ADDIS ABABA UNIVERSITY

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Department of Corporate Finance: Specialty in Investment Management

Determinants of Dividend Payout Policy in Private Commercial Banks of Ethiopia

"A Thesis Submitted to Addis Ababa University School of Commerce in Partial Fulfillment of the Requirements for the Degree of Master of science in Corporate Finance: Specialty in investment Management''

By

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June, 2025

Addis Ababa, Ethiopia

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Declaration

I, Kifle Workneh, hereby declare that this research project entitled ***"Determinants of Dividend Payout Policy in Private Commercial Banks of Ethiopia"*** submitted in partial fulfillment of the requirements MSc in Corporate Finance: Specialty in investment Management to Addis Ababa University, School of Commerce, is my original work and it has never been presented in any university. All sources and materials used for this research project have been duly acknowledged.

Name: Kifle Workneh Habtegebreal

Signature

Certification

This is to certify that the thesis entitled “Determinants of Dividend Payout Policy in Private Commercial Banks of Ethiopia” is carried out by **Kifle Workneh** under the supervision of **Meshesha Demie (PhD),** submitted in partial fulfillment of the requirements for the **Degree of Master of Corporate Finance: Specialty in investment Management** complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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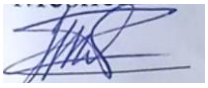
Meshesha Demie (PhD)		8 July 2025
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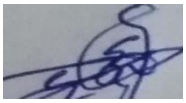
Takele Fufa (PhD)		8 July 2025

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ABSTRACT

This research project was intended to assess the determinants of dividend payout ratio in private commercial banks of Ethiopia. The study considers the impact of seven variables; which are profitability, liquidity, bank growth, previous year dividend, industry growth, inflation and GDP on dividend payout using panel data regression technique with a random effect model between the years 2005 and 2024. The study used data of ten private commercial banks that operate in Ethiopia. The empirical results of the study revealed that liquidity, previous year dividend and GDP have positively affected the dividend payout. On the other hand, firm growth, profitability, industry growth and inflation have negatively affected the dividend payout. Furthermore, the findings of the study revealed that previous year dividend, profit and bank growth have statistically significant impact on banks' dividend payout. On the basis of the findings of the study, it is recommended that bank managers, bank directors and board of directors need to consider the factors that have an impact on the dividend payout policy in their decisions. Moreover, the academic circle can use this research as reference in their effort of analyzing the determinants of dividend payout ratio in the banking industry and also make decision in their investment.

Key Words: *Private banks, Dividend, Dividend payout ratio, Panel data, Random effect regression,*

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List of Acronyms and Abbreviations

DPR – Dividend payout ratio

DW – Durbin-Watson

GDP: – Gross domestic product

GRO – Growth

IGRO - Industry Growth

INFL - Inflation

LIQ – Liquidity

M&M – Miller and Modigliani

NBE – National Bank of Ethiopia

PROF – Profitability

PYD – previous year‘s dividend

ROA – Return on asset

VIF - Variance Inflation Factor

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Corporate finance decisions comprise of three principles. These are the investment principle, the financing principle, and the dividend principle. Decisions in the investment principle determines where and how businesses invest their resources, the financing principle governs the mix of funding whether debt or equity used to fund these investments, and the dividend principle refers how much earnings should be reinvested back into the business and how much should be distributed to the owners of the business. (Damodaran, 2015)

Corporations after the earning can have a choice of what to do with the earnings. They keep the earning in the company for spending or further investment, they can pay off their liabilities, they can use it to repurchase shares or to pay dividends to maximize the shareholders' profit. (Brealey, Myers and Allen, 2014) Mostly corporations pay cash dividends to their shareholders despite the fact that these funds could increase the debt/equity ratio. These dividend payments are often considered as a positive signal of the corporation's future. However, default in the dividend payment would negatively damage the value of the company.

Dividend payment is confirmed by the general meeting of shareholders based on the proposal from the board of directors. Corporations pay out dividend in cash, stock or any type of property a corporation distributes to its shareholders. (Quiry et al, 2014). However, companies have not bound by law to distribute dividends. Fabozzi (2010) stated that the board of directors may declare a dividend at any time, but dividends are not a legal obligation of the corporation—it is the board's choice. Unlike interest on debt securities, if a corporation does not pay a dividend, there is no violation of a contract, nor any legal recourse for shareholders. Especially, younger and faster growing companies typically do not pay dividends.

Dividend policy is among the most important strategic decisions taken by the board directors and the senior managements. Desta (2021) indicated that dividend policy defines the explicit or implicit decision of the board of directors regarding the amount of residual earnings (past or present) that should be distributed to the shareholders. The dividend payout policy of a firm has

potential roles to be considered as part of the firm's strength to operate smoothly in the corporate world.

Anuar, Jasni and Azero (2023) identified dividend policy as one of the important decisions in any corporation since it relates to and affects investment and financing decisions of firms. Allen and Michaely (1995), argued that it is crucial for a firm to build a strong understanding of dividend policy. Because, the impact of firm's corporate dividend policy is very crucial in the areas capital budgeting, asset pricing, mergers and acquisitions, and capital structure. Damodaran (2015) Dividend policy must be evaluated in light of the objective of the firm namely, to choose a policy that will maximize the value of the firm to its shareholders. The dividend policy of a company reflects how prudent its financial management is. Dividend policy is a guideline about the issues related to dividend decisions. It determines the distribution of the firm's earnings between retention and cash dividend payments of shareholders. In making a decision about the size and pattern of cash distributions the management decision must be in line with the dividend payout policy.

The number of different studies has conducted to investigate the factors that determine dividend policy, yet it is still a puzzle and increasingly becoming interesting for several reasons. Because it affects the capital structure of the firm, changes the firm's stock value, announcement of dividend signals information to investors about the firm's efficiency (Anoka, et al,2014). Each corporation has a different dividend policy that takes into consideration different rules, regulations, and cultures. They further added that firms in every country have not follow the same dividend policy due to different tax policies, institutions, and even different capital markets.

The strategic choices made within the dividend principle significantly impact a corporation's growth and financial health. The dividend policy, in particular, stands out as a crucial aspect of corporate governance, is influencing not only how earnings are distributed but also reflecting the company's financial management and future prospects. While dividend payments can signal positive expectations to shareholders, they are not legally mandated, allowing companies the flexibility to reinvest earnings for growth. Ultimately, a well-considered dividend policy aligns

with the goal of maximizing shareholder value, contributing to a firm's strength and stability in the competitive corporate landscape.

The banking industry is playing a pivotal role for the nation’s economic development. Researches have to conduct a study in the banking sector in general and on the dividend payout ratio in specific. This will help the bank officials, investors, lenders, borrowers and other stakeholders.

1.2 Ethiopian banking sector overview

The Ethiopian banking sector is characterized by a relatively undeveloped, low accessibility, high level of government intervention and remarkable level of state ownership (Bezabeh and Desta,2014).Irrespective of the aforementioned characteristics of the industry there are numerous banks have joined the industry (Mekonnen, 2015). Recently, the Ethiopian banking sector has experienced rapid growth and regulatory changes, creating a need for dynamic financial management strategies. The government continues to implement promising policies which positively impact the performance of the banks and foreign exchange markets. In addition to controlling interest rates on deposits, the government also launch a secondary market to facilitates the efficient allocation of capital between investors and issuers, ensuring that funds flow to where they are most needed while maintaining protections for all participants.

On the basis of the data from the National Bank of Ethiopia, the total assets of the financial sector amounted to just over Birr 3,409 billion, at the end of June 2024, which is 15.1 percent higher than the previous year. The banking sector is continued to dominate the financial sector, with its total assets accounting for 96.1 percent of total financial sector assets at the end of June 2024 This shows that the stability of the Ethiopian financial system largely depends on the health and stability of the banking sector. (NBE, 2024).The public bank which is the Commercial Bank of Ethiopia is considered a systemically important bank and the largest bank in the industry has dominated the banking industry of the country. CBE accounts 47.9 % of the total asset and over 47.1 % of the depositsof the whole banking sector. (NBE, 2024). However, the private banks have shown the significant progress in the last ten years in terms of loan disbursement, dividend distribution, profitability and asset formation.

Ethiopian economy is in the track of continuous economic growth registering increasing GDP growth in a challenging operating environment which indeed is displaying favorable performances in the national economy (MOF, 2024). The banking sector is very important to the Ethiopian economy accounting for 21.6% of the GDP growth. Data shows the total assets of commercial banks reached Birr 3.3 trillion at the end of June 2024 with an increase of 15.2 percent from the previous year. (NBE, 2024)

Sector/Assets/GDP	June 2024	Share in Total assets (%)
Banks	3,277.3	96.1
Commercial banks	3,095.1	90.8
Development bank	82.2	5.3
Microfinance	60.1	1.8
Capital goods finance	6.4	0.2
Insurance	65.6	1.9
Total financial system assets	3,409.4	100
Total assets (%) of GDP	29.5	

Source: NBE, 2024

Table 1: Total Assets of the Financial System and the GDP, 2024 (Value in Billion)

In June 2024, the total income of the banking sector was Birr 361.4 billion for the year to the end of up from 297.5 billion birr in the previous year. Net income has increased to Birr 57.9 billion from Birr 48.9 billion a year earlier.

1.3 Statement of the Problem

The dividend policy of a bank plays a critical role in determining its financial strategy. It also has significant impact on the market valuation, shareholder satisfaction, and long-term growth opportunities (Saraf and Kaur, 2014). Wealth maximization is the main objectives of firms. Long term and short-term growth, increase in market share and maximization of shareholders wealth are also the common objectives of banks. Desta (2021) further explained that the declaration of

dividends involves some legal as well as financial considerations. The basic legal rule is that dividend can only be paid when the firm generates enough profit. However, in addition to profit, the management considers various financial considerations to come to a decision regarding dividend distribution. Some of the most important determinants of dividend policy are profitability, growth, change in government policies, the economic condition of the country, liquidity status of the company and other factors.

Various researches have been conducted in the topic of the determinant factors of firm's dividend policy. Lemma (2020), on his research stated that asset structure, firm size, growth in revenue, leverage, liquidity, profitability, previous year dividend, GDP and inflation has an impact on the dividend earning. Growth opportunity, liquidity, profitability, previous year dividend and inflation have found to have statistically significant relation with the dividend payout. He recommends to the banks managers to consider the major factors in setting their dividend payout policy. Demile (2016) took important variables such as profitability, liquidity, leverage, growth, size, and previous year's dividend as determinants of dividend payout ratio. The result shows that, last year's dividend, bank size, and growth have a significant and positive relationship with bank's dividend payout. On the contrary, profitability and leverage have negative relationship with dividend payout ratio of private commercial banks in Ethiopia. Other researches also conducted on the dividend payout policy. Girmay (2021) considered the macroeconomic factors and the industry factor are determined the dividend payout of the banks. Other research results also shown variation on the determinants of the divined payout indicating the need for further effort to identify the critical factors that determine dividend payout (Kinfe, 2011 and Desta, 2021).

