

**Addis Ababa University
College of Business and Economics**



**Factors influencing Corporate Dividend Payout Decision
Evidence from Ethiopian Private Banks**

**Submitted for Partial Fulfillment of the Requirement for
Master of Science in Financial Service**

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Statement of Declaration

I, the undersigned student of Addis Ababa University Faculty of business and economics, declare this paper on the topic entitled: “Factors influencing corporate dividend payout decision evidence from Ethiopian private banks “in the fulfillment of master of financial service program with the guidance and support of my research advisor. This study is my original work and that has not been presented for any degree or diploma program in any university or institutions.

I also declare that except where identified by references all the findings are fresh and my own results of the investigation.

Declared by: Yehenew Tadele

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This is to certify that the paper prepared by Yehenew Tadele, with the topic entitled” Factors influencing dividend payout decision evidence from Ethiopian private banks”, and submitted in fulfillment of the requirement for Master of Financial service program complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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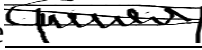
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ABSTRACT

Dividend policy is one of the most controversial issues in modern corporate finance. Even though, many researchers in different countries studied about the determinants of dividend payout decision, the inconclusiveness of dividend theories and empirical studies on the topic has made it one of the most debatable topics for researchers. In Ethiopia, few studies had been done regarding the topics. This study aims at investigating the factors influencing dividend payout decisions and their relationship to dividend payout in Ethiopian commercial private banks. The research considers the influence of six variables, namely, profitability, liquidity, business risk, lagged dividend payment (previous dividend paid), firm size, and stock (number of equity shares issued and outstanding) on the dividend payout ratio. Concerning sample size, all Ethiopian private banks that are consistently paid dividend during the study period are included. The research used quantitative type of research method. Audited financial statement of those selected banks was used to compute ratios of the selected variables. Panel data covering 2014 to 2018 G.C from Ethiopian private banks were analyzed within the framework of fixed effect technique. The findings showed that, as predicted, profitability, liquidity and size were found to be statistically significant factors which positively affect dividend payout decisions of Ethiopian private commercial banks. On the other hand, business risk, lagged dividend payment and stock had no influence in determining the level of dividend payout during the study period. In connection with dividend payment, Bank managers and board of directors should give special attention to the major determinants of dividend payout. Investors who want to invest their money in the dividend paying banks also look in to the major factors that influence dividend payout decision before selecting those banks.

Keywords: dividend payout, Ethiopian private commercial banks, determinants of dividend payout.

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LIST OF ACRONYMS AND ABBRIVATIONS

ABB	Abay bank
ADIB	Addis international bank
AIB	Awash international bank
BOA	Bank of Abyssinia
BUIB	Buna international bank
CLRM	Classical linear regression model
DB	Dashen bank
DPO	Dividend payout
ECM	Error component model
ETB	Ethiopian birr
FEM	Fixed effect model
G.C	Gregorian calendar
LIB	Lion bank
LIQ	Liquidity
NIB	Nib international bank
NPV	Net present value
OLS	Ordinary least square
REM	Random effect model
ROA	Return on an asset
S.C	Share Company
UB	United bank
US	United States
VIF	Variance inflating factor
WB	Wegagen bank
ZB	Zemen bank

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CHAPTER ONE

INTRODUCTION

This section provides a general introduction to the research topic. It begins with a discussion of the problem background and statement followed by the research objectives, significance, scope, and structure of the research.

1.1 Background and Motivation of the Study

Financial sector of an economy plays an important role in its economic development and prosperity of the country. Financial intermediaries perform key financial functions in economies; provide a payment mechanism, match supply and demand in the financial markets, deals with complex financial instruments and markets, provide market transparency, perform risk transfer and risk management functions Melaku (2012).The existence of a nation in the global economic map is dependent on the financial strength of the nation. A nation's financial strength depends on the condition and structure of its financial sector Zaman (2013).

Now days, the banking industry is increasingly growing and it has witnessed a huge flow of investment. In addition to simply being involved in the financial intermediation activities, banks are operating in a rapidly innovating industry that urges them to create more specialized financial services to better satisfy the changing needs of their customers.

In Ethiopia, in the absence of secondary (stock) market and well developed financial system, banks play an important role and acts as an engine force in enhancing modern trade and commerce for business firms and individual traders. The banking industry of Ethiopia demonstrates a vital role in contributing to national economy by intermediating between savers and productive investors. The financial performance of banks affects the interests of depositors, shareholders, regulators, potential investors and corporate owners. As banks dominate the financial sector in Ethiopia, ensuring the financial health of these institutions is likely going to ensure the health of the financial performance of the financial system of the country (Melaku, 2012).

On annual basis, when profit are made, a company has to determine what portion of the profit that is available should be paid out to shareholders in the form of dividends and what portion should be retained for reinvestment.

Now days, Ethiopian private banks are generating huge profit. Currently, there are sixteen private commercial banks that are in operation.

So, the question here is how much of their profit should be distributed as a dividend to their shareholders and how much of their income should be retained for further investment opportunities. Currently in Ethiopia, there are not foreign banks in operation. One can expect that if foreign commercial banks enter in to the business, they bring their huge capital, technology and knowledge so that Ethiopian banks will face strong competition in the industry to win the market and attract investors. This motivates the need to investigate factors affecting dividend payout decision and the relationship of those explanatory variables to the dividend payout in Ethiopian private banks.

If the company chooses to distribute the earnings, there are two alternative ways in which the company can distribute the profits to the shareholders, either to pay dividends or they can buy back their outstanding stocks (Hellstrom and Inagambaev, 2012). The payment of dividend can be either with cash or stock dividends.

Dividend policy is one of the most controversial issues in modern corporate finance. Black (1976) as cited in Maladjian and El khoury (2014) argues that “the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don’t fit together”. This mystery led to the emergence of a handful of competing theoretical and empirical research to explain why companies pay or do not pay dividends. Brealey and myers (2003) as cited in maladjian and El khoury (2014) stated that after two decades of non-stop research, the dividend policy is still listed as one of the top ten crucial unresolved issues in the world of finance in which no consensus has been reached. Recently, Ahmed and Javid (2009), Hazak (2011), and Alam and Hossian (2012) concluded in the same vein as Black (1976) that the dividend “puzzle”, both as a share value enhancing feature and as a matter of policy, is one of the most challenging topics of modern financial economics.

Previous studies regarding the determinants of corporate dividend payout did not get similar results. Concerning the independent variables, some of them had get positive and significant relationship with dividend payout but other researchers found negative or insignificant results. This situation of non-similarity of results was continued still with current studies also. Even if there is not executed adequate research about the topic in Ethiopia, few researchers in Ethiopia also got different results which need another researcher to overview and execute further studies.

Researchers and academicians provide considerable attention and thought to solve the dividend puzzle, resulting in a large number of conflicting theories, hypotheses and explanations. They have also primarily focused on developed markets; however, additional insight into the dividend policy debate can be gained by an examination of emerging and developing countries, like Ethiopia which is currently lacking in the literature.

To this end, the current study adds to the existing body of knowledge by examining the range of determinants which affect the dividend payout decisions of Ethiopian private commercial banks theoretically and empirically. No major work has so far been conducted in this area (as per the researcher's knowledge). The study will also provide new evidence of various determinants influencing the amount of dividend paid by firms from a developing country perspective.

Since developing countries generally share a number of similar characteristics, examining the dividend payout decisions of firms operating in Ethiopia could present a rich base for future comparative research in other firms operating in Ethiopia. In all, this study highlights the different variables that shall affect dividend payout between the established facts and practices. This will not only add to the existing literature but also it will serve as a guide to managers of banking industry when fixing the dividend policy.

The study used six explanatory variables which the researcher believed that they were dominant factors in Ethiopia. Among them, Profitability, Liquidity, Risk, Lagged (previous dividend paid), and Size are internal variables in which their impact was raised by the banks performance and strategy. The study also used Stock (the number of equity shares issued and outstanding) as an independent variable to measure external control by shareholders. The rest of the paper is organized as follows: Chapter two discusses about related literature review, Chapter three is about the research design and methodology while chapter four consists of data analysis and

discussion and the last chapter has consists of the conclusion and recommendation of the researcher.

1.2. Statement of the Problem

Banking industries play a pivotal role in the economy of a given country; this is particularly true in Ethiopia where no capital (stock) market exists. Since they are the main providers of funds, their stability is of paramount importance to the healthy and smooth running of the financial system. As such, an understanding of determinants of their dividend payout decisions is essential and crucial to both shareholders and managers or to anyone who have a stake in banks.

Dividend policy is one of the most controversial topics in corporate finance, and managements are in dilemma about whether they decide to pay a big or small percentage of their income as dividends to their shareholders or retain the whole amount of their earnings for future investment opportunities. This situation has come as a result of manager's think of fulfillment of various needs of shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividend today. On the other hand, shareholders who would like to invest in the future will prefer dividends to be retained by the company and be reinvested (Amidu, 2007).

Olowe (2011) as cited in olowe and moyosore (2014) stated that the dividend decisions have presented different issues to academicians and practitioners. Dividends which represent the distribution of the company's after tax earnings to shareholders have important implications for financing and investment decision of the firm as well as the company's share price. Miller and Modigliani (1961) argue that in the presence of perfect capital markets, the dividend decision has no effect on the firm value and is, thus, irrelevant. This view is contrary to the explanations offered by the traditional school also called the rightist that a given amount of dividends has an impact on stock prices as well as retained earnings (Graham and Dodd, 1934;.Lintner,1956; Gordon, 1959; Brittain, 1964; Walter, 1956, Walter,1963) etc.) As cited in olowe and moyosore (2014). During the same time period Gordon (1962) and Walter (1963), proved dividend to be relevant for the valuation of the firm and hence the shareholders are seen to be not at all indifferent as to the payment of dividend and retention of profits as cited in Muhammed (2012).

Chay and Suh (2005) reports that different countries will have their own culture, rules and regulations and restrictions on the dividend policy and companies operating in different countries also practicing different policy. As is the case in many developing countries, this area least researched in Ethiopia (little study has been conducted) to investigate the main determinants of the dividend payout decisions of companies especially those that emphasize on certain businesses like banks.

In Ethiopia, it is evidenced that few studies have so far been conducted on the determinants of corporate dividend payout decisions in all financial and non- financial sectors of the economy; when we see their findings, they did not get similar results regarding the problem and the sample they have used also not include all banks in their study. This augments the need to identify the driving elements of dividend payout policy through theoretical and empirical analysis by including all banks for the study. Therefore, a study on factors affecting corporate dividend payout decisions shall be a relevant decision in view of these phenomena since the study tried to see the influence of those variables from all Ethiopian private banks.

Tewodros (2011) conducted the first relevant Ethiopian study which dealt with the determinants and investigates the relationship between bank specific factors and the dividend payout and concludes that firm size, liquidity and the previous year's dividend payment are among the major determinants of dividend payout decision variables in Ethiopian private commercial banks. But some of the findings of Tewodros are different from other researchers. For instance, Yiadom (2011) concludes that profitability is a major and positively affects the dividend paid by banks, which is unlikely to Tewodros (2011). Next to Tewodros (2011), Elias (2015), Belisty (2015) and Tadele (2017) are the one who conducted similar research about the determinants of dividend payout in Ethiopian commercial private banks. When we see the findings of the previous researchers in Ethiopia, Elias found that lagged dividend, Growth, Size and risk are significantly affect dividend payout but Profitability, Liquidity and Leverage are not significant variables to dividend payout. And with the same year, Belisty (2015) also conclude that Profitability, Liquidity, Growth, Size and Leverage were among the significant variables to dividend payout while Lagged dividend and capital were found to be insignificant variables to dividend payout. Recently, Tadele (2017) also examined that Profitability, Retained earnings, Loan loss provisions, Lagged dividend and Inflation were among the significant variables to

dividend payout ratio. While Leverage, Liquidity and Economic growth were insignificantly affect dividend payout. When we see the above findings of those Ethiopian researchers, even if some of them reached same results, they also found different results about the same explanatory variables.

Therefore, this inconsistency of results needs to be investigated and the examination and additional study of the topic about the determinants of the dividend payout will make an important contribution to knowledge, and the study tries to address the determinants of dividend payout decision in Ethiopian private commercial banks.

This study tries to see the effect of Stock (number of equity shares issued and outstanding) on dividend payout decision which measures the external control by shareholders. Risk also did not adequately used and investigated as a determinant of dividend payout in Ethiopian private commercial banks.

All in all, the above issues coupled with the gap in the literature call for research in the area of factors affecting corporate dividend payout decisions. To this end, the present study provides insight into the factors that influence the dividend payout decisions and their relationships with the dividend payout of Ethiopian private commercial banks.

1.3 Objectives of the Study

1.3.1. General Research Objective

The general objective of this study is to empirically investigate the major determinants of dividend payout and their relationship as per the available literature that have any influence on the dividend payout decisions of Ethiopian private commercial banks through a series of theoretically and empirically justified research hypotheses.

1.3.2. Specific Research Objectives

The study will have also the following specific objectives to achieve the aforementioned general objective.

- ◆ Investigates the influence of profitability on dividend payout decision of Ethiopian private banks.

- ◆ Examine the impact of liquidity on dividend payout decision of Ethiopian private banks.
- ◆ Analyze the effect of risk on dividend payout decision of Ethiopian private banks.
- ◆ Tries to see the influence of the previous dividend payment on the dividend payout decision of Ethiopian private banks.
- ◆ Investigates the impact of bank size on the decision of payment of dividend on Ethiopian private banks case.
- ◆ Examine the influence of stock on the dividend payout decision of Ethiopian private banks.

1.3.3 Research Hypothesis

Hypotheses are predictions the researcher holds about the relationship among variables. They are numeric estimates of population values based on data collected from sample. This prediction often comes from prior literature and studies on a topic that suggests the potential outcome that the researcher may expect. Therefore, under this study, based on existing literatures, the following hypothesized relationships are predicted for each variable with respect to dividend payout.

H1: Profitability is expected to affect dividend payout significantly and positively.

H2: Liquidity is predicted to influence the dividend payout positively and significantly.

H3: Risk is expected to be negatively and significantly affect the dividend payout decision.

H4: Lagged dividend payment is expected to be affect positively and significantly the dividend payout decision.

H5: Size is expected to affect dividend payout decision positively and significantly.

H6: Stock is expected to affect positively and significantly the dividend payout decision of Ethiopian private banks.

1.4. Significance of the Study

The study will have significance from various directions. First the study supplies evidence whether factors identified by previous studies are the same as the ones found to be determinants of dividend payout of banking business in Ethiopia. Second it enhances the stock of information we have about the determinants of dividend payout in banking sector of Ethiopia and the study will be used as a reference for other researchers in this area. Managers of banks' will use the results of the study to review and fix their dividend payout decisions in line with the findings of

the study. Finally, investors and shareholders also are benefited from the study by examining which independent variable has a significant factor to dividend payout and invest their money to proper place.

