2016; Temesgen, 2016; Niway, 2019 and Nuredin, 2012 focused on the insurance sector, they mainly considered the internal factors affecting dividend payout policy. The impact of macroeconomic factors such as GDP growth rate and inflation were not considered. Therefore, this study empirically examined the influence of

firm-specific factors and macro-economic variables on the dividend payout of private insurance companies in Ethiopia.

Regardless of the above fact, very limited amount of the sectors returns are reinvested in the industry as the financial statements of Ethiopian insurance company's reveal. Smith and Chamberlain, (2009) indicates as it means much of the earning is paid as a dividend rather than retaining it for future growth. In addition, despite many insurance companies are operating and expanding their branches continuously in Ethiopia, only their financial statement shows the lump sum figure about their financial performance and they pay dividend. To the knowledge of the researcher, no study provides a comprehensive analysis of the potential agency factors to date that impact insurance company dividend policy.

Totally, the above issues coupled with the gap in the literature call for research in the area of determinants of dividend policy. To this end, the present study provides insight into the factors that influence dividend policy in the Ethiopian insurance industry.

1.4. Research questions

Based on the above problem statement the researcher has developed research questions. The overall question of the study is what internal and macro-economic factors will determine the Ethiopian insurance companies" dividend policy? This study sought to find answers to the following research questions.

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

- ➲ What are macro economic 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, the purpose of this project is to achieve the following ends:

- To determine the effect of profitability on dividend payout of Ethiopian insurance companies.
- To review the effect of liquidity on dividend payout of Ethiopian insurance companies.
- To inspect 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 GDP on dividend payout of Ethiopian insurance companies.
- To examine the effect of Inflation on dividend payout of Ethiopian insurance companies.
- To review the effect of the previous year dividend on dividend payout of Ethiopian insurance companies.

1.6. Research Hypothesis

Examining the determinants of dividend payout policy of private insurance share companies in Ethiopia is the purpose of this study. The empirical studies made around the world demonstrate various outcomes on the determinants of dividend payout policy of financial and none financial sectors. When the researcher observed from the reviewed empirical literature, there is no common consensus among even international researches on the sign and coefficient of an estimate of selected company-specific and macroeconomic independent variables. Thus, the researcher has developed the following hypothesis to estimate the significance of the relationship of different insurance companies" specific and macroeconomic variables with a dividend payout ratio of Ethiopian private insurance companies.

1. H1: There is no significant relationship between Asset structure and dividend policy of Ethiopian private Insurance companies.
2. H2: Firm size has a positive effect on dividend payout of insurance companies in Ethiopia.
3. H3: Growth opportunity has a negative impact on the dividend payout policy of Ethiopian insurance companies.
4. H4: Leverage has a negative impact on the dividend payout policy of Ethiopian insurance companies.
5. H5: Liquidity has a positive impact on the dividend payout policy of Ethiopian insurance companies.

6. H6: Profitability has a positive impact on the dividend payout policy of Ethiopian insurance companies.

7. H7: Previous year dividend has a positive impact on the dividend payout policy of Ethiopian insurance companies.

8. H8: Gross domestic product has a negative impact on the dividend payout policy of Ethiopian insurance companies.

1.7. Significance of the study

The emergence of several share companies in different sectors with a huge amount of capital raised from the institutional and individual investment is the recent phenomenon of businesses in Ethiopia (Dagnachew, 2009). Investors require returns from these investments. However, the only way of getting returns for the investor was a dividend. More dividends can be distributed to shareholders while maintaining the overall health of the company since a high and regular corporate dividend policy decided by corporate management would create a benchmark for doing well therefore, dividend policy is very important.

The research work is expected to provide importance to the board of directors, insurance companies managers, investors' and policymakers and has the following significances:-

To take corrective actions on their existing dividend payout policy or to formulate a new dividend payout policy this study would help the board of directors and management team of Ethiopian insurance companies.

It will create significant awareness on the mind of investors to be aware of the possible factors that determine dividend payout policy to predict the pattern of dividend payment expected from their investment and to manage investments. This information would help them in their investment decisions; supply evidence whether factors identified by previous studies are the same as the ones found to be determinants of dividend payout of a private bank in Ethiopia.

To fill gaps on existing theoretical and empirical knowledge by providing evidence whether factors identified by previous studies are the same as the ones found to be influential factors for a dividend payout of Ethiopian insurance companies.

1.8. Scope of the study

The topic of this study was to examine internal and macro-economic factors influencing dividend payout of Ethiopian insurance companies. This paper will show the trend of private insurances but not become the whole mirror for a wide period and since it is not possible to incorporate all factors that determine dividend payout policy in one study, the variables are limited to one dependent and nine independent variables i.e. the dependent variable is dividend payout ratio and nine explanatory variables were profitability, liquidity, leverage, growth opportunity, firm's size, business risk, GDP, inflation and lagged dividend. This variable has been identified as the major determinants of dividend payout policy by different scholars and the researcher wants to use them for the thesis.

The area of this study is limited to nine Ethiopian insurance companies which paid a dividend of years period of 2005-2017 for the study of dividend payout policy of nine samples selected private insurance companies (Awash insurance, Global insurance, Nile insurance, Nib insurance, ,National insurance, Ethiopia insurance corporation, Africa insurance, Nyala insurance and Global insurance) using purposive sampling methods. These are due to the unavailability of full data for other private insurance companies in one reason and because those same companies in the sample have not full information for the period's researcher has obligated to consider unbalanced panel data. The data will be collected from secondary sources of information which will be obtained from annual reports of private insurance companies collected by the national bank of Ethiopia.

1.9. Organization of the Paper

The study is organized in five chapters, chapter one discussed the introduction part of the thesis, where as chapter two the literature review contains theoretical and conceptual framework and detailed discussions of empirical studies on dividend. Chapter three discussed about the research methodology adopted variable definition, hypothesis and operational development in this study; Chapter four discussed about the data analysis and interpretation of the out puts from STATA 15 software. Based on the finding of the study, the final chapter (chapter five) conclusion and recommendation and farther research suggestions of the study.

Chapter Two

Literature Review

In this chapter, the literature on dividend and related aspects will be reviewed. The views of other authors and previous researches on dividend will be discussed. The first subpart discussed the theoretical framework to have a greater understanding of aspects of dividend. The second subpart presents a review of empirical studies. The third part discussed the firm-specific factors 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. Dividend irrelevance theory

The dividend irrelevance theory which was proposed by Merton Miller and Franco Modigliani (MM) in 1961 argues as the dividend policy of a company is completely irrelevant. In particular, MM argues that the dividend policy does not influence the stock's price or its cost of capital.

In a perfect world with no taxes, no brokerage casts, and infinitely divisible shares, the dividend irrelevance theory will hold. That's because a stockholder who is unhappy with the dividend payout policy can create a homemade dividend. That is if the investor is unhappy with the number of dividends he or she can adjust to buy or sell shares in the company.

According to M&M's irrelevancy theory, it does not matter how a firm divides its earnings between internal retentions and dividend payments to shareholders. The dividend irrelevance theory asserts that a firm's dividend policy does not affect its market value or its cost of capital. Modigliani & Miller (1961) dividend irrelevance theory states that investors can affect their return on a stock regardless of the stock's dividend. An investor could then buy more stock with the dividend that is over the investor's expectations. As such, the dividend is irrelevant to investors, meaning investors care little about a company's dividend policy since they can simulate their homemade dividend. Their theory was built on similar key assumptions to those, on which they based it on capital structure irrelevancy.

The assumptions of a perfect capital market necessary for the dividend irrelevancy hypothesis can be summarized as no differences between taxes on dividends and capital gains, no

transaction and flotation costs incurred when securities are traded, all market participants have free and equal access to the same information (symmetrical and costless information), no conflicts of interests between managers and security holders (i.e. no agency problem) and 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 its proof of irrelevancy.

2.1.2. Bird in hand

The bird in hand theory for dividend or dividend preference theory argues that investors prefer stock that pays a high and stable dividend. The theory was first proposed by Myron Gordon (1963) and John Lintner (1964). They proposed this theory in response to the dividend irrelevance theory of Modigliani and Miller (MM).

Gordon & Lintner (1959) debated that investors value dividends more than capital gains when making decisions related to stocks. The retained earnings that the company reinvests into the business will be less when investors become concerned that the company's future capital gains will dissipate as a company increases its payout ratio. The essence of the bird in the hand theory of dividend policy is that shareholders are risk-averse and prefer to receive dividend payments rather than future capital gains. The contended is that payment of current dividends "resolves investor uncertainty as dividend payments are considered to be more certain to shareholders than future capital gains. The implications of the bird in hand theory for dividend policy is evident. Investors will prefer companies that distribute a dividend, which will drive up the companies' share prices.

2.1.3. Tax preference theory dividend policy

The tax preference theory dividend policy or tax aversion theory states that investors take into consideration taxes when they consider investing in security. The theory also states that the reason why investors prefer low dividend payout too high payout: long term capital gained is less taxed as compared to dividend and unless the stock is sold taxes on capital gains are not paid. According to Miller & Scholes, 1978 and Gordon & Shapiro (1956) in most countries, taxes on dividends are higher than those on capital gains hence investors prefer capital gains to dividends.

Because the dividend tax rate is higher than the capital gain tax rate and most investors are tax-averse, investors will prefer not to receive dividends because of the higher tax due on dividends. Taken at the extreme, the tax-averse theory implies that investors want companies to have a zero payout ratio. In that case, investors will not have to pay the higher tax rate on dividends at all. Companies are prevented from accumulating excess earnings indefinitely because of tax laws. They are therefore forced to make dividend payments to distribute net income to the shareholders.

2.1.4. Clientele Effect

The clientele effect explains the movement in a company's stock price according to the demands and goals of its investors. These investor demands come in reaction to a tax, dividend or other policy change that affects the shares. Specific investors are preliminarily attracted to different company policies, as the clientele effect first assumes and when a company's policy alters, they will adjust their stock holdings accordingly. Stock prices may fluctuate as a result of such adjustment.

The tax preference between dividends and capital gains leads to different clientele (Miller & Scholes, 1978). Certain investor prefers higher dividends than others who prefer lower this is what is called the clientele effect. Hence if corporations are aware of the demands of their investors for higher dividends yields and other lower dividend yields then they will be able to adjust their dividend policies to meet the demands and the tendency of a firm to attract a set of investor who likes its dividend policy will exist. Black & Scholes (1974), assume that if companies were paying dividends, investors must derive some benefits from the dividends this offset the negative consequences.

2.1.5. Dividend Signaling

Announcement of an increase in dividend payouts is an indication of positive prospects as suggested by dividend signaling theory. Managers with good investment potential are more likely to signal as the theory is directly tied to game theory. Dividend signaling theory is still a concept used today by some investors while the concept of dividend signaling has been widely contested.

There has been regular testing of the theory because the dividend signaling theory has been treated skeptically by analysts and investors. On the whole, studies indicate that dividend signaling does occur. The positive future performance of the company's stock can be forecasted by increases in a company's dividend payout. Conversely, a negative future performance by the company can accurately be portended by decreases in dividend payouts tend.

