

Addis Ababa
University
(Since 1950)



Determinants of Dividend Payout in Ethiopian Private Banks

Elias Mitiku Saje

A Thesis Submitted to

The Department of Accounting and Finance

College of Business and Economics

Presented in Partial Fulfillment of the Requirements for the Degree of Master of
Science in Accounting and Finance

Addis Ababa University

Addis Ababa, Ethiopia

June 2015

Addis Ababa University

School of Graduate Studies

This is to certify that the thesis prepared by Elias Mitiku, entitled: Determinants of Dividend Payout in Ethiopian Private Banks and submitted in partial fulfillment of the requirements for the degree of Master of Science (Accounting and Finance) compiles with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee:

Advisor Dr. Abebaw Kassie Signature_____ Date_____

Examiner Dr. Laxmikantha Padakanti Signature_____ Date_____

Examiner Dr. Alem Hagos Signature_____ Date_____

Chair of Department of Graduate Program Coordinator

Abstract

Determinants of Dividend Payout: An Empirical Study on Ethiopian Private Banks

Elias Mitiku

Addis Ababa University, 2015

The main purpose of the study was to examine the determinants of dividend payout in Ethiopian private banks. Five years data from 2009/10 to 2013/14 were collected from National bank of Ethiopia and banks audited financial statement. The collected data were analyzed using panel data regression technique. The study used dividend payout as a dependent variable and seven independent variables; they are profitability, liquidity, leverage, lagged dividend payout, growth, size and risk. The finding indicated that among the seven independent variables; lagged dividend payout, growth, size and risk have statistically significant impact on dividend payout; the rest three variables have no statistical significant impact on dividend payout. Therefore, lagged dividend payout, growth, size and risk have a significant impact on dividend payout in Ethiopian private banks and board of directors of banks need to consider these variables while designing their dividend payout policy; on the same token investors need to consider these variables in their investment decisions when they want to make an investment in Ethiopian private banks.

Key words: Dividend payout, private banks

Acknowledgments

I would like to express my heartfelt gratitude for every living, lord of the lord, the almighty Allah, the most gracious and the most merciful; without him nothing can be done or accomplished, who has helped me in each step of my endeavor until now and I hope he will help me to achieve my purpose.

Next to this, I would like to thank my advisor Dr. Abebeaw Kassie who has guided me and provided me his valuable comments during each chapter of the study which helped me a lot to move my study on track and finally to complete it.

Also I would like to thank my mother, Zeitu Hassen, my wife, Muna Jemal, my sisters, Leyla Mitiku, Hawa Mitiku, Semira Mitiku and my brother Abesh Mitiku for their support, prayers and best wishes to complete the program successfully.

Lastly I would like to extend my gratitude to my friends; Dawit, Samson, Mohammed, Belay, Asfaw, Mestawot, Aberash, Teshome and Biniam; who have provided me their valuable comments on the study and who provided me the financial statements of the banks that I used on the study.

Table of Contents

List of Tables.....	vi
List of Figures.....	vii
List of Acronyms.....	viii

Chapter One: Introduction

1.1 Background of the study	1
1.2 Statement of the problem	4
1.3 Objective of the study.....	6
1.4 Hypotheses of the study	7
1.5 Significance of the study	8
1.6 Scope and limitation of the study.....	9

Chapter Two: Literature Review

2.1 Theoretical Framework	11
2.1.1 Meaning, Forms and Stability of Dividend	11
2.1.2 Background of Corporate Dividend Policy.....	12
2.1.3 Theories of Dividend Policy	14
2.1.3.1 Dividend Irrelevance Theory.....	14
2.1.3.2 The “Bird-in the Hand” Theory	16
2.1.3.3 Signaling Theory.....	17
2.1.3.4 Agency Theory	19
2.1.3.5 Tax Preference Theory	22
2.1.3.6 Clientele Effect.....	23
2.2 Types of Dividend Policy	25

2.2.1 Fixed Percentage Payout Ratio Policy	25
2.2.2 Zero Dividend Policy	25
2.2.3 Constant or Steadily Increasing Dividend	25
2.2.4 Residual Policy	26
2.2.5 Smoothed Residual Dividend Policy	26
2.2.6 Alternative Policies to Paying Cash	27
2.3 Alternatives to cash dividend	27
2.3.1 Scrip Dividends	27
2.3.2 Share Repurchases	28
2.3.3 Special Dividends	28
2.4 Emperical Studies On Determinants of Dividend Payout	29
2.5 Variables used in previous studies	35
2.6 Gaps in literature	36
2.7 Conceptual framework	38

Chapter Three: Research Methodology

3.1 Research Design	40
3.2 Data Collection and Sampling Technique	40
3.3 Data Analysis	41
3.3.1 Model assumptions	42
3.3.2 Model Specifications	44
3.4 Variables Construction	46

Chapter Four: Results and Discussions

4.1 Descriptive statistics	52
----------------------------------	----

4.2 Tests for the Classical Linear Regression Model (CLRM) Assumptions	55
4.3 Regression Results	59
4.3.1 Lintner's Dividend Model (Model I)	59
4.3.2 Determinants of Dividend Payout (Model II)	60
4.4 Summary of the analysis	68

Chapter Five: Conclusion, Recommendation and Implication of the study

5.1 Conclusion	70
5.2 Recommendation and Implication of the study	72
5.3 Areas of Future Research.....	73
References	74
Appendices	81

List of Tables

Table 3.1: Variables Description and Expected Sign -----	45
Table 4.1: Descriptive statistics -----	52
Table 4.2: Correlation matrix of dependent and independent variables -----	54
Table 4.3: Heteroscedasticity Test: White -----	56
Table 4.4: Breusch-Godfrey Serial Correlation LM Test-----	57
Table 4.5: Correlation Matrix between independent variables -----	57
Table 4.6: Random Effect- Hausman test -----	59
Table 4.7: OLS Regression- Lintner's model (Model I) -----	60
Table 4.8: Regression Result- Fixed Effect Model (FEM) -----	62
Table 4.9 Comparison of the Test Result with the Expectation -----	68

List of Figures

Figure 3.1	Rejection and Non-Rejection Regions for DW Test	-----	43
Figure 4.1	Normality test	-----	58

List of Acronyms

CLRM	–	Classical linear regression model
DVPO	–	Dividend payout
DW	–	Durbin-Watson
EPS	–	Earning per share
FEM	–	Fixed Effect Model
GRO	–	Growth
LDVP	–	Lagged dividend payment
LEV	–	Leverage
LIQ	–	Liquidity
M&M	–	Miller and Modigliani
NPV	–	Net present Value
P/E	–	Price-Earnings ratio
PRO	–	Profitability
REM	–	Random Effect Model
RIS	–	Risk
ROA	–	Return on asset
SIZ	–	Size of the bank
UAE	–	United Arab Emirates
USA	–	Unites States of America

Chapter One: Introduction

This chapter begins with presenting background of the study followed by statement of the problem, objective of the study, hypotheses of the study, significance of the study and scope & limitation of the study.

1.1 Background of the study

In corporate finance, finance managers generally thought to face two operational decisions: the investment (or capital budgeting) and the financing decisions. The capital budgeting decision is concerned with what real assets the firm should acquire while the financing decision is concerned with how these assets should be financed. A third decision may arise, however, when the firm begins to generate profits. Should the firm distribute all or proportion of earned profits in the form of dividends to the shareholders, or should it be ploughed back into the business? (Al-Malkawi, Rafferty, & Pillai, 2010; Alam & Hossain, 2012). How much of the profit should be distributed to shareholders and how much of it should be retained is the challenge what companies faces (Badu, 2013). Since 1956 dividend payout policy of companies have been studied till now, yet drawing conclusive results among different studies regarding factors affecting dividend payout policy has proven to be very difficult. Individuals and corporations invest on companies expecting dividends as a return for investment. Successful companies earn income. This income can be invested in operating assets, used to acquire securities, used to retire debt, or distributed to shareholders. The income distributed to shareholders is the dividend (Amidu & Abor, 2006). The decision of the firm concerning how much earnings should be distributed, how stable should the distribution be, and how much should be retained is the concern of dividend policy decision (Kinfé, 2011).

Dividend policy is one of the most controversial issues in modern corporate finance (Maladjian & El Khoury, 2014). Explaining why companies pay dividend and some do not pay dividends is still problematic to explain and therefore, dividend policy remains controversial (Ross, Westerfield,& Jaffe, 2002; Brealey & Myers, 2003; Badu, 2013). The debate around the importance of dividend payment by corporations as a value adding activity is still unresolved

because of some advantage and disadvantage attached to it. Many reasons exist why companies should pay or not pay dividends. Yet figuring out why companies pay dividends and investors pay attention to dividend that is the “dividend puzzle” is still problematic (Ross, Westerfield, & Jaffe, 2002). Dividend policy is defined as the payout policy that managers follow in deciding the size and pattern of cash distribution to shareholders (Sheikh Taher , 2012).

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

The bird-in-the-hand theory suggests that investors prefer dividend payment than future capital gains. Tax preference theory indicated, investors have different tax preferences, which lead them to prefer firms with dividend policies that fit their tax preferences. This is what is called in the financial literature the “clienteles effect” (Al- Najjar, 2009). Furthermore, the signaling theory reveals the way that investors receive the signals from firms due to the asymmetric information. It highlights the problems or the conflicts that might arise because of the information asymmetry in the market (Al-Shubiri, 2011; Al- Najjar, 2009). The agency theory is based on the assumption that conflicts of interest arise between corporate insiders and outsiders and hence managers may conduct actions according to their own self-interest, which may not always be beneficial for shareholders and such conflicts lead to agency costs (Al- Najjar, 2009).

Several empirical studies have been conducted to identify major factors that affect the dividend payout policy of companies (Amidu & Abor, 2006; Kashif, 2011; Sheikh Taher , 2012; Badu, 2013; Maladjian & El Khoury, 2014). For instance, Lintner (1956) indicated that the dividend payment pattern of a firm is influenced by the current year's profit and previous year's dividend payment, managers prefer stable dividend payout policy. Badu (2013) studied the determinants of dividend payout policy of listed financial institutions in Ghana from 2005 to 2009 and has found statistically significant and positive relationship between age and liquidity with dividend payout but saw statistically insignificant relationship between profitability and collateral with

dividend payout. Maladjian & El Khoury (2014) studied the lebanese banks to identify the factors that determines the dividend payout policy from year 2005 to 2011 and found that dividend payout policy is positively affected by the firm size, risk and previous year's dividends, but is negatively affected by the growth opportunity and profitability.

Eventhough, several studies have been conducted on dividend payout policy majority of these studies focused on developed countries (Kashif, 2011; Maladjian & El Khoury, 2014). There are differences between developed and developing countries that could affect the divided payout policy of companies resides in these countries like culture, tax, corporate governance, information asymmetry, and investors attitude (Ahmed & Javid, 2008).

The lack of empirical studies in developing countries and specifically in Ethiopian companies, where only few studies have been conducted so far to study the factors that determine dividend payout have triggered this study, plus lack of studies in a country where there are no stock markets used as a means to shareholders to convert their stocks in to cash. Therefore, this study focuses on the determinants of dividend payout of Ethiopian private banks.

Ethiopian banking industry is well known for its abnormal profit and associated high dividend payments due to lack of competitiveness and under development (Making finance work for Africa, 2014). It is also relatively under developed in comparison to that of other African countries (Zerayehu , Kagneu , & Teshome, 2013). But the last decades report shows, banking industry in Ethiopia is rapidly increasing. Currently there are 19 banks in the industry, of which three are government owned and the rest are privately held share companies (NBE, 2014). Currently public banks account for 67% of total deposits and 55% of loans and advances, 68% of the total industry profit is attributed to state giant commercial bank of Ethiopia only 32% goes to the rest of the banks (Making finance work for Africa, 2014).

Ethiopian banking industry is in the growth life cycle, where the industry is seen as a lucrative by investors and new banks are joining from year to year. At least one bank has been joining the industry since 2008 till 2013. Current reports indicate that access to banking services in Ethiopia is still low compared to other African countries. The number of bank branch per 100,000 adults in Ethiopia stands at 1.2. In Kenya it is 4, in Uganda it is 1.9 and South Africa it is 8. Therefore, banking industry will continue to generate high profit and this will attract additional banks until

the industry profit is comparable to other industries but the capital requirement to enter the industry has plunged from 75 million to 500 million, this will make entering the industry tough considering the industry is not allowed to foreign investors (Making finance work for Africa, 2014).

Therefore, this study will attempt to enrich the empirical researches conducted on the determinants of dividend payout in developing countries and also it is one of the few studies conducted in Ethiopian companies that could help to understand the factors that affects dividend payout of Ethiopian private banks.

1.2 Statement of the problem

Different studies have been conducted on the dividend payout policy of companies for several years, different theories have been formulated and tested empirically, yet generalization becomes difficult on the factors believed to have significant impact on dividend payout policies (Brealey & Myers , 2003; Mehta, Hashmi, & Irshad, 2014). Among the prominent theories presented by Modigliani and Miller (1961) says under perfect capital markets without any taxes, transaction costs and other market imperfections, the company value is independent of the dividend policy. Instead the firm value is solely dependent on the earning power of the company's assets and its investment policy and not by how its profits are distributed to shareholders. Therefore, dividend is irrelevant. Against the dividend irrelevance theory by M&M other theories have claimed that dividend has relevance to companies.

Lintner's (1956) studies concluded that dividends are determined by a target payout level which depends on the company's long term earnings. Lintner's research was supported by Gordon (1959) who stated that shareholders prefer dividends rather than capital gains. If this is true, the company's dividend payouts are of major importance both to shareholders and managers, since it contributes to a higher value and shareholders would be willing to pay a higher price for stocks that pay dividends (Gustav & Gairatjon , 2012). The agency theory describes conflict of interest faces by managers between self-interest and shareholders interest. Hence managers may conduct actions according to their own self-interest at the cost of shareholders (Al-Shubiri, 2011). Dividend plays a crucial role in this agency problem resulting from excess free cash flow. When there is excess free cash flow, the management interested in external growth of the

firm may undertake excessive investment and detrimental business expansion that can eventually cause the decrease of firm value and its share price (Lee, 2014). These and other theories have claimed, dividend is relevant.

Various studies have been conducted in order to determine the company factors that influence the dividend payouts. According to Lintner (1956) profitability and previously paid dividend has an impact on dividend payout policy of companies. Companies that are more profitable are expected to pay more dividends compared to those that are less profitable. This finding is similar to the finding of Maladjian & El Khoury, (2014); Kashif, (2011); and Lee, (2014).

Jensen (1986); Osegbue, Ifurueze, & Ifurueze (2014) claimed that the free cash flow is a major determinant of dividend payout. Jensen states that this is due to the agency costs connected to free cash flows and shareholders prefer cash payments in the form of dividends rather than to keep the free cash flow within the company. Company size is also a factor for dividend payment (Ahmed & Javid, 2008; Maladjian & El Khoury, 2014). Leverage, liquidity, risk and tax also have an impact on dividend payout (Osegbue, Ifurueze, & Ifurueze, 2014; Dickens, Casey, & Newman, 2002).

Eventhough, several emperical studies have been conducted on the determinants of dividend payout, the finding show differences. Although profitability is claimed to have a positive impact on dividend payment by Lintner (1956) and Gordon (1959) and others, but the finding in developing countries shows profitability is not significant (Zaman, 2013; Nyor & Adekunle, 2013) or is negatively related with dividend payment (Maladjian & El Khoury, 2014). In spite of the continuous and increasing theoretical and empirical debate on dividend policy, there is still no generally accepted standard on how firms actually pay out dividend to shareholders at a given time period (Bassey, Elizabeth, & Asinya, 2014). In addition, almost all of the studies on this topic have been conducted on the countries where there are established stock markets used as a means to convert stocks held by shareholders in to cash and only few studies have conducted in the area of dividend payout in Ethiopian companies like Dagnaw (2009) and Kinfel (2011) conducted a study to examine the determinants of dividend pay out in Ethiopian private banks while Nuredin (2012) conducted the same study on Ethiopian Insurance companies.

Previous studies on determinants of dividend payout or policy were focused on developed countries where their corporate characteristics is different from developing countries (Badu, 2013). Differences in culture, corporate governance, tax, information asymmetry, and investors attitude, and ownership structure are mentioned by Ahmed & Javid (2008) and Al-Malkawi (2008).

Only few studies have conducted on the determinants of dividend payout in Ethiopia and they are not even recent . This shows that the research conducted in this topic is very limited in Ethiopia, where a lots of share companies are emerging adjacently with the economic growth which demand public investment in these share companies and distribution of profit as dividend as a return for investement to shareholders. This condition requires more study to be conducted on the factors that determine dividend payout in Ethiopian private banks.

As stated by Sheikh Taher (2012) findings from several empirical studies suggest that risk among with published earnings, agency cost, size, taxes have more influence than others to determine the dividend payout of firms. The above stated three studies conducted in Ethiopian firms have not incorporated risk as a variable in identifying factors that determine dividend payout. Therefore, this study have incorporated the risk variable plus Ethiopia have no secondary markets for stock tarde while previous studies conducted on the topic of determinants of dividend payout were focused only in those countries who have an established secondary markets. Therefore, this study have conducted a research on the determinants of the dividend payout in Ethiopian private banks, where there are no secondary markets that could help investors to convert their stock easily in to cash; and where there are lack of enough and recent studies in Ethiopian companies.

1.3 Objective of the study

The main objective of this study was to examine the determinants of dividend payout in Ethiopian private banks.

The specific objectives of this study were:

1. To examine the impact of profit on the dividend payout of Ethiopian private banks.
2. To determine the impact of liquidity on the dividend payout of Ethiopian private banks.
3. To investigate the impact of leverage on the dividend payout of Ethiopian private banks.