1.5. Scope of the Study

Assessing the determinants of both the financial and non-financial sectors of dividend payout as a whole was very important to shed light on this issue in Ethiopia. However, due to time constraint, budget and constraint of availability of the required data, the study will focus exclusively on all Ethiopian private banks that are paid dividend consecutively during the study period. To this regard the study selects eleven private banks namely: Awash international bank(AIB), Bank of Abyssinia(BOA), Dashen bank s.c(DB) , NIB s.c, United bank s.c(UB), Wegagen bank s.c(WB), Abay bank s.c(ABB), Addis international bank s.c(ADIB), Buna international bank s.c(BUIB), Lion bank s.c(LIB), Zemen bank s.c(ZB). In this regard, the period of study covers from the year 2014 up to 2018 G.C. (Gregorian calendar). In addition the dividend payout decision is influenced by external factors like absence of secondary market and well developed financial system of a country, this study does not consider the possible effect of absence of secondary market and well developed financial system on dividend policy. Also the study will only empirically examine bank specific factors. Finally the result of this study does not generalize to other sectors other than banking industry.

1.6 Structure of the Study

The paper has been organized in five chapters. Chapter one deals with introduction of the study; chapter two assesses review of literatures by taking theoretical and empirical findings; Chapter three introduces the way how the study is undertaken, which is the methodology section of the study. Furthermore, Chapter four explains brief summary of data analysis and result of the study by using descriptive and econometric analysis. Finally, chapter five indicates conclusion and recommendations.

CHAPTER TWO

RELATED LITRATURES REVIEWS

This chapter covers the broad sub topics that are related to dividend theories and determinants of dividend payout. The first sub section provides the theoretical literatures part the second part states theoretical framework in which a number of theories that have been developed by researchers and theorists. The third sub section discusses the problem of dividend payment and the forth section is about dividend policy and the fifth section is about the empirical literature and finally the research framework and gaps in literature are presented.

2.1 Theoretical literature reviews

2.1.1 Establishment of Private Commercial Banks in Ethiopia

Monetary and banking proclamation and the licensing and supervision of banking business laid down the legal basis for investment in the Ethiopian banking industry. The first private bank entered in to operation was awash international bank in 1994 G.C by 486 shareholders and authorized capital of birr 50 million. A year after, Dashen bank was established in 1995 as a share company with an authorized capital of birr 50 million. Bank of Abyssinia was another private bank in Ethiopia following awash and dashen to establish with 131 shareholders and 50 million. Wegagen bank started operation in 1997 with authorized capital of birr 60 million. The fifth private bank was united bank which was established in 1998 by 335 shareholders. Nib international bank was started operation in 1999 with an authorized capital of birr 150 million. In the year 2004, cooperative bank of oromia was established with authorized capital of 22 million. After two year Lion bank was established with an authorized capital of birr108 million. The next banks established was Zemen bank with an authorized capital of birr 87 million in 2008 G.C. oromia international bank was established in the same year to Zemen bank with an authorized capital of birr 91 million. Buna bank was established on 2009. In 2010 G.C Abay bank and Berhan international bank were established. Following abay bank and Berhan bank, in the year 2011 Addis international bank was established. A year after Addis bank, Debub global bank was established in the year 2012. The last private bank established in Ethiopia in the year 2013 G.C was Enat bank.

According to National bank of Ethiopia latest report, the total capital of eighteen banks operating in the country has increased by 7.8%. From the total shares of the banking industry, the share of the two state banks commercial bank of Ethiopia and development bank of Ethiopia is 60.1%, while the remaining share belongs to the sixteen private banks. According to the report, the sixteen private banks have registered a total capital of birr 34.22 billion birr, which is 39.9% of the total capital of all banks in the country (*new business Ethiopia*).

When we see the above report, Ethiopian private banks are mobilizing huge capital and we can say that the industry is clearly in growing stage.

Next, let us see how their profitability is going on. For this idea, the researcher tried to see the 2018 June 30 annual audited financial statement.

The following table summarizes the latest profit generation by all Ethiopian private commercial banks.

Table 2.1 Annual profits after tax as of June 30, 2018

No	Bank	Net profit in ETB'000
1	Awash international bank	1,492,426
2	Dashen bank	928,954
3	Abyssinia Bank	562,800
4	Oromia international Bank	728,000
5	United Bank	573,634
6	Nib International Bank	514,853
7	Cooperative bank of Oromia	523,416
8	Wegagen bank	793,555
9	Lion international bank	390,766
10	Abay bank	316,985
11	Zemen bank	271,021
12	Bunna bank	315,263
13	Berhan bank	327,846
14	Debub global bank	106,634
15	Enat bank	158,875
16	Addis international bank	112,905

Source: Audited financial statements of those banks (2019).

2.1.2. Dividend Theories

When a company performs well and earns profit, the management of the company decides how much of the earning should be distributed and how much of it also retained for future investment opportunities. This payment of dividend has positive implications for financing and investment decision of the firm and also for the company's share price. It is a controversial issue over the academicians. Miller and Modigliani (1961) argue that in the presence of perfect capital markets, the dividend decision has no effect on the firm value and that is irrelevant. This conclusion is unlikely with the traditional school also called rightist that says the given amount of dividend has an impact on retained earnings and stock price (Graham and Dodd, 1934; Lintner, 1956; Gordon, 1959; Britain, 1964; Walter (1956, 1963) etc.) as cited in olowe and moyosore (2014).

Because of increasing complexities, competition, global and corporate structure, it is difficult to single out one single factor affecting dividend and dividend policy. Dividend policy has become a major decision in corporate finance in recent times. Dividend is a distribution or appropriation of profit to shareholders.

A number of theories have been developed on dividend policy. Some of these are bird- in- hand, signaling theory, tax preference theory, agency theory, life cycle theory, pecking order, and Clientele effect.

The **bird-in-hand theory** asserts that because of uncertainty of future cash flow, investors will often tend to prefer dividend to retained earnings. The main idea of this is that even in perfect market, the uncertainty of future situation is a sufficient reason to change the price of a share (kola, 2007). Thus, investors prefer to receive certain money today than to wait for gains from questionable future investments. As a result, higher payment of ratio will reduce the required rate of returns and have increased the value of the firm (Gordon (1963) and Linter (1962)) as cited in Yiadom (2011).

The **signaling theory** points out that share prices do not react to dividend payout rate in itself but to the information that investors believed changes in dividend levels have for the future prospects of the firm. Lasher (2000) submits that a decrease in dividend, for example, is taken as terrible news cited in Yiadom (2011). There is clearly some information content in dividend announcement. However, it is difficult to tell whether the stock price changes that follow

increases or decrease in dividends reflects only signaling effect or both signaling and dividend preference. The idea that dividend payouts can signal a firm's prospect seems to be accepted among the chief financial officers of large US corporations. If any company's board of directors recommend for a higher cash dividend for a certain period compared to the previous period, it is considered as a good signal to the shareholders that indicates the cash position of the given firm has increased which leads to increase the share price of that company and shareholders wealth as well(Alan & Hossain, 2012).

The **tax preference theory** asserts that low dividend ratios lower the required rate of return and increase the market valuation of firms stock. Because of tax advantages, investors may prefer to have companies who retain most of their earnings. If so, then low payment companies than otherwise similar higher- payment companies would be preferred. Studies by Litzenberger and Ramaswamy (1979) and Barclay (1987) have research findings in support of the tax preference theory as cited in Yiadom(2011). Kalay (1984) as cited in Kola (2007) supported this view and noticed that investors with high income prefer to hold non-paying stock, whereas those with low income tax brackets are willing to invest in high dividend yield stocks. According to Rafique (2012), this theory explains that dividends are subject to a higher tax cut than capital gain. This theory further argues that dividends are taxed directly, while capital gain tax is not realized until a stock is actually sold. Therefore, for tax related reasons, investors choose to retain the firms profit rather than distribute it as dividend.

The **Clientele effect** is another theory related to dividend policy. The theory recognizes that different groups /cliente prefer different dividend payment policies. For example, retired individuals, pension funds, and university endowment funds generally prefer cash income; so they often want the firm to distribute a high percentage of its earnings Brigham and Houston (2013) and Pettit (1977) as cited in Mehta (2012).

The other most important theory is the **agency cost** theory. The relation between shareholders and managers of a company is an agency relation. The shareholders are the principals and the managers are the agents. The managers are charged with acting in the best interest of the owners. However, there are possibilities for conflicts between the interests of the two. The key thrust of the agency theory is that managers may take actions in accordance with their own interest which may not always be beneficial to shareholders. One of the most influential studies about agency

cost was presented by Jensen and Meckling (1976) as cited in Hellstrom and Inagambaev(2012). Since the study brings the new view of the agency problem most studies considers this theory as a benchmark for their study. They define the agency cost as a cost that arises between the principals (shareholders) and the agent (management) where the principals hire the agents to maximize the wealth of the principals. Another empirical studies in support of agency explanation on dividend include Lloyd, Jaherer and Page (1985) and Jensen, Solberg and Zorn (1992). The payment of dividend therefore is seen as a means of reducing the amount of excess money available to managers which may not be used in the best interest of shareholders.

The **life cycle theory** is also cited as one of the explanations for dividend payment. The theory explains that as firms pass through the various stages in their lives, they tend to alter the dividend policy depending on the financial needs of each stage. Implied in this theory is the fact that firms that are in their growth stages are less likely to pay more dividends as compared to firms that are at their maturity stages. Old firms therefore, because they do not have a lot of growth opportunities to fund are expected to pay more dividends. Murhadi (2010) reveals that companies which enter in growth phase tend not to pay a lot of dividend, compared to companies at matured stage cited in Yiadom(2011).

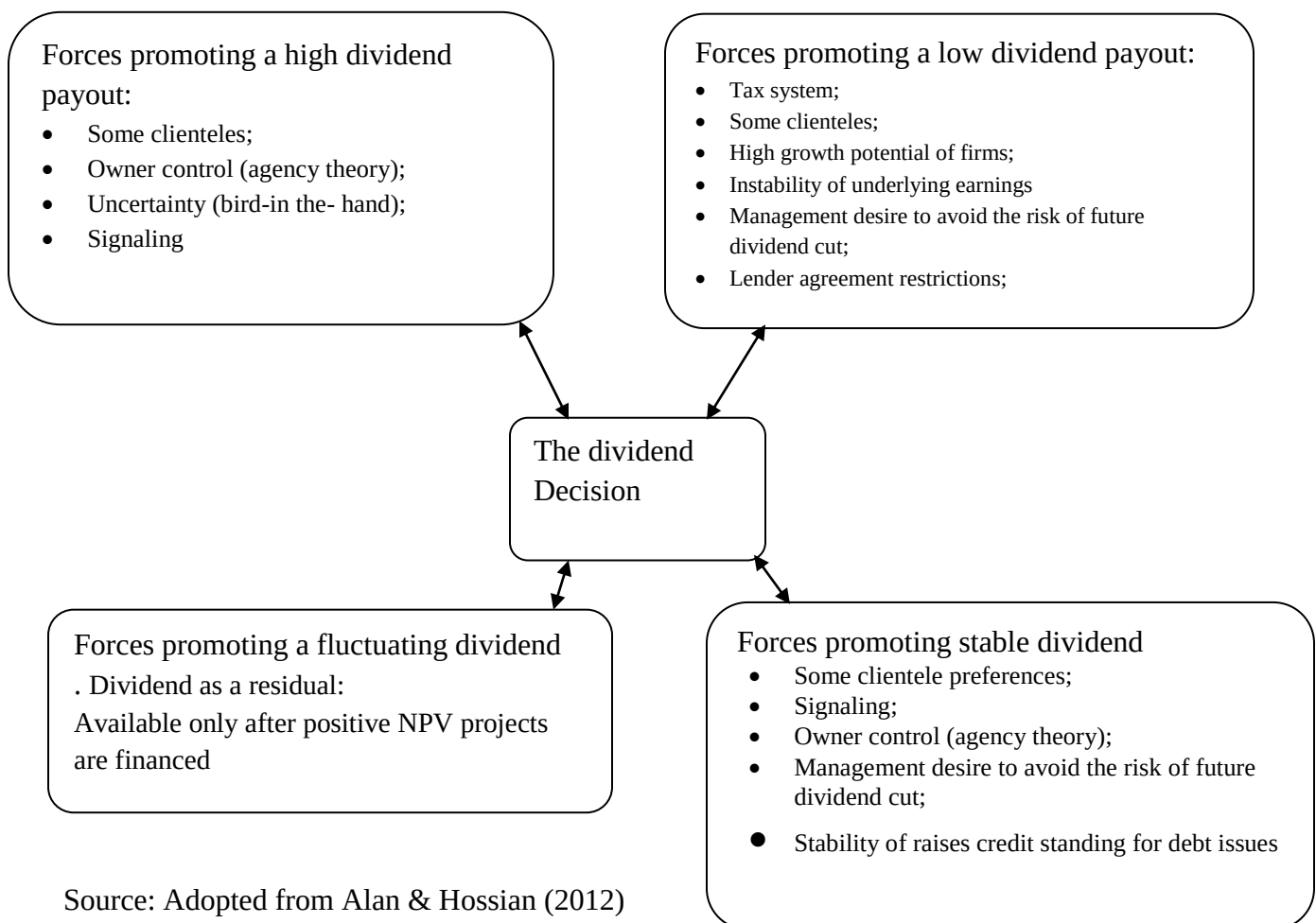
The '**Pecking Order** Theory' is one of the corporate leverage theories. It contains two assumptions which are as follows. First, there is asymmetric information between managers and outside shareholders. The second assumption is that the firm will follow a pecking order to finance its activities (Al-Najjar & Hussainey, 2009). They indicated that the firm will depend first on the retained earnings in financing and distributing the dividends. They added that if the retained earnings are not enough, the firm will use debt to borrow, rather than issuing new shares. This is consistent with Myers and Majluf (1984) in that the company prefers internal funding, rather than external sources for dividend distribution.

Bankruptcy Theory, in this dividend theory concept, bankruptcy costs had no influence on the dividend policy of a company. A general bankruptcy cost occurs when the firm faces great difficulty in meeting its long-term obligations (Al-Najjar&Hussainey, 2009). So, firm ownership has to be transferred and the capital structure is likely to have a new form. Some researchers found that the business risk toward bankruptcy costs is associated with the dividend policy in a

particular firm (Ho, 2003; Aivazian et al. 2003). This theory can be examined by the firm risk which is measured by firm beta.