Although a number of researches have been put forward in the literature to explain the theory, the topic of dividend payout is remaining one of the thorniest issues in finance. Among the researchers, most of them prioritize the internal factors, by ignoring the external factors. Actually the external macroeconomic factors are equally important to the internal factors to determine the dividend payout of the banks. It is very recommendable to investigate more variables about the determinant factors of dividend payout of private banks in Ethiopia to narrow the knowledge gap on the existing literature.

On this research, the researcher examines both internal and external variables. Furthermore, there were gaps in the collection of data for this subject. This research used relatively large number of observations and twenty year data and ten banks sample to show the real result than previous researches. Though it could be argued here that a number of studies have been conducted that are related to the dividend policy, this study aims to contribute by offering a comprehensive analysis of the factors affecting dividend policies in Ethiopian banks.

1.4 Research Questions

In line with the problem statement, the study has to answer the following questions on the determinant of dividend payout in the selected Commercial Banks in Ethiopia

- What is the impact of national GDP growth on dividend payout ratio of private commercial banks in Ethiopia?
- What is the impact of inflation on dividend payout ratio of private commercial banks in Ethiopia?
- How the industry's growths affect the dividend payout ratio of private commercial banks in Ethiopia?
- What is the effect of bank's profitability on the dividend payout ratio of private commercial banks in Ethiopia?
- What is the impact of liquidity on the dividend payout ratio of private commercial banks in Ethiopia?
- How bank growth determine dividend payout ratio of private commercial banks in Ethiopia?
- Does previous year dividend affect the dividend payout ratio?

1.5 Objective of the Study

1.5.1 General Objective

The general objective of the study is to assess the determinant of dividend payout in the selected Commercial Banks in Ethiopia.

1.5.2 Specific Objective

The specific objective of the study is

- To examine the impact of GDP growth on the dividend payout ratio of commercial banks in Ethiopia.
- To analyze the impact of inflation on the dividend payout ratio of private commercial banks in Ethiopia.
- To investigate the effect the industry growth on the dividend payout ratio of private commercial banks in Ethiopia.
- To explore the impact of profitability on dividend payout in private commercial banks in Ethiopia.
- To find out the influence of liquidity on dividend payout in private commercial banks in Ethiopia.
- To analyze the impact of growth on dividend payout in private commercial banks in Ethiopia.
- To examine the influence of previous years dividend on dividend payout in private commercial banks in Ethiopia

1.6 Significance of the Study

The main goal of the paper is to investigate the determinants of dividend policy in the selected commercial banks of Ethiopia. This study considers the impact of seven variables; which are profitability, liquidity, bank growth, previous year dividend, industry growth, inflation and GDP. Results of the findings are important for bank executives when creating dividend policies that would maximize profit and satisfy employees' and shareholders' needs in the long-term period. For the public, it helped them to make informed investment decision. Especially, in the country like Ethiopia where financial information is not clearly addressed, public's investment decisions are may not be purely economical and data based. Moreover, it gives an insightful point for the researchers to encourage them to investigate unexplored areas of the research topics.

1.7 Scope of the Study

The scope of this study is limited to examining the determinants of dividend policy in the selected commercial banks of Ethiopia. The study is limited to ten Ethiopian commercial banks,

which distributed a dividend payment from 2005 - 2024 by taking a twenty years data. A report of the NBE shows that there are 32 banks registered by the end of June 2024 in Ethiopia (NBE, 2024). For the sake of this research, the researcher considers ten banks, namely Awash Bank, Bank of Abyssinia, Cooperative Bank of Oromia, Dashen Bank, Hibret Bank, Berhan Bank, Wegagen Bank, NIB Bank, Zemen Bank, Global Bank Ethiopia. Selection of these banks is based on their market share compared to others. These ten private banks can be taken as a sample composition to represent the remaining private banks for the study.

1.8 Limitation of the Study

One of the limitations of the study is that the study is limited merely to ten private banks and which may not represent the overall picture of the banking industry as there are public banks as well as other private banks. In addition, the study covers the Ethiopian banks and its result may not serve for regional comparison. Thus, given the aforementioned limitations, the researcher try to provide clear picture through making proper analysis of the different variables considered against the determinants of dividend payout policy of banks.

1.9 Organization of the Study

The study has five chapters. The first chapter is the introduction part, which contains introduction, objectives of the study, research question, and significance of the study, scope of the study. The second chapter deals with the reviews of different related literatures, including theoretical and empirical reviews as well as the conceptual framework. Chapter three describes the research methodology applied in the study. It tries to address the research design, target population and sample, data source and collection instrument, diagnostic tests, data analysis procedure and ethical consideration. Chapter four focus on data analysis and interpretation of the results. The last chapter presents conclusion and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

In this chapter, efforts are made to review the various literature of the area. review section which focuses on the part of dividend definition, theoretical framework, empirical framework and conceptual framework. More specifically, it focuses on the meaning of dividend payout, different theories on dividend payout, dividend polices as well as detailed review of empirical studies on determinants of dividend payout.

2.2. The Concepts of Dividend and Dividend Policy

2.2.1. The Concept of Dividend and Its Forms

A dividend is the part of the company profit that can be cash, a stock, or any type of property a corporation distributes to its shareholders. Frankfurter and Wood (2003), define the term dividend that it is the distribution of earnings in real assets among the shareholders of the firm in proportion to their ownership. So, dividends can be distributed only from the earning of the company and it cannot from any another source of equity. Then, dividends should be backed by real asset. Finally, all stockholders are received the dividends relative to their proportional holdings in the corporation.

In a country where a well-developed capital market exists, there are important dates to the execution of a dividend. Fabozzi (2010) states that first, it is the *declaration date*, which is the date that the board of directors declares the distribution. Second, the *ex-dividend date*, which is the date that determines which investors receive the dividend. The investors who own the stock the day before the ex-date receives the dividend. So, the investor who buys the stock on the ex-date does not entitle to dividend. The *date of record*, which is specified by the board of directors as the date that determines who receives the dividend. The final day is the *payment date*, when the dividend distribution made. However, with the absence of proper and efficient capital market corporations have not got stressed about the dates. They distribute the dividend once a year after the board of directors decides the amount of distribution.

Companies don't have a legal obligation to pay dividend, and it is not entirely dependent on financial success and cash flow distribution. (Naveenan, Rajput and other, 2021).It mainly depends on the company internal policy. However, the distribution of dividend is crucial issue in a financial management decision. It is equally important for both the company and the investor. The investor wants more dividends in order to increase their wealth at the same time the firm wants to retain earnings for future cash flow and investment.

2.2.2. Forms of Dividend

In distributing dividend there are different forms of dividends that became available, including cash dividends, stock dividend, property dividend, special- dividend, Scrip dividend, Liquidating dividend, etc. Fabozzi (2010) argued that most dividends are in the form of cash. Cash dividends are payments made directly to shareholders in proportion to the shares they own. When cash dividends are paid, they are paid on all outstanding shares of a class of stock.

In addition to cash dividend dividends can be paid in the other forms. (Maladjian, 2013).argues that companies also declare stock dividends which are additional shares instead of cash given to each shareholder for every share currently owned. An issue of stock dividend is the distribution of shares free of cost to the existing shareholders. It increases the number of outstanding shares of the company and will increase the paid-up share capital. Stock dividend provides special advantages to the shareholders. They easily get a share, without any transactions cost, brokers commission and a discount from the current market price. A stock dividend has a tax advantage for shareholders. It is also the Indication of higher future profits. By issuing stock dividend shareholders normally interpreted as an indication of future higher profit.

Corporations may have their own reason to pay a stock dividend. According to Fabozzi (2010) A company may want to communicate good news to the shareholders. If the corporation has an attractive investment plan and needs funds for it, they prefer stock dividend instead of paying a cash dividend. Another reason is that a stock dividend can help to reduce the price of the stock. When the price of a stock is high relative to most other stocks of the market, it may bring higher transaction cost of the stock and higher broker's commission. So, by paying a stock dividend the company slices the equity pie into more piece, which also decline the price of the stock.

The other alternative dividends are Scrip dividends and Property dividend. Richard Pike & Bill Neale (2006) stated that it is an alternative form of payment used when the company does not have sufficient money to preserves liquidity, it may be important at a time of cash shortage, high borrowing costs, or higher level of cash outflows. Generally, it promises payment made by the company for the shareholders to pay them at the future. Property dividend is a dividend payment in assets of the corporation other than cash. For example, a corporation may produce mobile phones and home appliance. Instead of cash dividend the firm may provide his products to its stockholders.

In addition to the above types of dividend distribution approach Special- dividend, extra dividend and liquidating dividend also used by firms. However, Ethiopian firms distribute dividends through cash Kesto and Ravi, (2015). It is common way of dividend distribution to owners in the banking sector of Ethiopia is cash dividend. All banks operate in Ethiopia distribute dividend only in the form of cash. Mainly it is because of the absence of efficient secondary market.

2.2.3. What is Dividend Policy?

Kesito and Ravi (2015) argued that dividend policy is the set of guidelines that a company uses for dividend decision. It determine how much earnings could be paid out as dividend and how much could be retained by the firm.According to Opeyemi and Olusegun, (2018) the dividend policy determines what proportion of earnings is paid out to shareholders by way of dividends and what proportion is ploughed back in the firm itself for reinvestment purposes. The development of dividend policy set by the company's board of directors in conjunction with senior finance managements. It is highly influenced by the investment opportunities available to the firm and the value of dividends as against future benefit to the shareholders. Dividend policies are of such importance in corporate finance that it necessarily be addressed in depth.

The firm’s dividend policy required to support the selected strategic option to avoid the potential agency problems. The primary motive of investors is wealth maximization. However, a capital hungry firm may choose to retention of earnings by restricting the dividend payout. Retention may upset investors reliant on dividend income, resulting in share sales and lower share price, as well as exposing the company to the threat of takeover. Consequently, Corporations carefully consider the factors in designing dividend policies. Richard Pike (2006)

2.2.4. Types of Dividend Policy

Literatures show that there are different types of dividend policies, which include constant payout, residual policy, progressive policy, zero dividend policy and non-cash policy. Summary of each dividend policy is presented in the next section.

Constant (Fixed) dividend payment Policy: It is where a company sets up a dividend payout ratio and applies it to the earnings (Maladjian, 2013). Companies can follow the policy in which the payment of a fixed amount per share. Constant policy is simple and easy to predict when the company's earnings are stable and steady because it is not influenced by the companies' earnings. Kinfe (2011), argues that this policy allows the shareholders the opportunity to clearly know the amount of dividend to expect from their investments in the company. However, the policy could be stressed to companies when experiencing high fluctuating in profit earning which resulted uncertainties of profit.

Residual dividend policy: This is another dividend policy where the company first determines the capital budgeting decision and the amount of capital required to finance the project and then decides on the amount of dividend based-on the remaining earnings (Peoples University, 2010). The necessary steps in dividend declaration processes are: determination of optimum capital budget, assessment of capital required to finance that budget, use retained earnings to the extent possible to finance the project, payment of dividend only if more earnings are available than needed. In the pure residual dividend policy, dividends are paid out of the remaining earnings after all necessary capital expenditures. Priorities are given for investment. The smoothed residual dividend policy is more appropriate in which case dividends will show a steady progression. Under this policy company pays dividends after funding all profitable investment opportunities.