4. To explore the impact of firm size on the dividend payout of Ethiopian private banks.
5. To identify the impact of growth on the dividend payout of Ethiopian private banks.
6. To evaluate the impact of previous year's dividends on the dividend payout of Ethiopian private banks.
7. To examine the impact of risk, earning volatility, on the dividend payout of Ethiopian private banks.

1.4 Hypotheses of the study

In many quantitative researches, writers use research questions. However, a more formal statement of research employs hypotheses. These hypotheses are predictions about the outcome of the results, and they may be written as alternative hypotheses specifying the exact results to be expected (more or less, higher or lower of something). They also may be stated in the null form, indicating no expected difference or no relationship between groups on a dependent variable as stated by (Creswell, 2008).

After reviewing the theoretical and empirical studies that covered determinants of dividend payout, this study has identified and formed the following eight alternative hypotheses:

Hypotheses 1: Profit has a positive relationship with dividend payout in Ethiopian Private Banks.

Hypotheses 2: Liquidity has a positive relationship with dividend payout in Ethiopian Private Banks.

Hypotheses 3: Leverage has a negative relationship with dividend payout in Ethiopian Private Banks.

Hypotheses 4: Previous year's dividends have a positive relationship with dividend Payout in Ethiopian Private Banks.

Hypotheses 5: Growth has a negative relationship with dividend payout in Ethiopian Private Banks.

Hypotheses 6: Firm size has a positive relationship with dividend payout in Ethiopian Private Banks.

Hypotheses 7: Risk has a negative relationship with dividend payout in Ethiopian Private Banks.

Hypotheses 8: Ethiopian private banks follow stable or smooth dividend policy.

1.5 Significance of the study

This study would help to enrich literature related to dividend and would benefit bank board of directors and current and possible investors.

- Only few studies have been conducted in Ethiopian companies so far related to dividend and even these few studies are not recent. Therefore, this study would help to acquire latest information by empirically testing the factors that determines the dividend payout of Ethiopian private banks.
- Ethiopia has no secondary markets where stocks of companies traded, this limits shareholders choice in converting their shares in to cash and have an impact on dividend payment of companies. Almost all of the empirical studies conducted on dividend payout have focused on countries where there are existed stock (secondary) markets. The absence of studies on countries like Ethiopia in the exception of few like the study of Dagnew (2009), Kinfe (2011) and Nuredin (2012), where there are no stock (secondary) markets on the determinants of dividend payout and lack of latest information on this topic is the gap observed on literature and this study has attempted to fill this gap.
- This study helps bank board of directors to identify the possible factors that affect dividend payout and to set their dividend policy accordingly.
- Recent development on the emergence of different share companies on different industries as a viable alternative for investment would let the public to see other share companies as an option for investment. This condition would force Ethiopian private banks to compete for attracting additional capital to strength and grow their banks. Therefore, this study help banks to identify major factors that affect dividend payout which would help them to be more attractive to investors in order to collect additional

capital, because current shareholders and possible future investors prefer a firm which pays higher dividend than the other (Lintner, 1956; Al-Shubiri, 2011).

- Investors prefer a firm which pays higher dividend than the other. Identifying major factors that affects dividend payout would help bank board of directors to work on these variables in order to increase dividend payment which would help them to increase the value of their banks, because banks that pay high dividend have high share price and high firm value than the others.
- Investors prefer a firm which pays higher dividend than the other (Lintner, 1956; Al-Shubiri, 2011). Therefore, this study helps investors to be aware of the possible factors that determine dividend payout of Ethiopian private banks. This information would help them in their investment decisions.
- Current investors could also benefit from this study to look at the factors that determine dividend payout and to predict the pattern of dividend payment expected from their banks and to manage their investments.

1.6 Scope and limitation of the study

- This study was limited only to private banks because government banks are not publicly held meaning that the full owner of these banks are the government of Ethiopia, the profit they generate will go directly to government. Therefore, these banks did not include on this study because the main focus of the study was on the banks that pays dividend to shareholders.
- Out of the sixteen private banks currently operating, half of these banks started operation in or after 2008 and started dividend distribution even lately. Due to this, it was difficult to include them on this study. Therefore, this study only uses private banks that distributed dividend starting from year 2008/09 and onward.

- Important factors like risk could not be proxy by price-earnings ratio (P/E) due to absence of secondary market where data related to market price of shares of the banks could be accessed.
- The study focus was only in bank specific factors but external factors like inflation, absence of stock (secondary) markets used as an option for liquidity by shareholders were not considered.

Chapter Two: Literature Review

The second chapter introduces the reader with the necessary theoretical background and will present the most relevant theories and previous studies related with determinants of dividend payout. The last part of the chapter will discuss the company selected factors included in the research.

2.1 Theoretical Framework

2.1.1 Meaning, Forms and Stability of Dividend

In discussing about dividend, it is important to highlight what a dividend is? Dividend is simply the money that a company pays out to its shareholders from the profits it has made (Ross, Westerfield, & Jaffe 2002). Such payments can be made in cash or by issuing of additional shares as a dividend (Brealey & Myers , 2003). Investopedia, however defined it as the amount payable to shareholders from profit or distributable reserves; it is a distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. Companies that are listed in the stock exchange are usually obligated to pay out dividends on a quarterly or semiannual basis. The semiannual or quarterly payment is referred to as the interim dividend. The final payment, which is usually paid at the end of the financial year of the company, is known as the final dividend. Dividends are normally paid after the corporate tax has been deducted.

The decision whether or not to pay a dividend rests in the hands of board of directors of a corporation (Brealey & Myers , 2003). A dividend is distributable to shareholders of record on a specific date. When a dividend has been declared, it becomes a liability of the firm and cannot be easily rescinded by the corporation. The amount of the dividend is expressed as dollars per share (*dividend per share*), as a percentage of the market price (*dividend yield*), or as a percentage of earnings per share (*dividend payout*) (Ross, Westerfield, & Jaffe, Corporate Finance, 2002).

Most companies pay a regular cash dividend each quarter, but occasionally this regular dividend is supplemented by a one-off extra or special dividend. Dividends are not always in the form of cash. Frequently companies also declare stock dividends. That means it sends each shareholder some extra shares for every shares currently owned. A stock dividend is very much like a stock split. Both stock dividends and splits increase the number of shares, but the company's assets, profits, and total value are unaffected. Eventually both reduce value per share. The distinction between the two is technical. A stock dividend is shown in the accounts as a transfer from retained earnings to equity capital, whereas a split is shown as a reduction in the par value of each share (Ross, Westerfield, & Jaffe, 2002; Brealey & Myers, 2003).

Dividend policies tend to be one of the most stable and predictable elements of a company, and most companies began to pay dividends once they reach a level of business maturity where attractive investment opportunities are generally less available while cash flow generation is stable or growing more slowly when compared to the past. Decreasing or eliminating a dividend is tantamount to an announcement that the firm is financially distressed. Directors weigh dividend policies very carefully, they rarely lower dividends unless they have to, and they do not raise dividends unless they are confident that it can be sustained (Ross, Westerfield, & Jaffe, 2002). When a company announces a larger than expected dividend or unexpectedly announces a dividend cut or omission, the market reaction is dramatic and sudden. Thus a stable dividend policy should convey stability or lower risk within the enterprise.

2.1.2 Background of Corporate Dividend Policy

As per Al-Malkawi, Rafferty, & Pillai (2010) the issue of corporate dividends has a long history and is bound up with the development of the corporate form itself. Corporate dividends date back at least to the early sixteenth century in Holland and Great Britain when the captains of sixteenth century sailing ships started selling financial claims to investors, which entitled them to share in the proceeds, if any, of the voyages. At the end of each voyage, the profits and the capital were distributed to investors, liquidating and ending the venture's life. By the end of the sixteenth century, these financial claims began to be traded on open markets in Amsterdam and were gradually replaced by shares of ownership. It is worth mentioning that even then many investors would buy shares from more than one captain to diversify the risk associated with this type of business. At the end of each voyage, the enterprise liquidation of the venture ensured a

distribution of the profits to owners and helped to reduce the possibilities of fraudulent practice by captains. However, as the profitability of these ventures was established and became more regular, the process of liquidation of the assets at the conclusion of each voyage became increasingly inconvenient and costly. The successes of the ventures increased their credibility and shareholders became more confident in their management (captains), and this was accomplished by, among other things, the payment of “generous dividends”. As a result, these companies began trading as going concern entities, and distributing only the profits rather than the entire invested capital.

The ownership structure of shipping firms gradually evolved into a joint stock company form of business. But it was chartered trading firms more generally that adopted the joint stock form. In 1613, the British East India Company issued its first joint stock shares with a nominal value. “No distinction was made, however, between capital and profit”. In the seventeenth century, the success of this type of trading company seemed poised to allow the spread of this form of business organization to include other activities such as mining, banking, clothing, and utilities. Indeed, in the early 1700’s, excitement about the possibilities of expanded trade and the corporate form saw a speculative bubble form, which collapsed spectacularly when the South Sea Company went into bankruptcy. In the early stages of corporate history, managers realized the importance of high and stable dividend payments. In some ways, this was due to the analogy investors made with the other form of financial security then traded, namely government bonds.

In addition to the importance placed by investors on dividend stability, another issue of modern corporate dividend policy to emerge early in the nineteenth century was that dividends came to be seen as an important form of information. The scarcity and unreliability of financial data often resulted in investors making their assessments of corporations through their dividend payments rather than reported earnings. In short, investors were often faced with inaccurate information about the performance of a firm, and used dividend policy as a way of gauging what management’s views about future performance might be. Consequently, an increase in dividend payments tended to be reflected in rising stock prices. As corporations became aware of this phenomenon, it raised the possibility that managers of companies could use dividends to signal strong earnings prospects and/or to support a company’s share price because investors may read dividend announcements as a proxy for earnings growth (Al-Malkawi, Rafferty, & Pillai, 2010).

2.1.3 Theories of Dividend Policy

During the last fifty years several theoretical and empirical studies are done leading to the mainly two outcomes: the increase (decrease) in dividend payout affect the market value of the firm or the dividend policy of the firm does not affect the firm value at all (Ahmed & Javid, 2008). However, we can say that empirical evidences on the determinants of dividend policy are unfortunately very mixed. Furthermore there are numerous theories on why and when the firms pay dividends. Dividend policy has been the subject of considerable debate since Miller and Modigliani (1961) illustrated that under certain assumptions, dividends were **irrelevant** and had no influence on a firm's share price.

2.1.3.1 Dividend Irrelevance Theory

Prior to the publication of Miller and Modigliani's (1961) referred as M&M, seminal paper on dividend policy, a common belief was that higher dividends increase a firm's value. This belief was mainly based on the so-called "bird-in-the-hand" argument. However, as part of a new wave of finance in the 1960's, Miller and Modigliani demonstrated that under certain assumptions about perfect capital markets, dividend policy would be irrelevant (Al-Malkawi, Rafferty, & Pillai, 2010).

As the name of the theory suggests, it states that under perfect capital markets the dividend policy is independent to the value of a firm and it does not matter whether the company have high or low dividend payouts. They argued that the firm's value is determined only by its basic earning power and its business risk. In other words, M&M argued that the value of the firm depends only on the income produced by its assets, not on how this income is split between dividends and retained earnings (Miller & Modigliani, 1961). As per Ross, Westerfield, & Jaffe (2002) they use three criteria in order to define a perfect capital market:

- i. Perfect capital market - no single actor on the market is large enough to affect the market price of a security and everyone has access to the same costless information, i.e. no actor has an information advantage. Another important assumption is that there are no transaction costs or taxes and all actors can therefore operate on the market under the same conditions.

- ii. Rational behavior – it simply states that all actors on the market prefer more wealth to less. It also assumes that it does not matter whether the actors receive the increase in wealth in the form of capital gains from the stocks or dividend payments.
- iii. Perfect certainty - all actors on the market has the same information and knows the return of every security in the future. Therefore, it is possible to make the assumption that there only exists one type of security which Modigliani and Miller refer to as stocks.

In respect to the assumptions discussed above, the dividend payments become irrelevant for the shareholders. Because in order to pay dividends, the company has to issue new shares in order to raise the needed capital. As the new stocks are issued, the price of the stocks will drop in equal proportions to the dividend payments and the decrease in stock price and the dividend payments will cancel each other out.

M&M also argue that the shareholders are able to construct their own homemade dividends. For example, if the company does not pay dividends but the shareholder prefers two percent dividend he can sell two percent of his stocks and thus create a homemade dividend. The opposite is of course also true, if the company pays a higher dividend than the shareholder prefers he can use the surplus dividends to buy additional stocks. These two arguments discussed above are the underlying assumption of the irrelevance hypothesis and according to these arguments shareholders should be indifferent between capital gains and dividends. This in turn contributes to that the shareholders are unwilling to pay a higher price for dividend paying stocks which in turns make the question of dividends irrelevant (Ross, Westerfield, & Jaffe, Corporate Finance, 2002).

M&M (1961) suggest that in perfect markets, dividend do not affect firms' value. Shareholders are not concerned to receiving their cash flows as dividend or in shape of capital gain, as far as firms don't change the investment policies. In this type of situation firm's dividend payout ratio affect their residual free cash flows and the result is when the free cash flow is positive firms decide to pay dividend and if negative firm's decide to issue shares. They also conclude that change in dividend may be conveying the information to the market about firm's future earnings (Al-Malkawi, Rafferty, & Pillai, 2010). Since then, financial researchers and practitioners have disagreed with M&M's proposition and have argued that they based their proposition on perfect

capital market assumptions, assumptions that do not exist in the real world. Those in conflict with M&M's ideas introduced competing theories and hypotheses to provide empirical evidence to illustrate that when the capital market is imperfect, dividends do matter.

2.1.3.2 The “Bird-in the Hand” Theory

The name “bird in hand” is the umbrella term for all studies that argues that dividends are positively correlated to the company's value. It is based on the expression that “a bird in the hand is worth more than two in the bush”. Expressed in financial terms, the theory says that investors are more willing to invest in stocks that pay current dividend rather than to invest in stocks that retain earnings and pay dividends in the future. This is due to the high degree of uncertainty related to capital gains and dividends paid in the future (Al-Malkawi, Rafferty, & Pillai, 2010; Gustav & Gairatjon , 2012).

Gordon (1959) gave the bird in hand theory. He maintained that the discounted value of near future dividends is higher than the present value of distant dividends. He argued that the dividends to be received in future have much uncertainty as compared to the dividends in the near future since the shareholders would prefer certain returns the stock prices would be higher for the dividend paying stocks as compared to the companies paying lesser dividends.

In a world of uncertainty and imperfect information, dividends are valued differently to retained earnings (or capital gains). Increasing dividend payments, *ceteris paribus*, may then be associated with increases in firm value. As a higher current dividend reduces uncertainty about future cash flows, a high payout ratio will reduce the cost of capital, and hence increase share value (Al-Malkawi, Rafferty, & Pillai, 2010). Moreover, when making dividend payouts, the firm gets a higher rating from rating agencies as compared to a firm not making any dividend payout. With a better rating, the firm will be able to raise finance more easily from capital markets since credit institutions will be willing to give loans to the firm since the payout of dividends shows that the firm has the ability to meet its obligations. Moreover, in some cases, the firm will be able to borrow at preferential rates and enjoy better facilities (Kinfe, 2011).

Lintner's (1956) main arguments towards the bird in hand theory is based on that most companies are conservative in their financing policy and the dividend payments are therefore, based on an optimal payout ratio. The principal factor that contributes to deviations from the

optimal payout ratio is due changes in the company's profit, and if the profit increases the dividend payout should increase in the same proportions. But uncertainty regarding future profits also has an impact on the company's dividends. If the estimated risk in the future is higher than the current risk, the company may decrease the dividend payout ratio.

2.1.3.3 Signaling Theory

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

The signaling theory of dividends has its origins in Lintner's (1956) studies who revealed that the price of a company's stocks usually changes when the dividend payments changes. Even though M&M argued in favor of the dividend irrelevance they also stated that in the real world disregarding the perfect capital markets, dividend provides an "information content" which may affect the market price of the stock. Many researchers have thereafter been developing the signaling theory and today it is seen as one of the most influential dividend theories (Gustav & Gairatjon , 2012). Signaling theory assumes that managers typically have more information about the value of the firm's assets than outside agents. Managers therefore use dividend changes to communicate to the shareholders about the financial situation of the company. The information may reflect the strategies that the firm is employing in the short run or long run (Ross,1977).

Bhattacharya (1979) presented one of the most acknowledged studies regarding signaling theories which states that dividends may function as a signal of expected future cash flows. An

increase in the dividends indicates that the managers expect higher cash flows in the future. The research is based on the assumptions that outside investors have imperfect information regarding the company's future cash flows and capital gains. Another important assumption is that dividends are taxed at a higher rate compared to capital gains. Bhattacharya (1979) argues that under these circumstances even though there is a tax disadvantage for dividends, companies would choose to pay dividends in order to send positive signals to shareholders and outside investors.

According to the signaling hypothesis, investors can infer information about a firm's future earnings through the signal coming from dividend announcements, both in terms of the stability and changes in dividends. However, for this hypothesis to hold, managers should firstly possess private information about a firm's prospects, and have incentives to convey this information to the market. Secondly, a signal should be true; that is, a firm with poor future prospects should not be able to mimic and send false signals to the market by increasing dividend payments. Thus the market must be able to rely on the signal to differentiate among firm (Al-Malkawi, Rafferty, & Pillai, 2010).

As managers are likely to have more information about the firm's future prospects than outside investors, they may be able to use changes in dividends as a vehicle to communicate information to the financial market about a firm's future earnings and growth. Outside investors may perceive dividend announcements as a reflection of the managers' assessment of a firm's performance and prospects. An increase in dividend payout may be interpreted as the firm having good future profitability (good news), and therefore, its share price will react positively. Similarly, dividend cuts may be considered as a signal that the firm has poor future prospects (bad news), and the share price may then react unfavorably. Accordingly, it would not be surprising to find that managers are reluctant to announce a reduction in dividends (Al-Malkawi, Rafferty, & Pillai, 2010).