Another important theory is the **Transaction Cost** Theory. Transaction Cost“ is an important theory which was initiated by Rozeff (1982) who assumed that the more dividends which were paid, the lower would be the agency cost incurred. However, he added that if the company paid high dividends, this would lead to an increase in the transaction cost. Al-Najjar & Hussainey (2009) argued that smaller companies will have more transaction costs than larger ones, because the small companies would mostly rely on debts to finance their activities and payment of dividends. They concluded that firm size can be a determinant of dividend policy of the company. This theory is tested by the firm size variable.

Figure 2.1 Forces pulling management in the dividend decisions



2.1.3. Why not to Pay Dividends?

It is known that the goal of every firm is to earn profit and maximize the shareholder wealth, which is a positive gain from an investment or business operation after subtracting all expenses connected with it. Kola (2007) declared that the division of this earning within the company is an element of a company's financial strategy, which also includes decisions of where to invest money, possible sources of capital, capital structure and decisions of how to keep the cash flow. Because currently firms are belonging normally to different people or groups of people with individual view on the business, it becomes difficult to make the most valuable decisions about the payout. Some shareholders may choose profits to be retained by the firm, rather than be distributed in the form of dividends by considering that the business will expand and their share price will increase as a result. In general there are three possibilities of dividing the profit:

1. Retaining of all the profit of the company. If the owners decide to consider this way, they resign from paying out the dividend for the previous year in hope that the appraisal of the share prices or anticipated future dividends will bring higher return than today's payout;
2. Paying out the whole profit the company has earned as a dividend. This is very slight solution as the lack of internal capital sources limits the growth of a firm. Hence this possibility is hardly used in practice. However, followers of this theory argue that individual investors can better spot investment opportunities and therefore the whole profit earned by companies should return to them, so they would then find new best solution of its allocation;
3. Dividing the profit into two parts (retained earnings and paying dividends). One part of it is assigned for the investment requirements and future projects of the company and the second is paid out to different groups having some stock in the company. This approach seems to be the most popular among the companies of both developing and developed nations.

2.1.4. The Dividend Policies

The term dividend mostly refers to cash paid out of profit after tax. If a payment is made from sources other than current or accumulated retained earnings, the term "distributions" is used or dividend is simply the money that a company pays out to its shareholders from the profits (Berhane, 2011).

Dividend policy refers to the policy that the management formulates in regard to earnings for distribution as dividend among shareholders. It is not merely concerned with dividends to be paid in one year, but is concerned with the continuous course of action to be followed over a period of many years. As stated by Kola (2007), dividend policy refers to the dynamic decisions that firms must take repeatedly on regular basis. The word “policy” implies this consistency over time and that payouts do not simply evolve in an arbitrary and random manner. Payout policy also tries to answer the question how much company should give back to its shareholders and what form should this payment take.

Companies are generally free to select the level of dividend they wish to pay to holders of ordinary shares, although factors such as legal requirements, debt covenants and the availability of cash resources impose some limitations on this decision. It is thus not surprising that the empirical literature has recorded systematic variations in dividend behavior across firms, countries, time and type of dividend (Manos, 2001).

Variations across countries reported under the work of (La Porta, Lopez, Silanes, Schliefer, and Vishny, 2000) who studied the dividend policies of over 4000 firms from 33 countries around the world. They found that dividend policies vary across legal regimes in a way that is consistent with the idea that dividend payment is the outcome of effective pressure by minority shareholders to limit agency behavior. Variations amongst firms are noted, for example, in Fama and French (2001) they bring evidence to show that US dividend paying firms tend to be large and profitable, while non-payers are typically small, less profitable but with high investment opportunities.

In light of the freedom over dividend policy and the observed variations across firms, countries, time and type of dividends, the question of how dividend policy is determined has been the subject of many studies. This question is often referred to as the dividend puzzle, and this puzzle is generally still a very controversial issue for theorists and academicians. Though many studies have been conducted, the results indicate that there are some differences between countries regarding which factors that have an impact on dividend payouts.

2.1.5. Stability of Dividends

According to Pandey (2013) stability of dividend is considered as a desirable policy by the management of most firms in practice. Many surveys have shown that shareholders also seem generally to favor these policy value stable dividends higher than the fluctuating ones. All other things being equal, the stable dividend policy may have a positive impact on the market price of the share. Stability of dividends also means regularity in paying some dividend annually, even though the amount of dividend may fluctuate over the years, and may not be related with earnings. There are a number of companies, which have records of paying dividend for a long, unbroken period. More precisely, stability of dividends refers to the amounts paid out consistently.

2.1.6. Forms of Dividends

There are three popular ways that firms can set their payout: through cash dividends, stock dividends and repurchasing shares. The usual practice is to pay dividends in cash. In this paper the researcher has focused on the first of these. The cash dividend here the dividend situation in Ethiopia, where both stock dividends (bonus shares) and shares buyback (share repurchases) are not popular ways of payout. Companies mostly pay dividends in cash. A company should have enough cash in its bank account when cash dividends are declared. If it does not have enough bank balance, arrangement should be made to borrow funds. When the company follows a stable dividend policy, it should prepare a cash budget for the coming period to indicate the necessary funds, which would need to meet the regular dividend payments of the company. It is relatively difficult to make cash planning in anticipation of dividend needs when an unstable policy is followed (Pandey, 2013). Dividends are not always in the form of cash. Frequently companies also declare stock dividends. An issue of bonus shares is the distribution of shares free of cost to the existing shareholders. Issuing bonus shares increases the number of outstanding shares of the company. The bonus shares are distributed proportionately to the existing shareholders (Kola, 2007).

The buyback of shares is the repurchase of its own shares by a company. Corporations in many countries are allowed to buy back their own shares from the market, which is popularly known as stock or share repurchases. The most plausible reason for the buyback seems to be that a company may like to return surplus cash, which it cannot put to any profitable investment, to

shareholders. Companies may also like to use surplus cash to buy back shares rather than pay large dividends, which they cannot maintain in the future years. Pandey (2013) and Berhane (2011) stated that in those countries, where dividends are taxed at a higher rate than the capital gains, companies may like to resort to shares buyback from time to time to reduce shareholders tax burden.

2.2. Empirical Literatures

Baker and E.Powell (2000) investigated the determinants of corporate dividend policy with 1997 survey of NYSE- listed US firms about managers view of what factors determine dividend policy. Based on their findings the most important determinants of a firms dividend policy are the level of current and expected future earnings and the pattern or continuity of past dividends.

Aivazian, Booth and cleary (2002) studied about the dividend policy and organization of capital markets and compares the dividend policy of companies from eight emerging markets to the policies adopted by 100 US firms over the same period. It was concluded that firms in these emerging markets have more unstable dividend payments than their US counterparts. Regression results were indicating that dividends are much less sensitive to past dividends. These results support the substitute view of dividend policy on the premise that the institutional structures of these developing countries make dividends a less viable mechanism for signaling and for reducing agency costs than for their US counterparts operating in more highly developed arm's length capital markets.

Gugler, Burcin and Yurtoglu, (2002) studied about the corporate governance and dividend payout policy in Germany over the period 1992-1998 using 736 dividend change announcement and found significantly larger negative wealth effects in the order of two percentage points for companies where the ownership and control structure makes the expropriation of minority shareholders more likely than for other firms.

Dickens, Kasey and Newman (2003) studied about the factors that influence bank dividend policy by adopting Barclay, smith and watts (1995) model. Based on their analysis and findings, there is a negative relationship between dividend payout and signaling, investment opportunities, ownership and risk and found a positive relationship with size and previous dividend history.

Sharon.L, (2005) identified about factors to motivate corporate dividend payout decision by using ordinary least square OLS regression technique by analyzing the financial data of over 10,000 publicly traded firms. Surprisingly, all the explanatory variables return on equity, growth, current ration, debt to total asset, insider ownership, institutional ownership, capital spending and growth in EPS are were significantly affect the dividend payout decision.

Nikolaos (2005) was examined the effect of distributed earnings and size of the firm on its dividend policy for the Greek market. The paper was an extension of Vasiliou and Eriotis work that tested the assumption that firms set their dividend policy not only by the net distributed earnings, but also by the change from last year dividend, the change from the last years distributed earnings and the size of the firm. The paper was conducted using panel data set from large number of Athens stock exchange for the period of 1996 to 2001. The result explained that the Greek companies prefer to distribute each year a rather constant dividend, which they adjust from year to year according to their distributed earnings and size.

Pornsit and Yixi (2006) examined the association between dividend payout and shareholder rights and corporate governance. The research explained that there is an inverse relationship between dividend payout and shareholder rights. Regulation also influences the association between dividend and shareholder rights. This result indicates that the firm will pay higher dividend if the shareholder rights are more suppressed.

Ameer (2007) investigates the impact of product market competition and regulations on the dividend policies of the Malaysia banks. Ordered probit modeling technique was used for the study. Based on the findings, dividend payout was positively affected by earnings and the decision to cut dividends was significantly related to change in nonperforming loans, corporate and real estate sectors loan ratio and earning loses.

Al-Malkawi, (2008) examined the determinants of corporate dividend decisions of publicly quoted companies in Jordan as a case study of an emerging market. The analysis was executed based on 15-year unbalanced panel data with 1137 firm-year observations covering the period between 1989 and 2003. Based on the study findings profitability, size and age of the company are factors that positively affect the likelihood to pay dividends. Whereas financial leverage was found to be decrease the probability to pay dividends.

R.Azahagiah and Sabari (2008) investigates the impact of dividend policy on shareholders wealth in organic and inorganic chemical companies. The study proves that the wealth of shareholders was greatly influenced mainly by growth, improvement of profit margin, capital investment decision, capital structure decision and cost of capital. The result found that there was significant relationship to dividend payout on shareholder wealth in organic chemical companies. In contrast, there was not a significant impact of dividend policy in inorganic chemical companies.

Jinlan (2008) examined whether there was linkage between dividend policy and institutional ownership of US industrial firms between the years 1980 to 2002. The result indicated that the dividend payout decision was positively related to institutional ownership. The result implied that firms having higher institutional ownership tend to pay more dividend than others.

Al-Kuwari,(2009) investigated about the determinants of the dividend policy in emerging stock exchanges in the case of firms listed on Gulf Co-operation Council (GCC) country stock exchanges by using panel data set of non-financial firms between the year of 1999- 2003. The results suggested that the main characteristics of firm dividend payout policy were that dividend payments related strongly and directly to government ownership, firm size and firm profitability, but the result suggested that leverage ratio was negatively affect dividend payment.

Al-Kuwari, (2010) studied about factors influencing corporate dividend payout decision of firms listed on the emerging Gulf Cooperation Council (GCC) states' stock market. Panel data were obtained from 191 non-financial firms over the five year period from 1999 to 2003 and seven research hypotheses were tested. The study was used random effects probit models to test the seven research hypotheses. The results were revealed that government ownership, company profitability, and company size increases the probability of paying dividends, whereas the good investment opportunities decrease the probability of paying dividends.

Amarjit, Nahum and Rajendra (2010) was examined the determinants of dividend payout ratios evidence from United States. The study used service and manufacturing firms. Based on their findings, for manufacturing firms, dividend payout ratio was a function of profit margin, tax and market to book ratio. For service giving companies dividend payout was a function of profit margin, sales growth and debt to equity ratio.

Azhagaiah and Veeramuthu (2010) examine the association between the corporate leverage and the dividend policy of firms across industries in India in respect of size of corporate firms. The research was conducted by using panel data with sample of 73 firms across the industries for a period of 1996 to 2007. Based on their result, dividend payout was dependent on the level of debt for all size firms.

Caroll (2010) examined the relationship between liquidity and dividend policy on the international level. That means the liquidity and how much dividend the company paysto investors. Based on the result obtained, there was an inverse relationship between stock liquidity of the firms and the dividend amount paid.

Yiadom and Agyie (2011) investigated the bank specific factors that affect dividend payment in Ghana. Panel data for five years period was used starting from the year 1999 to 2003 with the framework of fixed and random effect model. Based on their result, profitability, debt, lagged dividend and collateral capacity were found to be the statistically significant and positive factors to affect dividend payout decision of banks in Ghana. According to their result, cash was not statistically significant factor and had a negative effect on dividend payout.

Sajid, Sumra, Syeda and Nabia (2012) made his research on the determinants of corporate dividend policy of Pakistani banking industry by selecting eighteen banks for the period of 2006 to 2011. As per the research conducted, the independent variables were firm size and risk, profitability, firm growth and leverage. Based on the result, growth, profitability and firm size have positive coefficient of correlation. And, profitability and firm size have linear association with dividend policy. But, risk and leverage were found to have inverse linear relationship to dividend policy.

Dr Seyed and Fatemeh (2012) investigated that the impact of financial leverages operating cash flow and size of the firm on dividend policy on companies of Teheran stock exchange. The result explained that there existed negative relationship between financial leverage and dividend policy of the firms. But, there was significant and positive relationship between cash flow and size of the company with dividend policy.

In his study, Ebenezer, (2013) has analyzed the determinants of dividend payout in financial institution in Ghana using panel data covering from the year 2005-2009 from the selected firm.

As per his result, Age and liquidity were found to be positive and statistically significant factors in explaining dividend payout whereas profitability and collateral were insignificant factors with dividend payout decision.

Komrattanapanya and Suntrauk, (2013) were examined about factors influencing dividend payout of all firms listed in the stock exchange market of Thailand during the year 2006-2010 with the application of Tobit regression technique analysis. Based on their results financial leverage, investment opportunities, and sales growth were found to be negatively affected the dividend payout; on the other hand, size of firm is positively affected dividend payout.

Adesina and Peter (2013) studied about the relationship between dividend payout ratio and working capital management. The data was collected from twelve firms quoted on the Nigerian stock exchange between 2002 and 2006. Based on their paper the working capital was measured by the net trade cycle, current ratio and debt ratio. The result revealed that dividend payout ratio was influenced positively by profitability and the net trade cycle. They also mentioned that growth rate in earnings was negatively affected to dividend payout. But, according to their findings, working capital management was not significant factor in dividend policy of Nigeria stock exchange.

Al Masum, (2014) researched about dividend policy and its impact on stock price – a study on commercial banks listed in Dhaka stock exchange for all the thirty banks listed in Dhaka Stock Exchange for the period of 2007 to 2011 in Bangladesh and the results were indicate that dividend policy has significantly positive effect on StockPrices.

Maladjian& El Khoury, (2014) investigated about the determinants of dividend policy: an empirical study on the Lebanese listed banks by using an unbalanced panel dataset between the years of 2005 and 2011. When we see their empirical results, dividend payout policies are positively affected by the firm size, risk and previous year's dividends, but are negatively affected by the opportunity growth and profitability. The results obtained indicate that firms pay dividends with the intention of reducing the agency conflicts. In addition, managers take into consideration the stability of dividends while determining the dividend policy. Moreover, the results suggested that the Lebanese listed firms prefer to invest their earnings to grow rather than to pay more dividends.