Akerlof (1970) defines the signaling effect as a unique and specific signaling equilibrium in which a job seeker signals his/her quality to a prospective employer. The share price will react positively as the firm having good future profitability (good news) which is an interpretation of an increase in dividend payout. Similarly, dividend cuts may be considered as a signal that the firm has poor prospects (bad news), and the share price may then react unfavorably. Dividends are information signals about the performance of a company which investors use to make decisions. According to Gordon & shapiro (1956), the smoothening hypothesis of dividends by management which predicts that dividends are maintained at a constant rate and any increase are carried out rather cautiously by the firm to avoid significant dividend cuts when the corporate earnings fall.

Ross (1977) states that not all investors are the same they regard dividend changes as a signal of management earnings share price forecasting. It has been observed that the price of a firm's stock generally rises when its dividend is increased and the price will fall when the Dividend is cut. Thus, firms are expected to raise dividends when future earnings are expected to rise. This is because managers have better information on the firm's performance than the investors. Therefore dividends act as a signal to investors on the current and future performance of the firm. Generally, a rise in dividend payment is viewed as a positive signal, conveying positive information about a firm's future earnings prospects increasing in the share price. Conversely, a reduction in dividend payment is viewed as a negative signal about future earnings prospects, resulting in a decrease in the share price.

2.1.6. Agency Costs

An agency cost is a type of internal company expense that comes from the actions of an agent acting on behalf of a principal. Agency costs typically arise in the wake of core inefficiencies,

dissatisfactions, and disruptions, such as conflicts of interest between shareholders and management. The payment of the agency cost is to the acting agent.

As early as 1932, American economists Gardiner Coit Means and Adolf Augustus Berle discussed corporate governance in terms of an "agent" and a "principal," in applying these principals towards the development of large corporations, where the interests of the directors and managers differed from those of owners. Agency theory is based upon the separation of ownership and management in corporations. Owners of the firm delegate managers to act on their behalf. The main assumption of this theory is the conflict of interests between managers and owners (Jensen & William, 1976).

2.1.7. Life-Cycle Hypothesis (LCH)

The life-cycle hypothesis (LCH) is an economic theory that pertains to the spending and saving habits of people throughout a lifetime. The concept was developed by Franco Modigliani and his student Richard Brumberg in the early 1950s.

The life cycle theory is one of the explanations for dividend payment. Dennis (1972) proposed a formal theory that a firm has a relatively well-defined life cycle, which is fundamental to the firm life cycle theory of dividends. Firms tend to alter the dividend policy depending on the financial needs of each stage as firms pass through the various stages in their lives as the theory explains. Implied in this theory is the fact that firms that are in their growth stages are less likely to pay more dividends as compared to firms that are at their maturity stages. Old firms are expected to pay more dividends because they do not have a lot of growth opportunities to fund. The life-cycle hypothesis (LCH) has largely supplanted Keynesian economic thinking about spending and savings patterns.

2.1.8. Pecking order theory

One theory in corporate finance is the pecking order theory of the capital. It tries to explain why companies prefer to use one type of financing over the other. The main reason is that the cost of financing trends to increase when the degree of asymmetric information increases. The theory is also one of the most well-known capital structure theories. This explains a capital structure company is dominated by debt. The theory was first proposed by Myers and Majulf in 1984.

Fama & French (2002) and Sunder& Myers (1999) develop an alternative theory known as the pecking order model of financing decisions. Companies use sources of funding where the degree of asymmetric information is higher, the cost of financing increases as stated by the pecking order theory or pecking order model states that. As companies raise more and more capital, it becomes increasingly hard to obtain such funding internally. Instead, they are forcing them to resort to bank debt and public equity. These sources of funding tend to be more expensive. Fama & French (2001) find that dividend payers are firms with high earnings relative to investment. Thus, for dividend payers, the prediction those firms with larger expected investments have less current leverage. The pecking order implies by the theory is, companies will prefer to use internal financing first, then debt, and finally new equity. Thus, the option of last resort will be raising new equity.

2.2. Types of dividend
2.2.1. Cash Dividend

Companies pay dividends in the form of cash, but the payment of dividends in the form of cash requires enough cash in its bank or hand. In other words, there should not be any shortage of cash for the payment of dividends. Sufficient cash is available only when a company prepares a cash budget to estimate the required amount for the period for which the budget is prepared.

If the company finds any shortage of cash, it should make arrangements to borrow funds. But it may be difficult to prepare a cash budget with the expected amount needed for payment of dividends. The cash dividend has psychological value for stockholders. The cash dividend is not only a way to earnings distribution but also a way of perception improvement in the capital market (Brigham & Houston, 2004).

2.2.2. Stock dividend/bonus share

A stock dividend occurs when the board of directors authorizes the distribution of common stock to existing shareholders. The stock dividend increases the number of outstanding shares of the firm's stock. Although the stock dividend does not have a real value, firms pay a stock dividend as a replacement for a supplement to the cash dividend. Under the stock dividend, shareholders receive additional shares of the company instead of cash dividends. The 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 affects the reduction in the market price of the share. Since the shares are distributed proportionately, shareholders retain their proportionate ownership of the company (Brigham & Houston, 2004).

2.2.3. Scrip Dividend

In this form of dividends, the equity shareholders are issued transferable promissory notes for a shorter maturity period that may or may not be interest bearing. Stated simply it means payment of dividends in the form of promissory notes. Payment of dividends in this form takes place only when the firm is suffering from a shortage of cash or a weak liquidity position.

Sometimes companies need cash generated by business earning to meet business requirements or with-hold the payment of cash dividend because of a temporary shortage of cash. In such circumstances, the company may issue a scrip dividend payable at future dates (Brigham & Houston, 2004).

2.2.4. Bond Dividend

Both scrip dividends and bond dividends are the same, but they differ in terms of maturity bond carries a relatively longer maturity date than scrip dividends. Bonds used to pay to carry interest and it means that the company assumes the fixed obligation of interest paid annually and the principal amount of bond at the maturity date (Brigham & Houston, 2004).

2.2.5. Stock Dividend (Bonus Shares)

A stock dividend occurs when the board of directors authorizes the distribution of common stock to existing shareholders. The stock dividend increases the number of outstanding shares of the firm's stock. Although the stock dividend does not have a real value, firms pay a stock dividend as a replacement for a supplement to the cash dividend. Under the stock dividend, shareholders receive additional shares of the company instead of cash dividends. The 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 affects the reduction in the market

price of the share. Since the shares are distributed proportionately, shareholders retain their proportionate ownership of the company (Brigham & Houston, 2004).

2.2.6. 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, the value of shares and the total net worth of the firm remain unchanged. Only additional certificates representing new shares may occur as the stock split does not involve any cash payment. A method that is used to raises the market price of a firm's stock by exchanging a certain number of outstanding shares for one new share of stock (Brigham & Houston, 2004).

2.2.7. 2.1.6.6 Stock repurchase

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

2.3. Dividend policy

A dividend policy dictates how much cash is returned to shareholders. A company must look at the profits it has made when deciding what dividend to pay, and weigh up how much should be returned to investors and how much should be retained in the business to fund future growth. If it has had a bad year and it doesn't have enough profit to cover its investment needs and the dividend but expects the poor performance to be a one-off, either using debt or dipping into any surplus cash it may still make a payout to investors.

As long as the firm has an investment project whose returns exceed its cost of capital, it will use retained earnings to finance these projects (Janis C. Vanhorn, 1975). Retained earnings and dividends have a reciprocal relationship between i.e. the larger the retained earnings, the lesser the dividend and smaller the retained earnings, the larger the dividend. The dividend policy of a

company reflects how prudent it's financial management. Theoretically, there are different types of dividend policies. These include stable dividend policy, constant payout, progressive policy, residual policy, zero policy and non- cash policy (Habtamu, 2019).

2.3.1. Types of dividend policy
2.3.1.1. Stable dividend policy

Lintner (1956) had observed that managers tend to value stable dividend policies and corporations tend to smooth dividends relative to earnings. Lower variability of dividends as compared to the variability in earnings occurs when dividends are increased gradually and rarely cut. Regardless of how the business has performed a company tries to make a consistent payout each year, if it has a stable dividend policy. Instead of basing the dividend on the company's performance over the short term, stable dividend policies are more closely linked with long-term prospects and forecasts. Ultimately, the policy aims to grow dividends at roughly the same rate as long-term earnings. Using a target payout ratio is a common way for a stable policy to be structured, which shows over the medium to long term what share of its earnings will be returned to shareholders.

The benefit of a stable dividend policy is that payouts are reliable and consistent, even if the business suffers short-term turmoil. A company will try to honor the dividend even if it has had a bad year, dipping into cash reserves if profits are not enough to cover it, providing something of a safety net for shareholders. If believes its sub-par performance will continue for longer, however, it may change the policy or rebase the dividend. This also means that shareholders won't see a large rise in distributions when the company has a better than an expected year either, with companies more likely to retain the cash.

A stable dividend policy comes with commitment. Even if the business enters a downturn investors expect dividends to remain consistent. Companies are not obligated to return it to investors although, they can hoard cash.

2.3.1.2. Residual dividend policy

Once all expenditure has been taken into account companies pays whatever cash is left in the business, if a company has a residual dividend policy. This means that shareholders receive the

sums left after the company has taken the likes of capital expenditure, investment and working capital into account.

If only the investment policy is satisfied dividend becomes a circumstantial payment. Firms adopt 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 causes more growth to the company. Rise to a zero dividend structure may occur by this type of policy. Investors of the different clienteles are not chased out by a strict application of the policy because of this firms may need to modify this policy to ensure that (Kolb and Rodriguez, 1996).

2.3.1.3. Alternative Policies to Paying Cash

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

2.3.1.4. Zero dividend policy

Firms may adopt a policy of zero dividends. This is especially common in newly established companies that require capital to accomplish the growth of their projects or for doubt of serious financial difficulties and may be unable to pay a dividend. So what company generated as profit is retained for business expansion? Because taxation will naturally be lured investors prefer capital gains to dividends by this kind of policy. It is also quite easy to avoids and operate all the costs associated with the payment of dividends (Watson & Head, 2010). The major advantage of this payout policy is it is easy to operate and will not incur the administrative cost associated with paying with dividends (Watson & Head, 2010).

2.3.1.5. A constant or fixed policy

Firms that adopted a constant payout policy pay the constant percentage of earnings as dividends and continue it considerably for a long time. According to this policy, the firm pays a fixed dividend each year and maintains it for consideration for a long time even though the firm

earning fluctuated. The major problem faced by firms which adopted the constant payout policy is that the firm earning decrees or in a certain time the firm record loss than profit, the dividend may not be paid or lower than usual as the result the firm stock price may be adversely affected because dividend is often considered as an indictors of firms future condition and status. Shareholders, to know the amount of dividend to expect from their investments in the company this type of policy brings the opportunity. However as noted by (Watson & Head 2010), the policy could be traumatic to companies experiencing a volatile or fluctuating profit earning.

2.4. Review of empirical studies

2.4.1.   Empirical Literature Studies in developed and emerging market countries

Linter (1956) conducted the first empirical study of dividend policy. He piloted his study on United States companies in the middle of 1950. From his study, he established that the dividend decision is can be affected by current profitability and the previous year's dividends. After his study, many empirical studies have been conducted on dividend policy which resulted in the controversial and ongoing debate on dividend policy.