Zero dividend policy (No Dividend): It is a situation when the corporations may not have pay dividend. Instead, the companies reinvest all their earnings to the business to fund their projects and stimulate operations. This is common especially in faster growing companies, young and newly formed companies. Kinfe (2011), According to the data Microsoft Corporation was founded in 1975 and went public in 1986, but the first dividend was distributed in January 2003.

In our case Amhara Bank established in 2019 and started operation in 2021. The first dividend was distributed in December 2024.

Progressive policy: According to this policy, the shareholders expect a growth in the dividends they receive. The progressive policy occurs when dividend payments are on a steady increase usually in line with inflation. Maladjian (2013). This policy is favorable in a company that experiences a steady progression in its earnings. However, the companies experiencing wide fluctuations in their earrings can get difficult to implement this policy.

2.3. Theoretical Framework and the Schools of Thought

Maladjian, (2013) stated that "The issue of dividend policy has attracted the attention of many academicians and researchers." In setting up a dividend payout decision, the corporate managers should consider the existing theoretical models. Damodaran (2015) explained the dividend debate by dividing the dividend school of thought into two schools. One is the school promotes "dividends are bad" and the second promotes "dividends are good". To explain the thought of dividend is bad, the tax system is taken as reason. In the United States, dividends have been taxed at much higher rates than capital gains. Based on this tax disadvantage, individuals are discouraged to invest in a corporation. Damodaran (2015) further explained that about two-thirds of all traded equities are held by institutional investors rather than individuals. These institutions include mutual funds, pension funds, and corporations, and dividends get taxed differently. So, pension funds are tax-exempted. They are allowed to accumulate both dividends and capital gains without having to pay taxes. Mutual funds are not directly taxed, but investors in them are taxed for their share of the dividends and capital gains generated by the funds. Corporations are given special protection from taxation on dividends they receive on their holdings in other companies.

The second school of thought is the "dividends are good" school. According to this thought, regardless of the tax disadvantages, many investors viewed such payments positively. The main reasons are: first, investors prefer dividends than the capital gain because dividends are certain, whereas capital gains are uncertain. Most risk-averse investors are preferring dividend income. Second, corporations may get the Excess Cash during the fiscal year. So, firms are to pay high dividends to stockholders in a period when their operations generate high earnings or excess

cash. Third, some investors are liked to receive dividends and irrespective of the tax disadvantage, because they needed the regular cash flows.

Many researchers have presented theoretical explanations for dividends based on the dividend decision on the value of the firm and cost of capital. There are contradicting views on the determinants of dividend policy. The first view states dividends are irrelevant, which implies that the dividend decision does not influence the value of a firm. The second view states dividends are relevant, which implies that the value of a firm depends on the dividend decision. Therefore, theories of dividend can broadly be classified into two groups:

2.3.1. The Dividend Irrelevance Theory

There are different theories of dividend payout policy. The normal argument is that increasing dividend payment increases a firm's value. Some argue that high dividend payouts have the opposite effect on a firm's value which reduces firm value. The other view claims asserts that dividends should be irrelevant and all effort spent on the dividend decision is wasted. (Pillai, Rafferty and Al-Malkawi,2010).

In a perfect market, the dividend policy of a firm has no effect on the price of a firm's stock or its cost of capital. The investor's investment is not affected by the dividend decision of the firm. So, they are indifferent between dividends and capital gains. The main rationale for their indifference is that shareholder wealth is not affected by the how the income distribution became. Rather, by the income generated by the firm and the investment decisions the firm makes. M&M contended that irrespective of how the company allocates its income, its value is influenced by its fundamental earning capacity and investment choices (V. Priya and M. Sundari, 2016).

In 1961, the two Nobel Prize winners and Economists, Merton Miller and Franco Modigliani (M–M) published a paper entitled "Dividend Policy, Growth and Valuation of Shares". The paper was published about sixty years ago. However, which is one of the most influential dividend theories it is still considered as one of the most respected theories. (Kowerski and Haniewska L2022). The dividend irrelevance theory proposes that dividend is not relevant because they do not affect firm value and the investors are only interested in the return, they receive whether they receive in the form of dividends or capital gains. (Fabozzi, 2010).

Miller and Modigliani (M–M) argued that the firm's value is determined by its basic earning power and its business risk. In simple term, the value of the firm depends only on the income produced by its assets, not on how this income is split between dividends and retained earnings. (Teame, 2011). The value of a firm is dependent on its earnings capacity which resulting from the investment policy and decisions. It cannot be influenced by the way in which its earnings are divided between dividends and retained earnings.

This model is based on certain assumptions. The basic assumptions are: there is a perfect market and investors are rational. There are no taxes, no difference between tax rates on dividends and capital gains. The firm has a fixed investment policy which will not change. So if the retained earnings are reinvested, there will not be any change in the risk of the firm. There are numerous transactions and information is freely available. There is no transaction cost. Securities are divisible and no investor can influence the market price of the share. Risk of uncertainty does not exist. (P.Saraf and R. Kaur, 2014).

Before the publication of the M–M dividend irrelevance theory, the prevailing wisdom at the time was that payout policy could improve the value of the firm and therefore was relevant. It was believed that dividend payments favored the growth of the value of companies. (J. Gitman and J. Zutter 2015).Evenif MM's irrelevance theory is the influential paper in the dividend theory, it suffers from limitations and various critics are arisen from the researchers. The MM hypothesis of dividend irrelevance is based on simple assumptions. Firstly, it assumes that the market is perfect. But in real world, markets are not perfect become perfect. Perfect market is an ideal condition that doesn't exist in reality.

Al-Malkawi (2010) criticizes the MM's irrelevance theory on the transaction cost assumption. MM Model assumes there are no transaction costs. Literally, transaction costs are the cost that are the incurred during on buying or selling the securities**.** In real world experience, transaction costs and brokerage charges are paid by the shareholders. He further adds that as per MM model, there is an assumption which is said no taxes on dividends and capital gains. In reality, both capital and dividend incomes are subjected to taxes. Additionally, MM's irrelevance theory

proposes that firm's should follow the unchanged fixed investment policy. Meanwhile, firms go every investment area to generate earning and investment.

M-M's model is based on the assumption of the information availability. However, Ross (1977), in his signaling theory argued that there is information asymmetry existing between managers and shareholders. Furthermore, the theory assumes that managers have access to more information relating to the value of the firm's assets than other outside and investors.

2.3.2. The Dividend relevance Theory

The other school of thought about dividend is the dividend relevance theory. The argument of this approach is that the current dividend payment of the firm can reduce the investor decisions. When the investors get a high dividend, they certainty will increase their share. On the contrary, if the dividend becomes low, the investor uncertainty will increase. The notable theories of the dividend relevance theory are Bird-in-hand theory, Walters's model and Gordon's model.

A. Bird-in-hand theory

According to the Scottish proverb "A bird in the hand's worth two fleeing by". In financial terms, the "bird in hand" implies that investors are more willing to invest in stocks that pay current dividend rather than to invest in stocks that do not pay dividends or even pay dividends in the future date. Investors are uncertain about the future capital gain and dividends. Since the stock price is determined by market forces current dividends are more predictable future dividends (Maladjian, 2013).

The bird in hand is the opposing view to the Miller and Modigliani's dividend irrelevance theory which was presented by (Lintner, 1956) and (Gordon, 1959), established that there is a direct relationship between dividend policy of firms and its market value. Gordon and Lintner argue that current dividend payments reduce investor uncertainty, causing investors to discount the firm's earnings at a lower rate and, if all other factors equal, to place a higher value on the firm's stock. However, if dividends are reduced or are not paid, investor uncertainty will increase, raising the required return and lowering the stock's value. (J. Gitman and J. Zutter, 2015).

Most importantly, Gordon (1963) argued that the firms after doing the dividend payout, they get a higher rating from rating agencies as compared to another firm, which does not make any dividend payout. The better rating helps the firm to raise finance more easily from the stock markets since credit institutions will be willing to give loans to the firm because the payout of dividends is the evidence of creditability and the future ability to meet its obligations.

The 'bird in hand' theory has been getting various criticisms. Modigliani and Miller argued that the bird-in-the-hand theory was completely a fallacy. Because investors who want cash immediately from a firm that did not pay dividends, they can simply sell a portion of their shares. By selling a few shares in every term investor has get the same cash flow that they were received if the firm had paid dividends rather than retaining earnings. The other argument is that if a firm increases its dividends without changing the investment policy, it will have to replace the dividends with new issued stocks. Presently, the investor who receives the higher dividend will lose in the future.

B. Walter's Model

It is one of the earliest theoretical works, which shows the importance of the relationship between the firm's internal rate of return, r, and its cost of capital k, in determining the dividend distribution policy that will maximize the wealth of shareholders. Furthermore, Walter's model proposes that the choice of dividend policies almost always affects the value of the corporation (Abdullahi, and Yaro, 2020). The assumptions of Walter's model can be stated as:

- The firm finances all investments through Retained Earnings, meaning that neither debt nor new equity is issued.
- The firm's Internal Rate of Return (I.R.R.) designated by „r" and its cost of capital designated by „k" are constant.
- All earnings are immediately either distributed as dividends or reinvested internally.
- Beginning earnings and dividends do not change. This is to say that the values of Earnings per share (EPS) designated by „E" and the Dividend per share (DPS) designated by „D" may be changed in the model to determine results, but any given values of E and D are assumed to remain constant forever in determining a given value.

- The firm has a very long and infinite life.

The formula of Walter's model can be shown as follow.

$$P = \frac{\left(D + r\frac{E-D}{K}\right)}{K}$$

Where:

P = Market Price of Share, D = Dividend per share, E = Earnings per share

r = Internal Rate of Return (Average), k = Cost of Capital

Walter (1963) strongly supports the idea that the dividend policy of the firm has impact on share valuation. On his works he clearly showed the importance of the relationship between the firm's internal rate of return on investments (r) and its cost of capital (k) in determining the dividend policy that will maximize the wealth of shareholders.

C. Gordon's Model

This model is developed by Prof. Myron J. Gordon on relevance of dividend in determination of the firm value. Gordon argues that the dividend policy has direct relation with the value of stock even if the internal rate of return is equal to the required rate of return. The dividend policy of a firm influences the market value of stock. In addition, investors preferred present dividend rather that future capital gains. The basic assumptions of Gordon's model are:

- The firm is an all-equity firm.
- No external financing is available. Consequently, retained earnings would be used to finance any expansion thus Gordon's model confined dividend and investment policy just as in Walter's model
- The internal rate of return, r of the firm is constant. This ignores the Diminishing Marginal Efficiency of Investment (DMEI).
- The appropriate discount rate k for the firm remains constant. Thus, Gordon's model also ignores the effect of a change in the firm's risk-class and its effect on k.
- The firm and the stream of earnings are perpetual.
- The corporate taxes do not exist.