Lintner (1956) argued that firms tend to increase dividends when managers believe that earnings have permanently increased. This suggests that dividend increases imply long-run sustainable earnings. This prediction is also consistent with what is known as the "dividend-smoothing hypothesis". That is, managers will endeavor to smooth dividends over time and not make substantial increases in dividends unless they can maintain the increased dividends in the foreseeable future.

2.1.3.4 Agency Theory

The agency theory is based on the principal agent relationships. The separation of ownership from management in modern corporations provides the context for the functioning of the agency theory. In modern corporations the shareholders (principals) are widely dispersed and they are not normally involved in the day to day operations and management of their companies rather they hire managers (agent) to manage the corporation on behalf of them (Habbash, 2010). The agents are appointed to manage the day to day operations of the corporation. The separation of ownership and controlling rights results in conflicts of interest between agent and principal. To solve this problem or to align the conflicting interests of managers and owners the company incurs controlling costs including incentives given for managers (Habbash, 2010). This controlling cost is called agency cost (Easterbrook, 1984).

Agency theory refers to a set of propositions in governing a modern corporation which is typically characterized by a large number of shareholders who allow agents to control and manage their collective capital for future returns. The agent, typically, may not always own shares but may possess relevant professional skills and competence in managing the corporation. The theory offers many useful ways to examine the relationship between owners and managers and verify how the final objective of maximizing the returns to the owners is achieved, particularly when the managers do not own the corporation's resources. Agency theory identifies the role of the monitoring mechanism of corporate governance to decrease agency costs and the conflict of interest between managers and owners (Habbash, 2010). Implementing corporate governance system usually makes possible controlling the activities of managers and by expending resources to alter the opportunity the managers have for capturing non-pecuniary benefits. These methods include auditing, formal control systems, budget restrictions, and the establishment of incentive compensation systems which serve to identify the manager's interests more closely with those of the outside equity holders (Jensen & Meckling, 1976).

Easterbrook (1984), raises a question "why do most firms pay significant dividends, given the costs of paying them (and raising new capital), and given that all investors either prefer capital gains or are indifferent between dividends and capital gains?" and raised two possible explanations.

- i. The first possible reason for firms to pay dividend stems from that managers are not perfect agents of the other participants in the corporate venture, but that they pursue their own interests when they can. Because the managers are not the residual claimants to the firm's income stream, there may be a substantial divergence between their interests and those of the other participants. Managers, investors, and other participants will find it advantageous to set up devices, including monitoring, bonding, and ex post readjustments that give managers the incentive to act as better agents. Therefore, dividend could use as a tool to achieve this purpose.
- ii. The second possible reason for firms to pay dividend is related to market response for securities of firms simultaneously paying dividends and raising new money from the market will appreciate relative to other securities.

According to agency theory the agent strive to achieve his personal goals at the expense of the principal. Managers are mostly motivated by their own personal interests and benefits, and work to maximize their own personal benefit rather than considering shareholders' interests and maximizing shareholders wealth. To control and shape this inclination of managers, shareholders adopt monitoring schemes like payment of dividend. The costs of monitoring and bonding are agency costs borne by investors (Easterbrook, 1984).

Easterbrook (1984) states that two factors affect the agency costs in a company, monitoring costs and the risk aversion preferences of managers. The monitoring cost refers to the costs incurred by the shareholders in order to supervise the managers and prevent them from following their own personal agenda instead of maximizing the value of the shareholders equity. The second source of agency costs is the risk aversion preferences of managers. The problem arises because most shareholders have diversified portfolios and they are therefore, only interested in systematic risk which cannot be eliminated through diversification. In contrast to shareholders, managers usually have a large amount of their personal wealth connected to the company. Therefore, if the company is unprofitable or even goes bankrupt, the managers' personal wealth becomes heavily affected. The managers will as a result be more risk averse

compared to the shareholders and they may reject potential high value project due to their risk aversion preferences.

Jensen (1986) argued that in order to monitor the conflict between owners and managers, payment of dividend is not a good option claiming that Payouts to shareholders reduce the resources under managers' control, thereby reducing managers' power, and making it more likely they will incur the monitoring of the capital markets which occurs when the firm must obtain new capital. Financing projects internally avoids this monitoring and the possibility that the funds will be unavailable or available only at high explicit prices. Managers have incentives to cause their firms to grow beyond the optimal size. Growth increases managers' power by increasing the resources under their control. It is also associated with increases in managers' compensation. The problem is how to motivate managers to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies. Therefore, Jensen developed two theories to prevent waste of free cash flow.

- i. The benefits of debt in reducing agency costs of free cash flows by issuing debt in exchange for stock, managers are bonding their promise to pay out future cash flows in a way that cannot be accomplished by simple dividend increases. In doing so, they give shareholder recipients of the debt the right to take the firm into bankruptcy court if they do not maintain their promise to make the interest and principle payments. Thus debt reduces the agency costs of free cash flow by reducing the cash flow available for spending at the discretion of managers.
- ii. Debt can substitute dividend - Managers with substantial free cash flow can increase dividends or repurchase stock and thereby pay out current cash that would otherwise be invested in low-return projects or wasted. This leaves managers with control over the use of future free cash flows, but they can promise to pay out future cash flows by announcing a "permanent" increase in the dividend. Such promises are weak because dividends can be reduced in the future. The fact that capital markets punish dividend cuts with large stock price reductions is consistent with the agency costs of free cash flow. Debt creation, without retention of the proceeds of the issue, enables managers to effectively bond their promise to pay out future cash flows. Thus, debt can be an effective substitute for dividends.

2.1.3.5 Tax Preference Theory

Taxation is one of the critical factors that affect firm value and future expected profits. For example, discounted expected after-tax cash flows can be used as a determinant for the market value of a firm. In this respect, differential tax treatment of capital gains relative to the dividends can influence the after-tax returns of investors and in turn affect the willingness of investors to receive dividends (Kinfé, 2011).

The M&M assumptions of a perfect capital market exclude any possible tax effect. It has been assumed that there is no difference in tax treatment between dividends and capital gains. However, in the real world taxes exist and may have significant influence on dividend policy and the value of the firm. In general, there is often a differential in tax treatment between dividends and capital gains, and because most investors are interested in *after-tax* return, the influence of taxes might affect their demand for dividends. Taxes may also affect the supply of dividends, when managers respond to this tax preference in seeking to maximize shareholder wealth (firm value) by increasing the retention ratio of earnings (Al-Malkawi, Rafferty, & Pillai, 2010).

Brigham and Houston (2004) pointed out three tax-related reasons that investors might prefer a low dividend payout to a high dividend payout: first, that long-term capital gains are taxed at a maximum rate of 20 percent, whereas dividends are taxed at effective rates that go up to 39.1 percent in case of USA. Therefore, wealthy investors (who own most of the stock and receive most of the dividends) might prefer to have companies retain and plow earnings back into the business. Earnings growth would presumably lead to stock price increases, and thus lower-taxed capital gains would be substituted for higher-taxed dividends. Second, Taxes are not paid on the gain until a stock is sold. Due to time value effects, a dollar of taxes paid in the future has a lower effective cost than a dollar paid today. Third, if a stock is held by someone until he or she dies, no capital gain tax is due at all, the beneficiaries who receive the stock can use the stock's value on the death day as their cost basis and thus completely escape the capital gains tax. Because of these tax advantages, investors may prefer to have companies retain most of their earnings. If so, investors would be willing to pay more for low-payout companies than for otherwise similar high-payout companies.

The tax-preference theory suggests that low dividend payout ratios lower the cost of capital and increase the stock price. In other words, low dividend payout ratios contribute to maximising the firm's value. This argument is based on the assumption that dividends are taxed at higher rates than capital gains. In addition, dividends are taxed immediately, while taxes on capital gains are deferred until the stock is actually sold. These tax advantages of capital gains over dividends tend to predispose investors, who have favourable tax treatment on capital gains, to prefer companies that retain most of their earnings rather than pay them out as dividends, and are willing to pay a premium for low-payout companies. Therefore, a low dividend payout ratio will lower the cost of equity and increases the stock price earnings (Al-Malkawi, Rafferty, & Pillai, 2010).

2.1.3.6 Clientele Effect

The portfolio choices of individual investors might be influenced by certain market imperfections such as transaction costs and differential tax rates to prefer different mixes of capital gains and dividends. M&M argued that these imperfections might cause investors to choose securities that reduce these costs. M&M termed the tendency of investors to be attracted to a certain type of dividend-paying stocks as "dividend clientele effect". Investors investment goal and their demographic factors matter on decision whether to invest on high dividend paying shares to low dividend paying shares. For example, assuming that investors have a portfolio of investments, these investments are attuned to serve the investors' goal such as: high growth, capital preservation, or income generation. These goals vary in terms of investor's age, family size, education expenses, career, employment package, and other characteristics.

Al-Malkawi, Rafferty, & Pillai (2010) classified clientele effect in to tax-induced clientele effect and transaction induced clientele effect.

Tax-Induced Clientele

Since most of the investors are interested in *after-tax* returns, the different tax treatment of dividends and capital gains might influence their preference for dividends versus capital gains. This is the essence of the tax-induced clientele effect. For example, *ceteris paribus*, investors in low tax brackets who rely on regular and steady income will tend to be attracted to firms that pay high and stable dividends. In addition, some corporate or institutional investors tend to be

attracted to high-dividend. On the other hand, investors in relatively high tax brackets might find it advantageous to invest in companies that retain most of their income to obtain potential capital gains, all else being equal. Some clienteles, however, are indifferent between dividends and capital gains such as tax exempt and tax deferred entities.

Transaction Cost-Induced Clientele

Another argument of the clientele effect is based on the proposition that dividend policy may influence different clienteles to shift their portfolio allocation, resulting in transaction costs. For example, small investors (such as retirees, income-oriented investors, and so on) who rely on dividend income for their consumption needs, might be attracted to (and even may pay a premium for) high and stable-dividend stocks, because the transaction costs associated with selling stocks might be significant for such investors. On the other hand, some investors (e.g. wealthy investors), who do not rely on their share portfolios to satisfy their liquidity needs, prefer low payouts to avoid the transaction costs associated with reinvesting the proceeds of dividends, which they actually do not need for their current consumption. Note that for both groups of investors, transforming one financial asset to another, transaction costs need to be incurred. That is, M&M's notion of homemade dividends is not costless and the existence of such costs may make dividend policy not irrelevant.

The other effect of transaction costs on dividend policy is related to the fact that firms may need to restore cash paid out as dividends with new equity issues (or debt financing) to take advantage of new investment opportunities. If issuing costs are significant, then firms are most likely to rely on retained earnings rather than external financing. This is reinforced by the empirical fact that retained earnings constitute the major source of firm finance not just in developing but also even in developed capital markets. In these cases, there should be a negative relationship between transaction costs and dividend payments. Firms can reduce or avoid such expenses by lowering dividend payments or not paying them at all. However, in practice, many firms continue to pay cash dividends, while at the same time issuing new equity and debt, suggesting that other factors may also be at work in influencing dividend policy.

2.2 Types of Dividend Policy

There are a number of different dividend policies or payout strategies that companies can adopt.

2.2.1 Fixed Percentage Payout Ratio Policy

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

2.2.2 Zero Dividend Policy

A company could decide to pay no dividend at all. Such an extreme policy is likely to be highly beneficial to a small minority of investors while being totally unacceptable to the majority. Such a policy is easy to operate and will not incur the administration costs associated with paying dividends. A zero dividend policy will allow the company to reinvest all of its profits and so will be attractive to investors who, from a personal tax perspective, prefer capital gains to dividends. Given that the majority of ordinary shareholders are institutional investors who rely on dividend payments for income, a zero dividend policy is hardly likely to be acceptable on an ongoing basis. A zero dividend policy, however, is often adopted by new companies which require large amounts of reinvestment in the first few years of their existence (Watson & Head, 2010).

2.2.3 Constant or Steadily Increasing Dividend

A company may choose to pay a constant or steadily increasing dividend in either money terms or in real terms. A constant or increasing dividend in money terms may result in a declining or increasing dividend in real terms, depending on the level of inflation (or deflation). A constant or increasing dividend in real terms will usually result in an increasing dividend in money terms. In both policies, dividend increases are kept in line with long-term sustainable earnings.

It is important for a company to avoid volatility in dividend payments as doing so can help to maintain a stable share price. Cuts in dividends, however well signalled or justified to the markets, are usually taken to mean financial weakness and result in downward pressure on a company's share price. The drawback of keeping dividends constant or of steadily increasing them is that investors may expect that dividend payments will continue on this trend indefinitely. This can cause major problems when companies wish to reduce dividend payments, either to fund reinvestment or in the name of financial prudence. Because of the reaction of the market to a dividend cut, companies experiencing increases in profit tend to be cautious about a dividend increase. Rarely will a 20 percent increase in profits lead to a 20 percent dividend increase. This is reinforced by the fact that a certain level of profit rarely equates to an equal amount of cash, which is ultimately what dividends are paid out of. Companies tend to increase dividends slowly over time, to reflect the new profit level, when they are confident that the new level is sustainable (Watson & Head, 2010).

2.2.4 Residual Policy

Dividends are just what is left after the company determines the retained profits required for future investment. This policy gives preference to its positive NPV (Net Present Value) projects and paying out dividends if there are still left over funds available. Dividend becomes a circumstantial payment paid only when the investment policy is satisfied. Firms 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 cause more growth to the company. There is a tendency therefore, that this type of policy could give rise to a zero dividend structure. Firms may need to modify this policy to ensure that investors of the different clienteles are not chased out by a strict application of the policy (Kolb and Rodriguez, 1996).

2.2.5 Smoothed Residual Dividend Policy

This policy suggests dividend fluctuations should be kept to a minimum. Dividend policy changes tend to lag behind earnings fluctuations. Dividends are set equal to the long-run residual between forecasted earnings and investment requirements. Dividend changes, in turn, are made only when this long run residual is expected to change; earnings fluctuations believed

to be temporary are ignored in setting dividend payments. The clear preference is for a stable, but increasing, dividend per share (Shapiro, 1990).

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

2.2.6 Alternative Policies to Paying Cash

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

2.3 Alternatives to cash dividend

In addition to paying cash dividends, there are a number of other ways in which companies can reward their shareholders.

2.3.1 Scrip Dividends

Scrip dividends involve the offer of additional ordinary shares to equity investors, in proportion to their existing shareholding (e.g. 1 for every 20 shares held), as a partial or total alternative to a cash dividend. Usually, shareholders are given the choice of taking either the declared cash dividend or the scrip alternative, allowing them to choose the alternative that best suits their liquidity and tax position. The major advantage with paying a scrip dividend is that it allows a company to keep the cash that would have been paid out in cash dividends. From a personal taxation point of view, the scrip dividend received is treated as income, with tax deemed to have been paid at the basic rate of personal income tax. Unfortunately, scrip dividends will be unattractive to investors who are exempt from paying tax on dividends as they are not able to reclaim tax which is only „deemed“ to have been paid (Watson & Head, 2010).

2.3.2 Share Repurchases

Share repurchases have become an increasingly common way of returning value to ordinary shareholders instead of distributing cash dividend. The reacquired shares may be kept in the company's treasury and resold if the company needs money (Brealey & Myers , 2003). The main benefit to shareholders of a share repurchase is that they receive surplus funds from the company which they use more effectively. The main benefit for a company of a share repurchase is that it enhances the value of the remaining shares. Another reason behind companies repurchasing their shares is if they consider the stock market to be undervaluing their company (Watson & Head, 2010).

2.3.3 Special Dividends

Occasionally, companies return surplus funds to shareholders by making a special dividend payment. A *special dividend* is a cash payout far in excess of the dividend payments usually made by a company. If a company has funds surplus to its investment requirements, paying out these funds via a special dividend enables shareholders to reinvest them according to their preferences (Watson & Head, 2010).

- ❖ During the last fifty years several theories have emerged around dividend, claims and counter claims have forwarded by authors about the relevance of dividend. M&M claimed that under perfect capital market dividend payment is irrelevant, what is really important to increase firms value are the earning capability of the firms and their associated risk not how the profit is divided, but the presence of market imperfections such as taxes, asymmetric information, agency costs, and transaction costs means that we cannot dismiss the proposition that dividend policy is relevant to the firm's value and other theories have emerged claiming dividend is relevant like Agency theory, Bird in hand theory and signaling theory.

2.4 Emperical Studies On Determinants of Dividend Payout

Several emperical studies have been conducted on determinants of dividend payout. The first of such type was the study of Lintner (1956) who studied 28 different American companies and found that profitability and previously paid dividend has significant impact on dividend payout policy of companies than other factors. Companies that are more profitable are expected to pay more dividends compared to those that are less profitable.

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

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

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

Gill, Biger, & Tibrewala (2010) conducted a study on determinants of dividend payout ratio of United States public companies for the year 2007 using multiple regression technique. The study used dividend payout as dependent variable and profitability, cash flow, tax, sales growth, market to book value and debt to equity ratio. The finding showed that profitability, sales growth, debt to equity ratio, and tax have significant impact on dividend payout. The sign of relationship with dividend payout is negative for profitability and growth.

Imran (2011) conducted a study on determinants of dividend payout policy of Pakistan engineering sector from 1996 to 2008 using panel regression technique. He identified dividend per share as dependent variable and last year dividend per share, earning per share, net income, cash flow, firm size, sales growth and liquidity as independent variables. The result indicated that it is only liquidity that has no significant impact on dividend per share, the rest all the variables have significant impact on dividend per share of Pakistani engineering companies. Cash flow has a negative relationship while the rest have a positive relationship with dividend per share.