Dickens et al., (2002), conducted a study to identify factors that explain the dividend policy of United States banks from 1998 to 2000 using a 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 a negative relationship exists between dividend payments and investment opportunities, signaling, ownership, and risk and a positive relationship to the size and dividend history.

The association between dividend payout and outside directorships was examined by Al-Najjar & Hussainey (2009). The study main focus was to examine whether the number of outside directors on the board of directors and dividend payouts are substitutes or complement mechanisms applied by the UK within firms to control agency conflicts of interest. Tobit and Logit regression models were used by the authors to examine the extent to which firms with a majority of outside directors on their boards experience significantly lower or higher dividend payout after controlling for insider firm size, ownership, firms growth rate, profitability, business risk, asset structure, liquidity and borrowing ratio. Based on a sample of 400 non-financial firms

listed at the London Stock Exchange for the period from 1991 to 2002, it was found that several outside directors on the board of directors is negatively associated with dividend payout. In the end, the study suggested that firms pay lower dividends when a higher number of outside directors is employed on the board. Firms establish a reputation by paying a dividend when they have weak corporate governance.

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

Mirbagherijam (2014) uses the panel data approach to test the non-symmetric effect of inflation on the companies' decision in decreasing, increasing and maintaining dividends. The results show that inflation has a positive effect on increasing and maintained the dividend decision of companies. But it has an inverse and negative effect on decreasing a dividend. Inflation has a significant contribution to the dividend policymaker decision according to the status of companies as making profit or loss.

2.4.2. Empirical Literature in Africa

Kimutai Pius Kibet (2012) studied the effect of liquidity on dividend payout in the case of companies listed at the Nairobi Securities Exchange. In the study dividend payout was considered as a dependent variable while profitability, cash flow, liquidity, leverage, corporate tax, sales growth, earning per share and industry as independent variables. The findings indicated that there is a positive effect of all independent variables except cash flow and corporate tax. As revealed from the finding cash flow has a negative impact on dividend payout while the corporate tax does not affect the dividend payout.

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

payment, but statistically insignificant relationship between profitability, collateral, and growth with the dividend payment. Therefore, the major determinants of dividend policy of financial institutions in Ghana are the age of the firm and liquidity.

Kofi Baah B. et al. (2014) Surveyed on the determinants of dividend policy and its effects on the share price of companies listed on the Ghana Stock Exchange for the period 2006-2011. The author analyzed factors such as volatility, profit after tax, earning per share, growth in assets, size, return on equity and liquidity and used dividend payout as the dependent variable. The findings show that the main determinants of dividend policy for companies listed on the Ghana Stock Exchange are returned on equity, profit after tax and size of the company. Across the different sectors, different factors influence the dividend payout. The researcher concluded that Profitability is a key determinant of dividend policy of companies across the various sectors on the GSE.

2.4.3.   Empirical Literature in Ethiopian

Tewodros (2011) undertook an empirical study on the determinants of dividend payout of six private banks in Ethiopia during 2006 - 2010. By using Linter's model, the study concluded that there was a positive relationship between the firm size and the dividend payout ratio, a negative relationship between liquidity and the dividend payout. However, there was no relationship between the payout ratio and profitability, growth, and leverage. He also concluded that in Ethiopian banks when making decisions on to pay dividends they consider the previous year's dividend, agency conflicts, and liquidity.

Elias (2012) conducted a study on the determinants of Dividend payout: An Empirical Study in Ethiopian Private Banks. The author has used seven independent variables; profitability, growth, liquidity, size, leverage, previous year dividend and risk earning volatility and dividend policy as a dependent variable. The finding showed that profit is not a significant factor, liquidity and growth found to be insignificant and negative whereas Leverage and the Lagged dividend have also found to be an insignificant and positive relationship with dividend payout in Ethiopian private banks.

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

Temesgen (2016) tried to explore the determinant factors of corporate dividend payout in the Ethiopian private insurance industry. To achieve the objective the researcher used a mixed research approach and 12 years panel data was collected from seven private insurance companies for the years (2001-2012). The result of the study revealed that earning per share, liquidity, age of a company in its life cycle and regulation on dividend taxation have a positive and statistically significant relationship with the dividend.

2.5. Gaps in literature

Even if there exist enormous researches on influential factors of dividend payout or policies in developed countries and emerging market countries (Kumar (2003); Ho (2003); Baker et al. (2006); Ahmed & Javid (2009); Hosain (2016); Sangeetha (2018)). A dividend is a puzzle that results from the existence of dividend policy in a real-world that is multivariate and complicated (DeAngelo et al., 2008). 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). A few studies are conducted on the determinants of dividend payout in Ethiopia like (Dagnaw (2009); Kinfe (2011) and Simegn (2013) focused on the banking sector while (Henok (2016); Temesgen (2016); Niway (2019) and Nuredin (2012) focused on the insurance sector, they considered the internal factors affecting dividend payout policy.

Dividend policy is not only affected by the factors that associated with the firms rather than the industry, the macroeconomic and legal environment of the country which the firms operate may have also a significant impact so that the firm's dividend decision in developing countries may be

affected by a different set of behaviors. Therefore further researches are required to study the dividend policy of firms in developing countries like Ethiopia. This study will contribute findings of the determinants of dividend policy of private insurance share companies in Ethiopia and the findings will also contribute to filling the literature gap that exists in developing countries specifically in Ethiopia.

TABLE 2.1. Summary of Ethiopian empirical findings

Author and Date	Title and Case study	Methodology	Variables considered	Research gaps in this thesis
Simegn H/mariam (2013)	Determinants of dividend policy of banks in Ethiopia panel data for ten years"	Panel data	earning, previous year's dividend, bank's age, loan loss provisions, and liquidity	Random effect panel regression model and Growth opportunity, liquidity, profitability, previous year dividend, GDP and Inflation
Temesgen(2016)	Journal on determinant factors of corporate dividend payout in Ethiopian private insurance industry	Mixed research approach panel data	Earnings per share, liquidity, age of company and regulation	Random effect panel regression model and Growth opportunity, liquidity, profitability, previous year dividend, GDP and Inflation
Samuel (2016)	Determinants of dividend policy of insurance	OLS	profitability, liquidity, previous year dividend,	Random effect panel regression model and Growth

	companies in Ethiopia		asset structure, and growth opportunities	opportunity, liquidity, profitability, previous year dividend, GDP and Inflation
Tewodros K. (2011)	Determinants of dividend payout of private banks in Ethiopia	Linter''s model,	Firm size, liquidity, profitability, leverage, and growth	Random effect panel regression model and Growth opportunity, liquidity, profitability, previous year dividend, GDP and Inflation
Muhamed N. (2012)	Determinants of dividend policy of insurance companies in Ethiopia.		Profitability, liquidity, and growth	Random effect panel regression model and Growth opportunity, liquidity, profitability, previous year dividend, GDP and Inflation

2.6.   Conceptual framework

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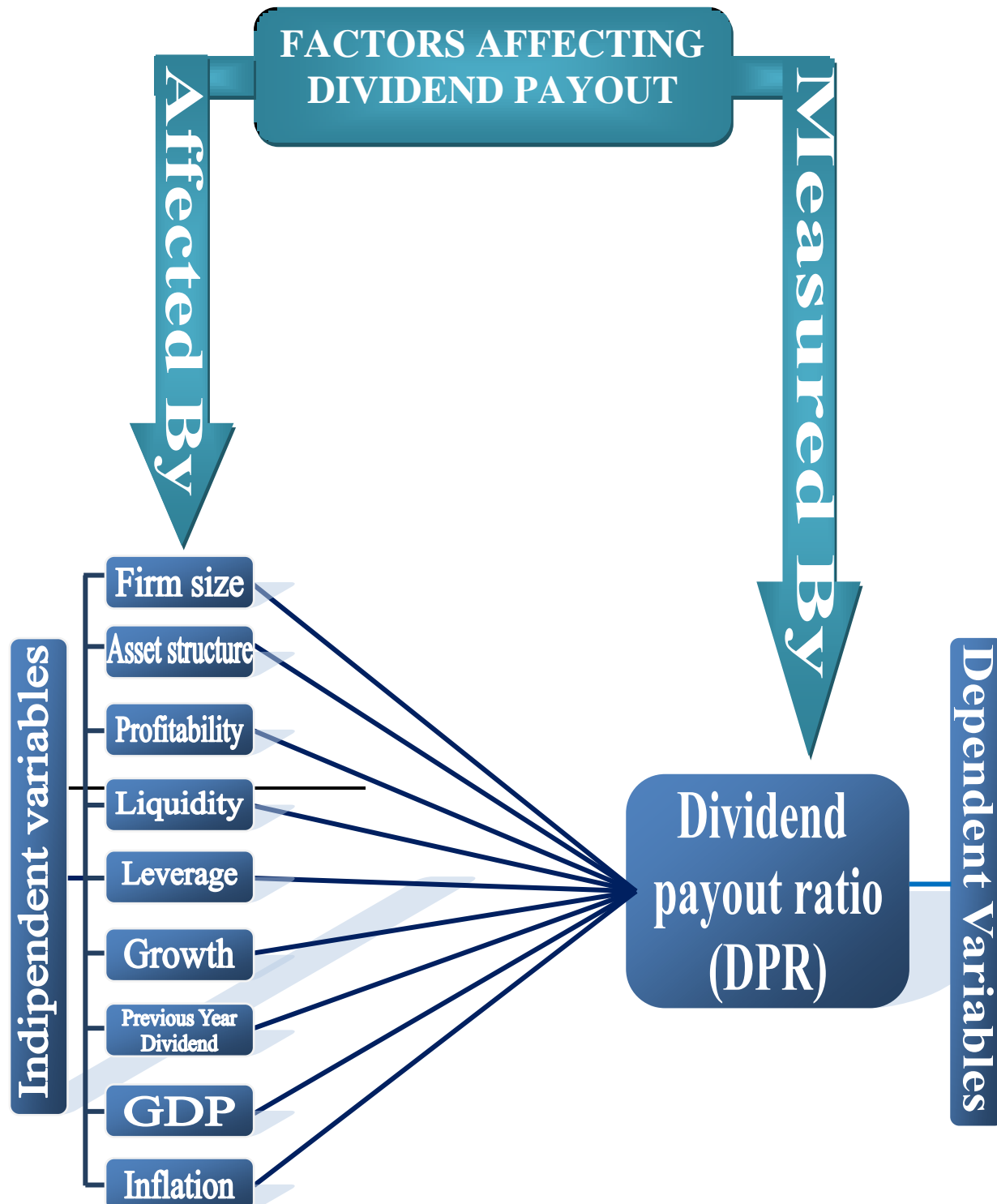
CHAPTER THREE

Research Methodology

3.1. Introduction

In this chapter, the aim is to describe the research design and methodology used in the study. It is organized as follows; the highlight of research design and the research approach then data type, data collection and sampling technique and finally by model specification and operationalization of study variables.

