DETERMINANT OF DIVIDEND PAYOUT:

THE ETHIOPIAN PRIVATE BANKS

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

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Abstract

This research is investigating the determinants of dividend payout in Ethiopian private banks. Ten years data from 2007/08 to 2016/17 were collected from National Bank of Ethiopia's reports and banks audited financial statement.Eight private banks are selected. The variables that are used in the study are dividend payout as dependent variable and independent variables are capital adequacy, loan to deposit, leverage, liquidity, growth, size and lagged dividend payout. The collected data were analyzed using panel data regression technique. The finding indicated that among the seven independent variables; lagged dividend payout, leverage and liquidity have no statistical significant impact on dividend payout while loan to deposit, capital adequacy and size have positive and statistically significant impact on dividend payment and growth have negative statistically significant impact on dividend payout. So the board of directors and managers should be able to take the the positive and significant variables that determine the dividend payout in designing and implementing their dividend policy.

Key words: Dividend payout, Liquidity, Firm size, Leverage, Last year dividend and Growth

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List of Acronyms

CLRM – Classical linear regression model

DVPO – Dividend payout

DW – Durbin-Watson

EPS – Earning per share

GRO – Growth

LDVP – Lagged dividend payment

LEV – Leverage

LIQ – Liquidity

CA – Capital adequacy

ROA – Return on asset

SIZ – Size of the bank

FEM- Fixed Effect Model

REM– Random Effect Model

Chapter one: Introduction

1.1 Background of the study

In Ethiopia the service sectors have significant and major role in the growth of the economy. It contributes 47.3 % of the country GDP in the year 2017 to the overall of the economy of the country (Birritu, 2017). Currently there are eighteen banks in the country, two of them are governmental and the rest are private banks (NBE 2016/2017).

The private banking is allowed only for local investors to invest in order to be able to strong and competitive until the government has confidence to compete with foreign banks (proc.592/2008). So the private banking industry increasing in alarming numbers which attract investors with the expectation of higher returns in the form of dividend.

Companies are facing with the problem of how income is distributed in the form of dividend to shareholders or investing back their earning in the company to foster further growth of the business. So the banking industry are concerning about how much earning should be distributed, how stable should be and how should be retained is the major concern of the dividend policy decision.

Many dividend theories have been propounded to give the explanation on how dividend decisions are undertaken and whether it has an influence on the value of the firm.

There are three different approaches; on the side of conservative groups, they believed an increase in dividend payout increases the value of the firm (James,1963) on the side of radical group, they believed a higher dividend payout reduces the value of the firm (Gaham and Dodd, 1934); on the side of

middle of the road group, founded in 1961 by Miller and Modigliani (MM) which claims that the payout policy makes no difference.

The study will investigate the variables which determine the dividend payout of the private banks in Ethiopia.

1.2 Statement of the problem

The Ethiopian economy grows in a continuous track and registering double digit when it adopts and entertaining private investors. For local investors, the government has given a special privilege investing in financial sectors. Awash International Bank S.C is the first private bank started its operation in 1994, and then other banks instantaneously investing in banking industry, currently the private banks reached sixteen.

The private banks are attracting many investors due to its lucrative profits and expecting high and growing continuously dividend. When there are additional shares available for sale by private banks, most of the time all the share holders are buying the shares to maximize their dividend.

The profitability and growth of the private banks should have a dividend policy to determine the dividend payout to the shareholders.

Many theories and models have been adopted to resolve the issues of dividend payout. The first empirical study of the dividend policy was performed by Litner (1956) and discovered that firms have long run target dividend payout ratios and place their attention more on dividend changes than dividend levels. He concluded that firms in the long run should have continuous changes in dividend.

On the other hand (MM, 1961) claims that the payout policy makes no difference. In a theoretical paper MM showed the irrelevance of dividend decision on the environment where there is no tax, transaction cost, or other market imperfection.

Based on the papers of MM and many researchers have shown an interest in investigating how the independent variables that determine the dividend decision.

Other researchers also by using different methodologies, variables that affects the dividend policy and research techniques have conclude their own results. Amitabh S.Dutta (2009), Felix Babatunde (2015) (Hashim Zameer, 2013) found that last year dividend have positive impact on dividend payment. Others researchers also used different variables which affects the dividend policy, such as (Hashim Zameer, 2013), Size, growth and capital adequacy do not have any significant impact on the dividend payout, however (Khoury, 2014) found that growth have a negative relationship with dividend payout, but size and capital adequacy have positively related with dividend payout.

Most of the researches are done in the developed countries where the banking industries have a significant role on the overall economy of the world. Since they used different variables which affects the dividend policy with the help of empirically investigating.

In Ethiopia, the first research is done by Thewodrose Kinfe (2011), found dividend payments related strongly and directly to firm size and lagged dividend per share but negatively to the liquidity ratio.

In the existing business environmental the banking industry flourished and their development sustainable continuously. So investors have more confidence in

investing in the banking industries, to get their return on the investment in the near and short period of time.

The purpose of this study is to investigate the determinant factors of dividend policy in the private banking industry by taking additional endogenous variables and including more banks in the study.

1.3 Objective of the study

1.3.1 General objectives

The general objective of the study is

- To evaluate the determinants of Dividend payout of Ethiopian private Banks

1.3.2 Specific objectives

In order to ascertain the objectives of the study, the determinant of explanatory variables are going to be tested

- To determine whether last year dividend is a determinant factor of dividend payout
- To evaluate the relationship between liquidity and dividend payout
- To determine the impact of leverage on dividend payout
- To evaluate the relationship of growth on dividend payout
- To examine the impact of size on dividend payout
- To evaluate the impact of capital adequacy on dividend policy
- To examine the relationship between loan to deposit with dividend payout

1.4 Hypothesis Formulation

In many quantitative proposals, writers use research questions. However, a more formal statement of research employs hypotheses. These hypotheses are predictions about the outcome of the results, and they may be written as alternative hypotheses specifying the exact results to be expected (more or less, higher or lower of something). They also may be stated in the null form, indicating no expected difference or no relationship between groups on a dependent variable as stated by (Creswell 2009).

The research is going to identify possible solutions by formulating hypothesis for determinant factors which have an effect on dividend policy.

Therefore, the study develops the following hypotheses based on null hypothesis form.

- H1= There is negative and significant relationship between leverage dividend payout.
- H2= There is negative and significant relationship between liquidity and dividend payout.
- H3= There is negative and significant relationship between growth and dividend payout.
- H4= There is positive and significant relationship between last year dividend and dividend payout.
- H5=There is negative and significant relationship between size and dividend payout.
- H6= There is positive and significant impact capital adequacy on dividend policy

- H7= There is positive and significant impact loan to deposit on dividend policy

1.5 Scope of the study

This study basically attempts to examine some of the features that determine the behavior of firms' dividend payouts ratio in private banks in Ethiopia. To accomplish this objective, the annual reports for the period 2007/08-2016/17 were analyzed. In addition, the study considered a total of eight banks listed in the National Bank of Ethiopia. The choice of the banks' arises based on the the data that covers ten years financial data.

1.6 Limitation of the study

In the study of determinant dividend payout of private banks, the data are collected for those who have financial statment consecutively for the maximum of ten years. So the private banks that are included in the study are half of them have financial data within the indicated period of time.

1.7 Organization of the study

This study is organized in to into five chapters:

Chapter two explains Theoretical Framework, Dividend policy and theory, Empirical Evidence, Gaps in literatures and Conceptual framework. Chapter 3: Presents the research design, Data collection, Method of data analysis and model specification. Chapter 4 discusses the result and discussion of findings, Empirical quantitative results based on Panel data model presents and analyze and Summary of the analysis and finally Chapter 5 concludes the study and gives possible recommendation which is vital for policy implications.

Chapter Two: Literature Review

2.1 Introduction

This chapter focuses on different theories of dividend payout, provide an analysis of dividend policies as well as provide a detailed review of empirical studies on determinants of dividend payout. Finally, the chapter will give a summary on literature review.

As corporate finance reminds us, there are two operational decisions that a finance manager is faced with: capital budgeting and financing decisions.

Capital budgeting decisions are those which are concerned with the assets that a firm must acquire, while financing decisions focus on how to finance these assets. When a company starts generating profits, another decision may be raised: whether to distribute a portion of the earnings to the shareholders or reinvest in the business (Al-Malkawi, 2008).

Dividend policy refers to the "distribution of cash to shareholders over time". As the level of equity retained in the company is affected by dividend decisions, financial managers are very careful in choosing the dividend policy. Dividend payouts influence the firm's value and most importantly, the wealth of the shareholders (Lease et al, 2000).

Over the years, dividend policy is one of the controversial topics among financial economists- although many studies have been carried out to solve the dividend puzzle, it still remains unsolved. Due to the extensive range of debate about dividend policy, a significant amount of literature grows every day.

This chapter attempts to review literatures on corporate dividends policy and those theoretical models summarized here will be the basis of the hypotheses of the current study.

2.2 Theoretical Litreature

2.2.1 Meaning, Forms and Stability of Dividend

Dividend is a payment made out of a firm's earnings to its owners, in the form of either cash or stock. (Ross, 2002). Such payments can be made in cash or by issuing of additional shares as a dividend (Brealey & Myers, 2003). It is a distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. Companies that are listed in the stock exchange are usually obligated to pay out dividends on a quarterly or semiannual basis. The semiannual or quarterly payment is referred to as the interim dividend. The final payment, which is usually paid at the end of the financial year of the company, is known as the final dividend. Dividends are normally paid after the corporate tax has been deducted.