James (2014) also investigates by measuring and analyzing the effects of dividend policy in banking profits and growth in Nigeria. He used survey research design by using structured questionnaire. James found that dividend policy was a strategic tool for growth in the banking industry and dividend payout has an impact on the wealth maximization of shareholders. Based on his findings, there exists a significant relationship between dividend payout and profitability of the banking industry.

Bahaa (2015) investigates on the determinants of dividend policy in Kuwait stock exchange. The study was used panel data set of publicly traded stock exchange between 2011 and 2014. Company size, profitability and financial leverage were explanatory variables for the study. Based on his findings, profitability, size and leverage had a positive relationship with dividend payout and all the three variables were found to be major determinants of dividend payout in Kuwait stock exchange.

Tahereh and Batool (2015) investigate that factors influencing corporate dividend policy of financial and non-financial firms on companies listed in Tehran stock exchange. The data was collected from seventy companies between 2009 and 2013. Multiple regression technique was applied for the research. Based on their findings, size and liquidity of the company have a significant and positive impact on the dividend payable. And they argue that increasing the size and liquidity of the company may lead to pay more dividends.

Gusni, (2017) studied about the determinants of dividend policy of financial industry in Indonesia for a period of 2009 up to 2015 consist of 79 companies and using purposive sampling technique and companies that are paid dividend during the study period consistently. The study was explanatory research with quantitative approach by using secondary data. The research used the combination of time serious data and cross sectional data called pooling data or panel data. The explanatory variables were corporate governance, profitability, risk, firm size and leverage. Based on the result obtained, profitability, leverage, and institutional ownership have negative impact on the firm's dividend policy. Whereas systemic risk, firm size and board of directors have no impact on the firm's dividend policy.

Nasir, Adnan and Muhammed (2018) were examines the determinants of dividend policy of Pakistani banking sector from 2005 up to 2015. The study was employed by using panel data

technique. Based on the findings they found, profitability, investment opportunities and last year dividends had a significant positive effect on the dividend payout of Pakistani banks but growth and loan to deposit ratio were found to be affect the dividend payout negatively. Based on the result, last year dividend payment was the most significant factor among other variables.

Thewodros, (2011) also studied the determinants of dividend payout in Ethiopian case. He was used profitability, liquidity, Leverage, Size, Lagged dividend, Growth and earnings per share as explanatory variables and dividend per share was a dependent variable. Based on his findings liquidity, firm size and lagged dividend payment were variables that were significantly affect the dividend payout decision. Profitability, growth and financial leverage were statistically insignificant factors of dividend payout.

Elias, (2015) was also have done a study on the determinants of bank dividend payment in Ethiopian private banks case by using five years data from the year 2010-2014 with panel data regression technique and he reported that lagged dividend payout, growth, size and risk have statistically significant impact on dividend payout but, profitability, liquidity and leverage were found to be statistically insignificant factors of dividend payout ratio.

Tadele,(2017) also conducted a research regarding factors affecting dividend payout decision in Ethiopian private commercial banks. He used explanatory and descriptive study & the data were covered the period from 2000-2015 for the sample of six Ethiopian private banks and used secondary and primary data. He also used a fixed panel regression model. As per his result of the study, he revealed that profit, leverage, and lagged dividend payment have positive and statistically significant impacts on dividend policy of Ethiopian private banks while retained earnings, loan loss provision, inflation have negative and statistically significant impact on dividend policy of Ethiopian private banks but liquidity and economic growth rate were found to be statistically insignificant factors and have no any impact on dividend policy of Ethiopian private commercial banks.

2.2.1 Summary of empirical literatures

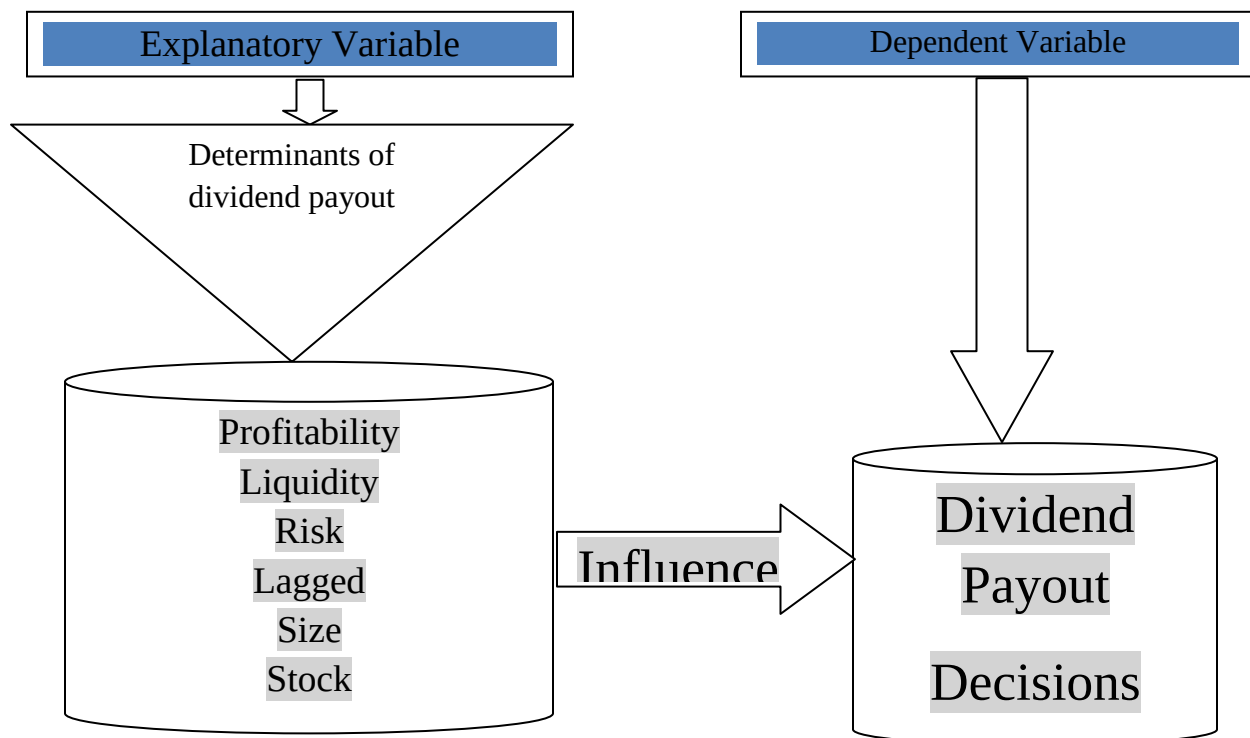
Different researchers from different countries have studied about dividend payout decision ratios of commercial banks and from other firm's side. They consider many internal and external independent variables that affect corporate dividend payout ratio. They also used different

models and techniques of data analysis tools like fixed effect model and random effect technique. Most of the studies have considered five years and above data's of the firms. When we analyze their result it is difficult to say that they reported similar results regarding the topic. Even if the above empirical evidences are from developed and under developed countries, their conclusions are also determined from their countries perspective. Each variable has its own influence on the dividend payout decisions. So, the result shows that one variable will have positive and significant relationship with dividend payout today in specific country, and will have negative relationship to dividend payout to another countries perspective. The same is true in our country cases. Even if few studies have done in Ethiopia regarding the topic, we cannot say that they report the same conclusion and recommendations about the problem.

2.3. Research Framework

Based on the literature review discussed above, the researcher has developed the following schematic representation of the conceptual frame work. The diagram clearly describes the relationship between the explanatory variables and the dependent variable for this study.

Figure 2.2 Conceptual Framework



Source: The researcher's own design (2019)

2.4. Gaps in Literature

Many of the previous research made on determinants of dividend payout decision were focused on developed countries where their financial administration, corporate governance, tax, capital, knowledge and other issues are different from developing countries.

When compared to other countries, in Ethiopia, few studies were conducted on the determinants of dividend payout decision. When we see their result and findings, many of the studies have got different results and relationship between the dependent variable which is dividend payout and independent variables. For instance, Theodros (2011) explained that profitability, leverage and growth were not significant factors on the dividend payout decision. But, unlikely Theodros, Tadele(2017) reported that profitability and leverage were significant explanatory variables on the dependent variable which is dividend payout.

Elias (2015) also conducted a study on the dividend payout decision and suggested that profitability, liquidity and leverage were not found to be significant factors on the dividend payout. But, in the same year, Belisti(2015), suggested that profitability, liquidity and leverage were significant explanatory variables on the decision of dividend payment. When we see sample banks included for the studies, based on the researcher's knowledge, all studies did not include all private banks as a sample for their study. But, this study includes all Ethiopian private banks that were in operation during the study period and paid continuous dividend throughout the study period.

Another gap in the previous studies made on Ethiopia was that all studies were used internal independent variables in their study. But, this study used stock (number of shares issued and outstanding) as external explanatory variable for the study. Therefore, this study tries to fill the above gaps by using recent data's and information.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

In this section, a brief overview of data and sample, tools & techniques used are discussed in line with the stated research objectives. Literature driven hypothesis are presented, simple statistical tools such as descriptive statistics and a more sophisticated econometric models to test the hypothesis has also be discussed.

3.1. Research Philosophy

A research philosophy is belief about the ways in which data about a phenomenon should be collected, analyzed and used.

This research is adopted the objectivism as its ontological position. The objectivistic standpoint states that the social reality has an existence that is independent to social actors. Therefore social actors cannot affect the reality which is independent (Bryman& Bell, 2007).

Thus, the investigator based this research on historical data and therefore used methods of natural science from positivism position. The researcher also based the argumentation on fact which cannot requires any kind of subjective interpretation of the collected data based on objectivism position and conducted the research from an external point of view, since the researcher has investigated the company's dividend payout decisions from an external point of view .

3.2. Research Approach

There are two type of approaches in which business research can be categorized: Deductive and Inductive approach. The deductive approach is the top- down approach, which means that researchers base their research on already existing theories in order to create a number of hypotheses which latter will be tested against empirical data in order to confirm or reject the stated hypothesis. Two important factors in the deductive approach are that the researcher is independent from what is being studied and sample size has to be sufficient in order to be able to generalize the findings (Bryman& Bell, 2007).

The inductive approach is the opposite of the deductive approach in that it is a bottom-up approach. Researchers in inductive approach are predominantly concerned with events that are actually taking place and deal with small sample as against the large number in deductive approach. Some academics argue that the inductive approach creates a higher level of understanding compared to the deductive approach which can be seen as a more descriptive approach since researchers most likely use qualitative data in this approach. Structure of the research is more flexible; less generalized as compared to highly structured methodology and generalized characteristics of deductive approach. The main difference between the two approaches is that the deductive tests the already existing theories while the inductive approach tries to develop new theories and principles based on the empirical data (Saunders, Lewis, and Thornhill, 2009). Thus, this study is adopted the deductive approach.

This research is based up on existing dividend theories and published articles in order to be able to deduce a number of hypotheses from which the research is based. A lot of research regarding dividend policies has already been conducted which makes the collection of previous studies and theories easier. Therefore, the researcher has chosen to base the theoretical framework on a mix of well-known and less known dividend theories. The selected dividend theories have had a major influence on this research process and they provided the theoretical framework which was necessary in order to deduce the hypotheses on which the researcher based the data collection.

3.3. Research Methods

In deductive research approach, quantitative research methods are mostly used where the aim of the study is to test a hypothesis for proving a theory (Creswell, 2009). In quantitative research analysis, the result will often be presented in numbers and quantifiable. This research method is subject to a low level of biasness in interpretation from the researchers as statistical tools are used for analysis of the results. It is more generalizing, more positivists in nature when it comes to epistemological orientation, while in ontological orientation it is objectivism in nature (Bryman& Bell, 2007).

Qualitative research methods are the opposite of the quantitative research methods in almost every aspect. These research methods are mostly used in inductive approach where emphasis is on the generation of theory that is based up on research observation. Analysis of the qualitative

research is based upon the words and statements and mostly in textual form. Qualitative research is more interpretivism in nature when it comes to epistemological orientation. While in ontological orientation it is constructivism in nature. Size of the sample in qualitative research is small. Researchers in the qualitative research require special skills for the interpretations of the results. Contrary to quantitative research, qualitative research is less generalizing and has very low level of replicability (Bryman and Bell, 2007). In conjunction with the deductive research approach, the research method in this study is quantitative. The quantitative research methods are adopted for this study since which deal with numerical data and statistical analyses to answer questions about relationships among measured variables, and it can be subjected to careful quantitative analysis that infers characteristics and relationships of population from the sample by using statistical tools (Creswell, 2009). In addition, the purpose of this study was to investigate the possible factors that could affect the dividend payout decisions of banking industry in Ethiopia, the survey, as a quantitative research strategy can collect quantitative data by different types. Fink (2002) as cited in Muhammed (2012) stated that there are four data collection types of survey, “self-administered questionnaires; interviews; structured record reviews to collect financial, medical, or school information; and structured observations”. The survey instrument adopted in this study to collect data is a structured record reviews.

3.4. Research Design

Explanatory type of research study is the most appropriate which aims to establish relationships between different variables in order to detect a certain patterns. The study used explanatory type of research method since it tries to investigate the relationship of those selected independent variables to dependent variable that is dividend payout. The quantitative aspect of research method has also utilized since it deals with numerical data and statistical analyses to answer questions about relationships among measured variable and it is subjected to careful quantitative analysis that infers characteristics and relationships of population from the sample by using statistical tools.

3.5. Sampling Technique

The researcher used a non-probability sampling technique since all Ethiopian private banks that have pay dividend during the study period are included in the study. Population in research is

defined as a complete set of people with a specialized set of characteristics. Sample is a subset of the target population. When we analyze the total population of the study, currently there are sixteen commercial private banks in Ethiopia. When we see their nature, they are almost working with the same technology, human power and knowledge. According to the national bank of latest report on 2018, Ethiopian private banks have 40% share of capital in the industry. Based on the 2018 annual report of those banks, all are reported a net profit. Including all private banks in the study helps the researcher to get adequate data and draws prominent result and conclusions about the problem to be solved. The rationale behind including those banks was based on the following certain criteria:

- Objectives of establishment (only private commercial banks' to be included)
- Time of establishment(only banks' who are in operation during the study period)
- Banks continuously paid dividend during the period of study (2014 up to 2018).
- The researcher also ignored stock dividends (if any) and examined only cash dividends.

Taking the above criteria into consideration, the researcher had selected the following Ethiopian private commercial banks they are fitting the above criteria as sample (Awash international bank, Bank of Abyssinia, Dashen bank s.c, NIB s.c, United bank s.c, Wegagen bank s.c, Abay bank s.c, Addis international bank s.c, Buna international bank s.c, Lion bank s.c, Zemen bank s.c) banks from the total of sixteen private commercial banks they are currently in operation. The period of the study was covered five years from 2014 to 2018 in G.C. The selection of this period was based on latest period of the available data. Five years was assumed to be relevant because five years and above is the recommended length of data to use in most finance literatures. .