3.2. Research design

The study aims to oversee the cause and effect relationships between dependent and independent variables to constitute a certain pattern so explanatory research approaches are to be used. As noted by Saunders et al. (2009), explanatory research design examines the cause and effect relationships between the dependent and independent variables. Therefore, this research is designed to examine the determinants of dividend payout of private insurance share companies in Ethiopia by examining the relationship between dependent variable, dividend payout, and independent variable; Company-specific such as asset structure, firm size, growth opportunities, leverage, liquidity, profitability, previous year dividend, and macroeconomic variables such as GDP and Inflation, these variables make the explanatory research design most appropriate. The study also explained the results by comparing them with empirical evidence and theories. Hypotheses were formulated and will be tested based on empirical and theoretical reviews on similar subject matters.

The study is conducted based on a quantitative research approach. Quantitative research is explaining phenomena by collecting numerical data that could be analyzed using mathematically based methods Aliaga & Gunderson (2002). Also, the quantitative method puts more emphasis on the results Zikmund et al. (2009) concludes as it usually depends on the causality of relationships. The method has been used because the study aims to generalize the truth found in the sample listed insurance companies regarding the determinants of dividend payout. This generalization under the quantitative method can be obtained through a systematic way of seeking facts and causes of phenomena, focuses on an analysis of numerical data, uses of controlled measurements and statistically analyzed to test the stated hypotheses.

3.3. Data Types and Sources

The study will use secondary data. As per Zikmund et al. (2009), secondary data are essential in the instance when primary data can't be obtained and they are quickly available. Selecting appropriate and acceptable data gathering instrument help the researchers to combine the strengths and amend some of the inadequacies of any source of data to minimize the risk of irrelevant conclusion. The data type used is quantitative data which was obtained from annual audited reports of private insurance share companies" balance sheet, income statement and cash flow statements and macroeconomic variables including inflation and GDP obtained from NBE.

The period selected is based on the reason that is providing recent time observation. The researcher will answer the research questions by developing a coherent framework for analyzing the data that had been obtained from the secondary source through taking a sample from the audited annual report of private insurance companies in Ethiopia.

3.4. Target population and Sample Design

The target population of the study will be nine private insurance share companies registered by NBE and currently under operation in Ethiopia. At present, eighteen private insurance share companies are operating in Ethiopia from the eighteen nine are selected.

From the total population of eighteen private insurance share companies, this study had selected sample by considering those companies which have the financial information and paid a dividend during the period 2007-2017 as a year of experience criteria. Accordingly, based on purposive sampling, the above-mentioned criteria eleven private insurance share companies that satisfy the criteria included as a sample. Those companies which were included in the sample are Awash insurance company s.c, Global insurance company s.c, National insurance company of Ethiopia, Nile insurance company s.c, Nib insurance company, Africa insurance company, Ethiopian insurance corporation, Nyala insurance company, and United insurance company.

Table 3.1- Lists of the selected private insurance companies operating in Ethiopia and their year of establishment. Source- NBE; developed for the research

Company list	Year of establishment
Awash Insurance share company	1994
NIB insurance company	2002
Global insurance share company	1997
Nile insurance share company	1995
National insurance share company	1994
Ethiopia insurance corporation	1975
Africa insurance company	1994
Nyala insurance company	1995
United insurance company	1997

3.5. Method of data analysis and presentation

To comply with the objective of this research, the paper is primarily based on quantitative researches, which will adopt an econometric model to identify and measure the factors influence dividend payout of Ethiopian insurance companies. The researcher wills adopt a multiple linear regression model to identify and measure possible factors that could affect the Dividend Payout as measured by the 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).

To describe and provide detailed information about selected variables descriptive statistics including minimum, mean, maximum and standard deviation is used; also to ensure safe application of least square method diagnostics tests of CLRM assumptions including Muliticollinearity, Hetroskadasticity, and autocorrelation tests were conducted; Correlation analysis, specifically Pearson correlation to measure the degree of association between the variables under considerations is also conducted; 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 to conclude based on the collected data about the influential factors in dividend payout in Ethiopian insurance companies; to determine the significance of the constant term and the coefficients terms for the regressions the P-value was used. The importance of each of the regressions was determined by carrying out the F-test at a 95% confidence level. To measure the strength to which independent variables explain the variations in the dependent variables the coefficient of determination R^2 was used. Both time series and cross-sections dimension have the data collected in this study. Therefore, the panel data regression technique is used to conduct the analysis and STATA 15 statistical software will be employed.

3.6. Model specification

Emphasis is given to the interaction of theoretical analysis and empirical data to picture the real-life events and data about the dividend policy of private insurance company in Ethiopia. After careful formulation of the question of interest, based on the hypotheses formulated and selected variables the economic model can be formulated as DPO=f (ASST, PROF, LIQ, GRO, LEV, SIZ, PYDPO, GDP, and INF). Wooldridge (2016) describes that the general economic model may come from intuition or observation and then it could make realistic if it is deducted into the economic model. The previous study applies the same derivation (Anil and Kapoor (2008; Amidu & Abor, 2006; Muhamed, 2012; Temesgen 2016; Tewodros, 2011; Samuel, 2016).

From the above economic model the following econometric model is specified;

DPO $it = \alpha + \beta1ASSTit + \beta2PROFit + \beta3LIQit + \beta4GROit + \beta5LEVit + \beta6SZit + \beta7PYDPO + \beta8GDPi + \beta9NFit + \varepsilon it$

Where;-

✓ DPO it = is Dividend Payout of …i" at time…t"

✓ ASST=Asset structure of …i" at time…t"

✓ PRO =Profitability of …i" at time…t"

✓ LIQ = Liquidity of...i" at time….t"

- ✓ GRO = growth of insurance company of...i" at time….t"

- ✓ SZ = Size of insurance company of...i" at time….t"

- ✓ LEV =Leverage of...i" at time....t"

- ✓ PYDPO= Previous year dividend payout ratio of „i" at time….t"

- ✓ INF= inflation of...i" at time….t"

- ✓ GDP=Real gross domestic product rate of...i" at time....t"

- ✓ α = is constant of the regression of...i" at time….t"

- ✓ β1 – β9= coefficient of independent variables

- ✓ ε = error term

- ✓ i= private Insurance company

3.7. Variables Definition and Hypothesis development

3.7.1. Dependent Variable

3.7.1.1. Dividend Payout Ratio

The dividend payout ratio is defined as the percentage of the company's earnings that is distributed to shareholders or reflecting the percentage of net income (available for shareholders). To calculate divide the total dividend to net profit. Rozeff, (1982); Muhamed (2012); Tewodros (2011) and Samuel (2016) were some of the studies which employed the same formula in determining dividend payout. Also, Lloyd (1985) employed dividend payout ratios as a determinant of dividend policy.

3.7.2. Independent Variables

3.7.2.1. Asset Structure and Dividend Payout

However, many studies didn't indicate asset structure as a factor of determinants of dividend policy. Al-Yahyae (2006) and Samuel (2016) explained as dividend policy can be affected by asset structure. In this study asset structure which indicates the tangibility of assets owned by a

company and potentially used as collateral for getting funds. As a result, the researcher formulates its hypothesis as follows:

H1: Asset structure influences dividend payout of private insurance companies in Ethiopia positively and significantly.

3.7.2.2. Firm Size and Dividend Payout

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. With access to capital, better credit rating, and more customers large companies tend to be more competitive, this will increase their profitability and their ability to pay higher dividends (Dickens et al., 2002). Supporting this logic, (Lloyd (1985); Jensen (1992) and (Fama, E., & French, K, 2001)), found a positive relationship between dividend payout policy and firm size. As a result, the researcher formulates its hypothesis as follows:

H2: Firm size has a positive and significant impact on dividend Policy of Ethiopian insurance companies

3.7.2.3. Growth Opportunity and Dividend Payout

Firm's ability to remain at the same level of development at a certain rate which is likely to be higher than the growth rate compared with other firms is defined as growth by (Al – Najjar & Hussainey, 2009). The proxy for growth opportunities is the change in annual income. Ho. (2003) that firms expected to spend more on new projects for expansion purposes when they have high opportunity for growth are. When 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 as stated by (Chang & Rhee 2003).

The same finding was reported Rozeff (1982); Jensen et al. (1992) and Alli (1993) firms with higher growth opportunities are likely to retain a greater portion of their earning, resulting in the lower dividend payout ratio. As a result, the researcher formulates its hypothesis as follows:

H3: Growth opportunity has a negative and significant impact on dividend Policy of Ethiopian insurance companies.

3.7.2.4. Leverage and Dividend Payout

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 effect of leverage on dividend payout is mixed regarding empirical evidence. 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 restricts the distribution of dividends. However, (Kania & Bacon, 2005) conclude that firms might use debt funds to pay dividends by founding a significant positive relationship. As a result, the researcher formulates its hypothesis as follows:

H4: Leverage has a negative and significant impact on dividend policy of Ethiopian insurance companies.

3.7.2.5. Liquidity and Dividend Payout

Firm liquidity position also affects dividend payout. Despite sufficient retained earnings, the firm may not able to pay cash dividends if the earnings are not held in cash. In this case, the company declares stock dividends instead of cash dividends. Due to these, it will be very important to compare a firm's liquidity position with its dividend payment.

Liquidity measures the extent to which a firm can meet its payment obligations. According to the signaling theory, firms with higher cash accessibility can pay higher dividends than firms with insufficient cash (Gupta & Banga, 2010). Furthermore, according to agency theory, Jensen et al. (1986) argued that firms with high cash flows pay higher dividends to diminish the agency conflict between .their managers and shareholders. Also, Christopher (2014) found liquidity is an essential factor that affects the dividend policy. Anil & Kapoor (2008) indicate that cash flow is an important determinant of the dividend payout ratio.

Logically a firm will only pay a dividend if it has a strong cash position. The profitability of firms and also liquidity is what cash dividend distribution depends on. Hence, highly liquid firms, i.e. firms with higher cash and cash equivalent assets, pay higher dividends to shareholders than those with insufficient cash. This positive association between liquidity and cash dividend payout is supported by prior literature. As a result, the researcher formulates its hypothesis as follows:

H5: Liquidity has a positive and significant impact on dividend policy of Ethiopian Insurance private companies.

3.7.2.6. Profitability and Dividend Payout

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). Besides, 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 a firm's profitability and dividend payments. As a result, the researcher formulates its hypothesis as follows;

H6: Profitability has a positive and significant impact on dividend policy of Ethiopian Insurance private companies.

3.7.2.7. Previous year Dividends and Dividend Payout

Lintner (1956) stated the primary indicator of a firm's capacity to pay dividends is the previous year's dividend payments. The model was tested and reaffirmed by Fama & Babiak (1968), who concluded that the previous year's dividends positively affect the current dividend payout ratio of a company. In reality, because investors perceive firms with stable dividends as stronger and more valuable it is often believed that companies pay a steady stream of dividends. As a result, the researcher formulates its hypothesis as follows;

H7: Previous Year Dividend has a Positive and significant impact on dividend payout policy of Ethiopian insurance companies.