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

Most companies pay a regular cash dividend each quarter, but occasionally this regular dividend is supplemented by a one-off extra or special dividend (Brickley, 1985). Dividends are not always in the form of cash. Frequently companies also declare stock dividends. That means it sends each shareholder some extra shares for every shares currently owned. A stock dividend is very much like a stock split. Both stock dividends and splits increase the number of

shares, but the company's assets, profits, and total value are unaffected. Eventually both reduce value per share. The distinction between the two is technical. A stock dividend is shown in the accounts as a transfer from retained earnings to equity capital, whereas a split is shown as a reduction in the par value of each share

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

2.2.2 History of Corporate Dividend Policy

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

in Amsterdam and were gradually replaced by shares of ownership. It is worth mentioning that even then many investors would buy shares from more than one captain to diversify the risk associated with this type of business. At the end of each voyage, the enterprise liquidation of the venture ensured a distribution of the profits to owners and helped to reduce the possibilities of fraudulent practice by captains. However, as the profitability of these ventures was established and became more regular, the process of liquidation of the assets at the conclusion of each voyage became increasingly inconvenient and costly. The successes of the ventures increased their credibility and shareholders became more confident in their management (captains), and this was accomplished by, among other things, the payment of "generous dividends". As a result, these companies began trading as going concern entities, and distributing only the profits rather than the entire invested capital.

The ownership structure of shipping firms gradually evolved into a joint stock company form of business. But it was chartered trading firms more generally that adopted the joint stock form. (Williston, 1800). In 1613, the British East India Company issued its first joint stock shares with a nominal value. "No distinction was made, however, between capital and profit". In the seventeenth century, the success of this type of trading company seemed poised to allow the spread of this form of business organization to include other activities such as mining, banking, clothing, and utilities. (Kindleberger, 1978) Indeed, in the early 1700's, excitement about the possibilities of expanded trade and the corporate form saw a speculative bubble form, which collapsed spectacularly when the South Sea Company went into bankruptcy. In the early stages of corporate history, managers realized the importance of high and stable dividend payments. In some ways, this was due to the analogy investors made with the other form of financial security then traded, namely government bonds.

In addition to the importance placed by investors on dividend stability, another issue of modern corporate dividend policy to emerge early in the nineteenth century was that dividends came to be seen as an important form of information. (Faulkner, 1924)The scarcity and unreliability of financial data often resulted in investors making their assessments of corporations through their dividend payments rather than reported earnings. In short, investors were often faced with inaccurate information about the performance of a firm, and used dividend policy as a way of gauging what management's views about future performance might be. Consequently, an increase in divided payments tended to be reflected in rising stock prices. As corporations became aware of this phenomenon, it raised the possibility that managers of companies could use dividends to signal strong earnings prospects and/or to support a company's share price because investors may read dividend announcements as a proxy for earnings growth (Al-Malkawi, 2010).

2.3 Dividend policy

A dividend policy is one of the action plans whenever the dividend decisions are going to be decided to distribute to the shareholders. It is a base line how much should be distributed the earning to the shareholders and how much earning should be reinvested.

So each company uses different type of dividend policy which relates to the main objectives and goal of the firm. The main dividend policies are described as follows

2.3.1 Residual Policy

Is a theory which firms are going to pay dividend from the firms retained earnings. After all the projects with positive net present value (NPV) financed.

This theory assumes that managers are not worried about the payment of dividend rather they are investing it in the firm. So managers believe that this policy will associate with high retention which contributes to the growth of the company (Preinreich,1932).

According to this policy the dividend to be distributed is fluctuating from year to year, so investors are not certain for their dividend to be distributed.

2.3.2 Constant payout residual dividend policy

On this type of policy, firms are going to pay dividends a fixed percentage of its earning to the shareholders each year. When it is computed dividend payout ratio, dividend per share divided by firm earning per share. So when the firm earning is growing, the dividend payout also directly increases and vice versa even non existence of dividend payments. So most companies do not use choose this kind of policy because of fluctuating or the uncertainty of dividend payout **(**Walter, 1956).

2.3.3 Smooth residual dividend policy

Many firms adopt this type of policy in the determination of their dividend payment. In such kind of policy firms are paying dividend in a fixed amount to the shareholder. Once they declare the dividend, it is not going to be reversed. So firms are increasing dividend only when they are sure that firms earning increases (Kale et.al, 1990).

2.3.4 Small quarterly dividend with annual bonus

Some firms chose this type of policy. In this type of policy firms pay low regular dividends, if the earning increases than normal earning then firms pay additional dividend designated as extra or special dividends. By designating the additional amount of dividends as special dividends, firms avoid giving investor

false hope. This type of policy is chosen by those firms who have temporary shifts in their earnings (Wilbur, 1932)

2.4 Dividend theories

In the dividend policy there are two opposing school of thought. (MM,1982) thought (dividend irrelevance) holds that whether the firms pay dividend or not is irrelevant on determining the stock price and market value of the firm.

The other school of thought (dividend relevance) have the opposing side holds that firms who pay periodic dividend payment have high stock price and high firm value James Walter (1963).

These two opposing school of thought have contributed a lot of empirical and theoretical research. This section analyzes theories about dividend policy including dividend irrelevance hypothesis and relevancy theories. Relevant theories such as bird- In-hand, life cycle, agency theory, and signaling theory.

Researcher are pointed out that there are contradictory theories about dividend decision on firms.

- Some researchers are stating that raising the dividend payout influence and increase the firm's value(birds in hand theory)
- (Husam, 2005) On the other hand other researchers argue that high dividend payments have a reverse impact on the value of the firm (tax preference theories)
- The third approach is dividend payment which is dividend irrelevance theories (MM, 1961)

2.4.1 The life cycle theory

The determination of dividend and the dividend policy are changing depending on the time and the financial demand at a particular stage. By implication, firms at early stage of growth are likely to return the earning for expansion purpose, there by paying lesser dividend than older firms. More matured and older firms are likely to pay more dividends as the lifecycle reaches the tip of the declining stage (Grullon et.al, 2002).

2.4.2 Bird-in-hand theory

(Gordon, 1963) argues that cash dividend received now reduces the risk associated with uncertainty of future income (deferred income) in the form of capital gain. Investors are reluctant to purchase shares of companies who have continuous dividend payments track rather than those who retain their earning for growth and expansion.

2.4.3 Signaling theory

(Ross 1977) created a theoretical model had its root from the information asymmetry existing between managers as fund users and shareholders as fund provider. Managers have an access to more information relating to the value of the firm's asset than outside agents and investors. Therefore managers seek to use dividend payout policies to signal to the shareholder about the financial performance of the firms.

2.4.4 Agency theory/free cash flow theory

The concept of agency theory starts from agency problems and agency costs. Agency problem refers to the problem arise from managers (principals) and the agent (shareholder). The main function of managers is to run the business efficiently and effectively to maximize the wealth of the shareholders.

(Jensen,1982) the problem of the agent or managers arise when managers have excess cash flow and investing in the low or negative NPV projects and misuse the cash for their personal purpose. Shareholders have to regulate and monitor managers to reduce the misbehaving of the agents. So shareholders are incurring costs for monitoring managers or agents known as agent costs.

In order to reduce the agency cost, managers should have to pay dividend and minimizing the cash that are found in the hands to reduce misuse of the excess cash.

Managers are forced to finance their new projects from external financing rather than from internal financing.

2.5 Empirical determinant of dividend payout

A lot of empirical studies have been undertaken on the determinants of dividend payout variables. Depending on the nature of the industry, the level of economic status and the existence of stock market have come up, even by using the same independent variables and applying the same analysis techniques, with different results.

The harder we look at the dividend picture the more it seems like a puzzle, with pieces that just do not fit together (Black, 1976). Even (Brealey and Myers 2005) said that dividend policy as one of the top ten most difficult unsolved problems in financial economics.

2.5.1 Leverage

(Olubukunola, 2013) his empirical findings from the regression analysis shows that the relationship between financial leverage (expressed in terms of debt-equity ratio) and the dividend payout of listed firms in Nigeria indicate that there is a significant inverse relationship.

(Augustina & Hermanato, 2014) conducted the study in Indonesia, by using panel data regression analysis finds that financial leverage and dividend payout have an inverse significant relationship between financial leverage and dividend payout relationship. However (Mahira, May 2012) was conducting the study on non financial firms listed on Karachi stock exchange, by using multivariate regression analysis found that Financial Leverage were found to be insignificant in dividend policy. (Thewodros, 2011) the study conducted on Ethiopian banking industry with the help of regression analyses and revealed that leverage does not have relationship with dividend payout. (Simegnew, 2013)the research is done in Ethiopian banking industry covering the period of data 2002-2011 and found that leverage have no statistically significant impact on dividend policy (Amitab & Charu, 2010) Conducted their study in Indian industry; those who have continuous cash dividend payment in the period of 2001-2007. The data analysis is done with the help of a two step multivariate regression analysis and found that leverage have a significant inverse relationship with dividend policy.

2.5.2. size

(Olubukunola, 2013) there is a significant positive relationship between the size of firms and the dividend payout decisions. (Inyiama Ethel, 2015) Using OLS and the dynamic panel regressions analysis, it was found that the dividend payout policies are positively affected by the firm size. (Mahira, May 2012), (Augustina & Hermanato, 2014) also conclude that Firm's Size had significant positive relationship with Dividend Payout. (Elias, 2015) He conducted his study on Ethiopian private banks covering the period from 2010-2014 and found that firm size has a negative and statistically significant influence on dividend policy but (Thewodros, 2011) he conducted his study in the banking

industry in Ethiopia and showed that firm size have positive and statistically significant impact on dividend payout.