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

Sheikh Taher (2012) conducted a study to identify factors that determine the dividend payout policy for banking sector in Bangladesh from year 2003 to 2010 using multiple regression technique. The study used the following factors; revenue, earning per share, net income, cash and equivalent, retained earning and price-earning ratio. The finding shows revenue, cash and equivalent and price earning ratio (P/E) has no effect on dividend payout policy of Bangladesh banks. Net income and earning per share have significant effect on dividend payout policy of Bangladesh banks but the sign of EPS is negative.

Nuredin (2012) conducted a study on determinants of dividend policy in Ethiopian insurance companies from year 2003 to 2011 using multiple regression technique. The author has used

five independent variables; profitability, growth, liquidity, size and leverage of the firm and dividend policy as dependent variable. The finding showed that profitability, liquidity and growth have a strong relationship with dividend policy of Ethiopian insurance companies with positive, positive and negative signs respectively. The rest of the variables have no strong relationship with dividend policy of Ethiopian insurance companies.

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

Mehta (2012) conducted a study on determinants of dividend policy of United Arab Emirates (UAE) companies year 2005 to 2009 using multiple regression technique. Mehta used dividend policy as dependent variable and profitability (measured by return on asset, return on equity, earning per share), risk, liquidity, leverage and size. The result indicated that profitability and size are the only significant variables that have an impact on dividend policy of UAE companies.

Gul et.al (2012) investigated the impact of different firm specific factors on the dividend policy of pakistani banks listed at karachi Stock Exchange from year 2006 to 2011 using correlation. The study used dividend yield and dividend payout ratio as dependent variables and firm size, growth opportunity, profitability, leverage and firm risk as an independent variables. The finding have shown that the independent variables growth, profitability and firm size have positive coefficient of correlation when the dependent variable is dividend yield and Dividend Payout Ratio. However, there is strong linear association between profitability and firm size with dividend policy but the variable growth rate has weak positive correlation with dividend policy. In contrast, the variables leverage and firm risk have inverse linear relationship with dividend policy.

Yahya & Hadi (2013) conducted a research to identify the determinants of dividend policy in the Malaysian Financial Institutions by looking at both conventional and islamic banking sectors

from year 2001 to 2010 using multiple regression technique. The study used the following factors: profit, financial leverage, cash flow, lagged dividend and revenue growth. The research finding shows that for conventional banks, revenue growth is the only variable among five independent variables which is significantly and positively related to dividend payment. For Islamic banks, only lagged dividend has significant positive relationship to dividend per share, the rest four independent variables have no significant effect on dividend per share.

Zameer et.al (2013) investigated the determinants of dividend policy of Pakistani banking sector from year 2003 to 2009 using 27 pakistani listed banks at different stock exchanges. The study used stepwise regression technique to analyze the data. Size, liquidity, profitability, agency cost, growth, last year dividend, risk and ownership structure were independent variables while dividend payout was dependent variable. the finding indicated that liquidity, profitability, last year dividend and ownership structure have significant relationship with the dividend payout of Pakistani banks. Profitability, last year dividend and ownership structure show positive impact on dividend payout and liquidity show negative impact on the pakistani banking industry. Size, leverage, agency cost, growth and risk show insignificant relationship and have no impact on the dividend payout of pakistani banks.

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

Komrattanapanya & Suntrauk (2013) conducted a study to determine the factors that influence the dividend payout of all firms listed in the Stock Exchange of Thailand during year 2006 to 2010 using Tobit regression analysis technique. The factors used in the study are profit, liquidity, financial leverage, investment opportunity, sales growth, business risk and firm size. The result showed that leverage, investment opportunity, sales growth and firm size have an impact on dividend payout of firms listed in the Stock Exchange of Thailand. While profitability, liquidity, and business risk are insignificantly related to dividend payout.

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

Dr. Turki & Ahmed (2013) conducted a study on determinants of dividend policy of Saudi Arabian non-financial companies from year 2004 to 2010 using multiple regression technique. The study used dividend per share as dependent variable and earning per share, growth, debt/equity ratio, market risk, size of equity and previous dividend per share. The finding showed that earning per share, previous dividend per share and size have significant positive impact on dividend per share, the rest of the variables are insignificant.

Zaman (2013) conducted a study on determinants of dividend policy of all 30 Dhaka Stock Exchange listed private commercial banks in Bangladesh over a period of seven years from 2006 to 2012 using correlation and multiple regression method. The factors used in the research are profitability, growth and size. The finding showed that none of the three factors are statistically significant during the study period.

Bassey, Elizabeth, & Asinya (2014) conducted a study to examine the various determinants of dividend payout of selected Commercial Banks in Nigeria from year 1989 to 2010 using ordinary least square regression technique. The study used the following factors; earning per share, previous year dividend, liquidity ratio, inflation rate and lending rate. The finding indicated that current earnings (EPS), lagged dividend and lending rate were the major determinants of cash dividend payout in Nigerian commercial banks and their sign is positive, while inflation rate and liquidity ratio failed to explain the variation in dividend payout.

Osegbue, Ifurueze, & Ifurueze (2014) conducted a study to analyze the extent of relationships between dividend payment and corporate performance in the Nigerian banking industry using 18 banks listed at Nigerian Stock Exchange from year 1990 to 2010. They used multiple regression analysis technique. The factors used are free cash flow, profitability, leverage, business risk and

tax. The finding showed, free cash flow, profitability and business risk have negative relationship with dividend payout, the rest tax and leverage have positive relationship but all of the variables have no statistically significant effect on dividend payout.

Maladjian & El Khoury (2014) investigated the factors that determine the dividend payout policy of Lebanese banks listed on the Beirut Stock Exchange from year 2005 to 2011 using ordinary least square and dynamic panel regression methods. The factors included in the research are profitability, size, liquidity, growth, leverage, firm risk and previous year's dividends. The finding shows that the dividend payout policies are positively affected by the firm size, risk and previous year's dividends, but are negatively affected by growth and profitability. Liquidity and leverage have no significant impact on dividend payout policy of Lebanese banks. The results obtained might indicate that firms pay dividends with the intention of reducing the agency conflicts. Furthermore, managers take into consideration the stability of dividends while determining the dividend policy. Moreover, the results suggest that the Lebanese listed firms prefer to invest their earnings to grow rather than to pay more dividends.

Lee (2014) conducted a study to identify the factors determining Korean banks' dividend policy from year 1994 to 2009 using panel regression method. The factors used are asset, debt ratio, loan ratio, return on asset and national bank dummy variable. The result indicated that Korean banks tend to pay more dividends as the debt ratio gets lower, loan ratio gets lower, and bank profit gets higher. Profit (ROA), debt and loan have statistically significant effect on dividend payment of Korean Banks. The sign of the effect is negative for debt and loan and positive for profit.

Mehta, Hashmi, & Irshad (2014) conducted a study to identify factors that explain bank dividend policy using data collected from year 1998 to 2000 using tobit regression method. The factors used are investment opportunity, capital adequacy, size, signaling, inside ownership, dividend history and risk. The finding showed a negative relationship between dividend payments and investment opportunities, signaling, ownership, and risk; and a positive relationship to size and dividend history.

But risk and capital adequacy proxied by earning volatility and capital-to-asset ratio respectively have no statistically significant effect on dividend yield, the rest of the variables have statistically significant effect on dividend yield.

- ❖ The above empirical studies have identified several factors as determinants of dividend payout; profit, liquidity, leverage, revenue/sales growth, tax, risk, age, lagged dividend, ownership structure yet the studies have mixed results. Some of the variables have strong effect on dividend payout in some of the studies yet the other studies found weak relationship and also the sign of the relationship is mixed.

2.5 Variables used in previous studies

Dependent variables

Almost all of the studies conducted on determinants of dividend payout have used dividend payout as a dependent variables. However, some have used dividend yield instead of dividend payout.

Independent variables

Lintner (1956) have used profit and lagged dividend as an independent variables to conduct his study and has found that both of them have an impact on dividend payment. The same result have found by many researchers, which confirms the popularity of this two variables.

As stated by Sheikh Taher (2012) findings from several empirical studies suggest that published earnings, agency cost, size, risk and taxes have more influence than other variables in determining firms dividend payout. Other variables like liquidity, leverage, revenue/sales growth, age, and investment opportunity are mostly used variables in different studies.

2.6 Gaps in literature

Previous studies conducted on determinants of dividend payout or policy were focused on developed countries where their corporate characteristics is different from developing countries (Badu, 2013). Differences in culture, corporate governance, tax, information asymmetry, investors attitude, and ownership structure are the differences mentioned by (Ahmed & Javid, 2008 and Al-Malkawi, 2008).

Few studies are conducted on the determinants of dividend payout in Ethiopia and even these studies are not recent, like Dagnew, (2009); Kinfе, (2011) and Nuredin (2012). This shows that the research conducted in the topic of determinants of dividend payout is very limited in Ethiopia, where a lots of share companies are emerging adjecently with the economic growth which demands public investements in these share companies and shareholders expect distribution of profit as a return for their investements. This condition demands more study to be conducted on the factors that determine dividend payout like profit, liquidity, leverage, risk, lagged dividend, tax, revenue growth. Therefore, this study would help to acquire recent information about determinants of dividend payout in Ethiopian private banks.

As stated by Sheikh Taher (2012) findings from several empirical studies suggests that risk among with published earnings, agency cost, size, taxes have more influence than others to determine dividend payout for firms. The previous three studies conducted in Ethiopia have not incorporated risk as a variable in identifying factors that determine dividend payout. Therefore, this study will incorporate **the risk variable** plus national bank of Ethiopia demands banks to set aside some portion of their profit as a legal reserve, which deminishes the available profit for dividend distribution. The previous studies conducted in Ethiopia have used profit as one of their independent variables in their studies while disregarding the legal reserve part but this study will consider the amount of profit after deducting legal reserve because the legal reserve part can not be distributed to shareholders. So, including it as part of profit avilable for distribution would be illogical.

The researches conducted by Dagnew (2009) and Kinfе (2011) on determinants of dividend payout in Ethiopian banks used multiple regression technique as a data analysis technique while the data they collected have had corss-sectional and time-series characteristics, it was more appropriate to use panel regression technique. Because panel data involves the pooling of

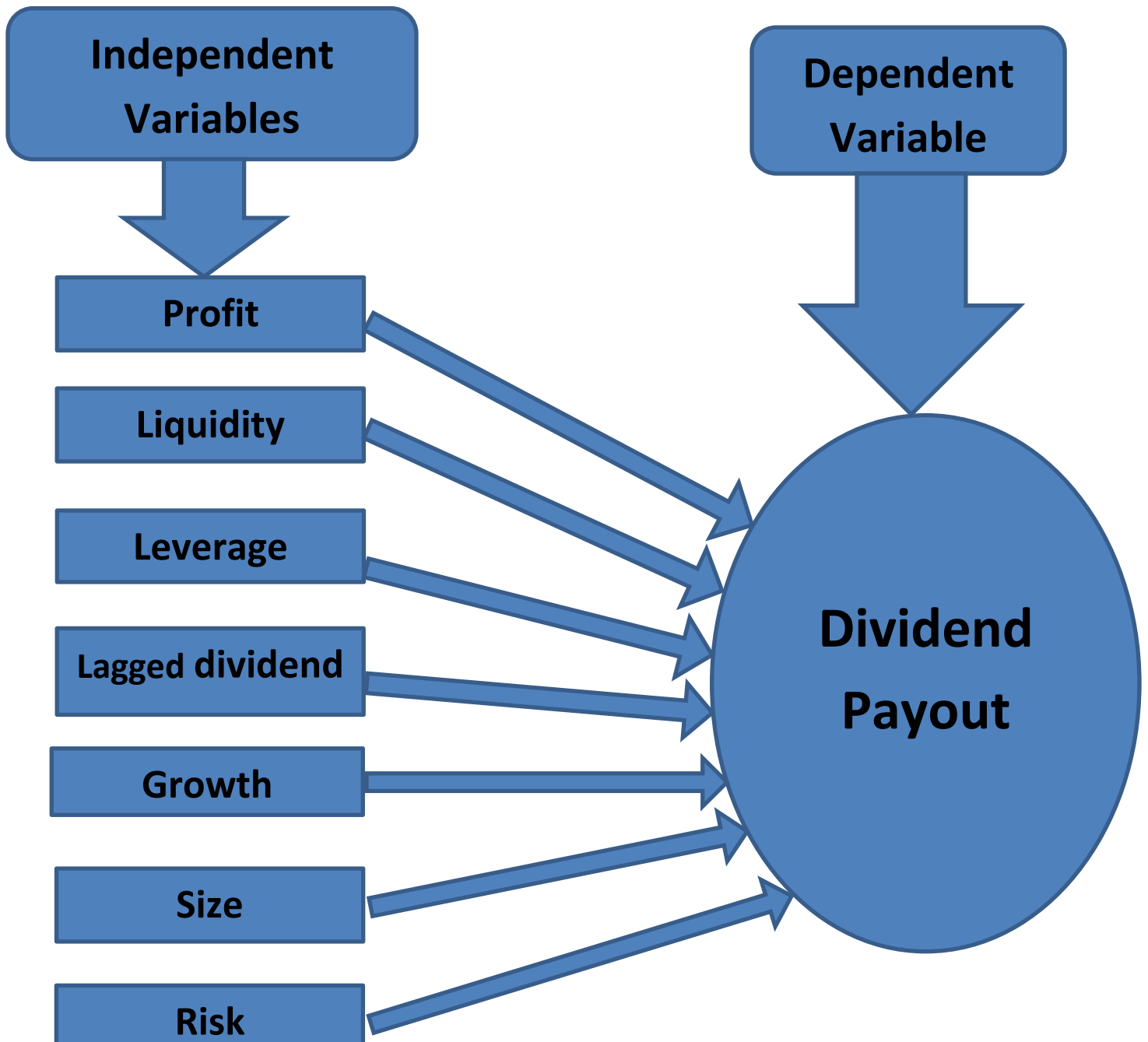
observations on a cross-section of units over several time periods and provides results that are simply not detectable in pure cross sections or pure time series studies. Therefore, the more appropriate data analysis technique for such type of data is panel data regression technique (Brooks, 2008). Therefore, this study will use panel data regression technique to analyze the data because the nature of the data for this research have both cross sectional and time series characteristics.

Nuredin (2012) conducted a study on determinants of dividend payout in Ethiopian nine insurance companies from 2003 to 2011 and used panel data technique to analyze the collected data but it was un-balanced panel data technique as a result of lack of data on dividend distribution because most of these insurance companies have started distributing dividend lately. In contrary to un-balanced panel data used by Nuredin, this study will use balanced panel data technique.

In addition, Ethiopia have no secondary markets for stock trade that is used to improve liquidity where investors could trade stocks of companies based on current market price. Absence of such type of liquidity option besides dividend has left Ethiopian shareholders with limited option to convert their investments in to cash. The only option is dividend. Previous studies conducted on the topic of determinants of dividend payout were focused only in those countries that have an established **secondary markets**. Therefore, this study would fill the above stated gaps by studying the determinants of dividend payout in Ethiopian private banks.

2.7 Conceptual framework

This conceptual frame work is self-extracted and shows the relationship between the dependent variable, dividend payout and the seven explanatory variables.



Definition and Measurement of Variables

Dividend payout – in this study dividend payout is the dependent variable. It is the proportion of profit distributed to shareholders and calculated by dividing the total dividend to net profit.

Independent Variables

Profit – in this study return on asset (ROA) is a proxy for profit. It is calculated by dividing profit after tax and legal reserve to total asset. Banking industry in Ethiopia has a mandate to earmark some of their yearly profit as legal reserve as per National bank of Ethiopia requirements. Due to this, banks cannot distribute all of the profit as dividend like other industries. Therefore, taking net profit after tax only without removing legal reserve would lead to higher ratio on return on asset and lower ratio on dividend payout.

Liquidity – this variable shows firms ability to pay its current obligations. It is calculated by dividing current asset to current liability.

Leverage – leverage shows firms capital structure meaning that how much of the firm's capital is covered by debt and equity. It is calculated by dividing debt to total asset.

Growth - The change in revenues is used as a proxy for growth opportunities. If a firm is growing rapidly, the more is the need for funds to finance the expansion, and the more likely the firm is to retain earning rather than to pay them as dividends (Chang & Rhee, 2003). It is calculated by $(\text{Current Revenue} - \text{Previous Revenue}) / \text{Previous Revenue}$.

Lagged dividend – it is a dividend paid by a firm one year back. It is measured by previous year dividend payout.

Size – size of a firm is used to indicate as a factor that affects dividend payout. In this study size is measured by natural logarithm of total asset.

Risk – it is used to show earning volatility and measured by log of standard deviation.

Chapter Three: Research Methodology

This chapter discusses the research design and methodology. The chapter is organized in four sections. The first section 3.1 discusses the research design; data collection and sampling design is presented in section 3.2; methods of data analysis, model assumption and description are presented in section 3.3; and finally section 3.4 discusses about variable construction.

3.1 Research Design

The primary aim of this study was to examine the determinants of dividend payout in Ethiopian private banks. To achieve the objective explanatory type of research design with a quantitative approach method was employed. The explanatory type of research design helps to identify and evaluate the causal relationships between the different variables under consideration (Creswell, 2008). So that, in this study the explanatory research design was employed to examine the relationship of the dependent and independent variables.

3.2 Data Collection and Sampling Technique

Financial statement data were collected on dividend payout, return on asset, liquidity, leverage, lagged dividend, size, revenue growth and risk from National bank of Ethiopia and published audited annual reports of the banks included in the sample in order to examine the factors that affect the dividend payout of Ethiopian private banks. Five years data were collected from year 2009/10 up to 2013/14.