3.6. Data Type and Sources

For the purpose of the analysis, the type of data that was used in this study is a balanced panel data (cross sectional & time series) and quantitative in nature. Since the study was done mainly based on secondary data sources, the investigator has collected secondary data from audited financial statements and annual reports of the selected banks and the National Bank of Ethiopia. Information from books, journal and online publications produced by academicians also used.

3.7. Methods of Data Analysis and Presentation

The data collected from secondary sources had been classified, summarized and presented using text, tables, graphs and diagrams, and statistical analysis technique was used to provide descriptive statistics (to determine the mean and standard deviation of each construct variables). Moreover, an econometric analysis using secondary data; the fixed effect models had been used to capture the significance level of main selected variables which affect the dividend payout decisions. Data analysis also done by using a statistical package called STATA 14. In addition, the panel character of the collected data allows for the use of panel methodology. 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-sectional or time serious studies (Gujarati, 2004). The general form of the panel data can be specified more compactly as:

$$Y_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

Where, ***Y_{it}*** represents the dependent variable which is banks Dividend payout, ***X_{it}*** contains the set of explanatory variables in the estimation model. ***i*** denotes the cross-sectional dimension and ***t*** represents the time serious dimension. While ***α_i*** is the constant term ***β*** represents the slope coefficient and ***ε_{it}*** represents the error terms.

In light of the above model and on the basis of the selected variables, the current study used the following econometric model as follows:

$$DPO = f (Prof, Liq, Risk, Lagd, Size, Stock)$$

$$DPO_{i,t} = \alpha_0 + \beta_0 prof_{i,t} + \beta_1 Liq_{i,t} + \beta_2 Risk_{i,t} + \beta_3 Lagd_{i,t} + \beta_4 Size_{i,t} + \beta_5 Stock_{i,t} + \varepsilon_{i,t} \dots \dots \dots (2)$$

Where, DPO=Dividend Payout, Prof= Profitability, Liq= Liquidity, Risk= Business Risk, Lagd= lagged dividend, Size= Size of the bank, and Stock= Number of equity shares issued and outstanding.

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-section studies (Freeman,1984) as quoted in Muhammed (2012). Panel data can also control for individual

heterogeneity due to hidden factors, which, if neglected in time-series or cross-section estimations leads to biased results.

There are two mostly used estimation techniques for analysis of panel data. These are the Fixed Effect Model (FEM) and the Random Effect Model (REM) (Gujarati, 2004). The FEM assumes that the slope coefficient of the explanatory variables is all identical for all firms. The intercept in the regression model is allowed to differ among individual firms in recognition of the fact that each individual or cross-sectional unit may have some especial characteristics of its own. Fixed effect model (FEM) controls for all time invariant differences between the individuals; so the estimated coefficients of the model can't be biased because of omitted time invariant characteristics. Fixed effect models are designed to study the causes of change within a person or an entity. But it can't be used to investigate time invariant causes of the dependent variables.

The REM is sometimes known as the error component model (ECM). In ECM, it is assumed that the intercept of an individual unit is a random drawing from a much larger population with a constant mean value. The individual intercept is then expressed as a deviation from this constant mean value or the variation across entities is assumed to be random & uncorrelated with the independent variables included in the model. It solves the problem of fixed effect models by including time invariant variables.

The Hausmann's test, a model specification test had been employed to select the appropriate method from the fixed effect model (FEM) and Random Effect Model (REM).

Based on the result of Hausmann's test, Fixed Effect Model was found to be the right technique for this study.

3.8. Definition of Variables

Because now the panel data model has specified and the variables are known, it is necessary to define and present briefly the dependent and explanatory variables. Different variables are expected to affect banks dividend payout (dependent variable) in the study area. The major variables that are expected to have an influence on banks dividend payout are presented and explained below with the direction of their effect following the definition of dependent variable.

3.8.1. Dependent Variable

The dependent variable which is dividend payout is defined as the cash dividend paid divided by net income after tax. Since all Ethiopian private commercial banks pay only one cash dividend once a year, and where both stock dividends (bonus shares) and shares buyback (share repurchases) are not popular ways of payout in Ethiopian case, it is a better variable than dividend per share used by Tewodros (2011) and other developed countries researchers.

3.8.2. Explanatory Variables

A. Profitability:

Profitability measures the earning power (business performance) of the company. The size of a firm's profit has been a long standing determinant of dividend payout. It is defined as the ability of a firm to generate profit. Return on assets (ROA) is used to measure profitability of banks.

B. Liquidity:

It is the ability of a company to convert its current assets into cash without significant concession of price and time which can be measured by current ratio. A firm's cash flow is a good measure of the firm's liquidity and it is very important to compare a firm's liquidity position in relation to its dividend payment. Liquidity measures the extent to which a firm is able to meet its payment of obligations. Current assets to current liabilities are used as a measure for cash position (liquidity).

C. Business Risk:

Business risk is the probability of loss or any non-optimal news about firm's operation or performance which block the ability of that firm to provide the investment return. Business risk is caused by the firm's unique situation (special risk of firm's operation) which is expected to influence the company's overall operation. The standard deviation of return on assets (ROA) is used here to measure the variability in earnings.

D. Previous year's dividend:

Previous year's dividend (lagged dividend paid) is the company's cash dividend paid in last year's. Usually companies opt stable dividend policy and base current dividends on the previous

year's dividends. The variability of dividend paid for previous years can have an effect on the dividend to be paid for the recent year. The lagged dividend paid by banks is used to measure the extent to which the previous dividend payment affects the current dividend payout.

E. Firm size:

Firm size indicates the total size of assets financed by internal and external sources to produce or generate revenues. Firm size variable has become a key influential variable in prior research works to explain the firm's decision to pay dividends. This indicates that large firms can afford to pay higher dividends than the smaller ones or it can serve as an index for the cost of external debt financing. To test the hypothesis, a proxy for firm size is the natural logarithm of total assets is used and to control for size differences across the sampled banks.

F. Float:

Float can be defined as the number of equity shares issued and outstanding and being traded in the public for the corporation. It can be used as an independent variable to measure external control by shareholders since shareholders will vote for directors who offer high dividends. Based on the previous studies, the number of equity shares issued and outstanding is used to measure external controls by shareholders.

3.9. Literature Driven Hypothesis of Variables

Alternative type of hypothesis is used under this study since it is popular in journal articles and the investigator make a prediction about the expected outcome for the total population of the study. This prediction often comes from prior literature and studies on the topic that suggests a potential outcome that the researcher may expect. Therefore, under this study, based on existing literature, the following research hypotheses are developed.

Dependent Variable

Dividend payout which is the dependent variable is defined as the cash dividend paid divided by net income after tax. Since stock dividends and share buybacks are not popular ways of dividend payout in Ethiopia cash dividend paid to net income after tax is a proxy variable than dividend per share.

Explanatory Variables

a) Profitability

The financial literature states that a firm's profitability is a significant and explanatory variable of dividend policy. Olowe and Moyosore (2014), in their study reported that profitability is significant and has a positive relationship with the dividend payout. Belsti (2015) examined the relationship between dividend payout and profitability in Ethiopian private banks and he found that profitability was statistically significant and has a positive relationship with dividend payout. Al-Kuwari, (2009) in his study about dividend payout also argues that profitability was an important factor in explaining dividend payout decision.

Thus, profitability is expected to be a key determinant of corporate dividend policy in Ethiopian banking sector. To test this hypothesis, the after tax earnings per total asset is used as a measure of a firm's profitability. The hypothesized relationship between profitability and dividends is positive.

H₁: Profitability is expected to be positively and significantly affect dividend payout.

b). Liquidity/Cash flow position

A firm's cash flow is a good measure of the firm's liquidity and it is very important to compare a firm's liquidity position in relation to its dividend payment. Jensen (1986) as cited in Maladjian and El Khoury(1986) argue that firms with high cash flows 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. According to their findings Maladjian and El Khoury (1986), stated that liquidity has a positive relationship with dividend payout. Although Jensen et al. (1992), Rozerff (1982) and Easterbrook (1984) argued that companies with high liquidity have to pay higher dividends in order to reduce the agency conflict between managers and shareholders as cited in Maladjian and El Khoury (1986). Based on the findings of the above studies, it can be speculated that there is a positive relationship between the liquidity and the dividend payout ratio and current liabilities to current assets is used as a measure for cash position here. Therefore, the hypothesis becomes:

H2: Liquidity is expected to be positively and significantly affect dividend payout.

c). Business Risk

The volatility of earnings reduces the accuracy of earnings predictability. Thus directors become reluctant to declare and pay dividend, when the certainty of future return is not assured. Thus business risk is hypothesized to have a negative relationship with the dividend policy (Amidu and Abor 2006 and Kowaleski et al 2007) as cited in Yiadom and Agyei(2011).

H3: Business risk is expected to be negatively and significantly affect dividend payout.

d) Lagged dividends

The variability of dividend paid for previous years can have an effect on the dividend to be paid for the recent year. Companies that vary their payments indicate that at least some level of dividend would be paid. Farrelly, Baker and Edelman (1986) as cited in Tewodros (2011) concluded that the major determinants of dividends payment are anticipated level of future earnings and the pattern of past dividends. This is confirmed by Yiadom and Agyei(2011) in their study, found that changes in dividend has a positive and significant relationship with dividend payout. Therefore, a positive relationship between last dividends paid and current year's dividend is expected and the hypothesis is developed as:

H4: Last year's dividend is expected to be positively and significantly affect current year's dividend.

e) Firm size

Eddy and Seifert (1988), Jensen, *et al.* (1992), Redding (1997) and Fama and French (2001) as cited in Tewodros(2011) indicated that large firms distribute a higher amount of their net profits as cash dividends, than do small firms. Several studies have tested the impact of firm size on the dividend-agency relationship. They found that firm size as important explanatory variable, as large companies are more likely to increase their dividend payouts to decrease agency costs.

The big size companies pay higher dividends and smaller size companies pay fewer dividends, as they find it difficult to raise funds, as compared to large companies who have easier access to the capital market and hence they are less dependent on the internal funds, leading to more capability

to pay the dividends. Besides, Olowe and Moyosore (2014) and Tewodros (2011) also supported the same view and conclude that there is a positive association between dividend payouts and firm size. To test the hypothesis, natural logarithm of total assets is used as a measure of firm size and based on the previous evidences, the hypothesis is formulated as:

H5: Firm size is expected to be positively and significantly affect dividend payout..

f). Stock (number of equity shares issued and outstanding)

Stock or number of equity shares issued and outstanding can be used to measure the external control by shareholders. The agency cost hypothesis postulates that agency cost can be reduced depending on the type of ownership and structure adopted by the firm. For instance, insider ownership can motivate management to work in the best interest of shareholders (Jensen and Meckling, 1976 and Rozeff, 1982) cited in Yiadom and Agyie (2011).

H6: Stock is expected to be positively and significantly affect dividend payout.

The next table summarizes the above specified dependent and independent variables of the study with their respective measurement and hypothesized signs.

Table 3.1 Predicted signs for the dependent and independent variables.

	Variables	Measurements	Predicted sign
Dependent variable	Dividend payout	DPS= Dividend paid to net income after tax for bank <i>i</i> over time <i>t</i>	
Independent	Profitability	Profitability = ROA (Net income to total assets) for Bank <i>i</i> in time period <i>t</i>	Positive
Independent	Liquidity	Ratio of Cash and cash equivalent to Current Liabilities (current assets to current liabilities) for Bank <i>i</i> in time <i>t</i>	Positive
Independent	Business Risk	The standard deviation of ROA for Bank <i>i</i> in time <i>t</i> from the average ROA of bank <i>i</i> over the period	Negative
Independent	Lagged	Lagged dividend paid divided to net income after tax for same year for bank <i>i</i> over time <i>t</i> .	Positive
Independent	Size	Natural logarithm of Total Assets for bank <i>i</i> over time <i>t</i> .	Positive
Independent	Stock	Number of equity shares issued and outstanding for bank <i>i</i> over time <i>t</i>	Positive

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

This chapter presented the descriptive statistics, correlation coefficients of study variables; brief descriptions on tests for fulfillment of basic ordinary least square (OLS) assumptions, the econometric analysis and the results.

4.1. Descriptive Statistics

Table 4.1 provides a summary of a descriptive statistics of the dependent and independent variables for eleven Ethiopian private commercial banks for a period of five years starting from year 2014 to 2018 with a total of fifty five observations. The table includes the mean, standard deviation, number of observations, minimum and maximum values for the dependent and independent variables of the model. It shows the average indicators of variables computed from the financial statements.

Table 4.1 Descriptive statistics of the dependent and independent variables

Variables	Observations	Mean	Std.Dev.	Min.	Max
DPO	55	0.5058182	0.1880769	0.12	0.9
ROA	55	0.0307273	0.0089968	0.02	0.05
LIQ	55	1.301455	0.1818263	0.85	1.75
RISK	55	0.0172727	0.0087039	0.000001	0.03
LAGGED	55	0.5052727	0.1950105	0.12	0.9
SIZE	55	23.24236	0.8959497	20.96	24.74
STOCK	55	8741713	1.64e+07	227830	9.21e+07

Source: Stata results from financial statements of sampled banks (2020)

According to table 4.1, all variables are comprised of 55 observations (eleven banks with five years of study period) and the dividend measure used in this study namely the dividend payout; the cash dividend divided by the net income after tax. The mean of dividend payout was 50.58 percent with the standard deviation of 18.8 percent. This means that private commercial banks in Ethiopia under the period of the study have paid out 55.57 percent of their net income after tax as dividends.

Return on assets (ROA) was used to measure the profitability of Ethiopian private banks and used to know the relationship between profitability and dividend payout of banks. For the total sample, the mean value of ROA was 3 percent with a minimum of 2 percent and a maximum of 5 percent. Which means that, for a single birr invested in the assets of a firm, the most profitable banks among the sampled private banks earned 5 percent profit after tax. On the other hand, the least profitable banks of sampled banks earned 2 percent profit after tax for each birr invested in the assets of the firm, with the standard deviation of .89 percent under the period of study.

During the study period, the average value of liquidity as measured by current ratio was 1.3 which means that, for each one birr current liability there were 1.3 birr current assets to meet short term obligations. The maximum and minimum values were 1.75 and 0.85 respectively with standard deviation of 0.18.

The average mean value of business risk as measured with the standard deviation of ROA was 1.7 percent. The maximum and minimum values were 0.03 and 0.000001 respectively; with the standard deviation of 0.87 percent. Theoretically, the lower the business risk as measured by the standard deviation of ROA is the less likelihood that the bank will be bankrupted and the higher possibility for banks to pay dividends due to low variation in earnings.