2.5.3. Liquidity

A lot of researches have been done on the impact of liquidity as one factor of dividend policy and come up with different results. (Agyemang, 2013) He showed that liquidity has positive and statistically significant in dividend payments. (Felix, 2015) This study conducted on banking industry in Nigeria and the result showed that liquidity were negatively and statistically significantly influence the dividend policy. (Augustina & Hermanato, 2014) the research was conducted on companies listed on Jakarta exchange market in 2009 and found Liquidity had an influence on dividend yield positively and significantly. (Thewodros, 2011) Liquidity is statistically negatively significant in the payment of dividend. (Amitab & Charu, 2010) the result of their researches shows, liquidity has a strong positive relationship with dividend payout. (Pornumpai, 2013) The factors that influence the dividend payout of all firms listed in the Stock Exchange of Thailand (SET) during year 2006 to 2010. Using the Tobit regression analysis, liquidity has insignificant relationship with dividend payment. (Simegnew, 2013) He conducted the study in Ethiopian banking industry and came up with the result of liquidity have a negative impact on dividend payment

2.5.4. Previous dividend

(Inyiama Ethel, 2015), (Jone Theis, 2009), (Felix Babtunde Dada, 2015), (Thewodros, 2011), (Simegnew, 2013) and (Elias, 2015) have found that previous or last year dividend have positive relationship with dividend payout. So different researchers come up on the independent variable previous dividend payment by using different statistical techniques, different years of

data and in different economical condition whether developed or developing countries even in different industries arrive on the same result of positively and statistically significant related with dividend policy.

2.5.5. Capital adequacy

(Ross N., 2002) the data are taken from morning star's stock tools July CD from 1998-2000 by identifying 677 banking firms. The result of the research shows that capital adequacy which is explained by earning volatility has a significant and inverse relationship with dividend policy. (Inyiama Ethel, 2015) found that capital adequacy has a positive relationship with dividend payout. (Lee, 2014) the study was conducted on Korean banks by using multiple regression analysis. In his findings showed that safer banks pay more dividend than those who are risky. (Elias, 2015) He conducted his study on Ethiopian banking industry and his finding showed that capital adequacy have a positive relationship with dividend policy. (Pornumpai, 2013) He revealed that capital adequacy have insignificant effect on determination of dividend payment.

2.5.6. Growth

(Inyiama Ethel, 2015) He found that growth has a negative impact on the determinant of dividend policy. (Agyemang, 2013) the study conducted on financial institution in Ghana and found that growth positively affects dividend payment but the effect of growth on the dividend payout is statistically insignificant. (Mahira, May 2012), (Thewodros, 2011) They have reached on the conclusion that growth have insignificant impact on the determinant of dividend payout. (Amitabh S.Dutta, 2009) in his research conclude that growth have a positive relationship with dividend payout, this indicates that shareholders have shown interest in getting dividend when revenue growth, so managers used as an instrument to satisfy their bosses. (Pornumpai, 2013)

Growth is negatively related to dividend payout, indicating that sales growth can send the signal regarding the future outlook of firms. Firms decide not to pay the dividend when they want to keep earnings into future project investment to sustain sales growth in the long-run.

2.6 Gaps in literatures

Previous studies conducted on the determinants of dividend payout arrived on different results by using almost the same independent variables. Most of the studies are done in developed countries. Even in those developed countries many researchers conducted in the determinants of dividend policy in each industry level and in the existing vibrant stock market exchange. Even if they use maximum numbers of independent variables, which determine the dividend payout, they come up in different outcome of theirs studies. Even if there is no stock exchange market in our country, there are independent variables which can be utilized in the context of the Ethiopian existing situation.

In Ethiopia the determinant of dividend policy was conducted specifically in the banking industry by (Thewodros, 2011) (Simegnew, 2013) and (Elias, 2015) as follows.

(Thewodros, 2011) had taken the financial data from the period 2006-2010, and used independent variables profitability, liquidity, leverage, firm size, growth and lagged dividend. (Simegnew, 2013) He had taken the financial data from the period 2002-2011 and used independent variables profitability, liquidity, leverage and lagged dividend which affects the dividend policy. Finally (Elias, 2015) used financial data from 2010-2014, and taking better independent variables from previous studies such as previous dividend, profitability, liquidity, leverage, growth, size and risk.

(Elias, 2015) used profitability minus legal reserve in the place of profitability as an independent variable which determine the dividend policy. The National Bank of Ethiopia demands banks to aside some portion of their profit as a legal reserve, which is applicable for all the banking industries in the country, so creating unknown variable and taking the variable as equivalent to profitability is not shown in any research and do not concide with the stated hyphothesis.

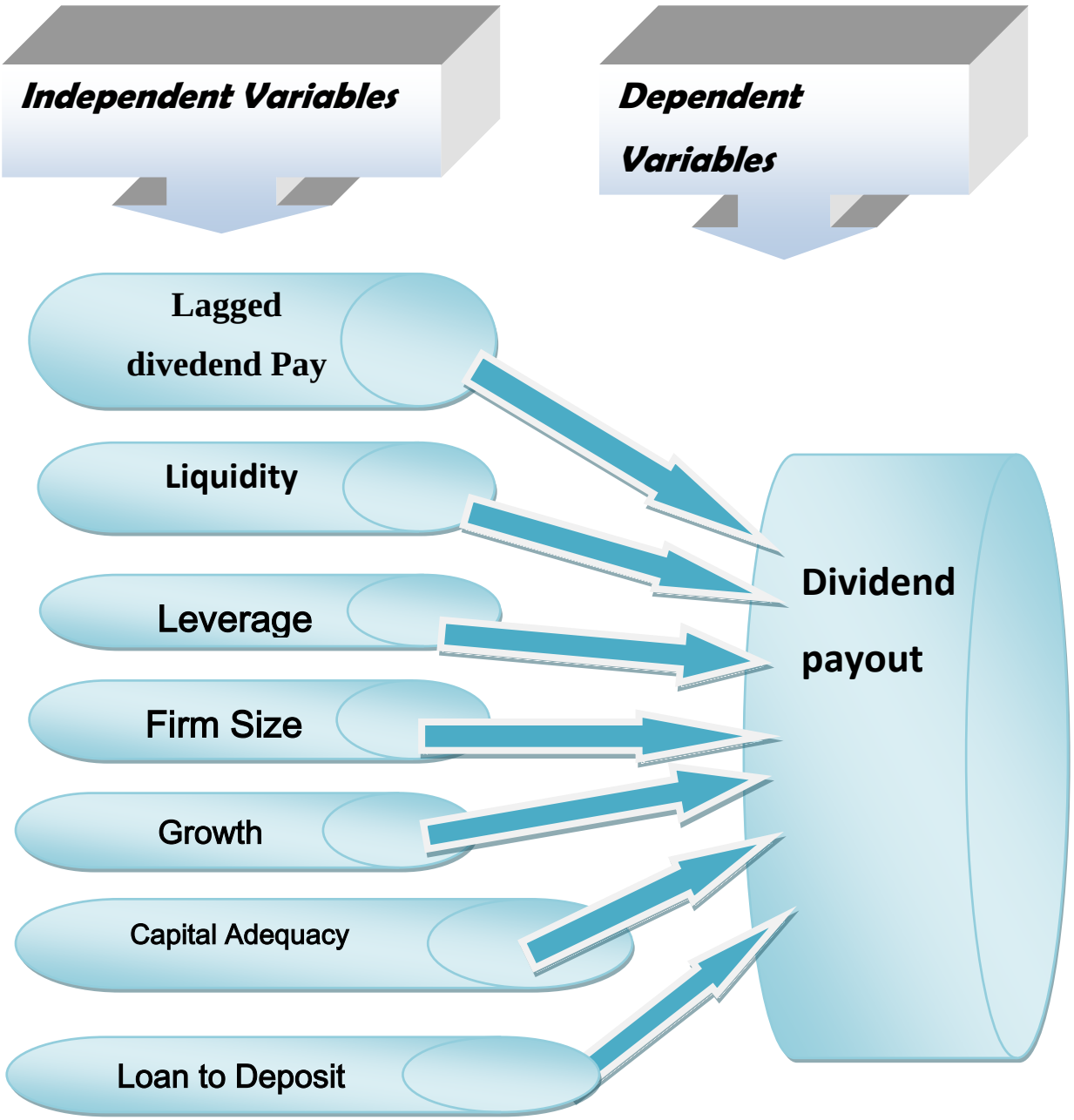
By taking the common independent variables undertaken by the researchers, they arrive on different results except on lagged dividend payment. Therefore the number and the nature of the banks; the period that covers the study; the number and the type of independent variable the type of regression used in their research have some limitation on the results.

So in my research the data to be taken under the study cover the period from 2007/08 – 2016/17 which is ten years data of the annual financial statement, in addition capital adequacy and loan and advance to deposit are additional the independent variables which are included and for data analysis panel data regression is used in my research.

2.7 Conceptual framework

The determinant of dividend payout had been done a lot of research by using different independent variables which are depending on the nature of the industry, the economic situation of the country and other related factors found different results. Some of the independent variables framework is compiled as shown below.

Figure 3.1.