To make inference about the population a large sample size is important and to make that this study have used eight banks out of the sixteen private banks currently working in Ethiopia, which is a sample size of 50%. While doing so, some of the banks started operation recently like Cooperative bank of Oromia in 2004, Lion international bank in 2006. These banks even started distribution of income as dividend recently for instance, Lion international bank has started paying dividend at 2008. In considering this, five years data were used to conduct this study. Otherwise, increasing the number of years to be included in the study like ten years would be

achieved only by decreasing the number of banks to be included in the study and this would affect negatively the ability to give inference about the Ethiopian private banking industry due to less representativeness of the sample.

A total of eight private banks were included in this study based on purposive sampling techniques. Because the below stated private banks are the only private banks that have started operation and distributed dividend on the study period from year 2009/10 to 2013/14.

The below are the banks included in this study:

1. Awash international bank,
2. Bank of Abyssinia,
3. Cooperative Bank of Oromia,
4. Dashen Bank,
5. Lion International Bank, us
6. Nib International Bank,
7. United bank, and
8. Wegagen bank

3.3 Data Analysis

Financial statement data were collected from National bank of Ethiopia and published audited annual reports of the banks. Descriptive statistics like mean, standard deviation is used to describe the selected variables; this study also conducted correlation analysis, specifically Pearson correlation to measure the degree of association between the variables under considerations and panel data regression method is used to examine the relationship between dependent and independent variables in order to conclude based on the collected data about the determinants of dividend payout in Ethiopian private banks.

This study has two dividend models to test. The first model replicate Lintner's model in the Ethiopian private banks, the only variables included are profit and lagged dividend paid with dividend payout used as a dependent variable in order to determine whether Ethiopian private banks follow stable dividend payout policy or not. The second model is an extension of the first

model by including additional independent variables in the model to examine the determinants of dividend payout in Ethiopian private banks.

The data collected for the study has the dimension of both time series and cross sections. Therefore, balanced panel data regression technique is used in order to examine the determinants of dividend payout in Ethiopian private banks. To conduct the analysis, Eview 6 statistical software package has employed.

3.3.1 Model assumptions

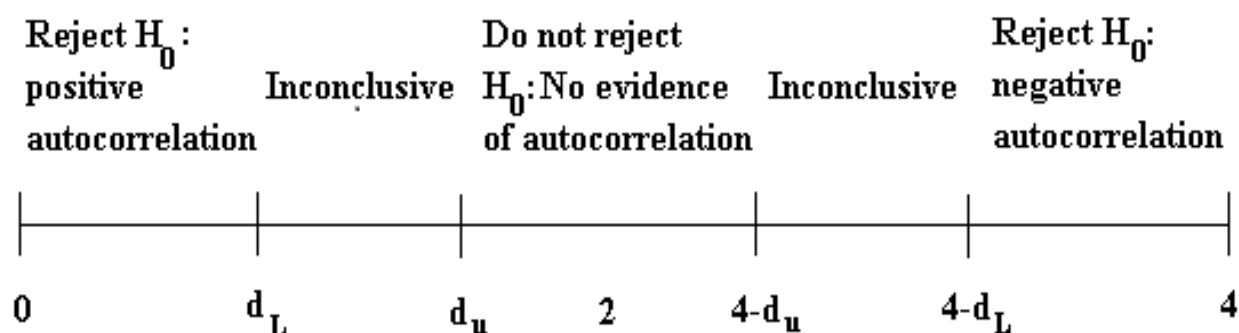
The assumptions on classical linear regression model were tested to determine whether the collected data would fit the assumptions in order to use Ordinary Least Squares (OLS) technique. Consequently, the following basic CLRM assumptions were tested in this study:

1. Errors have zero mean,
 2. Heteroscedasticity,
 3. Autocorrelation,
 4. Multicollinearity, and
 5. Normality
-
1. The first assumption is that the errors have zero mean. According to Brooks (2008), if a constant term is included in the regression equation, this assumption will never be violated.
 2. **Homoscedasticity**- to perform a homoscedasticity test the popular white test was used. In this test, if the p-value is very small, less than 0.05 significance level the null hypothesis of the variance of the residuals is homogenous must be rejected. As noted in Brooks (2008), this test is the most popular because it makes few assumptions about the likely form of the heteroscedasticity. Gujarati (2004) indicates that heteroscedasticity is a systematic pattern in the errors where the variances of the errors are not constant. Similarly, Brooks (2008) noted that if the errors do not have a constant variance, they are said to be heteroscedastic.
 3. **Autocorrelation**- this assumption indicates that the covariance between the error terms over time is zero; it assumed that the errors are uncorrelated with one another. If the errors are not uncorrelated with one another, it would be stated that they are serially correlated. Usually,

Durbin-Watson (DW) value in the main regression table is considered and used to test the presence of autocorrelation.

According to Brooks (2008), DW has two critical values: an upper critical value (d_U) and a lower critical value (d_L), and there is also an intermediate region where the null hypothesis of no autocorrelation can neither be rejected nor not rejected.

Figure 3.1 Rejection and Non-Rejection Regions for DW Test



The rejection, non-rejection, and inconclusive regions are shown on the number line in figure 3.1. So, the null hypothesis is rejected and the existence of positive autocorrelation presumed if DW is less than the lower critical value; the null hypothesis is rejected and the existence of negative autocorrelation presumed if DW is greater than 4 minus the lower critical value; the null hypothesis is not rejected and no significant residual autocorrelation is presumed if DW is between the upper and 4 minus the upper limits; the null hypothesis is neither rejected nor not rejected if DW is between the lower and the upper limits, and between 4 minus the upper and 4 minus the lower limits.

4. Multicollinearity- means that there is a linear relationship between explanatory variables, which may cause the regression model to be biased (Gujarati, 2004). When there is a strong correlation between explanatory variables it becomes difficult to identify the impact of individual independent variables. Thus, in order to examine the possible degree of

multicollinearity among the explanatory variables, Pearson correlation matrix is used. Usually the multicollinearity exists if the correlation between two independent variables is more than 0.75 (Malhotra, 2007).

5. Normality test- it's important that the residuals from the regression models should follow the normal distribution. Normality assumption of the regression model was tested with the Jarque-Bera measure. If the Jarque Bera value is greater than 0.05, the hypothesis of the normal distribution fails to be rejected (Brooks, 2008).

➤ Finally, Hausman specification test is used to test the fixed effects model against the random effects model.

3.3.2 Model Specifications

Panel data involves the pooling of observations on a cross-section of units over several time periods and provides results that are simply not detectable in pure cross-sections or pure time-series studies. The panel regression equation differs from a regular time-series or cross-section regression by the double subscript attached to each variable. The general form of the panel data model can be specified more compactly as:

$$Y_{i,t} = \alpha_i + \beta x_{i,t} + \epsilon_{i,t}$$

With the subscript i , denoting the cross-sectional dimension and t representing the time-series dimension. In this equation,

$Y_{i,t}$ represents the dependent variable in the model, which is the firm's dividend payout ratio;

$X_{i,t}$ contains the set of explanatory variables in the estimation model; and

α_i is taken to be constant over time t and specific to the individual cross-sectional unit i .

If α_i is taken to be the same across units, then Ordinary Least Square (OLS) provides a consistent and efficient estimate of α and β (Gujarati, 2004).

In the light of the above model and on the bases of the selected variables, the current study used the below econometric model

$$\text{Model I: } DVPO_{i,t} = \alpha_i + \beta_1 PRO_{i,t} + \beta_2 LDVP_{i,t}$$

$$\text{Model II: } DVPO = f (PRO, LIQ, LEV, LDVP, GRO, SIZ, RIS)$$

$$DVPO_{i,t} = \alpha_i + \beta_1 PRO_{i,t} + \beta_2 LIQ_{i,t} + \beta_3 LEV_{i,t} + \beta_4 LDVP_{i,t} + \beta_5 \\ GRO_{i,t} + \beta_6 SIZ_{i,t} + \beta_7 RIS_{i,t} + \epsilon_{i,t}$$

Where,

DVPO = Dividend payout

PRO = Profitability

LIQ = Liquidity

LEV = Leverage

LDVP = lagged dividend paid

GRO = Growth

SIZ = size of the banks

RIS = Risk

3.3.3 Variables Description and Expected Sign

Variables	Symbol	Description	Expected Sign
Dividend payout	DVPO	Dividend/net profit	Not Available
Profit	PRO	ROA= profit after tax and legal reserve/total asset	+
Liquidity	LIQ	Current asset/current liability	+
Leverage	LEV	Debt/Total asset	—
Lagged dividend	LDVP	Last year dividend payout	+
Growth	GRO	(Current Revenue -Previous Revenue) /Previous Revenue	—
Size	SIZ	Natural logarithm of total asset	+
Risk	RIS	Earning volatility- calculated by Log of standard deviation of revenues	—

3.4 Variables Construction

Based on previous researches on the determinants of dividend payout/policy, the following variables have been chosen in this study to be tested empirically, whether they have an impact on dividend payout of Ethiopian private banks or not. According to Creswell (2008), the variables need to be specified in quantitative researches so that it is clear to readers what groups are receiving the experimental treatment and what outcomes are being measured.

Dependent Variable

Dividend payout

Payout ratio is calculated by dividing the total dividend to net profit (Ross, Westerfield, & Jaffe, 2002). Most of the previous studies employed dividend payout ratios as a determinant of dividend in lieu of dividend per share and dividend yield (Amidu & Abor, 2006; Weber & Dr.

Procianoy, 2014; Maladjian & El Khoury, 2014). The dividend payout ratio is also used in this research, rather than dividend per share and dividend yield, for two reasons:

Firstly, the dividend payout ratio takes into consideration both dividend payout and dividend retention.

Secondly, dividend per share and dividend yield was considered unsuitable, because neither takes into account the dividend paid in relation to the income level (Gustav & Gairatjon, 2012). Plus to use dividend yield, it requires market price of a share in computing dividend yield, which we do not have in our country due to absence of secondary market.

Independent variables

I. Profitability

The decision to pay dividend starts with profit. Therefore, it is logical to consider profitability as a threshold factor, and the level of profitability as one of the most important factors that may influence firms' dividend decisions. Profitability can be defined as the ability of the firm to create profit (Badu, 2013). The profit size of a firm has been a determinant of dividend policy standing for years. Sheikh Taher (2012) stated that published earnings/profits have long been identified as the primary factor of the firm's capacity to pay dividends. Profit is the single most important factor in a company's financial statement and it has been widely used in previous studies in order to determine the relationship with the company's dividend payout ratio (Gustav & Gairatjon, 2012).

Lintner (1956) conducted a study in American companies in the middle of 1950 and found profit is a factor managers used on deciding dividend payment. Several studies confirmed profitability is one of the major factors that affects dividend payment. (Amidu & Abor, 2006; Nuredin, 2012; Ahmed & Javid, 2008; Maladjian & El Khoury, 2014 and Zhang & Fu, 2014) have found profit as a significant variable that affects dividend payment. Profitable firms are most likely to pay dividend compared to non profitable firms (Ahmed & Javid, 2008). Firms that earns high profits are more likely to pay high dividend (Amidu & Abor, 2006). Therefore, Profit is also expected to have a positive relationship with dividend payout in this study. But the calculation of return on

asset is done based on profit after tax and legal reserve divided by total assets. Because banks are required to set aside some portion of their profit, currently it is 25%, as a legal reserve, which can not be distributed to shareholders by National Bank of Ethiopia. So, including it in calculating return on asset would be illogical.

II. Liquidity

Liquidity is usually measured by the firm's cash flow; the cash flow position of a firm is an important determinant of dividend payout. Liquidity is determined based on firm's current asset divided by current liability. According to the agency theory of cash flow, Jensen (1986) argued that firms with high cash flow pay higher dividends in order to diminish the agency conflict between their managers and shareholders. Otherwise, managers may pursue their own personal agenda and maximize their personal wealth instead of maximizing the wealth of its shareholders.

Amidu & Abor (2006) found a positive relationship between liquidity and profitability explaining that firms earning stable cash flow (high liquidity) are in a position to pay higher dividends as compared to firms facing unstable earning. Chikashi (2011) also found positive relationship between liquidity and dividend payout policy suggesting that due to shortage of cash, poor liquidity results in less generous dividend payout policies. However, other studies found negative relationships with dividend payout (Sheikh Taher, 2012; Maladjian & El Khoury, 2014) while others like Trang (2012); Al-Najjar & BinSaddig (2013) have found no significant relation with dividend payout. These reseraches indicated that the realtionship between liquidity and dividend is mixed.

La Porta et al. (2000) argued that when a firm has free cash flow, its managers will engage in wasteful practices, even when the protection for investors improves. A number of studies have suggested that firms with a greater "cash flow" need to pay more dividends to reduce the agency costs of the free cash flow (La Porta et al., 2000). Based on agency theory, Badu (2013) claimed that it can be speculated that there is a positive relationship between the cash flow and the dividend payout ratio and he found on his empirical study a positive and significant relationship. Therefore, liquidity is expected to have a positive relationship with dividend payout in this study.

III. Leverage

The term leverage is used to show firms capital structure, mix of debt and equity financing. A firm relies on debt financing in order to minimize agency problem, to tap the tax advantages (interests deduction on income), as a result the use of debt financing can lever-up shareholders' return on equity (Al-Malkawi, 2008). However, leverage entails risk; that is, when a firm acquires debt financing it commits itself to fixed financial charges embodied in interest payments and the principal amount, and failure to meet these obligations may lead the firm into liquidation.

The risk associated with high degrees of financial leverage may therefore result in low dividend payments because firms need to maintain their internal cash flow to pay their obligations rather than distributing the cash to shareholders (Al-Malkawi, 2008), plus an increase in debt in financial industry like bank increases the requirement of reserves by national banks (NBE, 2014).

Jensen (1986), argued that debt can serve as a substitute device for dividends in reducing the agency costs of free cash flow. That is, when a firm obtains debt, it makes a fixed commitment to creditors, which reduces the discretionary funds available to managers and subjects them to the scrutiny of debt-suppliers. This suggests that, highly levered firms are expected to have low dividend payouts. Several empirical studies showed leverage has a negative effect whether it is significant or not (Al-Malkawi, 2008; Al-Shubiri, 2011; and Al-Najjar & BinSaddig, 2013) but few other studies showed a positive relationship. This study expects a negative relationship between leverage and dividend payout.

IV. Lagged Dividends

In the real world, it is often believed that companies "pay a steady stream of dividends because investors perceive firms with stable dividends as stronger and more valuable (Maladjian & El Khoury, 2014). Lintner (1956) conducted a study in American firms to test whether current earnings and previous year's dividends have an impact on dividend payout. He found current earnings and historical dividends are essential in determining current dividends. Empirical studies have showed a positive relationship between lagged dividends and current dividend payment (Ahmed & Javid, 2008; Yahya & Hadi, 2013; and Maladjian & El Khoury, 2014). Therefore, a

positive relationship between lagged dividends and dividend payout is also expected in this study.

V. Growth

Recent experiences have shown that growing firms tend to pay lower dividends. There will be a high demand of capital if a firm is fast growing. The pecking order theory states that firms should finance new projects first with least information-sensitive sources. Also, firms with high growth opportunities are likely to retain a greater portion of their earnings to finance their expansion projects as against returning these dividends to shareholders (Badu, 2013). Some firms have fewer growth opportunities but tend to pay higher dividends to prevent managers from over-investing the cash available to the firm. In such circumstances, the dividend policy of the firm plays the role of an incentive for the firm to move its resources and hence decrease its agency costs that may arise from the availability of free cash flow funds (Jensen, 1986).

The higher the growth opportunities, the more the need for funds to finance expansion, and the more likely the firm is to retain earnings than pay them as dividends (Chang & Rhee, 2003). Several previous empirical studies have found a mixed results about the relationship of growth with dividend payment. For instance, a negative relationship between growth and dividend payout has been observed in the work of (Ho, 2003, Al-Malkawi, 2008; Nuredin, 2012 and Maladjian & El Khoury, 2014), while a positive relationship has been observed in the work of (Yahya & Hadi, 2013). In this study a negative relationship between growth and dividend payout is expected.

VI. Firm Size

Size of a firm has been one of the most commonly used factors in previous studies. Various researchers have argued that the size of the company is one of the factors that have the largest influence on the dividend payout ratio (Holder, Langrehr, & Hexter, 1998).

Information asymmetry between managers and owners/shareholders in large firms are more sensitive than small firms due to lack of close supervision. To control this problem dividend payout is widely used as a motivating factor for managers to show shareholders that their organization is in the right track.

According to Fama and French (2001) larger firms expend a greater portion of their net profits as cash dividends compared to smaller firms. Larger firms have greater advantage over small firms in accessing capital from public and financial institutions. The cost of acquiring capital is smaller due to firm size. Holder, Langrehr, & Hexter (1998) said large firms have greater access to financial markets, making it easier for them to reduce their costs, become more profitable and pay higher dividends. Therefore, firm size is directly related to dividend payout. Several studies have showed size is directly related with dividend payout (Al-Malkawi, 2008; Kinfu, 2011; Al-Shubiri, 2011). Therefore, this study also expect a positive relationship between firm size and dividend payout.

VII. Risk

It is argued that business risk is one of the determinants of firm's dividend policy. A firm with stable earnings can predict its future earnings with a greater accuracy. Thus, such a firm can commit to paying larger proportion of its earnings as dividends with less risk of cutting its dividends in the future (Al-Shubiri, 2011). According to the pecking order theory and the trade-off theory, business risk negatively affects the firm's leverage and thus its dividend payout ratio. Moreover, these theories also argue that firms that are highly risky also experience high cash flow volatility (Al-Malkawi, 2008). As a result firms will be forced to decrease dividend payment.

According to Jensen (1986), the greater the systematic risk for any company, the greater the level of uncertainty between the current and expected future profits. Thus, firms tend to avoid paying large dividends as their profit uncertainty increases. This shows that an inverse relationship exists between business risk and dividend ratio. Empirical studies showed a negative relationship between risk and dividend payment (Ho, 2003; Trang, 2012 and Al-Shubiri, 2011). Therefore, a negative relationship between risk and dividend payout is also expected in this study.