Abdullahi and Yaro (2020) explained this model as, if r < k, then r/k <1, it follows that Po is smaller than the firm's investment per share in assets. Then the value of b increases while the value of the stock continuously decreases. The interpretation is "If the internal rate of return is smaller than k, which is equal to the rate available in the market, profit retention clearly becomes undesirable from the shareholders stand-point''. This is due to the fact that extra investment retained decreases the funds available for shareholders to invest at a higher rate elsewhere, which in turn lowers the company's share value. Gordon (1959) suggested that there were three extra possible hypotheses for why investors interested in buying a stock of certain company. The first reason is to obtain the dividends and earnings second, then to obtain dividends, and finally to get the earnings.

2.3.3. Other Theories

A. Agency Theory

The agency theory is first proposed by Jensen and Meckling (1976). Agency costs are costs that come through to the separation between the firm's owners and its managers. The owners of the firm are the principals and the managers are termed agents. Management is charged with acting in the best interests of the owners. Nevertheless, there are possibilities for conflicts between the interests of the two. Fabozzi (2010) Corporation officials sometimes have different interests than shareholders. Managers may want to retain earnings to increase the size of the firm's asset base. Shareholders also may want higher compensation.

The basic assumption is that managers may not necessarily always act as maximizing shareholders' wealth. Maladjian (2013).defines the agency cost as a cost that arises between the stockholders and the management. Basically, the stockholders hire and delegate the managements with a certain power to maximize their wealth. However, managers may conduct actions in accordance with their own self-interest which may get beneficial for shareholders.

In order to overcome the agency problem through dividend payouts, researchers refer some solutions. Theodros, (2011) advocated that firms should have to stay in capital markets to keep raising funds. These funds are raised mostly through from the public debt financing, and other credit institutions. The stock exchange authorities will be acting as a control since, by giving a

fund. The authority would be able to monitor the activities of the company to determine whether the company is being able to repay its debt obligations. Moreover, shareholders accept to pay higher tax rates as they do not incur costs in monitoring the activities of the managers to ensure that firm value is being maximized. With such monitoring, the firm will have shown positive cash flows. The external monitoring activity can reduce the agency problem of the firm and helps to reveal information about the financial health.

B. Signaling Theory

The empirical studies about the signaling theory or the asymmetric information have done by many researchers. Miller and Rock (1985), Bhattacharya (1979), Baker (2009) and others. The basic assumption is based on the idea of information asymmetries between managers and investors. In a time of symmetric information market, all the stakeholders have the same information about the firm and the market. However, Informational asymmetry exists when one of the parties has a superior amount of information about the current situation or future prospects of a firm.

Bhattacharya (1979) statement about the signaling theories is that dividends may serve as a signal of expected future cash flows. His basic assumption is that external investors have imperfect information regarding the company's future cash flows and capital gains. Managers and insiders have the right information. The other assumption is that dividends are taxed at a higher rate as compared to capital gains. Bhattacharya (1979) further argues that companies would choose to pay dividends in order to send positive signals to the shareholders and outside investors even if dividend income has a tax disadvantage.

Fabozzi (2010) stated that the board of directors is likely to have some information that investors do not have. Any changes of dividend, such as increases or decreases in dividend may be a way for the board to signal this private information. Because most boards of directors have the information that when dividends are became lowered. When companies change their dividend earning either increasing or decreasing the price of the company's shares seems to be affected accordingly. When a dividend is increased, the price of the company's shares became goes up; when a dividend is reduced, the price usually goes down. It is clear that a positive relationship

was happened between the announcement of a dividend payout change and the price of the stock. Consequently, investors are relying on these signals to decide on their investment decision.

C. Tax Preference Theory

Fabozzi (2010) examined the tax preference theory is derived from the fact that dividends used to be taxed at a higher level than other capital gains. Furthermore, *"when dividend income is taxed at the same rates as capital gain income, investors may prefer capital gains because of the time value of money. Capital gains are only taxed when realized that is, when the investor sells the stock whereas dividend income is taxed when received. If, on the other hand, dividend income is taxed at rates higher than that applied to capital gain income, investors should prefer stock price appreciation to dividend income because of both the time value of money and the lower rates."*

Fabozzi (2010) further explained that, in the United States finance system dividend income for individual investors is taxed at high rate than capital gain income. Even if the same rates applied to dividend income and capital gain, investors preferred capital gain income because capital gain taxes are not paid until a stock is sold. Because of time value of money, the amount of taxes paid in the future has a lower effective cost than the amount paid today.

D. Clientele Effect

The clientele effect which defined by Miller and Modigliani (1961) stating that each firm is has its own shareholders who find its individual optimal dividend policy. Investors are come from different backgrounds. Different groups, or *clienteles,* of stockholders prefer different dividend payout policies. Aged individuals, pensioners and endowment funds have a tax advantage and prefer cash income, so they want the firm to pay out a high percentage of its earnings. On the other hand, youngster stockholders might prefer reinvestment, because they have less need for current income and they are highly taxed (Theodros, 2011).

Investors financial needs and investment objectives tend to have different and depends by various factors. The investment objective is growth, capital preservation, and income generation. These objectives vary in terms of, family size, education expenses, investor's age, employment package, and other characteristics. These factors could have an impact on the clientele. On other

hand, dividend income is taxed at higher rates than capital gains. Because of these different tax implications, a tax clientele effect may arise. So, investors could take investment decision to narrow this difference. Investors that have high marginal tax rates may attracted toward stocks that pay little dividends. Investors with low-income tax brackets are much gravitated to invest in high dividend yield stocks. Investors with high income tax brackets prefer to hold non-paying stocks.

2.4. Empirical Review

The dividend payout policy of banks is highly researched topic in a corporate finance. Numerous researches have been conducted to find out the factors affecting dividend payout ratio of a firm. The researchers used various variables to show the impact on the dividend payout policy. In this section the previous empirical studies that are made on the global banking environment, African banking sector and Ethiopian banking sector dividend's policy are reviewed and incorporated to understand determinant factors of dividend payout

Maladjian, (2013) examined the factors influncing the dividend payout policy in the Lebanese banks listed on the Beirut Stock Exchange. His study analysed the impact of seven variables, namely, liquidity, profitability, leverage, growth, firm size, firm risk and previous year's dividend payout on the dividend payout ratios by using an unbalanced panel dataset of audited financial statement of listed banks between the years of 2005 and 2011. He employed OLS and the dynamic panel regressions models to test the seven hypotheses. In his finding dividend payout policies are positively affected by the firm size, risk and previous year's dividends, but are negatively affected to the opportunity growth and profitability. In determining the dividend policy managers must take into consideration the stability of dividends. Additionally, he noted that firms often distribute dividends to mitigate agency problems.

Azero, et al (2023) undertook a comprehensive analysis on the determinants of dividend policy on the Malaysian public listed companies. The variables are leverage, liquidity, profitability, firm size and corporate tax. Quantitative research method and the multiple regression analysis were used to test research hypotheses. Other tests including Diagnostic test, Normality test, Multicollinearity test, Autocorrelation test, and Pearson's Correlation coefficient analysis were also conducted in this study. The evidence synthesized in the study indicated that profitability, firm size and corporate tax

had a significant positive effect on dividend policy among public listed companies in Malaysia. However, the results of the other two factors revealed that both leverage and liquidity had an insignificant negative effect on dividend policy among public listed companies in Malaysia.

Messabiab, et al., (2021) conducted a study on the determinants of dividend policy in the Palestinian banks. This study investigated the determinants of dividend policy in the emerging Palestine economy. The study aimed to determine the main factors affecting the banks' propensity to pay dividends and the banks' dividend payout ratios. The study uses pooled Probit and ordinary least squares regressions to analyze 10 years of data from all listed banks in the Palestine Stock Exchange Market. The results indicate that agency cost, signaling, and regulatory pressure theories are valid for Palestinian banks. In addition, the analysis shows that bank size, profitability, and capital adequacy are the main positive determinants of Palestinian banks' propensity to pay dividends and of the dividend payout ratios. The final result shows that bank size is the most important determinant, followed by bank profitability and bank capital adequacy.

Vasić.,et al., (2021) investigated the determinants of dividend policy in Serbian banks. They applied the regression model of a random effects model to test the relationship between dividend determinants and dividend payout. The researcher examined by selecting six determinants (profitability, liquidity, leverage, growth rate of income on interest, previous year's dividends, and bank size). Finally, previous year's dividends have shown as the most significant variable in predicting future dividend payouts. The positive impact of the last-year dividends offers support in defining dividend policy that should rely on previous payout patterns. A statistically significant impact of profitability, leverage, dividend payout rate, and bank size on dividend policy has not been found in the paper.

Nadeem et al., (2018) carried out a study on the determinants of dividend policy of Pakistan banks by employing panel data techniques. The results of this study shows that profitability, investment opportunities and last year dividend have significant positive effect on dividend payouts of Pakistani banks whereas growth and loan deposit ratio have significant negative influence. Furthermore, that last year dividend paid is the most significant factor affecting the

dividend payout ratio of the banks and there is no significant difference in the factors affecting dividend payout ratio before and after the financial crisis.

Examination was made on the factors that shaped dividend distribution policies of Brazilian public companies listed on the Brazilian Securities, Commodities and Futures Exchange from 1995 to 2011 (Forti, et al., 2013). The researchers outlined the relationships between Dividends/Total Assets and potential determinants using the variables including firm size, corporate governance, profitability, leverage, market to book, liquidity, investment, risk, profit growth, information asymmetry and agency conflict. The econometric methods are employed, Tobit, given the nature of the dividend data, and the Generalized Method of Moments to control for endogenous regressors. The result implied that company Size, ROA, Market to Book, Liquidity and Profit Growth had a significant positive impact on dividend policy of banks in Brazil.

Agyeiet al., (2011) examined the determinants of dividend policy of Ghana within the framework of fixed and random effects techniques. The major determinants are profitability, leverage, changes in dividend, collateral capacity, growth and age. The results show that profitability, debt, changes in dividend and collateral capacity are statistically significant factors, which positively influence dividend policy of banks in Ghana. On the other hand, growth and age influenced bank dividend policy negatively and significantly.

J.Olusegun et al., (2018) studied how the determinants of Dividend Policy affect the Listed Deposit Money Banks in Nigeria. They analyzed the data for the period of ten years (2006 to 2015) using panel data regression model. Correlational research design was used for the study because it describes the statistical association between two or more variables. The study found that board size, leverage, financial crisis and political factor dummy variables had negative impact on the dividend policy while other variables had positive impact. The study concluded that the independent variable which is Board independent, Board size, profitability, leverage, firm size, financial crisis and political factor influence the dividend policy of deposit money banks. The study found that only firm size and political factor dummy variable is significant at 5% while other variables are not. They recommended that the management team needs to strive

for higher profitability, larger firm size and lower debt levels to satisfy the shareholders' goal of wealth maximization in the form of higher dividends.

Odawo and Ntoiti (2015) carried out the same study to examine the determinants of dividend payout policy in Kenya banks by examining the effect of liquidity, profitability, firm size and leverage on dividend payout by adopting a descriptive research design methodology. So, liquidity is negatively and significantly related to dividend payout while profitability, leverage and firm size was positively and significantly related to dividend payout. They ended up by recommending firms to maintain an optimal level of market liquidity and strive to engage in profitable ventures.