Independent Variables
Dependent Variables
Lagged divedend Pay
Liquidity
Leverage
Firm Size
Growth
Capital Adequacy
Loan to Deposit
Dividend payout

Definition and Measurement of Variables

Dependent variable

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

Independent Variables

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

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

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

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

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

Loan-Deposit Ratio

This ratio is a bank specific variable which may influence dividend policy as it has an impact on the liquidity of a bank. The ratio shows to what extent is the

bank loans and advances are met with the deposit liabilities of the bank. A high value of this ratio may negatively influence dividend policy. In this study, loan-deposit ratio (LTD) is defined as Loan and advances over total deposit liabilities.

Capital Adequacy

Capital adequacy (CA) is a specialized ratio used by banks to determine the adequacy of their capital keeping in view their risk exposures. Banking regulators require a minimum capital adequacy ratio so as to provide the banks with a cushion to absorb losses before they become insolvent. This improves the stability in the financial markets and protects deposit holders. A bank with higher capital to asset ratios is considered relatively less risky and less profitable compared to other banks or institutions with lower ratios while a bank with a low capital ratio is riskier and more profitable in comparison with other well capitalized financial institutions. Thus, a negative association between capital and profits (and, thus, dividends) is expected (Athanasoglou, Delis, & and Staikouras, 2006) ; (Wanzenried & Dietrich, 2009)(Flamini & Schumacher, 2009); (Berger, 1995b). Capital adequacy ratio is determined by dividing the sum of tier 1and tier 2 to Risk weighted Asset.

Chapter Three: Research design and methodology

3.1 Research design

The primary objective of the study is to determine the variables that have an impact in the determination of dividend payout. In order to see the impact of determinants of dividend policy in the Ethiopian private banks, explanatory research type conducted with the help of utilizing with a quantitative method data approach to determine and evaluate the casual relationship between the independent and dependent variables that is going to be tested.

3.2 Study population and sample selection

The study covers the whole banking industry whether they are governmental or private banks in the Ethiopian territory which are established for the purpose of profit motives. There are eighteen commercial banks in Ethiopia which are established for the purpose of profit making. Out of these two of them are governmental banks.

Among the private banks, some of them have been found in the infant stages that are not to be considered in the study. So purposive sampling is a suitable technique to conduct the research to get sufficient data on dividend payment, the study is covering the period from 2007/08- 2016/17.

The selected banks which are going to be included in this study are: Awash international bank, Bank of Abyssinia, Cooperative Bank of Oromia, Dashen Bank, Lion International Bank, Nib International Bank, United bank, and Wegagen bank

3.3 Data and data collection methods

The paper is primarily going to use secondary data from published and audited financial statements of the banks, annual report of National bank of Ethiopia.

3.4 Method of data analysis

In order to analyze the data that is obtained from the audited financial reports from banks and annual report of National bank of Ethiopia; both descriptive statistics which is used to describe the variables and inferential statistics were employed with the help of panel data analysis. Panel data regression models are selected because by combining time series and cross-section observations, panel data gives more degree of freedom and more efficiency. In addition to this panel data can better detect and measure effects that simply cannot be observed in pure time series data. By making data available for several thousand units, panel data can minimize the bias that might result if we aggregate individuals or firms in to broad aggregates (Gujarati, 2004).

3.5 Model Assumption and Specification

3.5.1 Assumption

Similarly to previous studies, a linear regression is used to capture the effect of various factors on banks' dividend payout ratio, as follows:

$$y = \alpha + \beta_{it}\, x + e_{it}$$

Where: y represents the dependent variable, which is the firm's dividend payout ratio (DVPO);

X contains the set of explanatory variables in the model mentioned above, which are LIQ, GRO, SIZ, LEV, CA, LTD and LDVP;

e_{it} is the disturbance term;

α is taken to be constant over time t and specific to the individual cross-sectional unit I;

i and t denote the cross-sectional and time-series dimension respectively;

All tests necessary for the empirical study will be performed using E-views

CLRM Assumptions

To maintain the data validity and robustness of the regressed result of the research, the basic classical linear regression model (CLRM) assumptions must be tested for identifying any misspecification and correcting them so as to augment the research quality.

There are seven CLRM assumptions that need to be satisfied and that are tested and be satisfied in this study, which are:

- errors equal zero mean
- test stationarity, normality,
- homoscedasticity
- autocorrelation
- multicollinearity and
- linearity tests.

Assumption 1: The Errors Have Zero Mean (E (e) = 0)

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

Assumption 2: The Normality Test

The normality assumption assumes that the errors of prediction are normally distributed.

Assumption 3: The Homoscedasticity Test

To be homoscedasticity, means whether the variance of the error is constant. Othrwise it becomes hetroscedasity.

Assumption 4: The Autocorrelation Test

The assumption is the covariance between the error terms over time (cross sectionally)is zero.

In the presence of residuals autocorrelation, statistical inferences can be misleading.

Assumption 5: The Multicollinearity Test

Multicollinearity refers to the situation in which independent variables are highly correlated; resulting in a paradoxical effect, whereby the regression model fits the data well, but none of the independent variables has a significant impact in predicting the dependent variable (Gujarati, 2004). Among several ways of multicollinearity tests, Pearson coefficient of correlation between variables is used to detect any problem.

Assumption 6: Linearity Test

Finally, linearity is usually most evident in a plot of the observed versus predicted values or a plot of residuals versus predicted values.

Choice of Regression

If the results indicate that all CRLM assumptions are not violated, the ordinary least square regression can be safely applied.

3.5.2 Model specification

The model that will be used in the study is the following econometrics model.

Model I: DVPO = f (LIQ, LEV, LDVP, GRO, SIZ, CA, LTD)

$$DVPO_{i,t} = \alpha i + \beta 1\ LIQ_{i,t} + \beta 2\ LEV_{i,t} + \beta 3\ LDVP_{i,t} + \beta 4\ GRO_{i,t} + \beta 5\ SIZ_{i,t} + \beta 6\ CA_{i,t} + \beta 7\ LTD\epsilon_{i,t} + e_{it}$$

Where,

DVPO = Dividend payout

LIQ = Liquidity

LEV = Leverage

LDVP = lagged dividend paid

GRO = Growth

SIZ = size of the banks

CA = Capital adequacy

LTD= Loan and Advances to Deposit

Variables description and expected sign

Table 3.1

variables	Symbol	description	Expected sign
Dividend payout	DVPO	Dividend/net profit	Not available
Leverage	LEV	Total debt/total asset	-
Size	SIZ	Natural logarithm of total asset	-
Growth	GRO	[current revenue-previous revenue]/previous revenue	-
Capital adequacy	CA	Capital/total asset	+
Liquidity	LIQ	Current liability /current asset	-
Loan to deposit	LTD	Total loan and advances to Total Deposit	+

Lagged dividend	LDVP	Last year dividend payout	+

Chapter Four: Results and Discussions

4.1 Descriptive Result

Table 4.1 shows the descriptive statistics of dependent and independent variables for eight banks for the period covering from 2007/08 to 2016/17 for 80 observation. In the the table the mean , median, standard deviation, number of observation, minimum and maximum for the dependent and independent variables which are used in the research

Date: 12/23/17 Time: 11:37
Sample: 2008 2017

	DVPO	CA	GRO	LDVP	LEV	LIQ	LTD	SIZ
Mean	0.565	0.174	0.396	2.009	0.851	0.595	0.606	3.943
Median	0.667	0.162	0.286	2.189	0.855	0.604	0.604	3.958
Maximum	0.981	0.317	4.974	2.769	0.914	0.703	0.823	4.623
Minimum	0.000	0.104	0.009	0.000	0.772	0.422	0.440	2.979
Std. Dev.	0.243	0.044	0.582	0.632	0.038	0.068	0.085	0.330
Observations	80	80	80	80	80	80	80	80

The descriptive statistics for eighty observation shows that the data is normally distributed. The data contains ten years data from 2007/08 up to 2016/17, seven independent variables and one dependent variable.

As it is shown on the above table the mean value shows 56.5% of their income paid for dividend payout in the private banking industry, they distribute their income to their shareholders in the form of dividend with the variability ups and down between 98% and 0% respectively.

In the descriptive statistics table capital adequacy shows 17% of the total risk weighted asset which means capital has taken a share of 17% of the risk weighted asset and the banking industry is above the National Bank of Ethiopia minimum criteria 10% equity to all banks to maintain in their capital structure .

Dividend paid by private banks has grown from the previous dividend 2 times with variability of 2.7 times. Shareholders have an anticipation of getting more dividends which is based on previous dividend.

The growth rate shows that on average Ethiopian private banks revenue have increased in the last ten years from 2007/08 to 2016/17 by 40% with a variability of 49.7 % ups. The most grown banks have managed to increase their revenue by 49.7 %. This result indicates that Ethiopian banking industry is in a rapid growth stage at least in terms of revenue.

In the leverage ratio which is the debt to total asset shows how much the debt has a share from the asset and the rest from capital. As we can see from the table debt has a composition of 85% of the total asset and the owner's equity has only a share of 15%, with variability of ups and down 91% and 77% respectively.

In the banking industry the liquidity concept is a little different from other business sectors. They collect money from depositors but stays for the short

term period and they give as a loan to their customers for short term or long term. So receiving money from the public in different deposit form especially for short term period and giving as a loan to for a longer period create a gap in liquidity status in the banking industry. So in other industries in order to avoid the liquidity problem their current asset should be able to settle their current liability. But as per the descriptive analysis table the private banks have 0.60 birr current asset to settle their one birr current liability with variability of ups and down 70% and 42%. So the banking industries are comfortable to handle their liquidity problem. As the national bank set the minimum liquidity of 15% shows Ethiopian private banks have maintained a liquidity position of higher than the minimum requirement and it can be said they are solvent.