3.7.2.8. Gross domestic product and dividend payout

In this study, GDP was analyzed as a factor of dividend policy. It is explained as GDP is one of the determinants of dividend policy and a positive association between GDP and dividend decision. GDP is hypothesized as follows in this study;

H8: Gross domestic product has positive impacts on dividend payout of private insurance companies in Ethiopia.

3.7.2.9. Inflation and dividend policy

When a firm establishes its dividend policy it should consider Inflation. On the other hand, investors would like to receive larger cash dividends because of inflations. To replace existing equipment, finance new capital expenditures, and meet permanent working capital needs, inflation causes it to have to invest substantially from the firm viewpoint. In such times, there may be a chance to hold down cash dividends and also forces companies to indulge in lower dividends and to hold a major part of their earnings. As the price rise, companies need to increase their capital reserves for their purchases and other expense.

Under these circumstances, the firm may be forced as a mitigation strategy to depend upon retained earnings as a source of funds to make up for the shortfall. Consequently, the dividend payout ratio will below. Basse &Reddemann (2011) studied the inflation and dividend policy of US Firms and established a stable long-run relationship between dividend payments and real economic activity and price level. Kiptoo (2010) conducted an empirical investigation on selected macro-economic variables and stock price a study of the Nairobi Stock exchange for ten years (1998-2008) using the macroeconomic variables such as inflation rate, money supply, interest rate, exchange rate, and Gross domestic product. The study revealed that inflation has a significant impact on stock price determination at the NSE. In these studies inflation was hypothesized as follow:

H9: Inflation has a negative and significant impact on dividend Policy of Ethiopian insurance companies

3.8. Operational definition and Measurement

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.

3.8.1. Dependent variable

3.8.1.1.Dividend Payout

Previous studies that determined the main determinants of dividend payment, the dividend payout ratio (DPR), defined as the dividend paid divided by net income (Rozeff, 1982); (Lloyd, 1985); (Amidu & Abor, 2006) is the dependent variable used in this study is. This variable measures the percentage of the company's earnings distributed to shareholders (Christopher and Rim, 2014). The payout ratio is calculated by dividing the total dividend to a net profit of every stock. One has calculated net profit and dividends of each company individually for every year to control the problem of extreme values in the individual year that leads the results to negative or low net income (Rozeff, 1982).

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

Dividend payout = dividend/ net profit

3.8.2. 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.

3.8.2.1. Asset structure

The asset structure of the private insurance companies indicates the tangibility of insurance companies fixed assets which could be used as collateral of borrowing of funds from financial institutions. The asset structure of private insurance companies can be measured by dividing total fixed assets over total assets.

Asset structure= Total fixed assets /Total assets

3.8.2.2.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. With access to capital, better credit rating, and more customers large companies become competitive, this will increase their profitability and 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.

Size =Natural logarithm of Total Assets

3.8.2.3.Growth

Turki and Ahmed (2013) investigated the determinants of dividend policy and they found that firms which experience more growth opportunity are more to reduce their dividends per share. This could attribute to firms other than paying dividends they channel the excess funds to profitable investments. The growth of private insurance share companies can be measured by annual changes in the annual income of each private insurance company (Muhamed, 2012; Samuel, 2016).

Growth = (Current income - Previous income)/Previous income

3.8.2.4.Leverage

Aivazian et al. (2003) argued that a firm's leverage is a key factor in explaining the firm's decision to pay a dividend. Leverage shows the extent to which the firm has utilized external debt to finance its operations. The dividend payout level gets higher as the leverage level gets higher, Firms have greater financial slack and more ability to pay and maintain their dividends with relatively less debt and more tangible assets. Leverage can be measured as the ratio of total debt to total assets for private insurance share company.

Leverage =Total liabilities /Total assets

3.8.2.5. Liquidity

Watson and Head (2010) in their study concluded that a company before paying dividends must consider its liquidity notwithstanding high profits and hence firm's liquidity is an important factor that affects the distribution of cash dividends. Liquidity measures the extent to which a firm can meet its payment of obligations. Liquidity also measures the extent to which the assets can be converted into cash to pay the firm's obligations. Scholars such as Muhamed (2012) and Kania and Bacon (2005) measure liquidity as the ratio of current asset and current liability. Hence liquidity can be measured as: 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.

Liquidity = current assets / current liability

3.8.2.6. Profitability

Firm profitability is a crucial indicator of its capacity to pay dividends, a highly profitable company most likely will pay a higher dividend and accompany with less or no profits will adopt conservative dividend policy. Profitability can be measured by different ratios such as return on assets (ROA) and return on equity (ROE) (Anil and Kapoor, 2008). ROA is a good internal management ratio because it measures profit against the entire assets a division uses to make those earnings, which is to evaluate the divisions of profitability, efficiency, and effectiveness (Mohammed, 2011).In this study, the Return on Asset (ROA) was used to measure the profitability of private insurance share companies in Ethiopia and defined as net income after tax divided by total assets. This measurement has been used by earlier scholars such as Anil &kapoor (2008), Tewodros (2011) and Muhamed (2012).

Return on Assets (ROA) = Net Profit/Total Assets

3.8.2.7. Previous year dividend

Firms with stable dividends are stronger and more valuable in the real world for investors because it is believed that such companies pay a steady stream of dividends. (Linter, 1956) showed that historical dividends are essential in determining current dividends. Fama and Babiak (1968)

concluded that the Lagged dividend payout ratios positively affect the current dividend payout ratio of a company. Last year's dividends payout is used as a proxy variable for historical dividends in this study.

PYDV = Previous Year Dividend Payout Ratio

3.8.2.8. GDP

The real GDP growth rate will be obtained from the national bank of Ethiopia.

3.8.2.9. Inflation

Some studies indicated that inflation has an impact on dividend policy determination. In this study, inflation will be measured by the general annual inflation rate of the country obtained from the national bank of Ethiopia.

3.8.3. Operationalization of study variables

The table shows definition, notation and expected sign of the study variables

	Variables	Notation	Measure	Used By (Source)	Expected Result
Dependent Variables	Dividend Payout Ratio	DPO	Dividend / Net Profit	(Lloyd, 1985).	
	Asset structure	ASST	Total fixed assets/Total assets	(Habtamu, 2019)	+
Independent Variables	Profitability	PRORA	Net Profit / TotalAssets	(Anil & Kapoor, 2008, Tewodros, 2011 and Muhamed, 2012).	+
	Liquidity	LIQ	Current Assets/ Current Liability	(Muhamed, 2012Kania and Bacon, 2005).	+
	Leverage	LEV	Total Debt/ Total assets	(Nuredin, 2012)	-
	Growth Opportunities	GRO	(Current income - previous income)/ previous income	(Muhamed, 2012).	-
	Firm Size	SZ	Natural logarithm of total assets	(Christopher, 2014)	+
	Previous Year Dividend	PYD	Previous year dividend ratio	(Christopher, 2014)	+
	GDP	GDP	Obtained from national bank of Ethiopia		-
	Inflation	INF	Obtained from national bank of Ethiopia		+

CHAPTER FOUR

Analysis and Interpretations

4. Introduction

The purpose of this chapter is to present results and analysis of data. The chapter has been organized as follow, first section deals about the preliminary Analysis, which is expected to presents descriptive and correlation analysis on variables of the study and then the second section presents the result of the fulfillment of the classical linear regression model (CLRM) assumptions and the third and final section lays down the results of regression analysis that constitute the main findings of this study.

4.1. Preliminary Analysis

4.1.1. Descriptive Statistics

Table 4.1 shows a summary of the descriptive statistics of the dependent and independent variables for nine insurance companies in Ethiopia from the year 2007 to 2017 with total observations of 102. The table shows the mean, minimum, maximum, standard deviation and number of observations for dependent (explained) variable dividend payout ratio (DPO) and independent (explanatory) variables (profitability (PR0ROA), liquidity (LIQ), leverage (LEV) , growth opportunities (GRO), firm size (FS), Pervious year dividend payout ratio (PYDPO) and Asset Structure (ASTT).

Table 4.1 descriptive statistics

. summarize dpo Asst fs gro Lev liq proroa Pydpo infg gdp

Variable	Obs	Mean	Std. Dev.	Min	Max
dpo	102	.6180588	.290606	.003	1.252
Asst	102	.1894804	.1170644	.028	.484
fs	102	19.39873	.8634534	17	20.8
gro	102	.2279608	.3274233	-.98	.949
Lev	102	.6706667	.0873193	.369	.89
liq	102	1.035431	.1907911	.672	1.632
proroa	102	.0730961	.154241	.0008	.684
Pydpo	102	.5604216	.2898487	.003	1.249
infg	102	15.94868	14.71759	2.707	55.24
gdp	102	10.42324	1.418012	7.958	13.53

Source: STATA 15 own computation

The study conducted descriptive statistic using STATA 15 software in order to give the audience more understanding about the study variables that are being analyzed. According to Raheman and Nasr, (2007) descriptive statistics is the first step in analyzing 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 tends to be very close to the mean, whereas high standard deviation indicates that the data points are spread out over a large range of values.

As shown in previous chapter, dividend payout ratio was measured as dividend divided by net profit. Table 4.1 shows the mean values of all the variables ranges from minimum of 0.073 for profitability (PROROA) measured by ROE to a maximum of 19.39 for firm size (FS) measured by natural logarithmic of total asset. Also the table shows that the mean value for DPR is 0.6180 indicating that on average Ethiopian insurance companies paid 61.8% their income as dividend. The standard deviation is 0.2906. This implies that the volatility of dividend payout ratio varies from the mean by 29.06%.

In this study the average profitability of Ethiopian insurance companies as indicated on table 4.1 during the study period is 0.073. This implies that Ethiopian insurance companies have generated on average 7.3% profit on equity committed in the company. The most profitable insurance company has generated 68.4% profit from investment on equity. Also the table provides the evidence for a 0.08% loss on equity committed in the business as a minimum for in Ethiopian insurance companies. The value of the standard deviation for ROE is 0.0.1542. This implies that the profitability of Ethiopian insurance companies varies from the mean by 15.42% during the study period 2007 to 2017.

Brealey and Myers, (2005), a company will be solvent if it has a minimum of one to one proportion between current asset and current liability. The average liquidity position of Ethiopian insurance companies' as shown in table 4.1 is 103% as measured by current asset divided by current liability. This implied that for a one birr current liability there is an available 1.03 birr on average on current assets, a maximum liquidity position of 163% and minimum of 67.2% with a dispersion of 19.07% ups and downs. Thus, it can be said that, Ethiopian insurance companies are solvent during the study period covering form 2007 to 2017.

Ethiopian insurance companies have on average 67.06% leverage ratio, in the result from table 4.1 leverage proxies by debt ratio (total debt divided by total asset) in their asset composition, mainly from provision for unearned premiums and outstanding claims, with 8.7% variability ups and downs with a maximum and minimum debt ratio of 89% and 36.9% respectively during the study period covering form 2007 to 2017.

Regarding the size of the firm natural logarithm of total assets were proxied to measure the size of Ethiopia insurance companies. According to the descriptive statistics table, the mean, over the study period is 19.3987. This implies the anti – logarithm figure on table shows nine Ethiopian insurance companies have an assets on average value of Birr 350 million over the study period and standard deviation of 0.2239 while the maximum and minimum value are 8.92 and 7.97 respectively during the study period covering form 2007 to 2017.