Yiadom and Agyei (2011) conducted research to find the determinants of dividend policy of banks in Ghana within the framework of fixed and random effects technique. The results show that profitability, debt, changes in dividend and collateral capacity are the statistically significant factors which positively influence dividend policy of banks in Ghana. On the other hand, they found that growth and age influenced bank dividend policy negatively and significantly. Additionally, cash flow had a negative relationship with dividend policy and the result was not significant. Therefore, the major factors of dividend policy of the banks were profitability, leverage, changes in dividend, collateral capacity, growth and firm maturity.

Dakito and Ravi (2015) investigated the determinants of dividend payout in the Ethiopian banking industry taking after tax profit, shareholders fund and liquidity by using descriptive and multiple regressions model, and generalized moment method (GMM) of estimation. The result showed that profitability and of last year dividend had a significant positive effect on the level of current dividend payout of the banking sector in Ethiopia. Contrary to this, the impact of Liquidity on the level of dividend payout of the banking industry had a negative effect.

Zelalem (2021) analyzed the factors influencing the dividend payout ratio of eight selected commercial banks in Ethiopia, utilizing a nine-year panel data set. The research identified six independent variables. Namely, financial leverage, profitability, firm age, corporate tax rate, operating cash flow, and the extent of shares distributed against one dependent variable, the dividend payout ratio. The findings revealed that financial leverage, corporate tax rate, cash

balance, and the extent of shares distributed significantly affect the dividend payout ratio of these banks. Conversely, profitability and firm age were found to be statistically insignificant in this context.

Kinfe (2011), undertook an empirical study on the determinants of dividend payout of six private banks in Ethiopia. The research concluded that there is a positive correlation between firm size and the dividend payout ratio, while no significant relationships were found between the payout ratio and profitability, growth, or leverage. Additionally, it was determined that liquidity had a negative relationship with dividend payouts. Kinfe suggested that Ethiopian banks take into account agency conflicts, previous year's dividends, and liquidity when making dividend payment decisions.

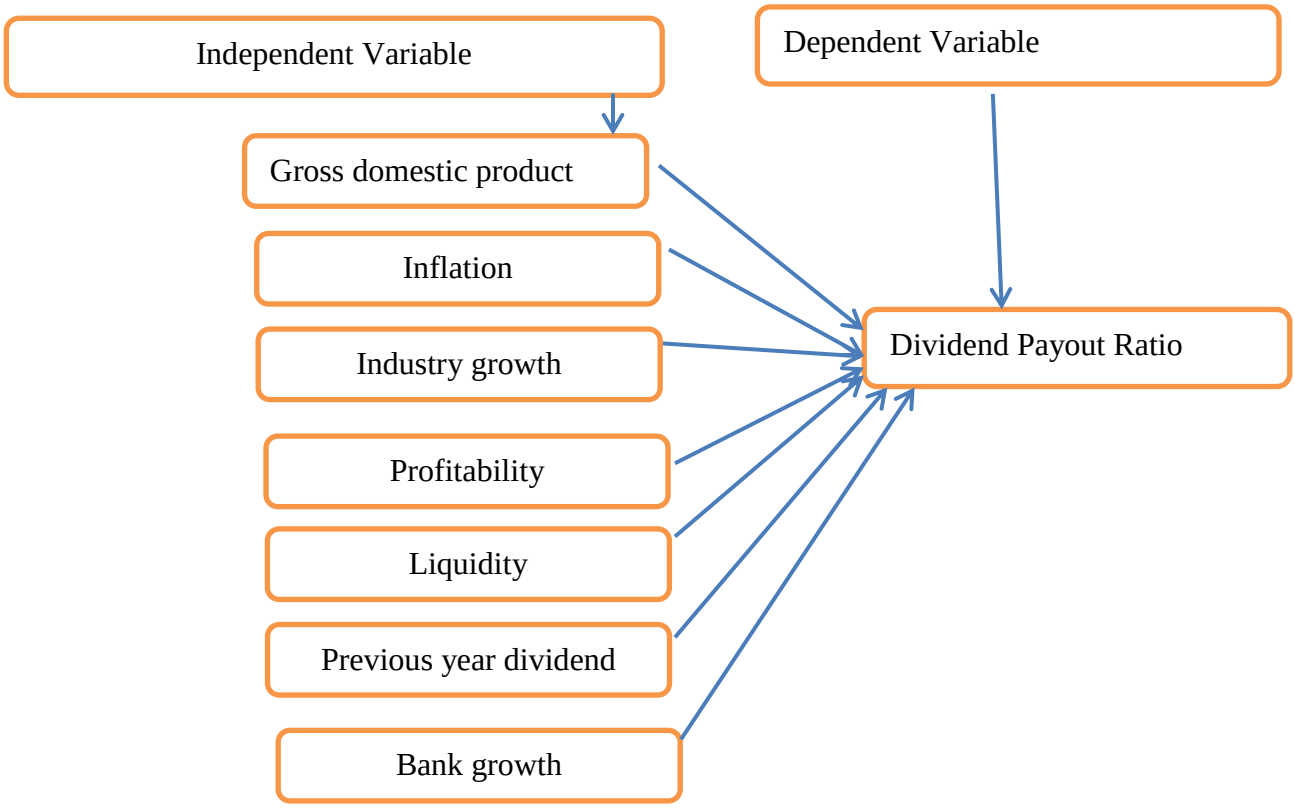
Demile (2016) focused on the internal factors affecting dividend payouts in private commercial banks in Ethiopia. This study assessed the influence of seven variables: profitability, liquidity, leverage, growth, size, and previous year's dividends, employing a panel data regression technique with random effects. The results indicated that previous year's dividends, bank size, and growth have a statistically significant positive relationship with dividend payouts. In contrast, profitability and leverage showed a negative and statistically significant relationship with the dividend payouts of private commercial banks in Ethiopia. The researcher recommended that investors and bank officials consider profitability, leverage, last year's dividends, size, and revenue growth when making investment and dividend payout decisions.

Hailu and Deyganto (2024) attempted to examine the determinants of dividend payouts in Ethiopian private banks. The study focused on six key determinants: profitability, liquidity, leverage, and growth of gross earnings, bank size, and the previous year's dividend payout. A quantitative approach with an explanatory research design was used to analyze data from 11 private banks in Ethiopia, covering the period from 2015 to 2023. The study employed a panel regression model to determine the relationship between the selected determinants and DPR. Diagnostic tests ensured the robustness and validity of the results. The analysis showed that profitability, liquidity and previous year's dividend payout have positively influence the dividend payout. On the contrary leverage and growth of gross earnings have negatively affected the dividend payout.

In summary, the empirical studies reviewed reveal a number of factors influencing dividend payout policies across various banking sectors in different regions and continents. Common determinants such as profitability, firm size, previous year's dividends, and liquidity consistently emerge as significant influences on dividend decisions. While, profitability and liquidity demonstrate inconsistent findings regards its relationships with the dividend payout policy.

2.5. Conceptual Framework

The conceptual framework of the determinants of dividend payout ratio shows the relationship between the dependent variables and independent variables. The dependent variable is dividend payout ratio and the independent variables are the macroeconomic variables, which includes Gross domestic product, inflation, the industry growth, profitability, liquidity, previous year dividend, and bank growth rate on the dividend payout ratios.



Source: chekole Demile (2016) and Wudneh Amare (2021)

Figure 1: Conceptual Framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, the methodological considerations and assumptions which underlying during the research process is presented. It discusses the approaches and procedures that the researcher employs in answering the research questions. The chapter covers the data collection, research design, sample size, target population, and finally how the data is analyzed to come up results.

3.2. Research Approach

Kothari (1990) categorized the research approach into quantitative and qualitative approach. The quantitative involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. Where, the qualitative research approach involves with subjective assessment of attitudes, opinions and behavior. In addition to the above categorization, there is a mixed research approach (Creswell, 2013). This approach involves where the researcher applies both qualitative and quantitative research approaches within a stage of the study. It helps to complements both the qualitative and quantitative information. Maladjian (2013) showed that the benefit of a mixed method approach that it balances the efficient data collection and analysis with data that provides context. The quantitative method captures large amounts of data from large groups of stakeholders and the qualitative facilitates the understanding and interpretation of the quantitative data.

In line with the research objectives and questions, this study investigates the determinants of dividend payout ratio of private commercial banks in Ethiopia. This indicates that the researcher wants to examine the various factors that affect dividend payouts, which requires quantitative analysis of a secondary data collected by the private commercial banks. On the basis of this research, the researcher assesses the determinants of dividend policy in private banks of Ethiopia and creates better understanding across researchers and regulators. The researcher has adopted the explanatory approach to assess the determinants of commercial banks dividend payout ratio. Research design refers to the conceptual structure within which research will be conducted. The explanatory research provides ideas and insights about the perception of causes, consequences, and reasons and provides evidence to support or disprove an explanation.

3.3. Sources of Data, Data Type and Variables

There are two types of data, primary and secondary. The primary data are those which are gathered for the first time through observation, questionnaire, interview and other tools. On the other hand, secondary data is defined as data that has been previously collected for some purpose other than the one at hand. (Kothari,1990) In order to get relevant information for the study, the researcher uses secondary sources. Secondary sources are consisting of published documents which include annual reports, online journals, books, and articles. However, in line with the research design, this research uses secondary data collected from the World Bank, the International Monetary Fund and the financial reports of private commercial banks. Bank secondary data, which including bank financial performance indicators and macroeconomic indicators are used in the study. Basically, bank specific variables financial reports of commercial banks are employed, for industry variables the reports of the National Bank of Ethiopia have employed and reports of the Ministry of Finance has included for macroeconomic variables. On the basis of the research objective, the independent and explanatory indicators of the study include Bank growth, previous dividends, liquidity, and profit after tax. In addition, industry growth economic growth, inflation is control variables that are used to capture their influence on the explained variables.

3.4. Population and Sampling

All private banks in Ethiopia are considered as the population of the study. Ten private banks are Awash Bank, Bank of Abyssinia, Cooperative Bank of Oromia, Dashen Bank, Hibret Bank, Berhan Bank, Wegagen Bank, Global Bank of Ethiopia, Zemen Bank, Global Bank Ethiopia Bank. These ten private banks have taken as a sample composition to represent the remaining private banks for the study. Banks with less than ten years of operations were exempted from the data set. The researcher collected twenty years secondary data from annual reports of these selected private banks and from reports of the National Bank of Ethiopia. The main reason of selecting these medium and small banks is that they possess above 52.12% of the total asset of the industry. Furthermore, these private banks have been active for the study period compared to others with continuous dividend payout history throughout the period of the study. In addition, purposive sampling method is used in this study. Purposive sampling is a type of non-probability sampling which enable the researcher to select the samples purposely or deliberate to represents

the whole population. So, the samples included in this research are ten private commercial banks of Ethiopia that are purposely selected based on their life on the operation.

3.5. Dependent and Independent Variables

Healey (2008) define dependent variable which is the event studied which is expected to change whenever the independent variable is altered. It is identified as an effect, result, or outcome variable. It is also termed as regressand, effect variable or explained variable. In this study, dividend payout ratio is used as dependent variable and several independent variables are used to identify their link with the dependent variable.