The loan to deposit ratio shows to what extent is the bank loans and advances are met with the deposit liabilities of the bank. The loan to deposit ratio shows 61% which means the banking industry are giving as loan of 0.61 birr from one birr collected from depositors. The variability of ups and down of have 82% and 44% respectively. According to National bank requirement the maximum loan to deposit ratio should be 70% which shows the banking industry is in a better condition.

The growth in the asset of the banking industry shows a remarkable increase even if the national bank have set minimum capital of two billion birr to exist in the market in the coming 2020 as per GTP second plan, otherwise they will merge each other. As per the statistical analysis the sizes of the private banks increase their asset 4 times with variability ups and down 4.6 times and 3 times respectively.

Table 4.2 Correlation matrix of dependent and independent variables

	DVPO	LTD	LIQ	LEV	LDVP	GRO	CA	SIZ
DVPO	1.0000							
LTD	0.0490	1.0000						
LIQ	-0.0326	-0.4408	1.0000					
LEV	0.0795	-0.1164	-0.3012	1.0000				
LDVP	0.4673	-0.2372	-0.2216	0.0861	1.0000			
GRO	-0.3745	0.3643	0.1382	-0.0899	-0.5683	1.0000		
CA	0.2587	0.1117	0.2791	-0.3220	-0.0193	-0.1031	1.0000	
SIZ	0.3822	-0.1396	-0.3471	0.2598	0.5868	-0.2837	-0.3280	1.0000

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

Among the variables lagged dividend payout (LDVP), size (SIZ), capital adequacy (CA), leverage (LEV) and loan to deposit (LTD) have positive relationship with dividend payout.

Lagged dividend payout (LDVP) has a strong positive relationship with dividend payout with a coefficient value of 0.47 and lead to a payment of higher dividend. capital adequacy (CA) have a positive impact on current year's dividend with coefficient of 0.26. Leverage also has a positive relationship which has a contribution to dividend payout with coefficient of 0.08.

Loan to deposit has a positive relationship to the payment of dividend with coefficient 0.05. Size is the total asset also shows a positive relationship with a coeficient of 0.38 Growth and liquidity have negative relationship to dividend payout in with coefficient of -0.37 and -0.03 respectively. As we can see from the data growth is the most negative significant factor for dividend payout.

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

As I mention on chapter three there is going to be done diagnostic test in order to ensure whether the data fits the basic assumption of the the classical linear regression model. Consequently, the results for the model assumption tests are presented as follows:

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

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

4.2.2 Assumption two: Test for Homoscedasticity

It has been assumed that the variance of the errors is constant, σ2 -- this is known as the assumption of homoscedasticity. If the errors do not have a constant variance, they are said to be heteroscedastic. In this study white test was used to test for existence of heteroscedasticity across the range of explanatory variables Table 4.3

VAR Residual Heteroskedasticity Tests: No Cross Terms (only levels and squares)
Date: 12/29/17 Time: 22:41
Sample: 2008 2017
Included observations: 64

Joint test:

Chi-sq	df	Prob.
1184.277	1152	0.2482

As on table 4.3 shown: the p-value shows 0.24 and which is greater than 0.05. So it proof that there is no heteroscedasticity problem in the regression result.

4.2.3 Assumption three: Tests of Autocorrelation

The assumption of autocorrelation states that errors are linearly independent each other (uncorrelated with one another). If the errors are auto correlated one with another, then it is said that the errors are auto correlated. This is an assumption that the errors are linearly independent of one another (uncorrelated with one another). If the errors are correlated with one another, it would be stated that they are auto correlated. Serial Correlation LM test is applied at 12 lagged level considering the seven independent variables used on the study. The test result indicated below shows the null hypothesis of no autocorrelation is not rejected, since it is above 5% significance level at each lag.

Table 4 Serial correlation LM test

VAR Residual Serial Correlation LM Tests
Null Hypothesis: no serial correlation at lag order h

Date: 12/29/17 Time: 22:40
Sample: 2008 2017
Included observations: 64

Lags	LM-Stat	Prob
1	65.26038	0.4327
2	56.98446	0.7207
3	70.13970	0.2794
4	62.04362	0.5460
5	44.80195	0.9674
6	75.62118	0.1517
7	77.66966	0.1171
8	50.89318	0.8827
9	63.06419	0.5096
10	67.35155	0.3632
11	58.88096	0.6575
12	48.56669	0.9239

Probs from chi-square with 64 df.

4.2.4 Assumption Four: Test for Multicollinearity

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

independent variables are well below 0.75. Therefore, the risk of multicollinearity will not affect our regression analysis.

Table 4.5: Correlation Matrix between independent variables

	SIZ	LTD	LIQ	LEV	LDVP	GRO	CA
SIZ	1.0000						
LTD	-0.1396	1.0000					
LIQ	-0.3471	-0.4408	1.0000				
LEV	0.2598	-0.1164	-0.3012	1.0000			
LDVP	0.5868	-0.2372	-0.2216	0.0861	1.0000		
GRO	-0.2837	0.3643	0.1382	-0.0899	-0.5683	1.0000	-0.1031
CA	-0.3280	0.1117	0.2791	-0.3220	-0.0193	-0.1031	1.0000

Source E-view output

4.2.5 Assumption Five: Test for Normality

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

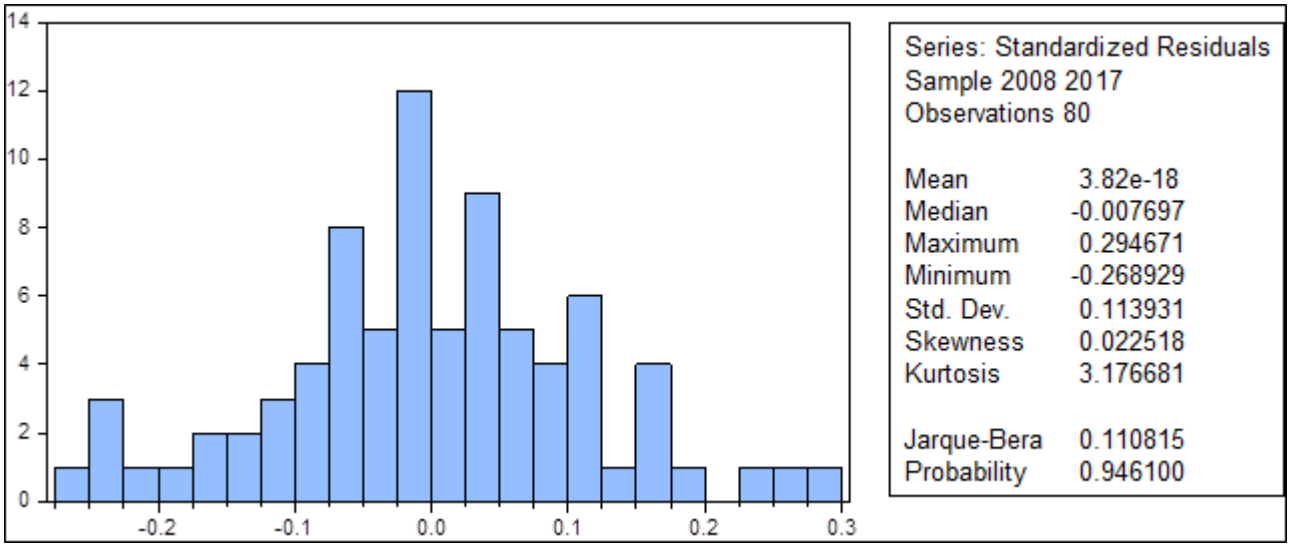


Figure 4.1 Normality

Sources E-View output

As it is shown on the on the figure 4.1 the skewness which is close to zero, and the p-value is greater than 0.05 so we can conclude that the data is consistent and normally distributed.

As we can see the data are presented on the private banking industry which comprises one dependent variable and seven explanatory variables regressed and tested with diagnostics tests. Therefore we are discussing the detail results of the variables on the regression analysis and the impacts of the each explanatory variable against the dependent variable (dividend payout). The discussion also tries to see the statistical results or findings not only to determine their impacts on the dependent variables but it also tries to compare with the previous studies results against the current study.

4.3 Regression Results and Discussions

As it is shown on the result all the CLRM are not violated, then the OLS regression model can be applied. However this study uses a panel data due to the data have a cross section and time series nature. In order to use the panel data, there are two

approaches that can be employed. They are fixed effect model (FEM) and random effect model (REM). To examine whether individual effects are fixed or random, a Hausman specification test was conducted for the model.

The null hypothesis: random effect model is appropriate.

As it is shown on the table providing evidence in favor of the fixed effect model (FEM) as presented in Table 4.6, p-value is less than 5%. Therefore, it is rejected that the random effect model is appropriate.

Table 4.6

Correlated Random Effects - Hausman Test
Equation: HTEST
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	102.901156	7	0.0000

4.4 Determinants of Dividend Payout Model

The purpose of the Model is to investigate the determinants of dividend payout in Ethiopian private banks. The model is developed with the concept of Linter's by including additional explanatory variables. Ten years data were collected from audited financial statements from year 2007/08 to 2016/17 for eight Ethiopian private banks. Dividend payout was used as a dependent variable and seven independent variables: loan to deposit, liquidity, leverage, lagged dividend paid, growth, size and capital adequacy. A fixed effect model (FEM) panel data regression technique was used to analyze the data based on the Hausman test result.