The average value of growth is 0.2279 with a standard deviation of 32.74%. This implies that on average, the insurance companies' sales increased by 22.79% 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 2007 to 2017 was 94.9% and a minimum value of -98%.

Descriptive statistics result shows that previous year dividend payout of Ethiopian insurance companies were on average 0.5604, minimum 0.003, maximum 1.249 with 0.2898 dispersions of ups and downs. This indicates that Ethiopian insurance companies have pay 56.04% of their income as dividend with 28.98% variability ups and downs for the study period covering from year 2007 to 2017.

Furthermore, Table 4.1 shows a descriptive statistics results of asset structure of Ethiopian insurance companies was on average 0.1894 minimum 0.028 and maximum 0.484 with 0.1170 dispersions of ups and downs. This indicates that from the total assets of Ethiopian insurance companies an average of 18.94% held by fixed asset from their total asset with 11.7% variance during the study period covering from year 2007 to 2017.

4.2. Correlation Analysis

It is important to check the correlation between different variables on which the analysis is built prior to regression result Wooldridge (2016). Correlation is a way to index the degree to which two or more variables are associated with or related to each other. To check whether there is multicollinearity problem in the model and to indicate whether the variables move together or not in the same direction and the correlation coefficient indicates the strength of a linear relationship between two variables is the purpose of undertaking correlation analysis is.

Correlation analysis deals about the relationship among variables, both the independent and dependent variables. In correlation analysis the correlation coefficient result of the variables should be between the range of +1 and -1. The magnitude of coefficient measure degree of liner association between variables and the sign indicate that the direction of the correlation (Brooks, 2014). The following table (table 4.2) shows the correlation matrix for the variables used in the analysis.

Table 4.2 Correlation matrix between variable

```
. correlate dpo Asst fs gro Lev liq proroa Pydpo infg gdp
(obs=102)
```

	dpo	Asst	fs	gro	Lev	liq	proroa	Pydpo	infg	gdp
dpo	1.0000									
Asst	0.0551	1.0000								
fs	0.2526	-0.0760	1.0000							
gro	-0.4840	0.0253	-0.2223	1.0000						
Lev	-0.2661	-0.3505	0.0722	0.0120	1.0000					
liq	0.3795	-0.4071	0.2601	-0.1899	-0.3483	1.0000				
proroa	0.4693	0.0566	0.4213	-0.2118	-0.2532	0.3548	1.0000			
Pydpo	0.3494	0.0772	0.0838	0.0710	-0.1750	0.1232	0.2660	1.0000		
infg	-0.0055	0.0080	-0.2766	0.0910	0.0873	-0.1643	-0.1727	-0.0127	1.0000	
gdp	-0.1207	0.0408	-0.3357	0.0988	-0.0342	-0.1001	0.0462	-0.0367	0.4840	1.0000

Source: STATA 15 own computation

According to correlation result in Table 4.2 shows that leverage, growth opportunity, inflation and GDP are negatively related to dividend payout ratio of Ethiopian insurance companies. This infers that when the increase in these factors leads in the decrease in dividend payout and in reverse decreases in these factors leads increases in dividend payout. Moreover, the coefficient

estimates of correlation in the above table are -0.4840, -0.2661, -0.0055 and -0.1207 respectively.

While asset structure, firm size, liquidity, profitability and previous year dividend are positively related with dividend payout with coefficient estimated in the above table 0.0551, 0.2526, 0.3795, 0.4693 and 0.3494 respectively. These figures implied that when the increase in these factors also leads to an increase in dividend payout of insurance companies in Ethiopia.

4.3. Regression model tests (CLRM Assumptions)

4.3.1. Assumption 1: The errors have zero mean ($\epsilon = 0$)

If a constant term is constituted in the regression equation, this assumption will never be violated, and the regression model of the study constitutes a constant term and the assumption is not violated, according to Brooks (2014).

4.3.2. Assumption 2: Homoscedasticity (variance of the errors is constant (UT) = σ2 <∞)

The other important assumption for classical linear regression model is that the disturbances appearing in the population regression are homoscedastic that means the variance of the error term is consistent. If errors have no a constant variance (not homoscedastic), they are said to have the problem of Hetroscedasticity (Brooks, 2014). In this study white test was used to test the presence of Hetroscedasticity across the range of explanatory variables.

The hypothesis for the Homoskedasticitytest was formulated as follow;

Ho: Homoskedasticity

Ha: unrestricted Hetroscedasticity

Decision Rule: Reject H0 if P value is less than significant level 0.05. Otherwise, fail to reject H0.

Table 4.3: Hetroscedasticity test result: white test

```
. imtest, white

White's test for Ho: homoskedasticity
          against Ha: unrestricted heteroskedasticity

          chi2(54)      =      44.77
          Prob > chi2   =      0.8103

Cameron & Trivedi's decomposition of IM-test
```

Source	chi2	df	p
Heteroskedasticity	44.77	54	0.8103
Skewness	11.56	9	0.2395
Kurtosis	1.56	1	0.2119
Total	57.89	64	0.6911

Source: STATA 15 own computation

The p-value for the tests should be greater than 0.05 in order to conclude that Hetroscedasticity problem does not exist. As it observed from the table 4.3 the test result of p-values of all version of the test static significantly greater than 0.05, which is 0.6911 for this model, which could be concluded as there is no problem of Hetroscedasticity.

4.3.3. Assumption 3: Test for absence of autocorrelation assumption (cov(ui , uj) = 0 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 rth order.

H0 = No autocorrelations errors

H1 = Autocorrelations errors

Decision Rule: Reject H0 if P value is less than significant level 0.05. Otherwise, fail to reject H0.

Table 4.4: Breusch-Godfrey Serial Correlation LM Test

```
. estat bgodfrey, lag(1)

Breusch-Godfrey LM test for autocorrelation
```

lags(p)	chi2	df	Prob > chi2
1	1.190	1	0.2753

```
                    H0: no serial correlation
```

Source: STATA 15 own computation

As can be seen in the above table 4.4, F test result and the P value of F-statistic (0.2753), 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 supports the absence of autocorrelation. 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.

4.3.4. Assumption 4: Normality (Errors are Normally Distributed ($u_t \sim N(0, \sigma^2)$))

Normality test is used to determine whether the error term is normally distributed. Brooks (2014) noted that the JarqueBera statistic would not be significant for disturbance to be normally distributed around the mean. The purpose of the JarqueBera test is to make sure that the data set is well modeled by a normal distribution. The hypothesis for the normality test was formulated as follow:

H0: Error term is normally distributed

H1: Error term is not normally distributed

α = 0.05

Decision Rule: Reject H0 if P value of Jarque-Bera(sktest)less than significant level 0.05. Otherwise, fail to reject H0.

Table 4.5: Normality Test Result using jarquebera

```
. sktest resid

                    Skewness/Kurtosis tests for Normality
                                                     ——— joint ———
        Variable |     Obs  Pr(Skewness)  Pr(Kurtosis) adj chi2(2)   Prob>chi2
    -------------+------------------------------------------------------------
           resid |     102      0.0771        0.1904        4.84        0.0888
```

Source: STATA 15 own computation

Table 4.5 indicated that distribution of the panel observation is symmetric around its mean. The Jarque-Bera statistic has a P-value of 0.0888.So because this P value is very big, it's above the standard significance threshold point 0.05, we would accept the null hypothesis of normality, and it can be conclude that at this time there is enough evidence to view these residuals from this regression model as being normally distributed. Thus, the null hypothesis that the data is normally distributed is to be accepted since the p-value was considerably in less of 0.05.

<u>Normality Graph</u>
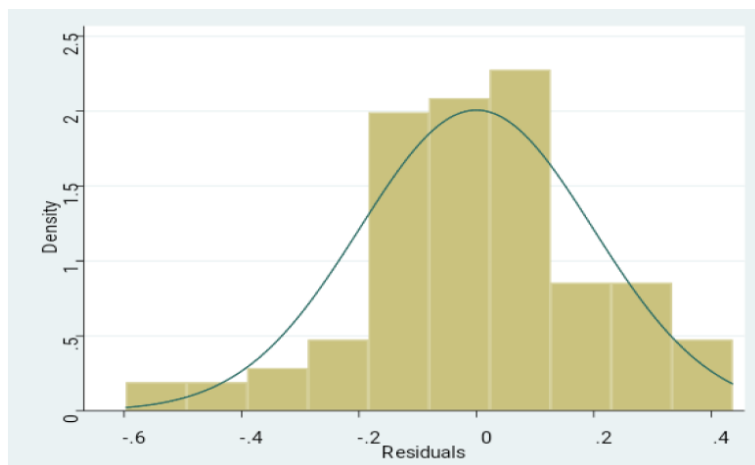
4.3.5. Assumption 5: Multicollinearity Test

Multicollinearity indicates a linear relationship (correlations) among explanatory variables. When independent variables are multicollinear, there is overlap or sharing of predictive power. This may lead to the paradoxical effect, where by 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). Hair et al. (2006) argued that correlation coefficient below 0.9 may not cause serious multicollinearity problem. Also, Cooper and Schendlar (2009) suggested that a correlation above 0.8 should be corrected for. In addition, Malhotra (2007) stated that multicollinearity problems exists when the correlation coefficient among variables should be greater than 0.75.

Table 4.6: Correlation matrix of explanatory variables

```
. pwcorr Asst fs gro Lev liq proroa Pydpo infg gdp

                   Asst        fs       gro       Lev       liq    proroa     Pydpo

      Asst       1.0000
        fs      -0.0760    1.0000
       gro       0.0253   -0.2223    1.0000
       Lev      -0.3505    0.0722    0.0120    1.0000
       liq      -0.4071    0.2601   -0.1899   -0.3483    1.0000
    proroa       0.0566    0.4213   -0.2118   -0.2532    0.3548    1.0000
     Pydpo       0.0772    0.0838    0.0710   -0.1750    0.1232    0.2660    1.0000
      infg       0.0080   -0.2766    0.0910    0.0873   -0.1643   -0.1727   -0.0127
       gdp       0.0408   -0.3357    0.0988   -0.0342   -0.1001    0.0462   -0.0367

                   infg       gdp

      infg       1.0000
       gdp       0.4840    1.0000
```

The results in the above correlation matrix table 4.6 show that the highest correlation of 0.4213 which is between firm size and profitability. Therefore, it is possible to conclude that there is no problem of multicollinearity.

4.4.Model Selection (Random Effect versus Fixed Effect 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-sectional but not over time, while all of the slope estimates are fixed both cross-sectional 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-sectional 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), H0: Random effects model is appropriate.

H0: Random effects model is appropriate.

H1: Fixed effects model is appropriate.

$\alpha = 0.05$

Decision Rule: Reject H0 if P value is less than significant level 0.05. Otherwise, fail to reject H0.