Another independent variable which is previous dividend paid (lagged) has a minimum and maximum amount of 12 and 90 percent respectively. Which means that, regarding the previous year data, Ethiopian private banks under the study period has paid a maximum of 90 percent of their net income as dividend and paid 12 percent of their income as dividend at the minimum.

Another important thing is the relationship between size of sampled private banks (which is proxied by natural logarithm of total assets) and payment of dividend. The average value of the

natural logarithm of total assets during the study period was 23.24 with the standard deviation of 0.89. The maximum and minimum values were 24.74 and 20.96 respectively.

The mean value of the number of ordinary equity shares issued and outstanding was 8741713 indicating that on average each bank holds 8741713 equity shares issued and outstanding under the period of study. The standard deviation was 1.64e+07, the maximum and minimum shares were 9.21e07 and 227830 respectively.

4.2. Correlation Analysis

The correlation matrix shows that the relationship or association between the dependent and independent variables. Table 4.2 below shows the result of the correlation matrix for the study variables.

Based on the result, the pair wise correlation matrix below portrays that dividend paid had a positive correlation with profitability, liquidity, lagged dividends and stock. Risk and size had a negative correlation with dividend payout. Correlation coefficient that exceeds 0.8 means, there exists a high positive or negative relationship between two variables. As shown in the table 4.2, during the study period there was not found high co linearity between the variables. Which indicates that the absence of multi co linearity problem.

Table 4.2. Correlation Coefficients among study Variables

	Dpo	roa	liq	risk	lagged	size	stock
dpo	1.0000						
roa	0.2995	1.0000					
liq	0.3422	0.3197	1.0000				
risk	-0.2514	-0.0215	-0.1624	1.0000			
lagged	0.4905	0.1719	0.1159	-0.0830	1.0000		
size	-0.0146	-0.1098	-0.1616	-0.3867	-0.1174	1.000	
Stock	0.1794	-0.1279	0.1661	-0.3454	0.0529	0.2092	1.0000

4.3. Econometric Analysis

This part of the study presents the results and discussions of the regression or econometric analysis. So far the study has established a framework of literature and data analysis including descriptive statistics and correlation analysis in order to investigate the determinants of bank dividend payout on sampled private banks in Ethiopia. To shed some light on the determinants of bank dividend payout, linear panel data regression models have been employed. Before running

the regression, the data sets were checked for certain diagnosis tests. Normality, Multi col linearity, heteroschedasticity and autocorrelation tests have been made to fit the Classical Liner Regression Model (CLRM) assumptions and to ensure that the model is applicable.

4.3.1. Test for Heteroschedasticity

If the error term does not have a constant variance, we can say that the assumption of homoschedasticity has been violated. This violation is said to be heteroschedasticity. This study used Breusch-Pagan test to test for existence of heteroschedasticity across the range of explanatory variables.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of dpo

chi2 (1) = 0.06

Prob>chi2 = 0.8111

Source: STATA results from financial statements of sampled banks (2020)

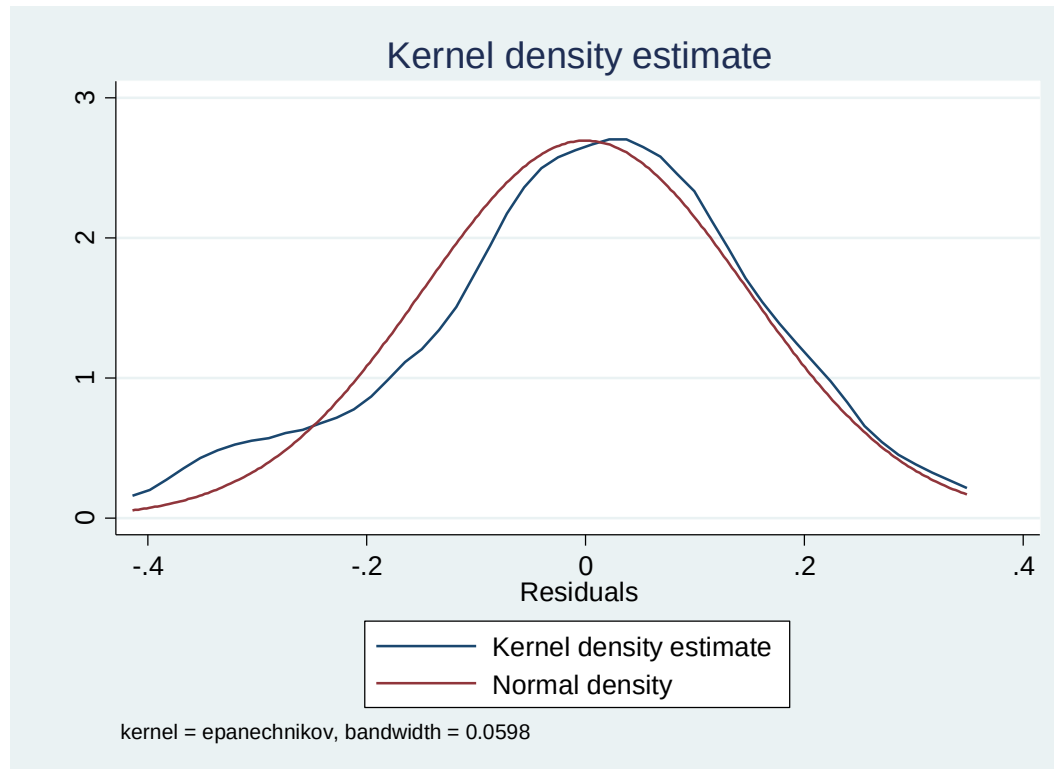
The above STATA result for test of heteroschedasticity revealed that there is absence of heteroschedasticity, Therefore, since the value is greater than 0.05 we have to fail to reject the null hypothesis.

4.3.2. Test for Normality

Normality test was used to determine whether the data set is well modeled by a normal distribution or not, and to compute how likely an underlying random variable is to be normally distributed.

Graphically, the normality of the data can be checked by using the kernel density estimate rule.

Figure 4.1. The kernel density estimate for normality test



Source: Stata results from financial statements of sampled banks (2020)

The above graph witnesses that normality assumption holds and it implies that the inferences made about the population parameters from the sample parameters tend to be valid.

4.3.3. Test for Multi co Linearity

Multi co linearity indicates a linear relationship between or among explanatory variables and which may cause the regression model to be biased (Gujarati, 2004). In order to examine the possible degrees of multi co linearity among the explanatory variables, Variance Inflating Factor (VIF) technique is used to detect co linearity problems and strengthen the analysis. Theoretically, a VIF greater than 10 or the tolerance level ($1/\text{VIF}$) less than 0.10 may suggest that the concerned variable is multi-co linear with others in the model.

Table4.3. Test for multi co linearity

Variable	VIF	1/VIF
Risk	1.36	0.737139
Size	1.30	0.770411
Liq	1.25	0.799504
Stock	1.22	0.822022
Roa	1.19	0.843286
Lagged	1.06	0.940326
Mean VIF	1.23	

Source: stata results from annual financial reports of banks. (2020)

As per the VIF result table above we can see that none of the VIFs were excessively high (VIF greater than 10 or 1/VIF less than 0.1). This result indicates that explanatory variables included in the model were not substantially correlated with each other. Therefore, the model was free from multi co linearity problem.

As per all the tests illustrated above, the employed model was not sensitive to the problems of violation of the CLRM assumption. Generally, the problem of heteroscedasticity, multi co linearity, normality and correlation are not serious problems in panel data methodology since we can minimize their effect on the model with the help of robust estimation techniques in the fixed and random effects regression techniques.

4.4. Regression Results

There are two frequently used estimation models for panel data analysis. These are the Fixed Effect Model (FEM) and the Random Effect Model (REM) (Gujarati, 2004). The FEM assumes that the slope coefficient of the explanatory variables is all identical for all firms. The intercept in the regression model is allowed to differ among individual firms in recognition of the fact that each individual or cross-sectional unit may have some especial characteristics of its own. Fixed effect model (FEM) controls for all time invariant differences between the individuals; so the estimated coefficients of the model can't be biased because of omitted time invariant characteristics. Fixed effect models are designed to study the causes of change within a person or an entity. The fixed effect assumption is that the individual specific effect is correlated with the independent variables.

The REM is sometimes known as the error component model (ECM). In REM, it is assumed that the intercept of an individual unit is a random drawing from a much larger population with a constant mean value. The individual intercept is then expressed as a deviation from this constant mean value or the variation across entities is assumed to be random & uncorrelated with the independent variables included in the model. It solves the problem of fixed effect models by including time invariant variables.

The choice of model in panel data should be based on information about the individual specific components and the exogeneity and endogeneity of the independent variables. If there is exogeneity in the independent variables, random effect model is consistent, efficient and unbiased. However, if there is correlation between the error term and the independent variables, its estimates would be inconsistent and thus fixed effect model would be preferred over random effect. The fixed effect model is always consistent but inefficient compared to random effect. Those properties of the two models lead the researcher to use Hausman test to identify the appropriate model.

The choice of a fixed effect model over a random effect model or vice versa is based on the use of the Hausman test. The Hausmann's test, a model specification test was employed for this study to decide the more appropriate model from the fixed effect model (FEM) and Random Effect Model (REM).

Hausman Test Results for Fixed and Random Effects Model:

Test: Ho: difference in coefficients not systematic

$$\chi^2(5) = (b-B)'[(V_b - V_B)^{-1}](b-B)$$

$$= 21.88$$

$$\text{Prob} > \chi^2 = 0.0006$$

($V_b - V_B$ is not positive definite)

Source: Stata results from financial statements of sampled banks (2020)

The Hausman test showed that the fixed effect method is the preferred regression technique. The STATA result in the above showed that the p-value for the test was less than 0.05(5%) that is 0.0006 and it indicates that fixed effect method was more preferable than the random effect method. Accordingly, the fixed effect regression model was employed to estimate the relationships between the dependent and independent variables.

Table 4.4 below shows the regression results between the dependent and independent variables.

Table 4.4 Regression Result- Fixed Effect Model.

	Coef.	Std. Err.	t	P> t
Roa	4.986724	2.27038	2.20	0.034*
Liq	.3231424	.1352027	2.39	0.022*
Risk	2.047139	2.542894	.81	0.426
Lagged	-.1472829	.1228665	-1.20	0.238
Size	.0670213	.0348933	1.92	0.062**
Stock	-5.51e-10	1.60e-09	-0.34	0.732
-cons	-1.58184	.8295854	-1.91	0.064

No. of observations= 55

R-sq: between=0.5681

R-sq: within =0.4254

Prob> F = 0.0001

F-statistic = 5.31

*, **, indicates significant at 5% and 10% level respectively.

Source: Stata results from financial statements of sampled banks (2020)

From the above table, as predicted, we can see that profitability; liquidity and size have a positive and statistically significant relationship with dividend payout. On the other hand, risk, previous dividend paid and stock were found to be statistically insignificant factors to dividend payout decision in Ethiopian private banks.

The fixed effects R-square within estimator (42.54%) showed that the total variation in the outcome variable was explained by the predictor variables that vary across time within an entity (a bank or each bank) in the model. The F-statistics value (5.31) and the p-value of zero in the regression model attached to the test statistics implies that the null hypothesis that all of the coefficients are jointly zero should be rejected implying that the independent variables in the model were able to explain variations in the dependent variable. Since the prob > F is less than the level of significance (0.05), suggesting that the model is useful to determine the variation in the measure of dividend payout. This test (F) is to see whether the entire coefficient in the model is different than zero.

4.5. Discussion of Results

This part of the chapter discusses the main implications of the results. The analysis is based up on the regression results between the dependent and independent variables as shown in table 4.4 above and the researcher tried to show how the relationship and significances of the explanatory variables with the dependent variable which is dividend payout.

Profitability

Based on the existing literature, this study was hypothesized and predicted that profitable firms are more likely to pay dividends. As predicted, the result of this study shows profitability was statistically significant factor and has a positive relationship with dividend payout at five percent's level of significance. This implies that profitable Ethiopian private banks with relatively stable earnings are often able to predict approximately what its future earnings will be and therefore are more likely to pay out part of their earnings as dividends. This is in line with the signaling theory of the dividend policy. Therefore, the more profitable the bank is, the higher the possibility to pay dividends.

The positive and significant relationship between profitability and dividend payout is well documented in financial literatures (Al-Malkawi (2007), Fama and French (2001), Amidu and Abor (2006), Jeong (2008), Moradi et al. (2012), Al-Kuwari (2009)), Olowe and Moyosore(2014), Yiadom and Agyel (2011). When we see an Ethiopian case, former studies on dividend payout like Belsti(2015), Tadele (2017) also confirms that profitability was a significant variable on dividend payment. A firm's profitability is considered to be an important factor that affects dividend payout. This is because profitable firms are willing to pay higher amounts of dividends and hence a positive relationship is established between firm's profitability and its dividend payments. Sumaiya zaman (2013), Ebenezer, (2013) found that profitability was not significant variable to dividend payout decision and he(Ebenezer) suggests that financial institution may pay dividend not necessarily considering the level of profit but will pay only when the managers think is appropriate to do so. Tewodros in 2011 also conducted his study on the determinants of dividend payout in Ethiopian private commercial banks and found that profitability was not statistically significant; suggesting that industry profitability effect seem to have no influence on the payment of dividends and Tewodros's study was inconsistent with the

previous studies which supported the positive and significant association between firm profitability and dividend payout. However, a year later in 2012, Muhammed carried out a study on the determinants of dividend policy of Insurance companies in Ethiopia and concluded that dividend decisions are relevant and profitability was statistically significant factor which positively influences dividend policy of insurance companies in Ethiopia. Similarly, for this study profitability was found to be a key determinant of corporate dividend payout decisions in Ethiopian banking industry, and supports the previous studies that establish a positive and significant relationship between dividend payout and firm's profitability.

Liquidity

In table 4.7, the result indicates that liquidity was found to be a positive and statistically significant variable at 5% of significance level in determining dividend payout decision. The result of this study reveals that Ethiopian private banks under the study period had necessarily reasoned out their liquidity position to pay dividend.

Chay and Suh (2005) also consider cash flow as a determinant of dividend payments where firms facing high levels of cash flow uncertainty are likely to pay low dividends fearing cash shortfalls in the future. This statement correlates to Brav et al. (2004) and, in their research report; they stated that more than two-third of Chief Financial Officers of dividend-paying firms stated that stability of future cash flow is an important factor affecting dividend payout decisions. On the other hand, Olowe and Moyosore (2011), Gupta and Banga (2010), Ahmed and Javid (2009), Musa (2009), Hellstrom and Inagambaev (2012)) revealed in their studies a positive and significant relationship between firm's liquidity and dividend payment.

When we see previous studies on Ethiopian private banks, Belsti(2015) on his study on factors affecting dividend payout decision, liquidity was found to be statistically significant factor having positive relationship to dividend payout decision.