Chapter Four: Results and Discussions

This chapter deals with the results and analysis of the findings. Section 4.1 deals with descriptive statistics of the variables, section 4.2 presents the result of the fulfillment of the classical linear regression model (CLRM) assumptions, 4.3 presents the regression results and discusses the findings.

4.1 Descriptive statistics

Table 4.1 provides a summary of the descriptive statistics of the dependent and independent variables for eight private banks from year 2009/10 to 2013/14 with a total of 40 observations. The table includes the mean, median, standard deviation, number of observations, minimum and maximum for the independent and dependent variables used in this research. It shows the average indicators of variables computed from the financial statements.

Table 4.1 Descriptive statistics

	DVPO	PRO	LIQ	LEV	LDVP	GRO	SIZ	RIS
Mean	92.37	2.24	67.45	86.35	89.46	32.61	22.74	18.27
Median	95.00	2.21	65.33	87.70	94.71	25.49	22.84	18.30
Maximum	100.00	3.51	94.26	89.76	100.00	127.83	23.82	19.69
Minimum	66.62	1.06	21.81	80.51	55.56	3.88	21.03	16.83
Std. Dev.	8.90	0.46	17.79	3.64	11.74	27.36	0.69	0.66
Observations	40	40	40	40	40	40	40	40

Source: E-view output

Table 4.1 shows a mean value of 92.37% for dividend payout indicating that the private banks in Ethiopia have paid 92.37% of their income as dividend with 8.90% variability ups and downs for the period from year 2009/10 to 2013/14. As stated in chapter three, this study used profit after tax and legal reserve to calculate dividend payout. The figure indicated that Ethiopian banking industry is a high dividend paying industry. On average, they distribute 92% of their profit to their shareholders.

Profit measured by return on asset shows the banks productivity to generate income using the available asset. The figure shows that Ethiopian private banks have generated on average 2.24% profit for a one birr investment on asset, the most profitable banks have generated 3.51% profit and the least profitable banks have generated 1.06% profit for each birr investment. The variability is below one percent.

Ethiopian private banks have on average 67.45% liquidity position measured by current asset divided by current liability. This means that for a one birr current liability there is an available 67 cents on average on current assets, a maximum liquidity position of 94.26% and minimum of 21.81 % with a high dispersion of 17.79% ups and downs. Had it been the companies are in other industries like manufacturing, the figure shows that there is a possibility to be insolvent due to lack of enough current assets available to settle current liabilities. It is believed a company is solvent if it has a minimum of one to one proportion between current asset and current liability, where for every one birr current liability there is a minimum of one birr in current asset (Brealey & Myers , 2003). But the nature of the banking industry is highly dependent on deposit, which is a debt, to finance their operation, where they receive deposit from the public, mainly has a nature of short term, and extend loan to borrowers both for short and long period of time. Receiving short term deposit and providing long term loan, create a gap on banks liquidity management but evaluating the above figure based on National bank of Ethiopia liquidity requirement of a minimum of 15% shows Ethiopian private banks have maintained a liquidity position of 4 times above the minimum requirement and it can be said they are solvent.

Ethiopian private banks have on average 86.35% debt in their asset composition mainly from deposit with 3.64% variability ups and downs. A maximum debt ratio of 89.76% which is an equity contribution of 10.24% which is well above the national bank of Ethiopia's requirement of a minimum of 8% equity to all banks to maintain in their capital structure. This condition shows banking industry is highly levered due to their main source of fund is from deposit, which is a liability.

Lagged dividend paid by private banks shows average value of 89.46% with a variability of 11.74% ups and downs. This figure shows Ethiopian private banks have distributed 90% of their revenues to shareholders, which indicates Ethiopian banking industry is a high dividend paying industry.

The growth rate shows that on average Ethiopian private banks revenue have increased in the last five years from 2009/10 to 2013/15 by 32.61% with a variability of 27.36 % ups and downs. Growth variable has a highest dispersion among other variables. The most grown banks have managed to increase their revenue by 127.83 % and the least grown bank by 3.88%. This result indicates that Ethiopian banking industry is in a rapid growth stage at least in terms of revenue.

The variable size measures eight private banks total assets who are included on the study. The anti-logarithm figure on table 4.1 shows eight Ethiopian private banks have an asset on average of birr 9,155,205,328.16. The variable risk is used to measures earning volatility proxy by natural logarithm of standard deviation of revenue. The average value of risk is 18.27% which means that Ethiopian private banks revenue has shown a volatility rate of 18.27% in the last five years from year 2009/10 to 2013/14 with a variability of 0.66% ups and downs. Banks revenue has shown on average an 18% change in the last five years. From this we can understand Ethiopian private banks revenues is not stable rather it is increasing rapidly from year to year as a result of growth of the country and availability of ample untapped markets for their banking products.

Table 4.2 Correlation matrix of dependent and independent variables

	DVPO	PRO	LIQ	LEV	LDVP	GRO	SIZ	RIS
DVPO	1.000000							
PRO	0.060656	1.000000						
LIQ	-0.19086	-0.08214	1.000000					
LEV	-0.1561	-0.443	0.153355	1.000000				
LDVP	0.710531	0.228712	-0.31708	-0.17546	1.000000			
GRO	-0.37734	-0.18344	0.527357	0.100093	-0.32542	1.000000		
SIZ	-0.18912	0.112440	-0.40804	0.315687	-0.04327	-0.43809	1.000000	
RIS	-0.03825	0.251445	-0.06173	0.288324	0.072439	0.083225	0.634660	1.000000

Source: E-view output

Table 4.2 shows the degree of correlation/association between the dependent, dividend payout and the seven independent variables.

Among the variables lagged dividend payout has a strong positive relationship with dividend payout with a coefficient value of 0.71. Previous years dividend paid have a positive impact on current year's dividend and lead to a payment of higher dividend in current year. Growth variable has the next strong but negative relationship with dividend payout with a coefficient value of -0.38. Meaning that when the revenue growth of a bank increases by one birr dividend will decrease by 38 cents, because growing firms tend to pay lower dividends. There will be a high demand of capital if a firm is fast growing. Profit has a positive relationship with dividend payout but the coefficient value of 0.06 is low. An increase in profit will lead to an increase in dividend payout. Liquidity and leverage have a negative relationship with dividend payout with the coefficient value of -0.19 and -0.15 respectively. Size and risk have also a negative relationship with dividend payout with a coefficient value of -0.19 and -0.04 respectively but the risk variable association with dividend payout is very low.

Among the independent variables, lagged dividend payout has the strongest positive association with dividend payout. And it is only lagged dividend payout and profit that have the positive relationship with dividend payout. The rest of the independent variables have a negative relationship with dividend payout.

4.2 Tests for the Classical Linear Regression Model (CLRM) Assumptions

In this study as mentioned in chapter three diagnostic tests were carried out to ensure that the data fits the basic assumptions of classical linear regression model. Consequently, the results for the model assumption tests are presented as follows:

4.2.1 Assumption one: The errors have zero mean ($\epsilon = 0$)

According to Brooks (2008), if a constant term is included in the regression equation, this assumption will never be violated. Thus, since the regression model used in this study included a constant term, this assumption is not violated.

4.2.2 Assumption two: Test for Homoscedasticity

The assumption of homoscedasticity is that the residuals are approximately equal for all predicted dependent variable scores- the variance of the errors is constant, if the assumption are met the pattern of the residuals will have about the same spread on either side of a horizontal line drawn through the average residual (Wooldridge, 2006). Otherwise if the errors do not have a constant variance, it is said that the assumption of homoscedasticity has been violated. This violation is termed as heteroscedasticity. In this study white test was used to test for existence of heteroscedasticity across the range of explanatory variables.

Table 4.3: Heteroscedasticity Test: White

F-statistic	2.460607	Prob. F(7,32)	0.0676
Obs*R-squared	13.99656	Prob. Chi-Square(7)	0.0912
Scaled explained SS	14.99821	Prob. Chi-Square(7)	0.0654

Source: E-view output

The result in table 4.3 shows, the F-stat, X^2 , and scaled explained SS versions of the test statistic give the same conclusion that reveals the absence of heteroscedasticity, because the p-values are greater than 0.05.

4.2.3 Assumption three: Tests of Autocorrelation

This is an assumption that the errors are linearly independent of one another (uncorrelated with one another). If the errors are correlated with one another, it would be stated that they are autocorrelated. The DW test statistic value from the regression result is 1.272. There are 40 yearly observations in the regression and 8 regressors including the intercept. According to DW statistics table, the relevant critical values for the test at 5% significance level were $dL = 1.06$, $dU = 1.97$. The DW statistics result of 1.272 is above the lower level but below the upper level. Therefore, it falls in the inconclusive region and the null hypothesis is neither rejected nor not rejected. Continuing Breusch-Godfrey Serial Correlation LM test is applied at 7 lagged level considering the seven independent variables used on the study. The test result indicated below

shows the null hypothesis of no autocorrelation is not rejected, since it is above 5% significance level.

Table 4.4: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.707549	Prob. F(7,25)	0.6659
Obs*R-squared	6.614190	Prob. Chi-Square(7)	0.4701

Source: E-view output

4.2.4 Assumption Four: Test for Multicollinearity

This assumption of multicollinearity is that explanatory variables are not correlated with one another. But, if the variables are not uncorrelated with one another, it will be the violation of the CLRM assumption of multicollinearity. To test the independence of the explanatory variables or to detect any multicollinearity problem in the regression model the study used a correlation matrix of independent variables. The problem of multicollinearity usually arises when certain explanatory variables are highly correlated. Malhotra (2007) stated that multicollinearity problems exists when the correlation coefficient among variables are greater than 0.75. Table 4.5 of correlation matrix has shown that the correlations among the independent variables are well below 0.75. Therefore, the risk of multicollinearity will not affect our regression analysis.

Table 4.5: Correlation Matrix between independent variables

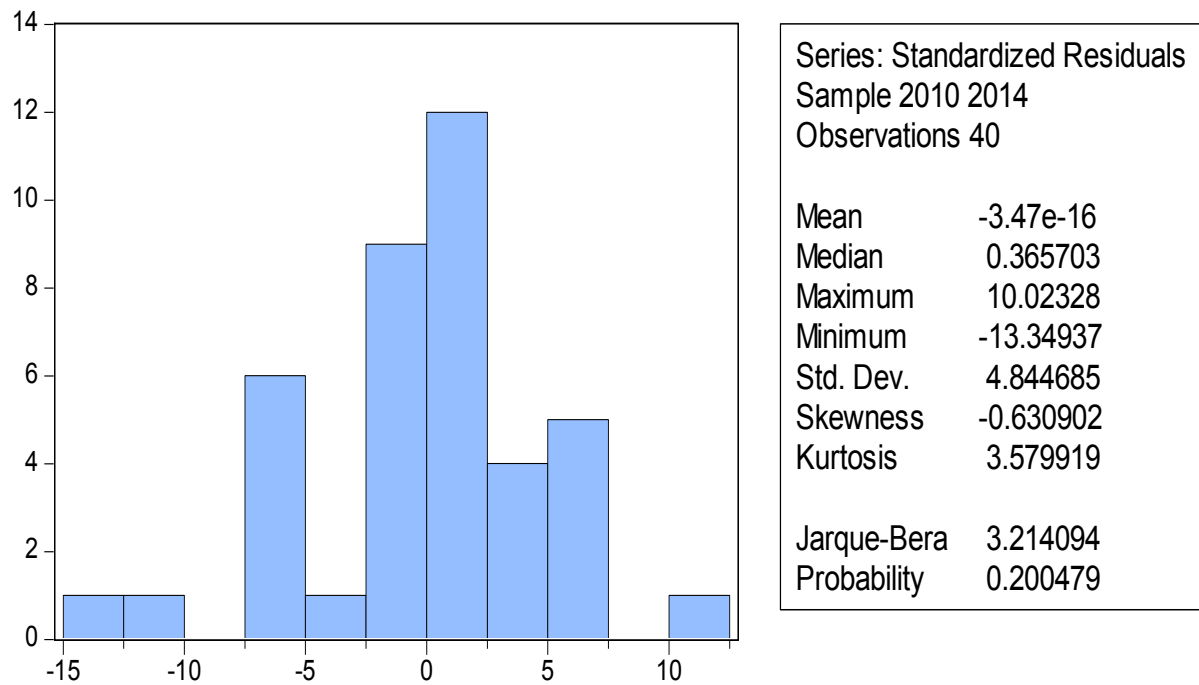
	PRO	LIQ	LEV	LDVP	GRO	SIZ	RIS
PRO	1.000000						
LIQ	-0.082144	1.000000					
LEV	-0.443003	0.153355	1.000000				
LDVP	0.228712	-0.317083	-0.175459	1.000000			
GRO	-0.183436	0.527357	0.100093	-0.325417	1.000000		
SIZ	0.217696	-0.530765	0.304631	0.179580	-0.610509	1.000000	
RIS	0.291772	-0.131142	0.291529	0.152601	0.077401	0.588611	1.000000

Source: E-view output

4.2.5 Assumption Five: Test for Normality

According to Brooks (2008), if the residuals are normally distributed, the histogram should be bell-shaped and the Bera-Jarque statistic would not be significant. This means that the p-value given at the bottom of the normality test screen should be greater than 0.05 to support the null hypothesis that the distribution is normal at the 5% significance level.

Figure 4.1 Normality test



Source: E-view output

The normality tests for this study as shown in figure 4.1, the coefficient of kurtosis is close to 3, skewness is close to zero and the Bera-Jarque figure is not significant and the P-value is 20%, which is greater than 5% implying that the data were consistent with a normal distribution assumption.

4.3 Regression Results and Discussions

The results so far indicated that all CLRM 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 for model II, namely: fixed effect model (FEM) and random effect model (REM) (Brooks, 2008). To examine whether individual effects are fixed or random, a Hausman specification test was conducted for model II providing evidence in favor of the fixed effect model (FEM) as presented in Table 4.6, p-value is less than 5%. Therefore, it is rejected that the random effect model is appropriate.

Table 4.6: Random Effect- Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	42.434179	7	0.0000

Source: E-view output

4.3.1 Lintner's Dividend Model (Model I)

To replicate Lintner's model in the Ethiopian private banks, the only variables included are profit and lagged dividend paid with dividend payout used as a dependent variable in order to determine whether Ethiopian private banks follow stable dividend payout policy or not using five years data from 2009/10 to 2013/14 for eight sample private banks.

$$\text{Model I: } DVPO_{i,t} = \alpha_i + \beta_1 PRO_{i,t} + \beta_2 LDVP_{i,t}$$

Table 4.7 below presents the regression results of Lintner's model for the purpose of testing whether Ethiopian private banking sector adhere to stable dividend payout policy. The prediction statement was both profitability and last years' dividend have a significant explanatory power to determine dividend payout. The result shows that the coefficient of lagged dividend paid is positive and statistically significant. This result is similar to the result of numerous studies conducted on emerging markets (Al-Ajmi and Abo Hussain, 2007; Ahmed and Javid, 2009; Kinfe, 2011; and Maladjian & El Khoury, 2014). But profit proxy by earning per share, although

it is positive, is statistically insignificant. This finding is consistent with those reported by Aivazian, Booth, & Cleary,(2003); Kinfе, (2011); and Maladjian & El Khoury, (2014) who founds that some emerging capital market firms do not follow a stable dividend payout policy. From this we can conclude that Ethiopian private banks do not follow stable dividend payout policy. The adjusted R^2 value reveals that the existing model explains 47.8 percent of the dividend payout pattern of Ethiopian private banks. Therefore, hypothesis 8 is rejected, which states that Ethiopian private banks follow stable dividend payout policy.

Table 4.7: OLS Regression- Lintner’s model (Model I)

Dependent Variable- Dividend payout

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	43.91962	8.219332	5.343453	0.0000
EPS	0.007725	0.062846	0.122924	0.9028
LDVP	0.538078	0.087743	6.132409	0.0000
R-squared	0.505056	Mean dependent var	92.37105	
Adjusted R-squared	0.478302	S.D. dependent var	8.900484	
S.E. of regression	6.428699	Akaike info criterion	6.631460	
Sum squared resid	1529.142	Schwarz criterion	6.758126	
Log likelihood	-129.6292	Hannan-Quinn criter.	6.677258	
F-statistic	18.87797	Durbin-Watson stat	2.366634	
Prob(F-statistic)	0.000002			

Source: E-view output

4.3.2 Determinants of Dividend Payout (Model II)

The purpose of Model II is to investigate the determinants of dividend payout in Ethiopian private banks. This is a continuation of Lintner’s model by including additional explanatory variables. Five years data were collected from audited financial statements from year 2009/10 to 2013/14 for eight Ethiopian private banks. Dividend payout was used as a dependent variable and seven independent variables: profit, liquidity, leverage, lagged dividend paid, growth, size

and risk. A fixed effect model (FEM) panel data regression technique was used to analyze the data based on the Hausman test result.

➤ The below is the regression model used for the study (Model II)

$$DVPO_{i,t} = \alpha_i + \beta_1 PRO_{i,t} + \beta_2 LIQ_{i,t} + \beta_3 LEV_{i,t} + \beta_4 LDVP_{i,t} + \beta_5 GRO_{i,t} + \beta_6 SIZ_{i,t} + \beta_7 RIS_{i,t} + \epsilon_{i,t}$$

Where,

DVPO = Dividend payout

PRO = Profitability

LIQ = Liquidity

LEV = Leverage

LDVP = lagged dividend payment

GRO = Growth

SIZ = Size of the bank

RIS = Risk

€ = represents Error Term

I = cross section dimension, refers banks

t = Time series dimension, refers number of years

Table 4.8 below shows regression results between the dependent variable (dividend payout) and the explanatory variables. The R-square value measures how well the regression model explains the actual variations in the dependent variable (Brooks, 2008). The adjusted R^2 value in table 4.8 below indicates that 58.73% of the total variability of dividend payout of Ethiopian private banks is captured by the variables in the regression model. Meaning that the seven independent variables; Profit, liquidity, leverage, lagged dividend, growth, size and risk explain 58.73% of the change in dividend payout in Ethiopian private banks for the study period from year 2009/10 to 2013/14.