- The below is the regression model used for the study

$DVPO_{i,t} = \alpha i + \beta 1\ LTD_{i,t} + \beta 2\ LIQ_{i,t} + \beta 3\ LEV_{i,t} + \beta 4\ LDVP_{i,t} + \beta 5\ GRO_{i,t} + \beta 6\ SIZ_{i,t} + \beta 7\ CA_{i,t} + \epsilon_{i,t}$

Where,

DVPO = Dividend payout

LIQ = Liquidity

LEV = Leverage

LDVP = lagged dividend payment

GRO = Growth

SIZ = Size of the bank

CA = Capital adequacy

LTD= Loan to deposit

ϵ = represents Error Term

I = cross section dimension, refers banks

t = Time series dimension, refers number of years

Table 4.7 below shows regression results between the dependent variable (dividend payout) and the explanatory variables. The R-square value measures how well the regression model explains the actual variations in the dependent. The adjusted R2 value in table 4.7 below indicates that 73% of the total variability of dividend payout of Ethiopian private banks is captured by the variables in the regression model. Meaning that the seven independent variables; loan to deposit, liquidity, leverage, lagged dividend, growth, size and capital adequacy explain 73% of the change in dividend payout in Ethiopian private banks for the study period from year 2007/8 to 2016/17

Table 4.7: Regression Result- Fixed Effect Model (FEM)

Dependent Variable: DVPO
Method: Panel Least Squares
Date: 12/22/17 Time: 15:47
Sample: 2008 2017
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.501072	0.739022	-2.031161	0.0463
CA	1.318603	0.559551	2.356539	0.0215
GRO	-0.133892	0.036777	-3.640689	0.0005
LDVP	0.014024	0.055022	0.254884	0.7996
LEV	0.278882	0.608783	0.458098	0.6484
LIQ	0.337358	0.327464	1.030212	0.3067
LTD	0.610751	0.282225	2.164059	0.0341
SIZ	0.267123	0.102254	2.612334	0.0112

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.779353	Mean dependent var	0.565225
Adjusted R-squared	0.731830	S.D. dependent var	0.242546
S.E. of regression	0.125603	Akaike info criterion	-1.144026
Sum squared resid	1.025442	Schwarz criterion	-0.697396
Log likelihood	60.76104	Hannan-Quinn criter.	-0.964959
F-statistic	16.39920	Durbin-Watson stat	1.622586
Prob(F-statistic)	0.000000		

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

Liquidity

The liquidity position of a firm is an important determinant of its ability to pay dividend payout. A firm with a poor liquidity position means will be less generous in paying dividend due to shortage of cash. Alli, Khan and Ramirez (1993) argues that dividend payments depend more on cash flows, which reflect the company's ability to pay dividends, than on current earnings, which are less heavily influenced by accounting practices.

Table 4.7 shows liquidity has no statistically significant relationship with dividend payout. This implies that in the current banking industry liquidity has no impact in the determination of dividend payout. Therefore as it is stated in the hypothesis (H2) liquidity have a negative and significant impact on the dividend payout determination. Based on the result the hypothesis is rejected.

The result is not consistent with the the previous research done which showed (Augustina & Hermanato, 2014), (Agyemang, 2013) Liquidity has a strong positive relationship with dividend payout. Where as (Felix, 2015) result showed that liquidity were negatively and statistically significantly influence on the dividend policy.

Leverage

The hypothesis (H1) stated that leverage have a negative and significant impact on the dividend payout determination. As it is shown in Table 4.7 leverage is not statistically significant factor in the determination of dividend payout the Ethiopian private banks. So the hypothesis is rejected.

When the result is is compared with the previous researches done, it is consistent with (Mahira, May 2012), (Simegnew, 2013) and (Thewodros, 2011) found that financial Leverage were insignificant in dividend policy. Whereas (Olubukunola,

2013) and (Augustina & Hermanato, 2014) in thier empirical findings showed that financial leverage and dividend payout have an inverse significant relationship.

Growth

In the hypothesis (H3) stated that growth have a negative and significant impact on the dividend payout determination. As it is shown in the regression analysis the Ethiopian banking industry growth has a negative and statistically significant factor in the determination of dividend payout. Sales growth indicates the positive sign of ongoing firms' operations. Increasing level of sales growth in a consistent manner means that a firm potentially enters into stage of expansion of business cycle and would expect positive cash earning power in the future year. A firm with high growth then requires a large amount of financing to invest in its projects. Sales growth is negatively related to dividend payment because they found that Ethiopian private banks having high growth rather use funds from financing to expand their projects. In other words, they tend to retain a large amount of earnings for future investment, not for dividend payment.

The finding is consistent with (Pornumpai, 2013) growth is negatively related to dividend payout. They are not reluctunt to pay the dividend because they want to keep earnings into future project investment to sustain sales growth in the long-run. So sales growth can send the signal regarding the future outlook of firms.. (Inyiama Ethel, 2015) He found that growth has a negative impact on the determinant of dividend policy. (Agyemang, 2013), (Mahira, May 2012) and (Thewodros, 2011) reached on the conclusion that growth have insignificant impact on the determinant of dividend payout. (Amitabh S.Dutta, 2009) in his research conclude that growth have a positive relationship with dividend payout, this indicates that shareholders have shown interest in getting dividend when revenue growth, so managers used as an instrument to satisfy their bosses.

Lagged dividend payment

In the hypothesis (H4) stated that Lagged dividend payment have a positive and significant impact on the dividend payout determination. But as it is shown in the regression analysis table lagged dividend payment is insignificant factor in the determination of dividend payout.

However (Inyiama , 2015), (Jone Theis, 2009), (Felix, Babtunde, Dada, 2015), (Thewodros, 2011), (Simegnew, 2013) and (Elias, 2015) have found that previous or last year dividend have positive relationship with dividend payout. So different researchers come up on the independent variable previous dividend payment by using different statistical techniques, different years of data and in different economical condition whether developed or developing countries even in different industries arrive on the same result of positively and statistically significant related with dividend policy.

Size

In the hypothesis (H5) stated that size have a negative and significant impact on the dividend payout determination. But as it is shown in the regression analysis table size has a positive and statistically significant factor in the determination of dividend payout. This indicates that private banks are paying dividend as their size shown an increment of total asset from year to year. In theoretical aspect large firms have an intention to pay out dividend than small firms.

The result of the regression is consistent with (Thewodros, 2011), (Olubukunola, 2013), (Inyiama Ethel, 2015), (Mahira, 2012) and (Augustina & Hermanato, 2014) have a significant positive relationship between the size of firms and the dividend payout decisions. However (Elias, 2015) conducted his study on Ethiopian private banks found that firm size has a negative and statistically significant influence on dividend policy.

Capital adequacy

In the hypothesis (H6) stated that capital adequacy have a positive and significant impact on the dividend payout determination. As it is shown in the regression analysis table capital adequacy has a positive relationship to explain dividend payout so the hypothesis is not rejected.

As it showen in the previous researchs (Inyiama Ethel, 2015) (Lee, 2014) and (Elias, 2015) found that capital adequacy has a positive relationship with dividend payout which means safer banks pay more dividend than those who are risky. (Ross N., 2002) the result of the research shows that capital adequacy which is explained by earning volatility has an inverse relationship with dividend policy. (Pornumpai, 2013) revealed that capital adequacy have insignificant effect on determination of dividend payment.

Loan to deposit

In the hypothesis (H7) stated that Loan to deposit have a positive and significant impact on the dividend payout determination. When banks exhaustively mobilize their deposit and giving in the form of loan, they earn thier major income in the form of interest becomes high. As it is shown in the result of regression analysis table, loan to deposit has a positive relationship and it is significant to explain dividend payout so the hypothesis is not rejected.

4.5 Summary of the analysis

Table 4.8 Comparison of the Test Result with the Expectation

Hypothesis No	Independent variables	Expected relationship With dependent variables DVPO	Actual Result	Status
Hypothesis 1	Leverage	-	insignificant	Rejected
Hypothesis 2	Liquidity	-	insignificant	Rejected
Hypothesis 3	Growth	-	-	Not rejected
Hypothesis 4	Lagged Dividend payment	+	insignificant	Rejected
Hypothesis 5	Size	-	+	Rejected
Hypothesis 6	Capital Adequacy	+	+	Not rejected
Hypothesis 7	Loan and advance to Deposit	+	+	Not Rejected

Hypothesis 1 is rejected, which states that leverage has negative and significant impact on dividend payout.

Hypothesis 2 is rejected, which states that liquidity has negative and significant impact on dividend payout.

Hypothesis 3 is not rejected, which states that growth has negative and significant impact on dividend payout.

Hypothesis 4 is rejected, which states that lagged dividend have a positive and significant relationship with dividend payout. In most of the research that is done on the area of dividend payout, lagged dividend has a positive and significant factor in determination of dividend. The result of the regression is against this assumption or findings by other researchers.

Hypothesis 5 is rejected, which states that size has negative and significant impact on dividend payout. But it has a positive relationship with dividend payout.

Hypothesis 6 is not rejected, which states that capital adequacy has a positive and significant impact on dividend payout.

Hypothesis 7 is not rejected, which states that loan to deposit has positive and significant impact on dividend payout.

Chapter Five: Conclusion and Recommendation of the study

5.1 Conclusion

The study is focusing on the Ethiopian private banking industry that covers from 2007/08-2016/17. Eight banks are taken in to consideration that have ten years financial data. In the study seven independent variables and one dependent variable are taken in the research. The independent variables are leverage, size, growth, lagged dividend, capital adequacy, loan to deposit and liquidity. The dependent variable is dividend payout. The data is analyzed with fixed effect model panel regression technique.