A. Dividend Payout Ratio /DPR/

Dividend payout ratio has been used as the dependent variable. The dividend is a part of a firm‘s net earnings, which is distributed among the shareholders. DPR is calculated by dividing the yearly dividend by the net profit after tax.

B. Independent Variables

The independent variables which is also known as explanatory variables that a researcher manipulates or changes in an experiment to see its effect on another variable Thus, they are identified as causal variables which are thought to cause the dependent variable (Healey, 2008). Even if there are number determinants for the dividend decisions, the bank specific explanatory variables which included in this study are profitability, liquidity, asset growth, previous year dividend of banks are included. In addition, industry growth, GDP growth and inflation rate had been considered as an external variable.

i) Profitability

Profitability refers to the firm’s ability to generate profit. According to various scholars profit is considered to be a crucial factor which affects the dividend policy. Lintner (1956) presents that profits are one of the main determinants of dividend policy. Okpara&Chigozie, (2010) argues that the high level of profits increases the intensity to pay more dividends and a company with low level profit follows a conservative dividend policy. However, high level of profit is not the confirmation of high dividend. In some cases when firm‘s profits are increased then dividends are affected negatively. This happens when firms invest their surplus earnings in their investment

rather than distributing dividends. Some Ethiopian banks have got the insignificant impact against profitability. Desta, (2021) in his paper shows that profitability has a positive and insignificant impact on dividend payout ratio of sampled commercial banks in Ethiopia. This implies that the increase or decrease in the profitability has not statistical significant effect on dividend payout ratio of commercial banks in Ethiopia.

(Dakito and J. Ravi, 2015) shows that there exist a positive relationship of profitability and dividend payout. Especially, Ethiopian banks get policy support from the supervisory body and the industry is allowed only for local operators. This helps the bank to easily access the market, raise funds with low operating cost which is ended up in a with high profitability and high dividend distribution.

H1: Profitability has a positive and significant impact on dividend Policy of Ethiopian private banks.

ii) Liquidity

The dividend policy of a firm is significantly influenced by a company's need for liquid funds for meeting working capital requirement. To make cash dividend payment firms must maintain enough liquid funds. If a company has adequate cash flows, it would like to distribute cash dividend in order to keep its shareholders satisfied (C. Maladjian (2013)).

H2: Liquidity has a positive and significant impact on dividend Policy of Ethiopian private banks.

iii) Firm Growth

Growth refers to the firm's ability to remain at the incremental level of development at a certain rate which is likely to be greater than the growth rate compared with previous year performance. Maladjian (2013) argued that firms with strong growth potential and future investment opportunities will need funds to finance their projects. So, they are forced to pay fewer dividends or to cut the dividends in order to shift their earning for investment. Similarly, Al Shabibi and G Ramesh (2011) argue that firms which have high opportunity for growth are expected to spend more on new projects for expansion purposes. As a result, dividend paid to the shareholders

would be less. However, other researchers have different argument about growth by refereeing the signaling theory. Chekole (2016) explained that companies with high investment opportunities pay more dividends for their shareholders to attract external investors, to maintain the goodwill of the firm and to avoid any negative response of shareholders. Furthermore, signaling theory refers that firms use dividends to signal their current a future performance to attract the potential investors. So, firms with high investment opportunities are tend to pay more dividends to attract the existing as well as new investors.

H3: Growth has a negative and significant impact on dividend Policy of Ethiopian private banks.

iv) Previous year dividend

Previous dividend payments have been considered as the main indicator of a firm's capacity to distribute dividends. Lintner (1956), argue that dividend payments as a key indicator of a firm's capacity to pay dividends because it was assumed that the firm's management will always try to maintain a stable dividend policy. Nadeem, Usman and etal, (2018) carried out a study on the determinants of dividend policy of Pakistan banks. Last year dividend have significant positive effect on dividend payouts. Furthermore, that last year dividend paid is the most significant factor affecting the dividend payout ratio of the banks.

H4: Previous year dividend has a positive and significant impact on dividend Policy of Ethiopian private banks.

v) Banking Industry Growth

The state of the industry refers the nature of the industry in which the business is operates. Baker (1988) argued that the dividend policy is associated with the type of the industry. He adds that there are two major reasons for industry influences on dividend policy. First, it involves the potential interdependency of firms in the investment, financing and dividend decisions. Mainly firms within the same industry may have similar investment opportunities. Secondly, the relationship existing between industry classification and dividend policy involves risk. More risky firms may prefer internal financing. Firm with a high level of business risk can also avoid or cut dividend.

H5: Industry growth has a negative and significant impact on dividend Policy of Ethiopian private banks.

vi) Economic Growth (GDP)

The GDP growth of the economy in which the company operates has a great impact on dividend policy. GDP has an impact on the firm's dividend policy are through their impact on firm value and investment opportunities. A high GDP is an indicator of economic growth and a favorable environment for investment which helps banks to retain more earnings rather than paying dividends. Yet, a low GDP can create uncertainty which leads firms to prioritize dividend payouts to shareholders.

H6: GDP has a positive and significant impact on dividend Policy of Ethiopian private banks.

vii) Inflation

Inflation is also another factor that may affect a firm's dividend decision. In the period of high inflation, funds from the depreciation cannot be enough to replace worn-out equipment. So, firm must depend on the retained earnings as a source of funds to make up for the shortfall. If the economy is passing through high inflation the cost of materials, labor and input materials are increases. Firms may face a higher operation costs. To maintain profitability, they forced to raise cost of their services.

H7: Inflation has a negative and significant impact on dividend Policy of Ethiopian private banks.

Variables	Measurement	Description	Expected Sign
Dependent variables			
DPR	DPR =Dividend paid /Net profit after tax	Dividend Payout Ratio	NA
Independent Variables			
BGRO	Natural logarithm of total assets	Bank growth	-
PYD	Natural logarithm of previous year dividend paid	Previous year Dividends	+
LIQ	Liquidity = Total Assets/Total Liability	Liquidity	+
PROF	ROA = Net Income/ Total assets	Profitability	+
IGRO	Growth in total asset	Industry growth	-
INF	Inflation rate	Inflation	-
GDP	GDP Growth	GDP growth	+/-

Source: Researcher

Table 2: Summary of the variables employed in the study

3.6. Diagnostic Test

To ensure the validity and reliability of the research's regression results, it's essential to test the consistency and reliability of the panel data and methods. This process helps identify and correct any misspecification and enhancing the quality of the research. The assumptions that have to be examined in this study include, Stationarity, the normality test, the homoscedasticity test, the multicollinearity test and linearity test.

3.7. Unit Root and Stationarity Test

The data has been examined for the presence of unit roots using panel root tests such as the Levin-Lin-Chu (LLC) test, Im–Pesaran–Shin (IPS) test, and Fisher-type tests. These tests will ascertain whether a panel data series has a unit root, indicating non-stationarity, which is crucial for obtaining accurate results. The study applied the following model to assess panel unit root tests and determine the stationarity of the series:

$$\Delta Y_{it} = \alpha_i + \delta Y_{i,t-1} + \sum_{j=1}^{n} \rho_i \, \Delta Y_{i,t-q} + z_t^i \gamma + u_{it} \quad \text{.. (1)}$$

Here, Δ represents the first difference operator, and Y denotes the series of observations for company i over $t = 1$ to n periods. The null hypothesis for the panel unit root test is $H_0: \delta_i = \delta = 0$ for all i, which posits that all series are stationary.

3.8. The Normality Test

The normality assumption test checks that the prediction errors are normally distributed. To evaluate the null hypothesis that the sample originates from a normally distributed population the widely used tests are Skewness-Kurtosis, Shapiro-Wilk, and Shapiro-Francia can be employed to (Park, 2002). Moreover, normality was checked by the histogram graph.

If the residuals follow a normal distribution, the histogram should display a bell shape, and the Bera-Jarque statistic should not be significant. This implies that the p-value from the normality test should exceed 0.05 to support the null hypothesis of normal distribution at the 0.05 significance level. (Brooks 2008).

3.9. The Multicollinearity Test

The multicollinearity test aims to assess the correlation between independent variables within a regression model. This test identifies which variables are influenced by multicollinearity and the extent of that influence. The Variance Inflation Factor (VIF) will be utilized to detect multicollinearity issues by examining whether explanatory variables are highly correlated with one another. Additionally, Pearson correlation analysis has evaluated the linear relationship between two continuous variables, measuring both the strength and direction of their association under the assumption of normal distribution and equal variances. The correlation matrix have been be analyzed to understand relationships among variables. In multiple regression analysis, strong or weak correlations may exist between independent variables; high correlations can lead to multicollinearity problems, diminishing the validity of the model.

3.10. The Homoscedasticity Test

The Homoscedasticity assumption describes a situation in which the residuals should be approximately equal for all predicted values of the dependent variable. This means the variance of the errors remains constant; when this assumption holds, the residuals will display a similar

spread on either side of a horizontal line representing the average residual (Wooldridge, 2006). However, if the errors do not have a constant variance; it is said that the assumption of homoscedasticity has been violated. This violation is known as heteroscedasticity.

The Breusch-Pagan test is used to assess whether there is heteroskedasticity in the residuals of a regression model. The null hypothesis states that there is constant variance among the residuals, while the alternative hypothesis suggests that heteroskedasticity is present.To test for heteroscedasticity, a hypothesis test is conducted using Stata 15, which provides a p-value. If the p-value exceeds the 0.05 significance level, it suggests that the model does not suffer from heteroscedasticity.

3.11. Linearity Test

A linearity test in regression assumes there is a linear relationship between the independent and the dependent variables. This assumption is typically illustrated through plots of observed versus predicted values or residuals versus predicted values. Linearity is tested through Scatter Plots by create scatter plots of the dependent variable against each independent variable or Plotting residuals which is the difference between observed and predicted values against the predicted values can also reveal non-linearity.

3.7 Estimation Models and Techniques

In this research, panel data models have used to identify the relationship between dividend payout and the various factors that determine dividend payout. The linear equation relating performance measures to the independent variables is as shown below:

$$y = \alpha + \beta it\, x + uit\,)\ldots\ldots\ldots\ldots(2)$$

Where:

Y= Dependent variable, it is banks dividend payout ratio;

X= represents set of explanatory variables in the model mentioned above, which are Bank growth, previous dividends, liquidity, profit, Industry growth, GDP, Inflation of the country.

uit is the disturbance term; α is taken to be constant over time t and specific to the individual cross-sectional unit, i represent the cross-sectional and t shows time-series dimension.