The regression F-statistic (6.04) and the p-value of zero attached to the test statistic reveal that the null hypothesis that all of the coefficients are jointly zero should be rejected. Thus, it implies that the independent variables in the model were able to explain variations in the dependent variable.

Table 4.8: Regression Result- Fixed Effect Model (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	217.7128	54.21725	4.015564	0.0004
PRO	-0.716192	3.216053	-0.222693	0.8254
LIQ	-0.042386	0.081825	-0.518002	0.6085
LEV	0.612168	0.495490	1.235480	0.2269
LDVP	0.368938	0.101145	3.647629	0.0011
GRO	-0.298105	0.075641	-3.941050	0.0005
SIZ	-14.99256	4.301204	-3.485665	0.0016
RIS	7.878654	2.954011	2.667104	0.0126
R-squared	0.703719			
Adjusted R-squared	0.587323		Durbin-Watson stat	1.272648
F-statistic	6.045896			
Prob(F-statistic)	0.000057			

Source: E-view output

The preceding sections present the result of the study. Thus, this section discusses in detail the analysis of the results for each explanatory variable and their importance in determining dividend payout. In addition, the discussion analyzes the statistical findings of the study in relation to the previous empirical evidences. Hence, the following discussions present the relationship between explanatory variables and dividend payout.

Profitability

The result of profitability measured by return on asset as shown in table 4.8 is negative and statistically insignificant. Profitability is not a significant factor that determines dividend payout

in Ethiopian private banks for the study period from year 2009/10 to 2013/14. Therefore, hypothesis 1 is rejected. Hypothesis 1 states that profitability measured by return on asset has a positive relationship with dividend payout. The finding is in contrary to the theory of signaling. The theory of signaling claims, in order to signal that the company is doing well, profitable firms should pay dividend. Empirical studies also support a positive and significant relationship between profitability and dividend payout. But this finding is compatible with the dividend irrelevance theory. Miller and Modigliani (1961) Describes paying dividend is irrelevant, shareholders are not concerned to receiving their cash flows as dividend or in shape of capital gain, as far as firms don't change the investment policies. The insignificant relationship between profit and dividend payout found confirms the Modigliani and Miller's (1961) assumptions that the value of the firm is independent to the dividend policy and profit do not have an impact on dividend payout.

This finding is similar to the finding of, Zaman, (2013), Kinfe, (2011), Gustav & Gairatjon , (2012), Komrattanapanya & Suntrauk (2013) and Badu (2013). For instance, Kinfe (2011) conducted a study on Ethiopian banks to identify factors that affects dividend payout. He found insignificant relationship between profitability and dividend payout. The possible reason for the insignificant relationship could be Ethiopian banking industry is in growth stage and banks requires capital to keep the growth momentum. One of the best and cheapest alternative to finance the growth is to use the profit earned from operation because it is the cheapest way of financing growth in terms of cost of capital instead of distributing as a dividend to shareholders. This may suggests that Ethiopian private banks may pay dividend not necessarily considering the level of profit but will pay only when the managers think is appropriate to do so.

Liquidity

Tabel 4.8 shows liquidity has a negative and statistically insignificant relationship with dividend payout. This implies that the increase or decrease in liquidity has not statistical significant effect on dividend payout in Ethiopian private banks for the study period. Therefore, hypothesis 2 is also rejected, stating that liquidity has a positive relationship with dividend payout.

The finding is in contray to the Jensen's (1986) agency theory stated, companies with higher free cash flow have higher dividend payout ratios. Based on this theory, a company that have higher

liquid assets is more exposed to agency problem than a company with lower liquid assets. Because shareholders do not trust managers, and they therefore, think that the managers may be engaged in excessive spending if they have excess free cash flow at their disposal. Many empirical studies showed a positive relationship between liquidity and dividend payout. But also a number of studies have showed a negative and/or insignificant relationship between liquidity and dividend payout, (Dagnaw, 2009; Imran, 2011; Kifle, 2011; and Maladjan & El Khoury, 2014).

The possible reason for insignificant and negative relationship between liquidity and dividend payout could be banks by their nature requires to maintain high liquidity in order to avoid insolvency problem due to large sum of their assets is made up from deposit and this deposit could be withdrawn at anytime, to avoid this problem banks should always make sure that they have enough liquidity to entertain huge amount of withdrawals from deposit due to different reasons. And also as stated by Kifle (2011) The possible reason for this unusual negative association of dividend payout ratio and liquidity may be efficiency problem of Ethiopian banking sector due to holding excess amount of unused current assets which eventually lead to decrease in profit as well as dividend payout.

Leverage

As shown in table 4.8, leverage has a positive but insignificant relationship with dividend payout. The increase or decrease in leverage ratio has no statistically significant effect on dividend payout in Ethiopian private banks for the study period. Therefore, hypothesis 3 is also rejected. It states that leverage has a negative relationship with dividend payout.

The finding is against pecking order theory. Pecking order theory states that external financing is more costly compared to internal financing. The transaction costs for companies with high leverage are therefore higher and instead of paying dividends to shareholders, highly levered companies choose to maintain their internal funds within the company (Al-Kuwari 2009). This is explained by the high transaction costs and highly leveraged companies therefore have to rely on retained earnings in order to meet their obligations due to the expensive external financing. Since they keep a larger proportion of their earnings within the company the dividend payout ratio decreases.

The negative relationship between leverage and dividend payout ratio can also be connected to the agency cost of debt. Since the objective of a company is to maximize the wealth of the shareholders, the management may undertake actions that favor shareholders to the expense of the bondholders (Schroeck, 2002). Most bondholders are aware of this behavior and they usually undertake certain actions in order to prevent the transfer of wealth from bondholders to shareholders. One of the most common actions taken by bondholders in order to prevent the transfer of wealth is to place restrictive covenants in the bond contract (Schroeck, 2002). The covenants may state that the company is not allowed to pay a higher dividend payout ratio than the maximum level stated in the contract. As a company's leverage increases, the risk connected to the company increases and the bondholders may place more severe covenants regarding the dividend payout ratio. Consequently the dividend payout ratio decreases as a company's leverage increases.

Empirical evidences shows a mixed results about the relationship between leverage and dividend payout. Kinfu, (2011) and Maladjian & El Khoury, (2014) conducted their study in banking industry have found similar positive and insignificant relationship like the current study between leverage and dividend payout. The possible reason for this could be the nature of banking industry, where most of their asset comprises deposit, which is a debt. When banks collect more and more deposit, they will have a chance to extend more and more loans which in turn brings more profit to the banks. Therefore, a positive relationship between leverage and profit is possible. Second possible reason, firms could use debt to make a dividend payment.

Lagged Dividend Payment

Table 4.8 shows lagged dividend payout has a positive and statistically significant relationship with dividend payout at 1% significance level. This means that a 1 birr dividend paid in previous year will lead to a 37 cents increase in current dividend payout holding other variables constant. A positive and significant relationship between lagged dividend paid and dividend payout is consistent with existed theories and most empirical studies. Lintner, (1956) has stated lagged dividend paid with profit has a significant and positive relationship with dividend payout. This finding supports the theory of signaling, where companies want to give a positive signal to the market that the company is in good condition where by it is continuing paying dividends. A company that pays dividend this year is also expected to pay in the coming years.

Therefore, hypothesis 4 is not rejected, which states lagged dividend paid has a positive relationship with dividend payout. Similar result also found in emerging markets such as Ahmed & Javid, (2008); Kinfu, (2011); Al-Ajmi & Abu Hussein, (2011); Dr. Turki & Ahmed, (2013); Mohammed, Dato, & Abdurzak, (2013) and Maladjian & El Khoury, (2014) have found lagged dividend payments are an important determinant of dividend payout.

Growth

The result of the growth variable as shown in table 4.8 indicated that it has a negative and statistically significant effect on dividend payout at 1% significance level. This shows that a 1 birr increase in revenue would result in a 30 cents decrease in dividend payout. This result is compatible with the hypothesis and existed theories. Thus, hypothesis 5 is not rejected. It is predicted that firms with high growth or investment opportunities tend to retain their income to finance their investments, thus paying less or no dividends.

Recent experiences have shown that a company observing growth in revenues tend to pay lower dividends. There will be a high demand of capital if a firm is fast growing. The pecking order theory states that firms should finance new projects first with least information-sensitive sources. Also, firms with high growth opportunities are likely to retain a greater portion of their earnings to finance their expansion projects as against returning these dividends to shareholders (Badu, 2013).

Ethiopian banking industry is in the growth stage and they need money for expansion and the revenue they generate from operation is one of the means to finance their growth. Therefore, they re-invest the money instead of paying higher dividends. This logic proves that growth has a negative relationship with dividend payout in Ethiopian private banks.

The higher the growth opportunities, the more the need for funds to finance expansion, and the more likely the firm is to retain earnings than pay them as dividends (Chang & Rhee, 2003). Several previous empirical studies have found similar results about the relationship of growth with dividend payment. For instance, a negative relationship between growth and dividend payout has been observed in the work of (Ho, 2003, Al-Malkawi, 2008; Nuredin, 2012 and Maladjian & El Khoury, 2014).

Size

Size is measured by natural logarithm of total asset. Table 4.8 shows that size has a negative and statistically significant relationship with dividend payout. Therefore, hypothesis 6 is not rejected but the sign differs, which states that size has a positive relationship with dividend payout. When size of the banks increase by 1%, dividend payout will decrease by 15.00 birr. The result is in contradiction with the agency theory which states large firms face high agency costs as a result of ownership dispersion, increased complexity, and the inability of shareholders to monitor firm activity closely. Hence, such firms pay a larger dividend to reduce agency costs.

Most empirical studies have showed a positive relationship between size and dividend payout, but others like Ahmed & Javid, (2008) and Nuredin, (2012) have found a negative relationship between size and dividend payout. Possible reason for positive relationship could be large sized firms invest their profits in their assets rather than paying dividends to its shareholder. Ethiopian banking industry is in growth stage and the big banks compete to increase their market share or at least wants to maintain their current status. To do so, they invest heavily their profit to finance the competition to maintain or increase their market share, this will decrease the amount available to pay dividend.

Risk

Risk has used by many researchers as a possible variable that determines dividend payout. It can be measured using price/earning ratio or using earning volatility. Since in our country there are no capital markets, it is difficult to get data about price of a company stock. Therefore, this study used earning volatility as a proxy for risk. Table 4.8 showed risk has a positive and statistically significant effect on dividend payout in Ethiopian private banks at 5% significance level. When risk of the banks increases by one unit, dividend payout will increase by birr 7.90. Although existed literature support a relationship between risk and dividend payout but the sign of relationship is not positive. Theories and empirical studies states that an increase in earning volatility, risk leads to a decrease in dividend payout. Amidu & Abor, (2006) stated that high-risk firms pay lower dividends to their shareholders. Firms experiencing earning volatility find it difficult to pay dividend, such firms would therefore, pay less or no dividend. On the other hand, firms with relatively stable earnings are often able to predict approximately what its future earnings will be and therefore, are more likely to pay out a higher percentage of its earnings as dividend. This positive relationship could be attached to unspecified industry or country factors.

Based on the finding, hypothesis 7 is not rejected but the sign differs from the initial assumption. Which states that risk has a negative relationship with dividend payout. Risk has a significant and positive effect on dividend payout in Ethiopian private banks for the study period.

4.4 Summary of the analysis

Table 4.9 Comparison of the Test Result with the Expectation

No.	Independent Variables	Expected Relationship with dependent variable (DPO)	Actual Result	Status
Hypothesis 1	Profitability	+	-	Rejected
Hypothesis 2	Liquidity	+	-	Rejected
Hypothesis 3	Leverage	-	+	Rejected
Hypothesis 4	Lagged Dividend paid	+	+	Not Rejected
Hypothesis 5	Growth	-	-	Not Rejected
Hypothesis 6	Size	+	-	Not Rejected
Hypothesis 7	Risk	-	+	Not Rejected

Table 4.9 shows summary result of the hypotheses test. Hypothesis 1 is rejected, which states that profitability has a positive relationship with dividend payout. But the type of relationship is negative in contrary to the hypothesis.

Hypothesis 2 is also rejected, which claims that liquidity has a positive relationship with dividend payout. But the type of relationship found is negative.

Hypothesis 3 is also rejected, which states that leverage has a negative relationship with dividend payout. But the type of relationship found is positive.

Hypothesis 4 is not rejected, which states that lagged dividend paid has a positive relationship with dividend payout.

Hypothesis 5 is not rejected, which states that growth has a negative relationship with dividend payout.

Hypothesis 6 is also not rejected, which states that size has a positive relationship with dividend payout. But the type of relationship found is negative.

Hypothesis 7 is also not rejected, which states that risk has a negative relationship with dividend payout. But the type of relationship found is positive.

Hypothesis 8, which states that Ethiopian private banks follow stable dividend pattern is rejected based on OLS regression result.

Chapter Five: Conclusion and Recommendation of the study

Chapter five is the final chapter provides conclusion based on the findings of the research; provides recommendations and shows future research areas.

5.1 Conclusion

Studying the factors that determines dividend payout has a significant importance in the business world where there are a lot of public companies that acquire capital from the public and distribute dividends from the profit they make. The main purpose of the study was to examine the determinants of dividend payout in Ethiopian private banks and testing Lintner's model in Ethiopian context to check whether Ethiopian private banks follow stable dividend payout policy or not. In order to meet the purpose a five years financial statement data were used from audited financial statements of the banks and National bank of Ethiopia reports from year 2009/10 to 2013/14 for eight selected private banks. The collected data was analyzed using pooled Panel regression method for model I and fixed effect panel regression method for model II.

Pooled panel regression method is used for model I to test whether Ethiopian private banks follow stable dividend payout policy or not. Lagged dividend paid and profit proxy by earning per share was used as an independent variables and dividend payout as a dependent variable. Profit was found insignificant while lagged dividend paid was significant. When both profit and lagged dividend paid found to be statistically significant, we conclude that firms are following stable dividend payout policy but in our case earning per share used as a proxy for profit was insignificant. Therefore, we can conclude that Ethiopian private banks did not follow stable dividend payout policy. Rather they change their policy from time to time based on existed condition and this situation may affect shareholders who prefer stable dividend payout policy to divert their investment to other companies who have stable dividend payout policy.

Fixed effect panel regression method was used for model II in order to examine the relationship between the seven company specific factors, which are (profit, liquidity, leverage, growth, size and risk) and dividend payout. The result of the regression analysis showed that profit is not a

significant factor that determines dividend payout in Ethiopian private banks. Although this result is against the signaling theory but the insignificant relationship to profit confirms Modigliani and Miller's (1961) assumptions that the value of the firm is independent to the dividend policy and profit does not have an impact on dividend payout. Different researches particularly, studies conducted in developing countries showed insignificant relationship between profit and dividend payout. Liquidity is also found to be insignificant and negative, which is against the theory of agency. Theory of agency states companies that have high free cash flow have high dividend payout ratio to prevent managers from engaging in excessive spending if they have excess free cash flow at their disposal. But contrary to agency theory due to banks their own inefficiency problem they may hold excess liquidity at their disposal which could be used to generate earnings and as a result profit could decrease when liquidity increases.

Leverage is also found to have insignificant and positive relationship with dividend payout in Ethiopian private banks. The increase or decrease in leverage has no significant impact on dividend payout in Ethiopian private banks. Banks by their very nature are highly levered firms. They extend loan to borrowers mainly from the deposit they collected from the public. The increase in deposit will lead to the increase in loan granted to borrowers as a result will lead to increase in revenue and profit, and this profit could be distributed to shareholders as a dividend. This case shows that leverage and dividend payout can have a positive relationship. Lagged dividend paid has a significant and positive impact on dividend payout. Banks that pay a high dividend in previous years have a tendency to pay a higher dividend on the coming years holding other things constant, which indicates lagged dividend paid has a positive impact on current year's dividend payout.

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

Size is found to have a significant but a negative impact on dividend payout against the theory of agency, which describes large firms face high agency costs as a result of ownership dispersion, increased complexity, and the inability of shareholders to monitor the firm activity closely. Hence, such firms pay a larger dividend to reduce agency costs. Risk is also found to have a significant and positive relationship with dividend payout. The finding showed that the increase in risk will lead to the increase in profit; this finding is against the finding of many researches and could be attached to industry or country factors.

5.2 Recommendation and Implication of the study

Since dividend policies have been described as a puzzle, it was necessary to conduct a study regarding the determinants of dividend payout in Ethiopian private banks. Investors, who are trying to predict future dividends will therefore, gain some useful information regarding which company selected factors to look for when predicting future dividends. Managers may also use the study when determining the dividend payout ratios since they will be given useful information regarding which factors they may consider when determining the dividend payouts.

The below recommendations are forwarded based on the finding of the research:

- Investors who want to invest on Ethiopian private banks and prefer stable dividend payout need to consider that Ethiopian private banks do not necessarily follow stable dividend payout policy rather they change their policy from time to time based different factors.
- To make an informed decision on investment options, investors need to look the banks performance in the following factors; lagged dividend paid, growth of the bank, size and risk factors before making an investment decisions. Because these factors have a significant impact on dividend payout in Ethiopian private banks.
- Board of directors of banks need to consider lagged dividend paid to set future dividend payout because shareholders expect banks that have a track record of paying high dividend is expected to pay higher dividend in the coming year. They also need to consider the growth of their banks which affects the fund available to distribute to shareholders due to growing banks consume larger portion of their profit to finance the growth. Size and risk variables have also significant effect on dividend payout. So, board

of directors also needs to consider these variables while deciding their dividend payout policies.