Fixed effect panel regression model was used in order to examine the relationship between the seven company specific factors, which are lagged dividend payment. loan to deposit, liquidity, leverage, growth, size and capital adequacy and dividend payout. The result of the regression analysis showed that capital adequacy, loan to deposit and size show positive relationship with dividend payout. Growth has an inverse relationship with dividend payout. But lagged dividend payment, leverage and liquidity do not have an impact in the determination of dividend payout.

Growth has shown a negative relationship and significant factor in the determination of dividend payout. This finding is coinciding with the concept of pecking order theory which it says using all the internal source of funds for promising projects. Therefore, firms with high growth or investment opportunities tend to retain their income to finance their investments, thus paying less or no dividends. Ethiopian banking industry is in growth stage and these private banks require further investments to fund the growth and the best alternative for financing this with low cost of capital. This implies that growth and dividend payout has an inverse relationship.

The effect of agency cost assumes that firm is likely to distribute cash dividends to avoid the conflict that exists between management and shareholders due to the separation of management and ownership (Jensen and Meckling, 1976). If there is not sufficient cash flow, this would force firm to look for external sources of finance in order to be subject to the scrutiny of a third part of (Partington, 1985). There is an argument that monitoring by outside suppliers of capital force managers to act to the best interest of outside shareholders (Rozeff, 1982 and Easterbrook, 1984). Hence dividends contribute to reduce the effect of agency costs from three angles. First, they put pressure on management to make sure it generates enough earnings to be able to pay out the dividends.

Second, they may force managers to rise outside funds to finance their projects. Investors find this process desirable because they are able to observe the terms on which new funds are raised, and perhaps the identity of the new suppliers of funds. Third, they reduce the amount of free cash flow that managers can waste on unprofitable investment projects. The effect of free cash flow assumes that management is likely to distribute dividend when there is excess funds that it has no way to reinvest, in an attempt to reduce free cash flow, eliminate wasteful investment projects, and satisfy shareholders. . But the result shows that leverage and liquidity have no relationship with dividend payout, which is contrary to the Agency cost theory.

Size and capital adequacy have positive and significant factor in the determinant of dividend payout. Birds in hand theory supports that dividends are positively correlated to the firm value. Increasing dividend payments may then be associated with increasing firm value.

5.2 Recommendation and Implication of the study

As many researches are done on the dividend payment, it is not arrived in the same conclusion to determine the factors that determine dividend payments. Even the study is conducted in the same industries; the result is not the same. So it becomes a puzzle for a long period of time to know the factor that affect the dividend payment. So managers and investors should consider different variables that help to determine the dividend payment.

Investors, who are trying to predict future dividends payment gain some useful information the factors that determine. Managers should also consider in using the results of the researchs done when determining the dividend payout since it gives useful information regarding which factors they may consider when determining the dividend payouts.

Based on the finding capital adequacy, size and loan to deposit are a good indicator in the determination of dividend payment. So investors, shareholders and managers should consider the above factors as a good indicator in the determination of the dividend payment.

Capital adequacy should be used as a good indicator of paying of dividend as far as showing healthy and found in the safest position. The status of each bank is critically and timely regulated by National Bank of Ethiopia, so shareholders and stakeholders have full confidence on the reliability of the measurment.

Loan to deposit should be also used as measurment in the payment of dividend. The major income of banks are interst income getting in the form of interst from the loan. So each loan status is also regulated by National Bank of Ethiopia, the interest generated from the loan shows the progress and sustanability of the banks.

Size of banks has also an implication in the determination of dividend payout. As in the life cycle theory sugest that matured firms paying better dividend than the younger one. So size should be used as an instrument in the dividend payment.

Understanding the determinants of dividend policy has significant implication on investors and portfolio analysts, investors who want to select the most dividend paying firms might have to look into the three mentioned factors before selecting the bank. Furthermore, the board of directors of the banks should give consideration to capital adequacy, loan to deposit and size when they set the dividend policy as they are found to be the most positive significant variables that affect the dividend policy of banks. This will help them to make an efficient, effective, and reasonable dividend payout decision which in the long run will help them to achieve their objective of maximizing profit and satisfying employees and shareholders' needs.

A research conducted on this subject is very few in Ethiopian private banks to test empirically the determinants of dividend payout. Therefore, it may help future studies in the subject as a reference.

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Appendices

Appendix 1

Correlated Random Effects - Hausman Test
Equation: HTEST
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	102.901156	7	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
CA	1.318603	1.583584	0.152012	0.4967
GRO	-0.133892	-0.143599	0.000157	0.4380
LDVP	0.014024	0.030586	0.000657	0.5181

LEV	0.278882	1.045516	0.187348	0.0765
LIQ	0.337358	1.149579	0.015526	0.0000
LTD	0.610751	1.092711	0.022844	0.0014
SIZ	0.267123	0.323692	0.002765	0.2820

Cross-section random effects test equation:
Dependent Variable: DVPO
Method: Panel Least Squares
Date: 12/22/17 Time: 00:42
Sample: 2008 2017
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.501072	0.739022	-2.031161	0.0463
CA	1.318603	0.559551	2.356539	0.0215
GRO	-0.133892	0.036777	-3.640689	0.0005
LDVP	0.014024	0.055022	0.254884	0.7996
LEV	0.278882	0.608783	0.458098	0.6484
LIQ	0.337358	0.327464	1.030212	0.3067
LTD	0.610751	0.282225	2.164059	0.0341
SIZ	0.267123	0.102254	2.612334	0.0112

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.779353	Mean dependent var	0.565225
Adjusted R-squared	0.731830	S.D. dependent var	0.242546
S.E. of regression	0.125603	Akaike info criterion	-1.144026
Sum squared resid	1.025442	Schwarz criterion	-0.697396
Log likelihood	60.76104	Hannan-Quinn criter.	-0.964959
F-statistic	16.39920	Durbin-Watson stat	1.622586
Prob(F-statistic)	0.000000		

Appendix 2

VAR Residual Heteroskedasticity Tests: No Cross Terms (only levels and squares)
Date: 12/29/17 Time: 22:41
Sample: 2008 2017
Included observations: 64

Joint test:

Chi-sq	df	Prob.
1184.277	1152	0.2482

Individual components:

Dependent	R-squared	F(32,31)	Prob.	Chi-sq(32)	Prob.
res1*res1	0.609534	1.512257	0.1263	39.01015	0.1837
res2*res2	0.439896	0.760838	0.7770	28.15332	0.6618
res3*res3	0.460762	0.827766	0.7012	29.48875	0.5943
res4*res4	0.918572	10.92829	0.0000	58.78862	0.0027
res5*res5	0.454116	0.805893	0.7265	29.06340	0.6159
res6*res6	0.371699	0.573106	0.9387	23.78872	0.8520
res7*res7	0.563601	1.251121	0.2674	36.07045	0.2839
res8*res8	0.762825	3.115789	0.0011	48.82081	0.0289
res2*res1	0.672545	1.989673	0.0293	43.04289	0.0920
res3*res1	0.517249	1.037979	0.4594	33.10396	0.4131
res3*res2	0.423164	0.710671	0.8293	27.08253	0.7139
res4*res1	0.566780	1.267410	0.2557	36.27390	0.2760
res4*res2	0.809201	4.108577	0.0001	51.78885	0.0149
res4*res3	0.845832	5.314977	0.0000	54.13324	0.0086
res5*res1	0.424818	0.715499	0.8245	27.18833	0.7088
res5*res2	0.505495	0.990278	0.5116	32.35165	0.4494
res5*res3	0.516397	1.034443	0.4632	33.04941	0.4157
res5*res4	0.761060	3.085623	0.0011	48.70787	0.0296
res6*res1	0.491954	0.938066	0.5714	31.48506	0.4925
res6*res2	0.470909	0.862220	0.6608	30.13817	0.5610
res6*res3	0.614754	1.545878	0.1142	39.34426	0.1741
res6*res4	0.704513	2.309737	0.0110	45.08884	0.0623
res6*res5	0.564698	1.256717	0.2633	36.14068	0.2812
res7*res1	0.474889	0.876098	0.6444	30.39289	0.5480
res7*res2	0.627605	1.632657	0.0878	40.16674	0.1523
res7*res3	0.609686	1.513225	0.1259	39.01989	0.1834
res7*res4	0.827268	4.639642	0.0000	52.94514	0.0114
res7*res5	0.534984	1.114511	0.3822	34.23897	0.3607
res7*res6	0.406285	0.662926	0.8736	26.00227	0.7635
res8*res1	0.601897	1.464663	0.1454	38.52138	0.1983
res8*res2	0.558432	1.225135	0.2869	35.73963	0.2970
res8*res3	0.680477	2.063116	0.0233	43.55055	0.0837
res8*res4	0.850641	5.517314	0.0000	54.44104	0.0080
res8*res5	0.366951	0.561543	0.9452	23.48489	0.8625
res8*res6	0.579401	1.334514	0.2120	37.08168	0.2461