More specifically, the econometric model can be expressed in mathematical form incorporating the identified variables.

$$DPRit = F(BGRO + PYD + LIQ + PROF + IGRO + GDP + INFL, u) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

The dividend payout ratio is regressed against the independent variables, by the equation below.

$$DPRit = \beta 0 + \beta 1BGROit + \beta 2PYDit + \beta 3LIQit + \beta 4PROFit + \beta 5IGROit + \beta 6GDPit + \beta 7INFLit\ u \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

Where: DPR_{it}; dividend payout policy of bank i in time t

BGRO= Bank growth in time t

PYD = previous dividends in time t

LIQ = liquidity in time t

PROF=profit after tax in time t

IGRO = Industry growth in time t

GDP= GDP of the country in time t

INFL = Inflation of the country in time t

u = random disturbance term and

β = regression coefficient

CHAPTER FOUR: DATA PRESENTATION & ANALYSIS

4.1 Introduction

The objective of this chapter is to present the major findings on the descriptive analysis and correlation statistics on variables of the study; secondly to present the result of the fulfillment of the linear regression model assumptions and on the final section to present the results of regression analysis which constitute the main findings of this study.

4.2 Descriptive Statistics

Table 3 presents a summary of the descriptive statistics for all variables concerning ten private commercial banks in Ethiopia over a twenty-year period from 2005 to 2024. The table includes key metrics such as mean, median, standard deviation, number of observations, and the minimum and maximum values for each variable, providing a comprehensive overview of the data utilized in the analysis.

Variable	Obs	Mean	Std. Dev.	Min	Max
PROF	176	0.024126	0.009968	0.019762	0.052487
LIQ	176	1.220777	0.147596	1.005061	2.495117
PYD	128	5.620484	1.063144	3.707911	8.599123
BGRO	176	7.5322	1.118541	5.42608	10.66296
IGRO	200	24.62726	8.439017	11.65455	43.8186
INFL	200	17.21	9.830928	2.8	36.4
GDP	200	9.472649	2.088822	6.153424	13.46072
Dividend Payout ratio	173	0.379356	0.291449	0	1.525923

Source: Researcher analysis result

Table 3: Descriptive statistics

On the basis of the information in the above table, the expected number of observations is 200. However the average observations are 176 and previous year dividend comprises 128 observations. This is due to missing reported figure from the individual bank annual report.

The mean value which is the average dividend payout ratio was 37.9 percent, with a standard deviation of 0.1 percent. This indicates that, on average, the ten Ethiopian private banks distributed 37.9 percent of their net income after tax as dividends. The standard deviation suggests that the dividend payout ratio varied minimally around the mean, with deviations of just 0.1 percent in either direction, indicating a relatively stable payout ratio.

To assess profitability and its relationship with dividend policy, return on assets (ROA) calculated as net income divided by total assets was employed as a proxy. The average ROA was a log value of 2.412, indicating that for every 100 ETB invested in equity by these banks, there was an average return of a log value of 2.412 ETB. The minimum recorded ROA was 19.76 percent, while the maximum reached 52.48 percent. The standard deviation was 9.96 percent, reflecting low variability from the mean.

The average value of the liquidity is measured by the current ratio through dividing current asset into current liability. The average value was 1.22. This means that the asset of private banks were 1.22 times greater than the liabilities held by the banks. Their current asset is sufficient enough to meet the obligations. The maximum value and the minimum value was 2.495 and 1.005061 percent respectively during the study period.

From the data that we get from the table, the average previous year dividend paid by the sampled banks during the period of study was about 5.620484. This means that the sampled private banks in Ethiopia, under the period of study, paid out 5.620484(log value) of their net income after tax as dividend. The maximum value of the mean previous year dividend was about 8.599123 and the minimum was 3.707911.

Regarding bank growth, the proxy for the average value of the growth is the natural logarism of total assets. So the natural logarism of assets (SIZE) of private commercial banks of Ethiopia, they have on the average of 7.5322. This implies that on average, the listed banks' asset increased by the log value of 7.5322. The maximum value of growth for the study period was 5.426 and a minimum value of 10.6629. The standard deviation was 1.1185.

As shown from the result, the average level of banking industry growth which was proxied by growth in asset is 24.62 percent. The growth rate is registered the minimum result by 11.65 percent and the maximum growth was 43.8186 for the study period.

Inflation and GDP have considered as a macroeconomic variable which influence the dividend payout ratio of banks. The average inflation of the country during the study period was 17.21 percent. The maximum level of inflation is registered a 36.4 percent and the minimum level was 2.8 percent. In the same saying the average level of GDP is 9.4726. the maximum and the minimum level of GDP is 13.46072 and 6.153424 respectively.

4.3 Correlation Analysis among variables

Wooldridge (2016) correlation analysis is the important step we check before the regression of result. Correlation is a measurement in which two or more variables are related to each other. The most commonly used bi-variate correlation statistic is the Pearson product-moment coefficient, which is often referred to as the Pearson correlation that was utilized in this study. The correlation coefficient between two variables ranges from +1, indicating a perfect positive relationship, to -1, indicating a perfect negative relationship.

As shown in Table 4 below, there is a negative correlation between profitability (PROF) and the (BGRO) growth. This finding indicates that when revenue growth ratios and profitability increase, dividend payouts tend to decrease. This suggests that Ethiopian commercial banks are in a growth phase and are reinvesting most of their profits rather than distributing them as dividends. In the same analysis, liquidity has a negative correlation with the dividend payout ratio, meaning that higher liquidity corresponds with lower dividend payouts. Banks rather than distributing dividend payments, they prefer in distributing loans and advances for the customers. Furthermore, previous year dividend payment and the industry growth have shown a positive correlation. The dividend payout ratio is positively correlated with bank growth in asset; this means that as bank size increases, dividend payouts also tend to increase.

	DPR	BGRO	PROF	LIQ	PYD	IGRO	INFL	GDP
DPR	1.0000							
BGRO	-0.0723	1.0000						
PROF	-0.2434	-0.1978	1.0000					
LIQ	0.0831	-0.1578	0.3291	1.0000				
PYD	0.0252	0.9599	-0.1084	-0.0708	1.0000			
IGRO	0.0457	-0.1122	0.0080	0.1090	-0.0775	1.0000		
INFL	-0.1266	0.1799	-0.0901	-0.1185	0.1330	-0.1236	1.0000	
GDP	0.0683	-0.4618	0.3417	0.3476	-0.3930	0.1664	-0.4949	1.0000

Source: Researcher Analysis result

Table 4: Correlation matrixes of dependent and independent variables

4.4. Tests for the Variables to be used in the Regression Model

To maintain the data validity of the regressed result of the research, the linear regression model assumption has to be tested. The assumptions that need to be satisfied and tested in this study are the stationarity, normality, homoscedasticity, linearity and Multicollinearity tests. After the test when the assumptions are satisfied enough, it means that we have used all the available information from the patterns. However, if an assumption is violated, it implies that there is a pattern of data that we have not included in our model, and we find a model that fits the data better (Brooks,2008).

4.4.1. Stationarity or Unit Root test

The Im-Pesaran-Shin unit-root test is the widely used method for testing the presence of unit roots in the panel data. It is a procedure to test whether a panel of data is stationary or non-stationary (unit-root).

Im-Pesaran-Shin unit-root test for the variables

Ho: All panels contain unit roots Number of panels = 10

Ha: Some panels are stationary Avg. number of periods = 17.60

Variable	Statistic test	p-value
BGRO	1.8211	0.0021
PROF	-2.0011	0.0014
LIQ	-0.6122	0.0000
PYD	2.100	0.0010
IGRO	-1.4522	0.0044
GDP	-5.5649	0.0000

Source: Researcher Analysis result

Table 5: Im-Pesaran-Shin unit-root test for the variables

The result of the above table Im-Pesaran-Shin unit-root test P-value shows that all variables are less than the significant level of 0.05, which indicates that the data is stationary across all panels.

4.4.2 Normality test

To check the residuals are normally distributed, we are using two Jarque Berra test and Shapiro-Wilk test and one graphical method which Quantile-Quantile Plots (Q-Q Plot) is conducted. Summary of the Skewness/Kurtosis tests for Normality is as follow.

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
residuals	128	0.933	6.81	4.313	0.14

Source: Regression analysis result

Table 5: Jarque Berra test

The Jarque Berra test is a useful tool for assessing the normality of the data based on its skewness and kurtosis. In the above table the test statistics for Shapiro-wilk test is 0.933, which is closer to 1. The more likely it is that the data are normally distributed. The p-value is 0.14 it is concluded that the null hypothesis is not rejected and the data were consistent with a normal distribution assumption.

Skewness/Kurtosis tests for Normality

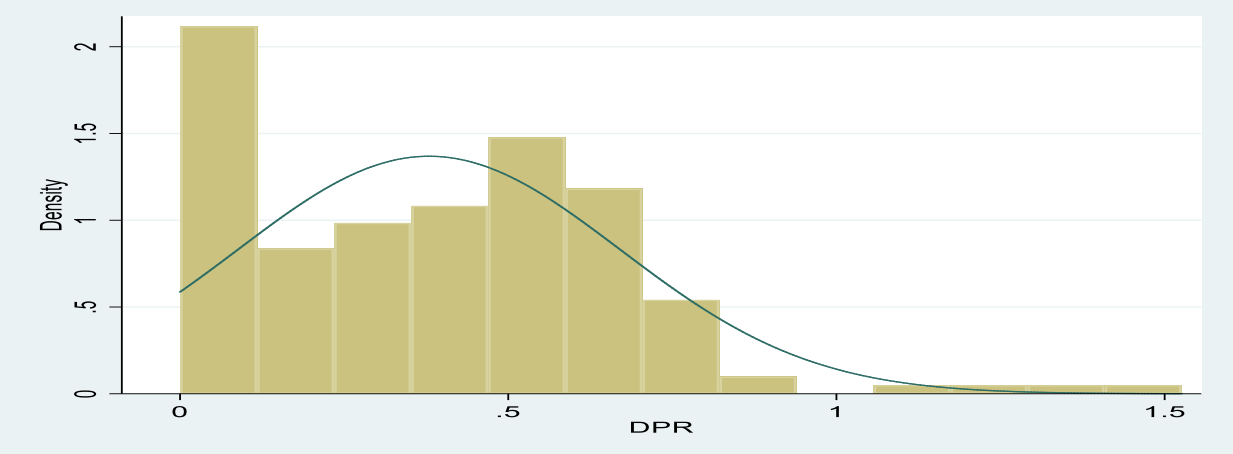
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
residuals	128	1.6	0.98	11	0.43

The p value is 0.43 which is greater than 0.05 that leads to not to reject the null hypothesis from the normal kurtosis.

Source: Researcher analysis

Table 6: Shapiro-Wilk W test

Normality test can be tested graphically using the output of a normal Q-Q Plot. When the data are normally distributed then the data points will be close to the diagonal line. Otherwise the data are not normally distributed. The below figure shows that, the data is normally distributed. Normality test can be tested by using histogram. The figure below shows that all the bars are inside the curve; this shows that the variable is normal.



Source: Researcher normality test

Figure 2: Histogram for DPR.

4.4.3 Homoscedasticity Test

Homoscedasticity is a situation that the variance of the errors remains constant. When the errors exhibit varying variances, this assumption is considered violated, which is known as heteroscedasticity. In this studythe Breusch-Pagan test to examine the presence of heteroscedasticity among the explanatory variables.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of DPR

chi2(1) = 7.82

Prob> chi2 = 0.052

Source: Researcher analysis result

Table 7: Breusch-Pagan / Cook-Weisberg test

The value of 7.82 indicates the test statistic calculated based on the relationship between the fitted values of the dependent variable (DPR) and the residuals. The p-value of 0.052 is greater than the common significance level of 0.05, indicating constant variance and no problem of heteroskedasticity.