- The current relative conducive environment for investment as a result of the establishment of many share companies is an option for investors in addition to the financial sector. Absence of stock market (Secondary market) where investors can easily sell or buy shares of companies and related high costs to investors to sell shares to generate money may require high dividend by investors since it is the only option to be benefited from their investment in short period of time. Therefore, Private banks should work to retain and attract investors by paying high dividend than other industries. Otherwise, there could be a possibility for shift of capital to these new corporations that pays high dividend.
- A research conducted on this subject is very few in Ethiopian banking industry to test empirically the determinants of dividend payout. Therefore, it may help future studies in the subject as a reference.

5.3 Areas for future research

- This research has used only five years data in order to keep the sampled banks representative due to banks recent establishment and history of recent dividend distribution. Therefore, future researches could replicate this study using multiple years' data like 10 years.
- This research has used only company specific variables; future studies should also include macro-economic variables to examine their impact on dividend payout. In addition, other industries, other than banking industry can be covered by future researches.

References

- Ahmed, H., & Javid, A. Y. (2008). The determinants of dividend policy in Pakistan.
- Aivazian, V., Booth, L., & Cleary, S. (2003, September). Do Emerging Market Firms Follow Different Dividend Policies From U.S. Firms? *Journal of Financial Research*, 26(3), 371-387.
- Al-Ajmi, J., & Abu Hussein, H. (2011). Corporate dividends decisions: evidence from Saudi Arabia. *The Journal of Risk Finance*, 12(1), 41-56.
- Al-kuwari, D. (2009, September). Determinants of the Dividend Policy in Emerging Stock Exchanges: The Case of GCC Countries. *Global Economy & Finance Journal*, 2(2), 38-63.
- Al- Najjar, B. (2009). Dividend Behavior And Smoothing New Evidence from Jordanian Panel Data. University of the West of England.
- Alam, Z. M., & Hossain, M. E. (2012, May-June). Dividend Policy: A Comparative Study of UK and Bangladesh Based Companies. *Journal of Business and Management*, 1(1).
- Al-Malkawi, H.-A. N. (2008). Factors Influencing Corporate Dividend Decision:Evidence from Jordanian Panel Data. *International Journal of Business*, 13(2).
- Al-Malkawi, H.-A. N., Rafferty, M., & Pillai, R. (2010). Dividend Policy: A Review of Theories and Empirical Evidence. *International Bulletin of Business Administration* (9).
- Al-Najjar, D., & BinSaddig, R. (2013, November). The Determinants of dividend policy in an Islamic financial system: Evidence from the Kingdom of Saudi Arabia. Birkbeck College, University of London, the School of: Business, Economics and Informatics.
- Al-Shubiri, D. F. (2011, August). Determinants of Changes Dividend Behavior Policy: Evidence from the Amman Stock Exchange. *Far East Journal of Psychology and Business*, 4(2).
- Amidu , M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *The Journal of Risk Finance*, 7(2), 136-145.

- Badu, E. A. (2013). Determinants of Dividend Payout Policy of listed Financial Institutions in Ghana. *Research Journal of Finance and Accounting*, 4(7).
- Bassey, N. E., Elizabeth, A. A., & Asinya, F. E. (2014). Determinants of Dividend Payout of Financial Institutions in Nigeria: A Study of Selected Commercial Banks. *Research Journal of Finance and Accounting*, 5(7).
- Bhattacharya, S. (1979). "The Bird in the Hand" Fallacy. *The Bell Journal of Economics*, 10(1), 259-270.
- Brealey, R., & Myers, S. (2003). *Principles of corporate finance*. New York: McGraw Hill.
- Brigham, E. F., & Houston, J. F. (2004). *Fundamental of Financial Management* (10 ed.). McGraw-Hill.
- Brooks, C. (2008). *Introductory Econometrics for Finance* (2 ed.). UK: Cambridge University Press.
- Chang, R. P., & Rhee, G. S. (2003). The Impact of Personal Taxes on Corporate Dividend Policy and Capital Structure Decisions. *Financial Management*, 19(2), 21-31.
- Chikashi, T. (2011). A Test of Dividend Policy: The Case of the Japanese Machinery Industry Firms. *International Journal of Economics and Finance*, 3(3).
- Creswell, J. W. (2002). *'Research Design' Qualitative, Quantitative, and Mixed Methods Approaches* (2 ed.). SAGE publications.inc.
- Creswell, J. W. (2008). *'Research Design' Qualitative, Quantitative, and Mixed Methods Approaches* (3 ed.). SAGE publications.inc.
- Dagnew, Y. (2009). The determinants factors of dividend payment of private banks in Ethiopia.
- Dickens, R. N., Casey, K. M., & Newman, J. A. (2002). Administration Bank Dividend Policy: Explanatory Factors. *Quarterly Journal of Business and Economics*, 41(1/2), 3-12.
- Dr. Turki, A. S., & Ahmed, A.-K. (2013, January). Determination of Dividend Policy: The Evidence from Saudi Arabia. *International Journal of Business and Social Science*, 4(1).

- Easterbrook, F. H. (1984). Two Agency-Cost Explanations of Dividends. *The American Economic Review*, 74(4), 650-659.
- Fama, E. F., & French, K. R. (2001). Disappearing dividends: changing characteristics or lower propensity to pay? *Journal of Financial Economics*, 60 , 3-43.
- Gill, A., Biger, N., & Tibrewala, R. (2010). Determinants of Dividend Payout Ratios: Evidence from United States. *The Open Business Journal*, 3, 8-14.
- Gordon, J. M. (1959). Dividends, earnings, and stock prices. *The Review of Economics and Statistics*, 41(2), 99-105.
- Gujarati, D. N. (2004). *Basic Econometrics* (4 ed.). The MacGraw-hill Companies.
- Gul, S., Mughal, S., Bukhari, S. A., & Shabir, N. (2012). The Determinants of Corporate Dividend Policy: An Investigation of Pakistani Banking Industry. *European Journal of Business and Management*, 4(12).
- Gustav , H., & Gairatjon , I. (2012). Determinants of Dividend Payout Ratios; A Study of Swedish Large and Medium Caps; A degree project. Sweden: Umeå School of Business and Economics.
- Habbash, M. (2010). The effectiveness of corporate governance & external audit on constraining earning management practice in UK. Retrieved 11 11, 2013, from etheses.dur.uk:
[Http://www.etheses.dur.uk/448](http://www.etheses.dur.uk/448)
- Ho, H. (2003, May). Dividend Policies in Australia and Japan. *International advances in economic research*, 9(2), 91-100.
- Holder, M., Langrehr, F., & Hexter, J. (1998). Dividend policy determinants: an investigation of the influences of stakeholder theory. *Financial management* , 27, 73-82.
- Imran, K. (2011, September). Determinants of Dividend Payout Policy: A Case of Pakistan Engineering Sector. *The Romanian Economic Journal*.
- Investopedia. (n.d.). Retrieved 12 08, 2014, from [Investopedia.com](http://www.investopedia.com/terms/d/dividend.asp):
<http://www.investopedia.com/terms/d/dividend.asp>

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323-329.

Jensen, M. C., & Meckling, W. H. (1976, October). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.

Kashif, I. (2011). Determinants of Dividend Payout Policy: A Case of Pakistan Engineering Sector. *The Romanian Economic Journal*, 47-60.

Kinfe, T. (2011). Determinants of Dividend payout: An Empirical Study on Bank Industry in Ethiopia. Thesis submitted to Addis Ababa University in partial fulfillment of Masters of Accounting and Finance.

Kolb, R. W., & Rodriguez, R. J. (1996). *Financial Management* (2 ed.). Blackwell Publishers, Cambridge.

Komrattanapanya, P., & Suntrauk, P. (2013). Factors Influencing Dividend Payout in Thailand: A Tobit Regression Analysis. *International Journal of Accounting and Financial Reporting*, 3(2), 2162-3082.

Laporta, R., Lopez-de Silanes, F., Shleifer, A., & Vishny, R. W. (2000, February). Agency problems and dividend policies around the world. *Journal of Finance*, 55(1), 1-33.

Lee, S. W. (2009). Determinants of dividend policy in Korean banking industry. *Banks and Bank Systems*, 4(1).

Lee, S. W. (2014). Bank Characteristics and Payout Policy. *Asian Social Science*, 10(1).

Lily, J., Venkatesh, S., & Sukserm, T. (2012). Determinants of Dividend Payout in Thailand. Retrieved 12 16, 2014, from http://www.ubu.ac.th/web/files_up/08f2013021216511330.pdf

Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. *The American Economic Review*, 46(2), 97-113.

Making finance work for Africa. (2014, 12, 30). Retrieved 12, 30, 2014, from Making finance work for Africa: <http://www.mfw4a.org/banking/banking.html>

- Maladjian, C., & El Khoury, R. (2014). Determinants of the Dividend Policy: An Empirical Study on the Lebanese Listed Banks. *International Journal of Economics and Finance*, 6(4).
- Malhotra , N. K. (2007). *Marketing Research: An Applied Orientation* (5 ed.). New Delhi: Pearson Publication.
- Mehta, A. (2012, March). An Empirical Analysis of Determinants of Dividend Policy - Evidence from the UAE Companies. *Global Review of Accounting and Finance*, 3(1), 18 – 31.
- Mehta, A. M., Hashmi, I., & Irshad, A. (2014, March). Determinants of Corporate Dividend Policy: An Empirical Study of Banking Sector of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 5(11).
- Miller, H. M., & Modigliani, F. (1961). Dividend policy, growth and valuation of shares. *Journal of Business*, 4(34), 411-433.
- Mohammed , H., Dato, H., & Abdurezak, Y. (2013). The Dividend Payout Policy – A Comparison on Malaysian Islamic And Conventional financial Institutions. *WEI International Academic Conference Proceedings*. Istanbul, Turkey.
- NBE. (2014). Retrieved 12 20, 2014, from National Bank of Ethiopia: www.nbe.gov.et
- Nuredin, M. (2012). Determinants of Dividend Policy of Insurance Companies in Ethiopia. Thesis submitted to Addis Ababa University in partial fulfillment of Masters of Accounting and Finance.
- Nyor, T., & Adekunle, A. A. (2013). What Accounts for Dividend Payment in Nigerian Banks. *International Journal of Business, Humanities and Technology*, 3(8).
- Osegbue, I. F., Ifurueze, M., & Ifurueze, P. (2014). An analysis of the relationship between dividend payment and corporate performance of Nigerian Banks. *Global Business and Economics Research Journal*, 3(2), 75-95.
- Rehman, A., & Takumi, H. (2012). Determinants of Dividend Payout Ratio: Evidence from Karachi Stock Exchange. *Journal of Contemporary Issues in Business Research*, 1(1), 20-27.

Ross, S. A. (1977). The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics*, 8(1), 23-40.

Ross, S. A., Westerfield, R. W., & Jaffe, J. F. (2002). *Corporate Finance* (6 ed., Vol. 1). New York, USA: McGraw-Hill/Irwin.

Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of Financial Research*.

Shapiro, A. C. (1990). *Modern Corporate Finance*. New York: Macmillan Publishing Company.

Sheikh Taher , A. (2012). Determinants of dividend payout policy: Evidence from Bangladesh. *International Journal of Economic Practices and Theories*, 2(3).

Schroeck, G. (2002). *Risk management and value creation in financial institutions*. New Jersey: John Wiley & Sons, Inc.

Trang, N. T. (2012). Determinants of Dividend Policy: The case of Vietnam. *International Journal of Business, Economics and Law*, 1.

Watson, D., & Head, A. (2010). *Corporate Finance: Principles & Practice* (5 ed.). Pearson Education Limited.

Weber, R. D., & Dr. Procianoy, J. L. (2014). Are Banking Dividends Different? Evidence from the Brazilian Banking Sector. Brazil.

Wooldridge, J. M. (2006). *Introductory Econometric: A Modern Approach. International Student* (3 ed.). Canada: Thomson South–Western.

Yahya, M., & Hadi, A. (2013). The dividend payout policy – a comparison on Malaysian Islamic and conventional Financial institutions. The 2013 WEI International Academic Conference Proceedings. Istanbul.

Zaman, S. (2013). Determinants of Dividend Policy of A Private Commercial Bank in Bangladesh: Which is The Strongest, Profitability, Growth or Size? Proceedings of 9th Asian Business Research Conference. Dhaka, Bangladesh: BIAM Foundation.

Zameer, H., Rasool, S., Iqbal, S., & Arshad, U. (2013). Determinants of Dividend Policy: A Case of Banking Sector in Pakistan. *Middle-East Journal of Scientific Research*, 18(3), 410-424.

Zerayehu , E. S., Kagneu , T. W., & Teshome, A. K. (2013, December). Competition in Ethiopian Banking Industry. *African Journal of Economics*, 1(5), 176-190.

Zhang, X., & Fu, J. (2014). Does Ownership Structure Matter for Dividend Yield? Evidence from the Hong Kong Stock Exchange. *Business and Economic Research*, 4(2), 2162-4860.

Appendices

Appendix 1

Heteroskedasticity Test: White

F-statistic	2.460607	Prob. F(7,32)	0.0676
Obs*R-squared	13.99656	Prob. Chi-Square(7)	0.0912
Scaled explained SS	14.99821	Prob. Chi-Square(7)	0.0654

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 03/27/15 Time: 17:39

Sample: 1 40

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-69.83159	178.9830	-0.390158	0.6990
PRO^2	2.775529	4.121667	0.673400	0.5055
LIQ^2	0.001834	0.004147	0.442130	0.6614
LEV^2	0.002038	0.015123	0.134776	0.8936
LDVP^2	-0.006521	0.004080	-1.598519	0.1198
GRO^2	0.006131	0.002854	2.148067	0.0394
SIZ^2	0.158230	0.464981	0.340293	0.7359
RIS^2	0.050750	0.436145	0.116361	0.9081

R-squared	0.349914	Mean dependent var	25.54471
Adjusted R-squared	0.207708	S.D. dependent var	47.34048
S.E. of regression	42.13815	Akaike info criterion	10.49664
Sum squared resid	56819.95	Schwarz criterion	10.83442
Log likelihood	-201.9328	Hannan-Quinn criter.	10.61877
F-statistic	2.460607	Durbin-Watson stat	2.704201
Prob(F-statistic)	0.0676721		

Appendix 2

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.707549	Prob. F(7,25)	0.6659
Obs*R-squared	6.614190	Prob. Chi-Square(7)	0.4701

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 03/29/15 Time: 10:26

Sample: 1 40

Included observations: 40

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.84262	81.93899	0.181142	0.8577
PRO	-0.367927	2.893377	-0.127162	0.8998
LIQ	-0.021655	0.089195	-0.242786	0.8102
LEV	-0.139605	0.445546	-0.313334	0.7566
LDVP	0.067014	0.123377	0.543163	0.5918
GRO	0.041447	0.082224	0.504076	0.6186
SIZ	-0.046029	5.028531	-0.009154	0.9928
RIS	-0.367624	3.355508	-0.109559	0.9136
RESID(-1)	0.049687	0.231247	0.214864	0.8316
RESID(-2)	0.180835	0.217749	0.830474	0.4141
RESID(-3)	-0.330885	0.221948	-1.490822	0.1485
RESID(-4)	0.354900	0.265491	1.336770	0.1933
RESID(-5)	0.104333	0.315946	0.330224	0.7440
RESID(-6)	-0.160489	0.251793	-0.637383	0.5297
RESID(-7)	0.226083	0.259689	0.870591	0.3923
R-squared	0.165355	Mean dependent var	3.55E-14	
Adjusted R-squared	-0.302047	S.D. dependent var	5.118564	
S.E. of regression	5.840653	Akaike info criterion	6.647559	
Sum squared resid	852.8307	Schwarz criterion	7.280888	
Log likelihood	-117.9512	Hannan-Quinn criter.	6.876551	
F-statistic	0.353775	Durbin-Watson stat	2.021842	
Prob(F-statistic)	0.976795			

Appendix 3

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	42.434179	7	0.0000

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

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
PRO	0.907214	-2.926214	1.392848	0.0012
LIQ	-0.053504	0.001246	0.001704	0.1847
LEV	0.248293	0.149556	0.309868	0.8592
LDVP	0.021558	0.438969	0.011094	0.0001
GRO	-0.289065	-0.249525	0.000537	0.0881
SIZ	-3.115048	-10.642753	13.730196	0.0422
RIS	5.117477	6.779832	0.602735	0.0323

Appendix 4

Dependent Variable: DVPO

Method: Panel Least Squares

Date: 03/27/15 Time: 15:10

Sample: 2010 2014

Periods included: 5

Cross-sections included: 8

Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	217.7128	54.21725	4.015564	0.0004
PRO	-0.716192	3.216053	-0.222693	0.8254
LIQ	-0.042386	0.081825	-0.518002	0.6085
LEV	0.612168	0.495490	1.235480	0.2269
LAGGED_DVPO	0.368938	0.101145	3.647629	0.0011
GROWTH	-0.298105	0.075641	-3.941050	0.0005
LOG(SIZE)	-14.99256	4.301204	-3.485665	0.0016
LOG(RISK)	7.878654	2.954011	2.667104	0.0126

Effects Specification

Period fixed (dummy variables)

R-squared	0.703719	Mean dependent var	92.37105
Adjusted R-squared	0.587323	S.D. dependent var	8.900484
S.E. of regression	5.717667	Akaike info criterion	6.568324
Sum squared resid	915.3680	Schwarz criterion	7.074988
Log likelihood	-119.3665	Hannan-Quinn criter.	6.751517
F-statistic	6.045896	Durbin-Watson stat	1.272648
Prob(F-statistic)	0.000057		