res8*res7	0.683616	2.093192	0.0213	43.75141	0.0806

Appendix 3

	CA	DVPO	GRO	LDVP	LEV	LIQ	LTD	SIZ	YEAR
AIB - 08	0.164143	0.778775	0.128114	2.075547	0.876115	0.492086	0.674736	3.683067	2008
AIB - 09	0.159152	0.546314	0.127385	2.046140	0.793760	0.659545	0.516649	3.853236	2009
AIB - 10	0.138349	0.719231	0.487997	2.192690	0.774182	0.685873	0.490895	3.955350	2010
AIB - 11	0.162501	0.724256	0.350318	2.250547	0.791714	0.696788	0.496082	4.044901	2011
AIB - 12	0.143601	0.719574	0.150009	2.416955	0.783686	0.616155	0.581868	4.118106	2012
AIB - 13	0.139362	0.754866	0.363531	2.453037	0.772335	0.593928	0.600413	4.219144	2013
AIB - 14	0.136718	0.723322	0.283840	2.583357	0.788518	0.605320	0.596295	4.344527	2014
AIB - 15	0.141790	0.714121	0.149789	2.650323	0.820475	0.522662	0.662241	4.401581	2015
AIB - 16	0.180409	0.717503	0.228670	2.663560	0.873687	0.490568	0.666391	4.493426	2016
AIB - 17	0.157339	0.722229	0.395336	2.727262	0.885424	0.422321	0.727228	4.622989	2017
BOA - 08	0.134417	0.134417	0.227246	1.819544	0.801620	0.426124	0.737996	3.630422	2008
BOA - 09	0.164559	0.164559	0.152354	1.684145	0.805193	0.601786	0.543535	3.738512	2009
BOA - 10	0.148029	0.148029	0.167003	1.657638	0.806762	0.582305	0.568161	3.797928	2010
BOA - 11	0.132973	0.132973	0.329910	1.881835	0.791567	0.609568	0.527584	3.862010	2011
BOA - 12	0.138859	0.138859	0.132695	2.023915	0.889996	0.598889	0.560781	3.915901	2012
BOA - 13	0.129394	0.129394	0.178124	2.128328	0.890998	0.615889	0.542426	4.006890	2013
BOA - 14	0.169425	0.169425	0.433110	2.234001	0.864410	0.593287	0.556370	4.052170	2014
BOA - 15	0.161219	0.161219	0.422100	2.574355	0.867530	0.585927	0.531133	4.135691	2015
BOA - 16	0.150935	0.150935	0.411998	2.315847	0.873757	0.530939	0.587579	4.226034	2016
BOA - 17	0.130955	0.130955	0.507046	2.345083	0.885298	0.457003	0.672787	4.403546	2017
	CA	DVPO	GRO	LDVP	LEV	LIQ	LTD	SIZ	YEAR
CBO - 08	0.103739	0.696606	1.072826	0.380211	0.881281	0.655478	0.823420	3.831360	2008
CBO - 09	0.218009	0.561460	0.162323	0.313284	0.846963	0.468651	0.642538	3.509824	2009
CBO - 10	0.173590	0.451255	1.282308	0.253822	0.893283	0.651938	0.592857	3.475606	2010
CBO - 11	0.157335	0.344404	0.475108	0.215460	0.901594	0.632510	0.514294	3.398043	2011
CBO - 12	0.145022	0.355507	0.639838	1.211681	0.886248	0.682576	0.618063	3.564752	2012
CBO - 13	0.151088	0.438961	0.928178	1.559529	0.893367	0.631310	0.665541	3.815493	2013
CBO - 14	0.188077	0.405641	0.654902	1.953051	0.851568	0.583425	0.682512	3.866354	2014
CBO - 15	0.148087	0.718960	0.393973	2.143639	0.876896	0.475507	0.705337	4.059263	2015
CBO - 16	0.143683	0.528834	0.394560	2.351470	0.885757	0.484704	0.604682	4.028870	2016
CBO - 17	0.106555	0.504668	0.399819	2.439282	0.914408	0.473235	0.652474	4.248568	2017
DB - 08	0.127241	0.669051	0.295092	2.188928	0.906726	0.493127	0.603018	3.893683	2008
DB - 09	0.159754	0.585535	0.095429	2.188928	0.906634	0.604681	0.492895	3.988228	2009
DB - 10	0.119782	0.533067	0.287740	2.203957	0.909066	0.653378	0.439779	4.091786	2010
DB - 11	0.131196	0.631190	0.336207	2.165286	0.904746	0.639841	0.459451	4.166128	2011
DB - 12	0.130687	0.346010	0.374340	2.237380	0.895684	0.602464	0.506574	4.243535	2012
DB - 13	0.126251	0.696138	0.008984	2.454004	0.896406	0.615310	0.489408	4.295505	2013
DB - 14	0.146558	0.684173	0.184556	2.353347	0.881723	0.624161	0.486953	4.341676	2014
DB - 15	0.140976	0.806309	0.175683	2.625732	0.881929	0.590052	0.518914	4.393819	2015
DB - 16	0.142771	0.752026	0.078178	2.687941	0.882496	0.612054	0.494820	4.456008	2016
DB - 17	0.126569	0.721297	0.251645	2.769309	0.884678	0.528635	0.578405	4.539385	2017
LIB - 08	0.144583	0.000000	4.974211	0.000000	0.802141	0.638279	0.823420	3.590133	2008
LIB - 09	0.136008	0.000000	0.658863	0.000000	0.798670	0.617465	0.642538	2.978849	2009
LIB - 10	0.171997	0.000000	1.422974	0.418724	0.822679	0.685876	0.592857	3.134689	2010
LIB - 11	0.140582	0.098402	0.248049	1.601625	0.804782	0.680409	0.514294	3.257225	2011
LIB - 12	0.248787	0.646783	0.576017	1.633973	0.820657	0.645470	0.618063	3.391470	2012
LIB - 13	0.244081	0.699950	0.344172	1.688171	0.815817	0.702900	0.665541	3.468706	2013
LIB - 14	0.245487	0.605269	0.111216	1.891983	0.826250	0.614853	0.682512	3.557908	2014
LIB - 15	0.170285	0.481122	0.985739	2.028360	0.859692	0.597165	0.705337	3.767850	2015

LIB - 16	0.164481	0.825721	0.362261	1.860002	0.868231	0.534955	0.604682	3.909515	2016
LIB - 17	0.174468	0.980666	0.105862	2.334371	0.867994	0.569273	0.652474	4.040442	2017
NIB - 08	0.239727	0.750407	0.532313	1.755875	0.836135	0.523390	0.823420	3.562306	2008
NIB - 09	0.271451	0.749348	0.379527	1.928529	0.848367	0.656092	0.642538	3.681829	2009
NIB - 10	0.226851	0.716268	0.330266	2.061241	0.846494	0.694500	0.592857	3.776011	2010
NIB - 11	0.258334	0.668516	0.150902	2.158028	0.835411	0.600253	0.514294	3.851963	2011
NIB - 12	0.237155	0.704969	0.130835	2.216812	0.815369	0.688065	0.618063	3.917804	2012
NIB - 13	0.225214	0.671760	0.096650	2.304892	0.817823	0.621584	0.665541	3.961162	2013
NIB - 14	0.220380	0.768254	0.214422	2.303421	0.817223	0.589784	0.682512	4.031299	2014
NIB - 15	0.187651	0.610786	0.122565	2.401723	0.835751	0.551873	0.705337	4.122416	2015
NIB - 16	0.183532	0.750011	0.143624	2.313614	0.840942	0.599896	0.604682	4.199489	2016
NIB - 17	0.160154	0.964923	0.365068	2.427347	0.859462	0.546786	0.652474	4.322627	2017
UB - 08	0.206075	0.678465	0.426461	1.732394	0.856135	0.511790	0.740748	3.511878	2008
UB - 09	0.186864	0.828433	0.186582	1.929766	0.888357	0.616656	0.576858	3.667611	2009
UB - 10	0.194033	0.570537	0.579461	2.089290	0.891871	0.643200	0.532985	3.770574	2010
UB - 11	0.180076	0.671680	0.195283	2.140445	0.883305	0.665464	0.525270	3.887933	2011
UB - 12	0.165703	0.663692	0.303084	2.325600	0.874618	0.620165	0.590475	3.943834	2012
UB - 13	0.145783	0.785114	0.040891	2.440812	0.879616	0.601151	0.573350	3.999029	2013
UB - 14	0.169044	0.703177	0.035021	2.457467	0.825473	0.684516	0.561099	4.074684	2014
UB - 15	0.138403	0.850827	0.390390	2.144322	0.882581	0.573569	0.574043	4.157181	2015
UB - 16	0.144413	0.622362	0.210670	2.379039	0.879989	0.553237	0.619287	4.237292	2016
UB - 17	0.134408	0.666012	0.198813	2.324268	0.885145	0.483608	0.669979	4.340502	2017
WB - 08	0.205486	0.600549	0.285143	1.732394	0.853220	0.541018	0.744331	3.615412	2008
WB - 09	0.317276	0.576626	0.141580	1.921057	0.836584	0.631487	0.532067	3.709126	2009
WB - 10	0.262061	0.606481	0.259319	2.017684	0.816834	0.664431	0.605595	3.759058	2010
WB - 11	0.268977	0.518151	0.459838	2.131785	0.834085	0.684249	0.466284	3.906391	2011
WB - 12	0.240891	0.722899	0.648100	2.224036	0.807823	0.688642	0.604179	3.921538	2012
	CA	DVPO	GRO	LDVP	LEV	LIQ	LTD	SIZ	YEAR
WB - 13	0.211493	0.742707	0.096436	2.385739	0.823875	0.644461	0.607246	4.016774	2013
WB - 14	0.210752	0.792072	0.076444	2.406513	0.834677	0.591885	0.539989	4.050866	2014
WB - 15	0.207095	0.677640	0.234722	2.382921	0.823915	0.625034	0.615130	4.137080	2015
WB - 16	0.204185	0.706121	0.150115	2.378094	0.826697	0.598039	0.677545	4.209239	2016
WB - 17	0.192608	0.529257	0.408394	2.423616	0.839812	0.560520	0.730022	4.321167	2017