Table 4.7: Housman Test

```
. hausman fe re

                     ──── Coefficients ────
                     (b)            (B)            (b-B)          sqrt(diag(V_b-V_B))
                     fe             re             Difference     S.E.

        Asst         .3401776       .2522952       .0878824       .185929
          fs        -.0270352      -.0063863      -.0206489       .0300285
         gro        -.3355001      -.3662814       .0307813       .0231544
         Lev        -.4930467      -.1962913      -.2967555       .2074636
         liq         .4026245       .3294279       .0731966       .1047898
      proroa         .5389595       .4990543       .0399052       .0311117
       Pydpo         .1727927       .2620565      -.0892638       .0337944
        infg         .004384        .0039007       .0004833       .
         gdp        -.0392357      -.0346351      -.0046006       .0021786

                     b = consistent under Ho and Ha; obtained from xtreg
          B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

           chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                   =          7.43
           Prob>chi2 =     0.5921
           (V_b-V_B is not positive definite)
```

Source: STATA 15 own computation

Table 4.6 above shows Hausman specification test, the P-value of the model is 0.5921, 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.

4.5. Panel Data Regression Result And its Discussion

4.5.1. Operational Model

As it was mentioned in chapter three the operational panel regression model used to find the significant factors of dividend payout policy of private insurance companies in Ethiopia measured by dividend payout ratio (DPO) is:

$$DPO = \beta 0 + \beta 1 ASST_i + \beta 2 FS_i + \beta 3 GRO_i + \beta 4 LEV_{i,t} + \beta 5 LIQ_{i,t} + \beta 6 PROROA_{i,t} + \beta 7 PYD_{i,t} + \beta 8 GDP_{i,} + \beta 9 INFG + \varepsilon_{i,t}$$

4.5.2. Interpretations on regression results

Table 4.8 Random effects model regression results

```
. xtreg dpo Asst fs gro Lev liq proroa Pydpo infg gdp, re

Random-effects GLS regression                  Number of obs      =        102
Group variable: com                            Number of groups   =         10

R-sq:                                           Obs per group:
     within  = 0.5107                                      min =          6
     between = 0.6574                                      avg =       10.2
     overall = 0.5333                                      max =         11

                                                Wald chi2(9)       =     105.11
corr(u_i, X)    = 0  (assumed)                  Prob > chi2        =     0.0000
```

dpo	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Asst	.2522952	.2430972	1.04	0.299	-.2241664	.7287569
fs	-.0063863	.0300569	-0.21	0.832	-.0652967	.0525242
gro	-.3662814	.0668074	-5.48	0.000	-.4972215	-.2353414
Lev	-.1962913	.3230878	-0.61	0.543	-.8295316	.4369491
liq	.3294279	.1603018	2.06	0.040	.0152422	.6436136
proroa	.4990543	.1719452	2.90	0.004	.1620479	.8360608
Pydpo	.2620565	.0757274	3.46	0.001	.1136334	.4104795
infg	.0039007	.0016609	2.35	0.019	.0006454	.007156
gdp	-.0346351	.0180034	-1.92	0.054	-.0699211	.0006509
_cons	.6836403	.6942914	0.98	0.325	-.6771458	2.044426

sigma_u	0		
sigma_e	.20212507		
rho	0	(fraction of variance due to u_i)	

DPO = 0.6836 + 0.2522ASST$_{it}$ - 0.0063FS$_{it}$ -0.3662GRO$_{it}$ -0.1962LEV$_{it}$ + 0.3294LIQ$_{it}$ + 0.4990PROROA+ 0.2620PYD$_{it}$ - 0.034GDP$_{it}$ + 0.039INFG, + ε_{it}

The regression output in table 4.8 above indicated as the overall the model is like to fit if it is observed prob> chi2 =0.0000 at 1% significant level. The overall R squared of the random effect regression model is 0.5333. This result indicates that 53.33% of the variation in dividend payout policy of Ethiopian private insurance companies has been explained by independent variables, whereas the remaining percent of variation will be explained by other variables which couldn't be included in this study. For panel data, R-Squared greater than 20% is still large enough for reliable conclusions (Cameron Trivedi, 2009; Hsiao, 2007, cited in Nyamsogoro, 2010).

Among the independent variables liquidity has negative coefficient and significant relationship, profitability has positive coefficient and significant relationship, previous year dividend positive coefficient and significant relationship, growth opportunity negative coefficient and significant relationship and inflation have a positive coefficient and significant relationship with dividend payout of private insurance share companies in Ethiopia, whereas firm size, leverage, asset structure and GDP all have a negative coefficient on dividend payout of private insurance share companies and are statistically insignificant.

4.6. Discussion on Findings
4.6.1. Firm Size

H0: firm size has negative and insignificant relationship with dividend payout of private insurance share Companies in Ethiopia.

Ha: firm size does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia.

As shown in the regression output presented in Table 4.8, the coefficient of Firm Size (FS) proxied by the natural logarithmic of firms' total asset -0.0063 and its corresponding P-value 0.832. Meaning that holding other independent variables fixed at their average value, when Firm Size (FS) increase by one percent, dividend payout ratio (DPO) of Ethiopian insurance companies will decrease by 0.63% and statistically insignificant at 5% of significance level.

Therefore, the study fail to reject the null hypothesis that firm size has negative and insignificant relationship with dividend payout ratio. This means, there is no sufficient evidence to support the positive relationship between dividend payout ratio and Firm Size. Therefore, this study does not support the relevance of firm size as most important consideration of dividend policy.

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.

4.6.2. Asset Structure

H0: asset structure has negative and insignificant relationship with dividend payout of private insurance share Companies in Ethiopia.

Ha: asset structure does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia.

As shown in the regression output presented in Table 4.8, the coefficient of asset structure (ASST) measured by the ratio of Fixed Asset to Total Asset is 0.2522 and its corresponding P-value is 0.299. Meaning that holding other independent variables constant at their average value, when Asset structure (ASST) increase by one, dividend payout ratio (DPO) of Ethiopian insurance companies will increase by 25.22% but statistically insignificant at 5% of significance level.

Therefore, the study failed to reject the null hypothesis that asset structure has positive effect on dividend payout. This means, there is no sufficient evidence to support the negative relationship between dividend payout ratio (DPO) and asset structure. This is consistent with the hypothesis as described in the previous chapter companies owning the most tangible assets are likely to borrow more than those owning the most intangible assets, so they have the ability to keep less retained earnings and pay higher dividends ratio. This result is also similar to previous studies of Rashid, (2014) and Ho (2003).

4.6.3. Growth opportunities

Hypothesis testing of the relationship between growth opportunities and dividend payout ratio;

H0: Growth opportunity does not have a significant effect on Ethiopian private insurance company's dividend payout.

Ha: Growth opportunity has negative and significant effect on Ethiopian private insurance company's dividend payout.

The study rejects Ho since growth and Ethiopian private insurance companies have negative and statistically significant relationship at 1% significance level. The STATA output in the above table 4.8 showed that the coefficient of growth is negative. According to the regression result, the coefficient of growth opportunity is -0.3662 and it is statistically significant at 1 % level of significant. This means that an increase of growth in income of Ethiopian private insurance companies by 1% on average will result in 36.62% reduction in dividend payout ratio, holding all other variables remain equal.

The result is also in line with pecking order theories, those firms with high growth have a habit of to pay fewer dividends; internal financing of investment opportunities is preferred because it avoids the outside scrutiny of suppliers of capital and also there is no floatation costs associated with the use of retained earnings. Therefore as per empirical findings of this study, growth opportunity is considered as most an important factor in determination of dividend payout for Ethiopian private insurance companies.

This is consistent with the hypothesis as described in the previous chapter. Firms with higher growth opportunities are likely to retain a greater portion of their earning, resulting in lower dividend payout ratio; which is supported in literature see for instance Ruzeff (1982), Jensen (1992), Ho (2003), Al-najjar&Hussainer (2009),Amidu and Abor (2006), Al-Yahyae (2006), and Muhamed (2012).

4.6.4. Leverage

Hypothesis testing of the relationship between leverage and Ethiopian private insurance company's dividend payout;

H0: leverage has negative and insignificant relationship with dividend payout of private insurance share Companies in Ethiopia.

Ha: leverage does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia.

As shown in the regression output presented in Table 4.8, the coefficient of leverage (LEVG) measured by debt to asset ratio is -0.1962 and its corresponding P-value 0.543. Meaning that holding other independent variables fixed at their average value, when leverage (LEVG) increase by one, dividend payout ratio (DIPO) of Ethiopian insurance companies will decrease by 19.62% and statistically insignificant at 5% of significance level. Therefore, the researcher fail rejects the null hypothesis leverage has negative and insignificant relationship with dividend payout ratio.

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. 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).

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 is also attributable to the fact that, there exists a high difference in their size, whereas there is relatively closeness in Dividend payout ratio of Ethiopia insurance companies.

4.6.5. Liquidity

Hypothesis testing of the relationship between liquidity and Ethiopian private insurance companies dividend payout;

Ho: liquidity does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia.

Ha: liquidity has positive and significant relationship with dividend payout of private insurance share Companies in Ethiopia.

The study rejects Ho since liquidity and dividend payout ratio of Ethiopian private insurance have positive and significant relationship at 5% level of significance. The STATA result in the above table 4.8 shows that the coefficient of liquidity is positive. According to the regression result, the coefficient is 0.3294 and it is statistically significant with p value of 0.04 at 5% significant. This means that on average, when liquidity increase by one birr, dividend payout ratio will increase by 32.94%, holding other variable constant; which is supported in literature see for instance Anil and Kapoor (2008), Christopher (2014), Gupta &Banga (2010,Muhamed (2012) and Samuel G. (2016), are among others.

The result is parallel with signaling theory; firms with higher cash accessibility are able to pay higher dividends than firms with insufficient cash (Gupta &Banga, 2010). The result is also consistent with agency theory, that firms with high cash and cash equivalent asset flows pay higher dividends in order to diminish the agency conflict between their managers and shareholders (Jensen, 1986). Therefore as per empirical findings of this study, liquidity is considered as most important factor in determination of dividend payout for Ethiopian private insurance companies. Companies have to pay higher dividends in order to reduce the agency conflict between managers and shareholders if they have a high liquidity as argued by Jensen et al. (1992), Rozeff (1982) and Easterbrook (1984).

4.6.6. Profitability

Hypothesis testing of the relationship between profitability and Ethiopian private insurance companies" dividend payout;

Ho: profitability does not have a significant effect on Ethiopian private insurance company"s dividend payout

Ha: profitability has positive and significant effect on Ethiopian private insurance company"s dividend payout.

The study rejects H0 since there is a positive significant relationship between profitability and dividend payout ratio. The STATA output on the above table 4.8 reveals that the coefficient of profitability is positive. According to the regression result the coefficient is 0.4990 and is highly significant (0.004) at 1 percent level of significance. This means on average as profitability increase by 1 percent, dividend payout ratio will increase by 49.90 percent, holding other variables constant. This means that the profitable insurance companies in Ethiopia are in a condition of more likely to pay dividends for their shareholders. This result is also consistent with the signaling theory of the dividend policy theory.