Generally, a positive and significant result of liquidity indicates that banks having good and stable cash flows are able to pay more dividends compared to banks with unstable cash flow position.

Business Risk

Another variable that hypothesized as a determinant of corporate dividend payout decision in Ethiopia commercial private banks was risk. Risk can be measured using price/earnings ratio or 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 the standard deviation of ROA to measure the variability in earnings of banks in Ethiopia. As per the regression result, risk is not a significant factor in determining dividend payout decision of Ethiopian commercial private banks.

There are previous studies to support the finding of this research. Duha AL-Kuwari (2010) in his study on factors affecting corporate dividend payout decision revealed that business risk was not significant factor on the decision to pay or not to pay dividend. Pornumpai and Phassawan (2013) in their study on factors influencing dividend payout in Thailand also found that risk was not a significant factor in dividend payout decision.

Previous year's dividends

In table 4.7, the result of this study indicates that last year's dividend payout has a negative and insignificant relationship with dividend payout. This implies that Ethiopian private commercial banks under the study period had not seen their previous dividend ratio to pay or not to pay dividend to the current year.

Belsti (2015), also explained that previous dividend payment does not have any influence in determining current year dividend payment in Ethiopian commercial private banks.

Size

Size was hypothesized that it will have a positive and significantly affects dividend payout. As predicted before, this study has found that size is positively and significantly affected the dividend payout decision. Similar studies which found the same result are Elias (2015), Husam-Aldin Nizar Al- Malkawi(2008) and Zaman(2006-2011) , as cited in Elias (2015) Ahmed and javid (2008) and Nureidin (2012) also found similar results like this study. This means that Ethiopian commercial private banks having big size under the study period tend to pay more dividends. This result supports the transaction cost theory of dividend which assumes firm size as a determinant of dividend policy. When a firm size increases the

agency conflict also increases. So, those big firms tend to pay dividend to minimize the agency conflict with the shareholders.

Stock

stock or the number of equity shares issued and outstanding can be used as one influential explanatory variable in prior research works that affect the payment of company dividends and used to measure external control by shareholders since shareholders will vote directors to offer high dividends. This study found that stock (number of outstanding shares issued and outstanding) is not a significant factor of dividend payout decision in Ethiopian commercial private banks and found to be negatively affect dividend payout. Yiadom and Agyie, (2011) also found that stock (ownership) did not have significant effect on dividend payout decision. This result implies that in Ethiopian private banks, stock holders do not influence managers and board of directors to pay dividend. Instead, the board of director of the bank is determining to pay or not to pay dividend for the year.

In overall, the results suggest that profitability, Liquidity and size were found to be significant variables that affect dividend payout decision in the case of Ethiopian private commercial banks. Whereas lagged dividend payment, risk and stock were factors that are insignificant on the dividend payout decision under the study period. If this is correct, the banks cannot decide dividend payout without taking consideration the integral part of business strategies both financial and investment decisions.

Table 4.5 below summarizes the comparison of the test result for factors affecting corporate dividend payout decisions in Ethiopian private commercial banks with the hypothesized expectations. As shows in table 4.5 below, the statistical test result of the variables was consistent with the hypothesis presented under chapter three with the exception of risk, lagged dividend payment and stock which were found to be statistically insignificant variables.

Table 4.5.Comparison of the test results with the expectations

Independent Variables	Expected relationship with DPO	Actual Results	Statistical Test	Significant	Hypothesis Accepted or Rejected
Profitability	+	+	Significant		Accepted
Liquidity	+	+	Significant		Accepted
Risk	-	+	Insignificant		Rejected
Lagged	+	-	Insignificant		Rejected
Size	+	+	Significant		Accepted
Stock	+	-	Insignificant		Rejected

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

Chapter five presents the conclusions which are raised based on the findings obtained in the analysis and discussion part and followed by recommendations based on what the researcher concluded. Finally it ends up by indicating limitations of the study and further research directions.

5.1. Conclusion

This study was conducted to investigate about factors that influencing corporate dividend payout decisions and their relationship to dividend payout in the case of Ethiopian private commercial banks. In order to achieve this objective, the researcher used six literatures driven hypothesis. The study used quantitative research method with the adoption of co relational research design. Panel dataset was constructed from the annual and audited financial statements of Ethiopian private commercial banks from the period of 2014 to 2018. The fixed effect model was used to estimate the regression equation and testing dividend policy. Eleven Ethiopian private commercial banks were included for the study. The study used Profitability, Liquidity, Risk, Lagged dividend paid, Size, and stock (number of equity shares issued and outstanding) as independent variables whereas Dividend payout was the dependent variable.

The results show that there is a positive and statistically significant relationship between dividend payout and the independent variables profitability, liquidity and size. Risk, lagged dividend payment and stock were found to be statistically insignificant factors to dividend payout decision. Lagged dividend and stock have negative relationship with dividend payout. Unlikely, risk has a positive relationship to dividend payout.

The positive and significant relationship between profitability and dividend payout indicates that Ethiopian private commercial banks under the study period are likely to pay dividends to their shareholder if they found to be profitable. It is obvious that currently almost all banks operating in Ethiopia are profitable. And even their profit is increasing year to year.

Another independent variable which is liquidity is found to have a positive and significant relationship with dividend payout and it indicates that Ethiopian private banks under the study period examine their liquidity position before they pay dividend to shareholders.

Size also has a positive and significant relationship with dividend payout. This implies that Ethiopian private commercial banks having big size tend to pay dividend during the study period.

Stock or outstanding number of shares issued and outstanding has negative sign and insignificant factor to dividend payout. This may be as a result of some shareholders preferred to retain the profit of the company for future investment opportunity instead of distributing as a dividend to them.

Lagged dividend payment and risk have no any significant effect in the decision of dividend payment by Ethiopian commercial private banks under the study period. Concerning business risk, it may come from since Ethiopian private banks are not face business risk instead they are profitable year to year.

So, based on the above findings and conclusions, in order to maximize the values of their shareholders, Ethiopian private commercial banks should not decide any dividend payout decisions without taking consideration the integral part of their business strategies including both financial and investment decisions.

5.2. Recommendations

Based on the findings and the conclusion drawn for this study, the researcher has forwarded the following recommendations.

- Board of Directors and Managers of Ethiopian private commercial banks should give special consideration and examine the major determinants of dividend payout decisions which are profitability, liquidity and size upon fixing their dividend payout policy since based on the study those variables are found to be significantly affected the dividend payout decision. Board of directors should apply consistent dividend payout strategy by maximizing their profit and also maintaining sufficient and consistent cash flow position so that they can maximize their shareholder wealth. Managers of Ethiopian private banks should also maintain their branch's profitability and liquidity position by increasing their customer deposit and give adequate loan to their customers in to their day to day business activities. This situation may help them to decide their dividend policy efficiently, effectively and to be flexible enough. And also helps them to maximizing the values of their shareholders and will benefit anyone who has a stake in the bank.
- Shareholders and other new investors who need to invest their money in this industry and expect continuous dividend payment shall invest their money in banks which are most profitable and have adequate liquidity position.
- As per the researcher knowledge, Ethiopian private commercial banks do not make adequate research and investigation before paying yearly dividends. So, since the business is dynamic and always in change, the research and development department of the banks should make adequate and continuous research regarding the determinants of dividend payment.
- Due to time and budget shortage the researcher did not investigate economic variables. Further work is necessary and additional variables especially economic variables like inflation and others should be investigated well.

5.3. Limitation of the study and Further Research Direction

The findings of this study only are generalized to firms similar to financial sectors. Investigating other industries other than banks also needed to determine factors influencing dividend payment in Ethiopian firms as a whole.

Further research could also examine with wider scope and by adding another variable for instance the impact of inflation, board independence, board size, audit type, insider ownership and institutional ownership on dividend payout decisions.

References

- Adesina Olugoke Oladipupo and Peter Okoeguate Ibadin (2013), Does working capital management matter in dividend policy decision? Empirical evidence from Nigeria international journal of finance research vol.4. No.4. pp. 140-145
- Ahmed,H, &Javid. (2009). Dynamics and Determinants of Dividend Policy in Pakistan Evidence from Karachi Stock Exchange Non-Financial Listed Firms. International Research Journal of Finance and Economics.
- Alan, Z. and Hossian, E. (2012). ‘Dividend Policy: A Comparative Study of UK and Bangladesh based Companies,’ Journal of Business and Management, Vol.1, PP 57-67
- Al-Malkawi, HN.(2008). ‘Determinants of corporate dividend policy in Jordan: an application of the Tobit model’. Journal of Economic & Administrative Sciences,Vol. 23, No.2, december pp.44-70.
- Al-Najjar, B., and Hussainey,K. (2009). ‘What Drives Firms’ Capital Structure and Dividend Policy?’ Working Paper.Middlesex University.
- Amarjiti Gill, Nahum Biger and Rajendra Tibrewala (2010), Determinants of dividend payout ratio: evidence from United States. The open business journal, pp.8-14
- Ameer, Rashid(2007), product market competition, regulation and dividend payout policy of malaysia banks, Munich personal Re Pec. Archive.no.8579
- Amidu, M, and Abor, J.(2006). ‘Determinants of dividend payout ratios in Ghana,’ Journal of Risk Finance
- Amidu, M. (2007). How does dividend policy affect performance of the firm on Ghana Stock exchange? Investment Management and Financial Innovations, Vol. 4 (2)
- Azhagaiah and Veeramuthu (2010), the impact of firm size on dividend behavior: a study with reference to corporate firms across industries in India. Managing global transitions. Pp. 49-78
- Baker,H. K, E. & Powell, E., G. (2001). Factors Influencing Dividend Policy Decisions of NASDAQ Firms. The Financial Review, Eastern Finance Association.
- Belisti Jemberie(2015), factors affecting corporate dividend payout decisions (evidence from Ethiopian private commercial banks)
- Berhane,T. (2011). Dividend Policy and Share prices, the case of Private Banks in Ethiopia.(Master Thesis, Addis Ababa University)..
- Bryman, A. & Bell, E. (2007).Business research methods (2nd Ed.). Oxford: Oxford University Press.
- Caroll Howard (2010), liquidity and dividend policy: international evidence. International business research. Vol.3. No.3

- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Method approach*(3rd Ed.).USA: SAGE publication, Inc.
- Chay,B.,J.andSuh ,J.(2005). *Cross-Sectional Determinants of Dividend Payments: International Evidence*. Sungkyunkwan University and Ewha Womans University, Current Draft: August 2005
- Christopher maladjian and rim El Khory(2014), *determinats of dividend policy. An empirical study on the Lebanese listed banks*, international journal of economics and finance vol.6, no.4;2014
- Dr Bahaa.Awad (2015), *determinants of dividend policy in Kuwait stock exchange*, international journal of business and management review vol.3, no.7, and pp.72-78.
- Dr seyed Abbas Hashemi and Fatemeh Zahra Kasahani (2012), *the impact of financial leverage operating cash flow and size of company on the dividend payout policy (case study of Iran)*, interdisciplinary journal of contemporary research in business vol.3. No.10. Pp.264-270
- Duha Al Kuwari, (2009), *Determinants of the Dividend Policy in Emerging Stock Exchanges: The Case of GCC Countries*, PP 38-63
- Ebenezer Agyemang Badu,(2013), *Determinants of Dividend Payout Policy of listed Financial Institutions in Ghana*, Research Journal of Finance and Accounting, ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.7, 2013.
- Elias Mitiku, (2015), *Determinants of dividend payout in Ethiopian private banks. A thesis submitted to the department of accounting and finance, college of business and economics june, 2015.*
- Eugene F, Brigham and Joel F.Houston (2013). *Fundamental of financial management: 8th edition*, pp.492
- Fama, E., & French, K. (2001).Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay.Journal of Financial Economics.
- Gujarati, D. N. (2004).Basic Econometrics.(4th Ed.).McGraw-Hill companies. New York
- Gupta,A., &Banga, C. (2010). *The Determinants of Corporate Dividend Policy Decision*,Vol.37 (2)
- Gusni (2017), *the determinants of dividend policy: a study of financial industry in Indonesia*. Journal kenangan dan perbankan, pp. 562-574
- Hazak, A. (2011). *Dividend Decision Under Distributed Profit Taxation: Investor's Perspective*.Journal of Financial Markets Research, (2)
- Hellstrom, G., & Inagambaev, G. (2012).*Determinants of dividend payout ratios, a study of Swedish Large and Medium Caps*.(Master thesis, UMEA University).

- Ho, H(2003, may), dividend policies in Australia and Japan. *International advance in economic research*,9(2),91-100
- James O.Abiola,(2014), measuring and analyzing the effects of dividend policy in banking profits and growth. *Journal of policy and development studies* vol.9, No.1
- Jensen,G.D.Solberg &T.zorn ,(1992), Simultaneous determination of insider ownership, Debt, and dividend policies, *Journal of financial and quantitative analysis*.
- Jinlan Ni (2008), Institutional ownership and firms dividend policy, corporate ownership and control/volume 5, issue 2. pp. 128-136
- Klaus Gugler, B. BurcinYurtoglu,(2002), Corporate governance and dividend pay-out policy in Germany, Department of Economics, University of Vienna, Bruennerstr. PP 731-758
- Kola, J. (2007).The Influence of the Dividend Policy on the Market Share Price Volatility,Evidence from the Polish Stock Exchange Market.(Master's thesis).
- Kowaleski, O., Stetsyuk, I., & Talavera, O. (2007).Corporate Governance and Dividend Policy in Poland Wharton.Financial Institutions Centre Working Paper No. 07-09.
- LaPorta, R., F.Lopez-de-Silanes, A. Schliefer and Vishny, R. (2000). 'Agency Problems and Dividend Policies Around the World,' *Journal of Finance*, 55(1), February, 1-34.
- Lloyd, W. P., Jahera, J. S., & Page, D., E. (1985). Agency Costs and Dividend Payout Ratios. *Quarterly Journal of Business and Economics* Vol. 24, pp. 19-29.
- Manos, R. (2001).Capital Structure and Dividend policy: Evidence from Emerging markets,(Doctorial Dissertation, University of Birmingham).
- Mehta, A.(2012). An Empirical Analysis of Determinants of Dividend Policy - Evidence from the UAE Companies. *Global Review of Accounting and Finance* Vol. 3 (1)
- Melaku, A.(2012).Determinants of Banks Profitability in Ethiopia, a case of study of private Commercial Banks: Master Thesis, Addis Ababa University ,Ethiopia
- Miller, H., and Modigliani, F.(1961). 'Dividend Policy, Growth, and the Valuation of Shares,' *Journal of Business* Vol. 34, pp. 411-433.
- Moradi, J., Valipour, H., & Mousavi, S. (2012). Determinant Factors of Dividend Policy in Firm Listed in Tehran Stock Exchange (TSE). *American Journal of Scientific Research*, Vol. 45, pp. 22-32
- Muhammed, N. (2012). Determinants of Dividend Policy of Insurance Companies: Master Thesis, Addis Ababa University, Ethiopia
- Musa, F.(2009). The dividend policy of firms quoted on the Nigerian stock exchange: An empirical analysis. *African Journal of Business Management*, Vol.3 (10), pp. 555-566,