According to bird in hand, signaling and pecking order theory, highly profitable firms are in a position to distribute dividends. Fama and French (2001) reported a positive association between dividends and profitability which they interpret as evidence in support of the pecking order theory. Thus, profitable firms will find it more significant to pay dividends and to generate more retained earnings. This result is also similar to Lintner (1956). Whereas Lintner stated that net earnings were the dominant element which determined current changes in dividends. Besides Al-Kuwari (2009) and Pruitt and Gitman (1991) concluded that current year's profit is important factors that influence dividend policy. Among some empirical studies conducted in Africa the following have the same results in which profitability determine dividend payout positively and significantly are (Tewodros, 2011; Mhamed, 2012 and Amidu and Abor, 2006).

Hence, profitability is considered an important factor in influencing dividend payment. This result clearly supports hypothesis that profitability has a positive and significant impact on dividend policy of private insurance companies in Ethiopia and it is in line with the result obtained from the audited annual report of the companies.

4.6.7. Previous year dividend

Hypothesis testing of the relationship between previous year dividend and Ethiopian private insurance companies" dividend payout;

Ho: Previous year dividend does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia

Ha: Previous year dividend has significant relationship with dividend payout of private insurance share Companies in Ethiopia.

The study rejects Ho since Previous year dividend and Ethiopian private insurance dividend payout ratio has positive and significant relationship. The STATA result on the above table 4.8 shows that the coefficient of previous year dividend is positive. According to the regression result the coefficient is 0.2620 and is statistically significant with p value of 0.001 at 5% significance level. This means that an increase of pervious year dividend by 1%, on average, will result in 26.20 % increase of dividend payout ratio, holding other variables constant.

This is consistent with the hypothesis as described in the chapter three. Firms with higher previous year dividend are likely to resulting in higher dividend payout ratio; which is supported in literature see for instance Lintner (1956), Fama and Babiak (1968) and Kinfe (2011), among the many. The result also in line with signaling theories, companies wants to give a positive signal to the market that the firm have sustainable earning and its decent condition to continue paying dividends.

4.6.8. Real Gross Domestic Product (GDP)

Hypothesis testing of the relationship between GDP and Ethiopian private insurance companies‟ dividend payout;

Ho: GDP does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia

Ha: GDP has negative and insignificant relationship with dividend payout of private insurance share Companies in Ethiopia.

The study rejects Ho since GDP and Ethiopian private insurance dividend payout ratio has negative and statistically significant relationship. The coefficient of GDP is -0.0346 with p-value 0.054 which is statistically significance at 5 percent level of significance. This indicates that there is negative relationship between dividend payout and GDP. That is, for a one percent increase in GDP on average dividend payout of Ethiopian private insurance companies will decrease by 3.46 percent.

4.6.9. Inflation

Hypothesis testing of the relationship between inflation and Ethiopian private insurance company's dividend payout;

Ho: inflation does not have significant relationship with dividend payout of private insurance share Companies in Ethiopia.

Ha: inflation has positive and significant relationship with dividend payout of private insurance share Companies in Ethiopia.

The study rejects Ho since inflation and Ethiopian private insurance dividend payout ratio has positive and significant relationship. As it can be seen in table 4.8, inflation has 0.0039 coefficient and p-value of 0.019 which is statistically significant at one percent of level of significance, as supported by Mirbagherijam (2014) and Wanjiru, (2013). This shows that, on average if inflation increases by one percent, dividend payout of Ethiopian private insurance companies increases by 0.39% other factors remain constant.

4.7. Summary of the Analysis

Table 4.10: Comparison of the Test Result with the Expectation

Independent Variables	Expected Relationship	Actual Result	Status (null hypothesis)	Statistical
Asset structure	+	+	Fail to rejected	Insignificant
Firm size	+	-	Fail to rejected	Insignificant
Growth	-	-	Rejected	Significant
Leverage	-	-	Fail to rejected	Insignificant
Liquidity	+	+	Rejected	Significant
Profitability	+	+	Rejected	Significant
Previous year DPO	+	+	Rejected	Significant
GDP	+	-	Rejected	significant
Inflation	-	+	Rejected	significant

CHAPTER FIVE

5. Conclusions and Recommendations

The preceding chapter presented the results and discussion, while this chapter deals with conclusions and recommendations based on the results of the study. Accordingly, this chapter is organized into two subsections. Section 5.1 presents the conclusions and section 5.2 presents the recommendations.

5.1. Conclusion

The main focus of dividend payout decision is about how much to withdraw to investors and for future company needs how much to be retained. Therefore, making of the correct dividend payout decision is advantageous for a mutual benefit for the company and for the investors. As per the data obtained from secondary source (National bank of Ethiopia) of the respective companies" annual reports and macroeconomic variables and reached up on conclusions. It was explained that the dividend payout is relevant in the industry in contrary to the MM's irrelevancy theory and for deciding what amount to be paid they give much consideration.

Based on the regression analysis findings outlined in the above chapter three, the researcher concludes with some recommendations and provides insight on Ethiopian insurance company's influential factors of dividend payout decisions. However, it should be emphasized that the absence of active secondary stock market in the country has limited the scope of the study and limited research on this specific topic. Therefore, as the idea of dividend is controversial area in finance and one of a relatively broad concept, the research finding in somehow is different from other research's done in developed and emerging market countries case.

The influential factors of dividend payout decisions of insurance companies in Ethiopia over the period 2007 to 2017 were researched. 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 which most doesn't include the macro economic factors GDP and inflation. Nine insurance companies were selected out of currently operational eighteen companies and collected secondary data from National Bank of Ethiopian. Many variables have been identified as influential factors of dividend payout policies in other empirical literature.

Against this background, in this study the relationship, relative importance and significance in dividend payout policy decision of Ethiopian insurance companies.

For econometric analysis of the data regression Analysis was identified as the most appropriate tool. The descriptive statistics revealed the data to be normal. Also, the assumptions needed to be fulfilled for ordinary least square method (OLS) were tested; the data was found to be homoskedastic, free of autocorrelation free of Multi-collinearity and normally distributed. As shown in the previous chapter Liquidity, growth opportunity, profitability, previous year dividend GDP and inflation a significant relationship with Dividend Payout. The rests explanatory variables i.e. asset structure, firm size and leverage were found to be insignificant in context of Ethiopian insurance companies. In addition, the study has showed positive coefficient for asset structure, liquidity, profitability, previous year dividend and inflation, while firm size, GDP, leverage and growth have negative coefficient. Also, the coefficient of determination (R2) is 0.53.33 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 Breush-Godfrey Serial Correlation LM test which is (0.2753) shows as there was no presence of auto correlation; hence, the model produced a generous result.

The results of the regression analysis showed significant positive relationships between dividend payout with, liquidity, profitability, previous year dividend and inflation, whereas significant negative relationship between dividend payout and growth opportunity. The results suggested that, growing opportunity of insurance companies require more funds in order to finance their growth and therefore they would typically retain greater proportion of their earnings by paying low dividend.

In general, the study also clearly demonstrated that internal factors such as growth, liquidity, profitability and previous year dividend and from external factor GDP and inflation were the six most important determinants influencing dividend policy of private insurance share companies in Ethiopia.

5.2. Recommendations

Given the fact shareholder preferring company with stable and predictable dividend policy, the model in this study could use to predict a company dividend payout. The results of this study have provided insight into the predictor variable that have an important influence in explaining the variation of dividend payout for Ethiopian private insurance companies. Therefore, understanding the determinants of dividend payouts has significant implication on individual investor; investment policy and management depending on their dividend preference. On the basis of the findings of this study, the student has drawn the following recommendations.

- ✓ Growth, Liquidity, profitability, previous dividend payout, GDP and inflation needs to be considered when setting dividend payout policies as they are most significant variables affecting dividend payout policy of Ethiopian insurance companies by managers and board of director as it helps them in the long run to achieve their objective of maximizing profit and satisfy shareholder sand onward then employee's needs.
- ✓ For individual investors understanding the determinants of dividend payout has significant implication depending on his/her dividend preference. Since, searching and brokerage costs are high and the absence of secondary market, it is difficult for an individual investor to shift easily and construct his or her own dividend policy by buying and/or selling existing stocks. Besides, investors who want to select the paying dividend firms might have to look into the six mentioned significant factors before selecting the companies.
- ✓ By considering national bank directives and regulations and including different company selected factor such as the investment opportunity, management efficiency, insider ownership, institutional ownership and business risk could be examined for further studies directions.
- ✓ Money supply and interest rate are another potential macroeconomic variable that can be examined. Finally, the investor's approaches towards dividend policy were uncovered by the findings and so it can be explored by future academicians and researchers.

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Appendices

Appendix A: - 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	>>
18	Zemen Insurance S.C	17/1/2020	General	>>

Via: - https://nbebank.com/insurers.htm

Appendix B: Regression Result

Source	SS	df	MS			
Model	4.54846629	9	.505385144			
Residual	3.98116935	92	.04327358			
Total	8.52963565	101	.084451838			

Number of obs = 102
F(9, 92) = 11.68
Prob > F = 0.0000
R-squared = 0.5333
Adj R-squared = 0.4876
Root MSE = .20802

dpo	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Asst	.2522952	.2430972	1.04	0.302	-.2305167	.7351072
fs	-.0063863	.0300569	-0.21	0.832	-.0660819	.0533094
gro	-.3662814	.0668074	-5.48	0.000	-.4989667	-.2335962
Lev	-.1962913	.3230878	-0.61	0.545	-.8379715	.4453889
liq	.3294279	.1603018	2.06	0.043	.0110547	.6478011
proroa	.4990543	.1719452	2.90	0.005	.1575563	.8405524
Pydpo	.2620565	.0757274	3.46	0.001	.1116553	.4124577
infg	.0039007	.0016609	2.35	0.021	.0006021	.0071994
gdp	-.0346351	.0180034	-1.92	0.057	-.0703913	.0011212
_cons	.6836403	.6942914	0.98	0.327	-.6952823	2.062563

Appendix C: Fixed effect panel regression output

Fixed-effects (within) regression
Group variable: com

Number of obs = 102
Number of groups = 10

R-sq:
within = 0.5244
between = 0.4093
overall = 0.5103

Obs per group:
min = 6
avg = 10.2
max = 11

corr(u_i, Xb) = -0.0737

F(9,83) = 10.17
Prob > F = 0.0000

dpo	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Asst	.3401776	.3060487	1.11	0.270	-.2685411	.9488962
fs	-.0270352	.0424868	-0.64	0.526	-.1115397	.0574693
gro	-.3355001	.0707061	-4.74	0.000	-.4761317	-.1948685
Lev	-.4930467	.383962	-1.28	0.203	-1.256732	.2706383
liq	.4026245	.1915139	2.10	0.039	.021711	.7835379
proroa	.5389595	.1747372	3.08	0.003	.1914142	.8865048
Pydpo	.1727927	.0829259	2.08	0.040	.0078564	.3377289
infg	.004384	.0016367	2.68	0.009	.0011286	.0076394
gdp	-.0392357	.0181347	-2.16	0.033	-.0753049	-.0031665
_cons	1.271122	.8889914	1.43	0.157	-.4970459	3.039291

sigma_u	.09477978					
sigma_e	.20212507					
rho	.18024905	(fraction of variance due to u_i)				

F test that all u_i=0: F(9, 83) = 1.61   Prob > F = 0.1271