- Myers S. and Majluf, N. (1984). 'Corporate Financing and Investment Decisions When Firms have Information that Investors Do not have'. *Journal of Financial Economics*. Vol. 13, pp. 187-221.
- Nasir Nadeem, Adnan Bashir and Muhammead Omer (2018), determinants of dividend policy of banks: evidence from Pakistan, *the Pakistan journal of stock issues* pp. 19-27
- Nikolaos Eriotis (2005), the effect of distributed earnings and size of the firm to its dividend policy: some Greek data. *International business and economics journal* volume 4, Number 1. Pp.67-74
- Nuredin, M (2012), Determinants of dividend policy of insurance companies in Ethiopia, Thesis submitted to Addis Ababa university for partial fulfillment of Masters of Accounting and Finance.
- Pandey, I. M. (2013). *Financial Management* (10th Ed.) India: Vikas Publishing House Pvt Ltd.
- Pornumpai Komrattanapanya and Phassawan Suntrauk, (2013), Factors Influencing Dividend Payout in Thailand: A Tobit Regression Analysis, *International Journal of Accounting and Financial Reporting*, ISSN 2162-3082 2013, Vol. 3, No. 2.
- R. Azahagiah and Sabari Priya, N. (2008), the impact of dividend policy on shareholders' wealth. *International research journal of finance and economics*. pp 181-187.
- Rafique, M. (2012). Factors Affecting Dividend Payout: Evidence from Listed Non-Financial Firms of Karachi Stock Exchange. *Business Management Dynamics* Vol.1,
- Rofus Ayodeji Olowe and Soyoye Lukmon Moyosure (2014). Determinants of dividend payout in the Nigerian Banking Industry *Proceedings of 9th Annual London business research conference*
- Ross N. Dickens, K. Michael Casey and Joseph A. Newman, (2003), Bank dividend policy, explanatory factors, *quarterly journal of business and economics*, 2003, pp3.
- Rozeff, M. S. (1982), Growth, beta and agency cost as determinants of dividend payout ratio. *Journal of financial research* (2).
- Sajid Gul, Sumra Mughal, Syeda Asma and Nabia Shabir (2012), the determinants of corporate dividend policy: an investigation of Pakistani banking industry. *European journal of business and management*. ISSN 2222-1905 (paper) ISSN 2222-2839 (online).
- Saunders, M, Lewis, P., & Thornhill, A. (2009). *research methods for business students* (5th Ed.). Harlow: Pearson Education.
- Sharon .L Kania, (2005), what factors motivate the corporate dividend decision, *Theses, Dissertations & Honors Papers*. Paper 195.

- Sumaiya Zaman (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 20-21 December 2013, BIAM Foundation, Dhaka, and Bangladesh ISBN: 978-1-922069-39-9.
- Tadele Tesfaye, (2017), determinants of dividend policy in Ethiopian private banks, Thesis submitted to Accounting and Finance department for partial fulfillment of masters of Science in Accounting and Finance.
- Tahereh Sanjari and Batool Zareli (2015), Studying of factors influencing corporate dividend policy of financial and non-financial firms on companies listed in Theran stock exchange. Indian journal of fundamental and applied life sciences.ISSN.2231-63459(online)
- Tewodros, K. (2011). Determinants of dividend payout, An Empirical Study on Bank Industry in Ethiopia.Master Thesis, Addis Ababa University, Ethiopia.
- Yiadom, M., Y. and Agyei, K.S., (2011).‘Determinants of Dividend Policy of Banks in Ghana, International Research Journal of Finance and Economics ISSN 1450-2887 Issue 61 (2011).
- Varouj Aivazian a, Laurence Booth a,, Sean Cleary (2003), Dividend policy and the organization of capital markets, journal of multinational financial management, pp 101.121

Appendix A: Fixed Effects Regression Result:

. xtregdporoaliqu risk lagged size Stock, fe

Fixed-effects regression Number of obs = 55

Group variable: banks id Number of groups = 11

R-sq: Obs per group:

Within = 0.4254 min = 5

Between = 0.5681 avg = 5.0

Overall = 0.0182 max = 5

corr(u_i, xb) = -0.3865 F(6,38) = 4.69

dpo	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
roa	4.986724	2.27038	2.20	0.034	.3905798	9.582867
liq	.3231424	.1352027	2.39	0.022	.0494388	.5968461
risk	2.047139	2.542894	0.81	0.426	-3.10068	7.194957
lagged	-.1472829	.1228665	-1.20	0.238	-.3960131	.1014473
size	.0670213	.0348933	1.92	0.062	-.0036164	.137659
Stock	-5.51e-10	1.60e-09	-0.34	0.732	-3.78e-09	2.68e-09
_cons	-1.58184	.8295854	-1.91	0.064	-3.261237	.0975788

Prob> F = 0.0001

Appendix B: Hausman Test for Random and Fixed Effect Regression

. hausmanfe re

Hausman Test Results for Fixed and Random Effects Model:

Test: Ho: difference in coefficients not systematic

$\chi^2(5) = (b-B)'[(V_b - V_B)^{-1}](b-B)$

= 21.88

Prob>chi2 = 0.0006

(V_b-V_B is not positive definit)

Appendix C: Descriptive Statistics

.Summarize dpo roa liq risk lagged size Stock

Variable	Obs	Mean	Std. Dev.	Min	Max
dpo	55	.5058182	.1880769	.12	.9
roa	55	.0307273	.0089968	.02	.05
liq	55	1.301455	.1818263	.85	1.75
risk	55	.0172727	.0087039	0.000001	.03
lagged	55	.5052727	.195905	.12	.9
size	55	23.24236	.8959497	20.96	24.74
Stock	55	8741713	1.64e+07	227830	9.21e+07

Appendix D: Correlation Test Result of Variables

. cor dpo roa liq risk lagged size Stock(obs=55)

	dpo	roa	liq	risk	lagged	Size	Stock
dpo	1.0000						
roa	0.2995	1.0000					
liq	0.3422	0.3197	1.0000				
risk	-0.2514	-0.0215	-0.1624	1.0000			
lagged	0.4905	0.1719	0.1159	-0.0830	1.0000		
size	-0.0146	-0.1098	-0.1616	-0.3867	-0.1174	1.0000	
Stock	0.1794	-0.1279	0.1661	-0.3454	0.0529	0.2092	1.0000

Appendix E: Heteroskedasticity Test: Breusch-Pagan

. esthettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

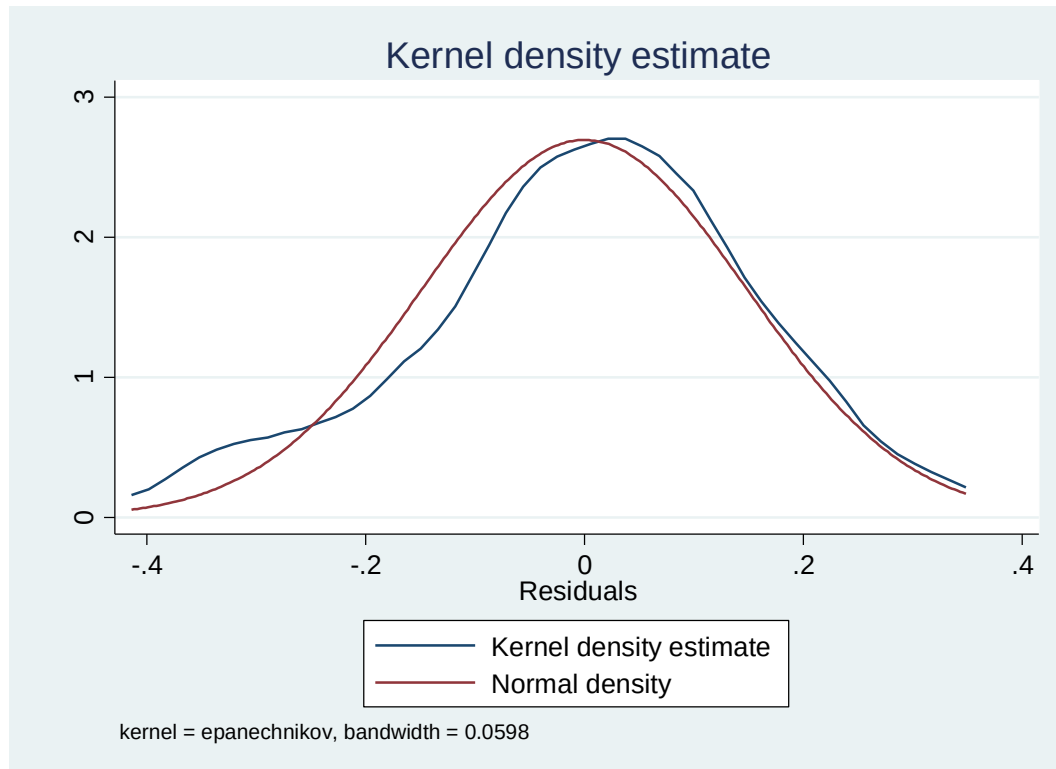
Variables: fitted values of dpo

chi2(1) = 0.06

Prob>chi2 = 0.8111

Appendix F: Normality Test

. kdensity r, normal



Appendix G: Test for Multi co linearity- VIF

. vif

Variable	VIF	1/VIF
risk	1.36	0.737139
size	1.30	0.770411
liq	1.25	0.799504
stock	1.22	0.822022
roa	1.19	0.843286
lagged	1.06	0.940326
Mean VIF	1.23	

Appendix H: Financial Ratios Data

Years	Banks	banks id	Dpo	roa	liq	risk	lagged	size#	Stock"
2014	ABB	1	0.49	0.04	1.24	0.01	0.37	21.88	3304438
2015	ABB	1	0.34	0.02	1.24	0.02	0.49	22.24	4615562
2016	ABB	1	0.51	0.03	1.25	0.03	0.34	22.54	6350456
2017	ABB	1	0.57	0.04	1.25	0.01	0.51	22.88	8281270
2018	ABB	1	0.45	0.03	1.23	0.02	0.57	23.23	1115045
2014	ADIB	2	0.45	0.03	1.33	0.03	0.20	20.96	227830
2015	ADIB	2	0.57	0.04	1.50	0.03	0.45	21.26	313690
2016	ADIB	2	0.52	0.02	1.54	0.03	0.57	21.62	442257
2017	ADIB	2	0.67	0.05	1.56	0.00	0.52	23.96	5629269
2018	ADIB	2	0.61	0.03	1.48	0.02	0.67	22.16	6598772
2014	AIB	3	0.21	0.04	1.25	0.02	0.63	23.82	1301614
2015	AIB	3	0.12	0.03	0.87	0.03	0.21	23.95	1450196
2016	AIB	3	0.14	0.02	1.31	0.02	0.12	24.16	2004759
2017	AIB	3	0.22	0.02	0.85	0.02	0.14	24.46	2452173
2018	AIB	3	0.48	0.04	1.22	0.02	0.22	24.74	2748482
2014	BOA	4	0.72	0.03	1.59	0.03	0.70	23.14	7109016
2015	BOA	4	0.70	0.03	1.55	0.01	0.72	23.33	10337884
2016	BOA	4	0.55	0.02	1.45	0.01	0.70	23.54	28409090
2017	BOA	4	0.55	0.02	1.16	0.01	0.55	23.95	57494623
2018	BOA	4	0.71	0.03	1.58	0.00	0.55	24.19	92111292
2014	BUIB	5	0.51	0.02	1.37	0.02	0.33	21.82	351119
2015	BUIB	5	0.42	0.04	1.26	0.03	0.51	22.23	469256
2016	BUIB	5	0.42	0.03	1.25	0.02	0.42	22.64	544960
2017	BUIB	5	0.59	0.04	1.41	0.01	0.42	23.00	833919
2018	BUIB	5	0.48	0.04	1.40	0.01	0.59	23.29	1102318
2014	DB	6	0.47	0.03	1.34	0.03	0.65	23.81	1063409
2015	DB	6	0.55	0.04	1.25	0.02	0.47	23.93	1237918
2016	DB	6	0.40	0.02	1.35	0.02	0.55	24.07	1492915
2017	DB	6	0.16	0.02	1.27	0.02	0.40	24.27	1928836
2018	DB	6	0.38	0.02	1.30	0.01	0.16	24.54	2160358
2014	LIB	7	0.84	0.05	1.62	0.01	0.45	24.66	16369533
2015	LIB	7	0.35	0.03	1.30	0.03	0.84	22.49	18886301
2016	LIB	7	0.24	0.02	1.27	0.02	0.35	22.82	21795110
2017	LIB	7	0.29	0.02	1.24	0.01	0.24	23.12	34461823
2018	LIB	7	0.59	0.04	1.42	0.02	0.29	23.38	51757086
2014	NIB	8	0.68	0.04	1.09	0.03	0.71	23.09	2194182
2015	NIB	8	0.51	0.03	1.08	0.02	0.68	23.30	2460385
2016	NIB	8	0.65	0.02	1.03	0.02	0.51	23.48	2764953

2017	NIB	8	0.71	0.03	1.02	0.02	0.65	23.77	3289448
2018	NIB	8	0.75	0.04	1.15	0.01	0.71	24.01	3842186
2014	UB	9	0.79	0.02	1.13	0.02	0.72	23.19	8150308
2015	UB	9	0.90	0.04	1.75	0.01	0.79	23.38	9433913
2016	UB	9	0.69	0.03	1.07	0.01	0.90	23.57	10450533
2017	UB	9	0.69	0.02	1.05	0.01	0.69	23.81	14049146
2018	UB	9	0.53	0.02	1.18	0.00	0.69	24.06	16208929
2014	WB	10	0.33	0.03	1.31	0.02	0.31	23.17	1220079
2015	WB	10	0.30	0.03	1.31	0.02	0.33	23.34	1444447
2016	WB	10	0.70	0.02	1.36	0.01	0.30	23.52	1691970
2017	WB	10	0.25	0.03	1.37	0.02	0.70	23.77	1425435
2018	WB	10	0.20	0.03	1.36	0.00	0.26	24.03	2174123
2014	ZB	11	0.38	0.05	1.28	0.02	0.80	21.09	573566
2015	ZB	11	0.63	0.04	1.46	0.03	0.38	23.31	478125
2016	ZB	11	0.56	0.03	1.33	0.01	0.63	22.12	553133
2017	ZB	11	0.57	0.03	1.19	0.01	0.56	23.00	689160
2018	ZB	11	0.73	0.04	1.56	0.01	0.57	23.24	947625