4.4.4 Multicollinearity test

In this section, efforts are made to make a multicollinearity test between the independent variables. Results of the analysis shows that there is no correlation between the independent variables, indicating the fitness of the variables for subsequent analysis.

	BGRO	PROF	LIQ	PYD	IGRO	INFL	GDP
BGRO	1.0000						
PROF	-0.1978	1.0000					
LIQ	-0.1578	0.3291	1.0000				
PYD	0.1425	-0.1084	-0.0708	1.0000			
IGRO	-0.1122	0.008	0.109	-0.0775	1.0000		
INFL	0.1799	-0.0901	-0.1185	0.133	-0.1236	1.0000	
GDP	-0.4618	0.3417	0.3476	-0.393	0.1664	-0.4949	1.0000

Source: Researcher analysis result

Table 8: Multicollinearity test

The strongest concern arises from the correlation between Banks Growth and Previous Dividends (0.9599), suggesting significant multicollinearity. Moderate Concerns: Correlations between GDP and Banks Growth (-0.4618) and Inflation Rate and GDP (-0.4949). Other variables demonstrate low correlations, suggesting they are less likely to cause multicollinearity issues. In the same manner, further efforts made to analyze the existence of multicollinearity using vector inflation factors (VIF). Results of the study shows that there is no problem of multicollinearity across the variables to be used for the regression.

Variable	VIF	1/VIF
GDP	1.92	0.522136
INFL	1.36	0.736118
PROF	1.28	0.781783
LIQ	1.26	0.791398
IGRO	1.05	0.953523
Mean VIF	1.37	

Source: Researcher analysis result

Table 9: Variance Inflation Factor (VIF) of the explanatory variables

On the basis of the above analysis, the mean VIF was 1.37, which is much lower than the limit of 10. The VIF for individual variables was weak correlation.

4.4.5 Linearity test

Linearity test refers to the assumption of a linear relationship between the independent and dependent variables. Linearity test can be tested graphically using the output of a normal Q-Q Plot. When the data are normally distributed then the data points will be close to the diagonal line. Otherwise the data are not normally distributed. The below figure shows that the data is distributed normally.

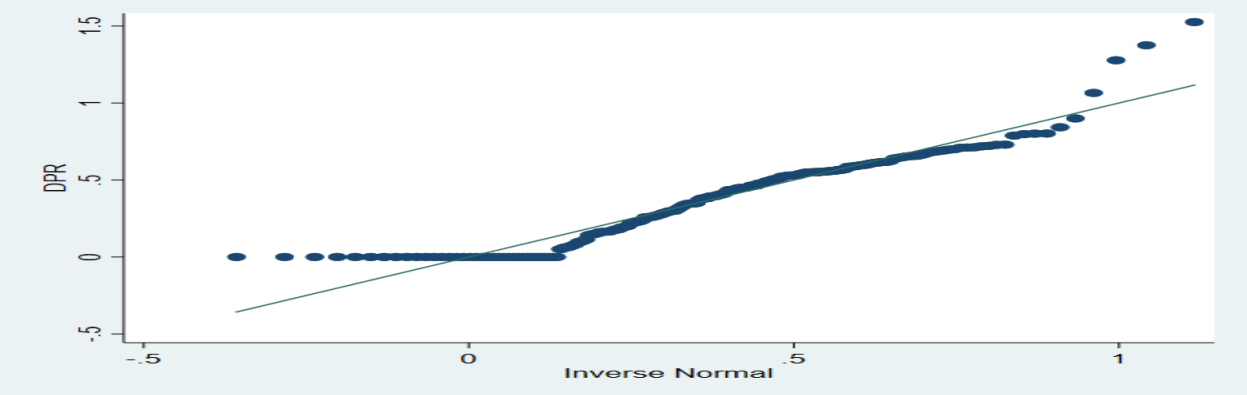


Figure 3: Normal Q-Q plot for the Dependent variable.

Source: Researcher analysis result

4.5 Regression Result of Dividend Payout Ratio

The regression analysis aims to examine the relationship between the dependent variable, **DPR**, and several independent variables. The model includes 128 observations and reveals insights into which factors significantly influence DPR.

Source	SS	df	MS	Number of obs	=	128
				F(7, 120)	=	6.49
Model	2.26580581	7	.323686544	Prob > F	=	0.0000
Residual	5.9867092	120	.049889243	R-squared	=	0.2746
				Adj R-squared	=	0.2322
Total	8.25251501	127	.064980433	Root MSE	=	.22336

DPR	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
BGRO	-.3800232	.073566	-5.17	0.000	-.5256788	-.2343676
PROF	-13.75265	2.798216	-4.91	0.000	-19.29292	-8.212378
LIQ	.1939873	.2576469	0.75	0.453	-.3161356	.7041102
PYD	.3707254	.072231	5.13	0.000	.227713	.5137378
IGRO	-.0012525	.0031474	-0.40	0.691	-.0074841	.0049791
INFL	-.0016994	.0024916	-0.68	0.497	-.0066327	.0032338
GDP	.0045338	.0150516	0.30	0.764	-.0252674	.0343349
_cons	1.476787	.4262403	3.46	0.001	.6328607	2.320713

Source: Researcher analysis result

Table 10: Regression analysis result

The F-statistic value is 6.49 ($p < 0.0001$). So, the model is statistically significant, indicating that at least one independent variable significantly predicts DPR. The R-squared value is 0.2746:

Approximately 27.46% of the variance in DPR is explained by the model. This suggests a moderate fit. The Adjusted R-squared: 0.2322, and this value (23.22%) accounts for the number of predictors and indicates a slightly lower explanatory power. The Coefficient Analysis of the data is: Banks growth coefficient: -0.3800 ($p < 0.0001$) which is one-unit increase in Banks growth results in a decrease of 0.38 in DPR, indicating a negative relationship. The profitability coefficient is -13.75 ($p < 0.0001$) A one-unit increase in profitability is can lead with a decrease of approximately 13.75 in DPR, suggesting that higher profitability may negatively impact DPR.

The Liquidity coefficient is 0.1939 ($p = 0.453$) Not statistically significant; liquidity does not have a meaningful impact on DPR. The Previous year dividends coefficient is 0.3707 ($p < 0.0001$)A one-unit increase in Previous Dividends correlates with an increase of about 0.37 in DPR, indicating a positive influence. The Industry growth coefficient: -0.001252 ($p = 0.691$) Not statistically significant; no evidence of a relationship with DPR. The level of inflation Rate coefficient: -0.001699 ($p = 0.497$) Not significant; inflation does not appear to influence DPR. The GDP coefficient: 0.0045 ($p = 0.764$) Not significant; GDP does not have a substantial effect on DPR. The Constant (cons) coefficient is 1.4767 ($p = 0.001$) Represents the expected value of DPR when all independent variables are zero.

4.6 Discussion of the Results

This section discusses the overall findings derived from the Random Effect Regression Model. The analysis focuses on the relationship between the dependent variable and the independent variables, examining how each explanatory variable influences the dividend payout levels of private commercial banks in Ethiopia.

A. Profitability and dividend payout

Among the independent variables profitability was found to be a statistically significant determinant of the dividend payout decision in the Ethiopian private banks. The sign of the coefficient was negative and statistically significant. This means that when the profitability of a bank increases, its dividend payout ratio paid to the shareholders will decrease. Maladiajan (2010) conducted a research in Lebanon and found the same result and concluded that when firms experience positive earnings, they allocate most of the profit to the retained earnings and future investment for the growth of the firm. Chekole Damile (2016) found that a negative and

statistically significant impact of ROA on the amount of dividend payout. On his study he hypothesized that there is a no relation between ROA and dividend payout of private commercial banks. However the other research conducted by Hailu and Deyganto (2024) insists that Profitability (PROF) is a positive relation with dividend payment. Higher profitability is associated with increased dividend payouts. Zelalem (2021) also finds that profitability has a positive and insignificant impact on dividend payout ratio of sampled commercial banks in Ethiopia. This implies that the increase or decrease in the profitability has not statistical significant effect on dividend payout ratio of commercial banks in Ethiopia.

The banks current and projected profitability is the major factor to decide the amount of dividend payout. The result indicates that Ethiopian private banks after their positive profit, they did not distribute to the shareholders. Higher net income will not be a guarantee for the higher dividend payout, because dividend is determined after deciding the portion of net income to be retained for projects. Mainly banks on growing stage prefer to invest their income than distributing dividend to shareholders. The analysis result clearly shows that profitability has a negative and significant impact on dividend policy of Ethiopian private banks.

B. Liquidity and Dividend Payout

The result of the regression model indicates a positive but statistically insignificant relationship between liquidity and dividend payout ratios among the banks studied. This suggests that fluctuations in liquidity—whether increases or decreases—do not significantly affect dividend payouts in Ethiopian private banks during the study period. This finding aligns with Demile's (2016) research, which also found that while liquidity had a positive effect; it did not significantly influence dividend payouts. Similarly, Maladijian's (2013) findings indicate that liquidity is not a critical factor influencing dividend payments; his results showed a positive yet non-significant impact on the dividend policies of listed banks in Lebanon. Furthermore, Demile (2016) argues that while liquidity may affect the timing of payments to shareholders, it does not determine the amount paid. In instances where a bank encounters liquidity issues, it may delay dividend payments temporarily.

Dakito and Ravi (2015) explained that liquidity is one of the variables that had a highly significant but a negative relationship with the dividend payout by suggesting that the banks with a better liquidity position pay low dividends. Mainly it is because of banks have high demand of liquid cash as compared to any other firms in the business industry, because their total operations are directly related to cash.

C. Bank growth and dividend payout

The analysis results revealed that the estimated coefficients and test statistics for growth (GRO) of -0.3800 and -5.17 respectively. This indicates a negative and statistically significant impact of growth on dividend payouts. Firms in the stage of high growth or potential investment opportunities can retain their income to finance their future investments. Firms with high growth or investment opportunities tend to retain their income to finance their investments, thus paying less or no dividends. So, they are paying fewer dividends or totally cannot pay a dividend. Researches by (Maladjian, 2013) and Hailu & Deyganto (2024) shows that there is the negative impact of growth in the dividend payment. That is banks emphasizing growth may prioritize reinvestment over dividend distribution.

D. Previous year's dividend payments

Previous year's dividend is a last year dividend payment and from the regression result previous year dividend shows a positive and significant impact on dividend policy of Ethiopian private banks. The results show that the coefficient of previous year's dividend payments is positive. This finding shows that previous dividend payment history of Ethiopian banks had an impact on the future dividend payment. Mean that, if their past records have a high dividend yield, it can be expected that the future dividend payment have a positive increment.

The result of this research is similar to other studies conducted in previous year's dividend payments as an important determinant of dividend payments. Similar research conducted by Jovković, B., Vasić S. A., & Bogićević, J. (2021), in the Serbian banks shows that previous year’s dividend is the most significant variable in predicting future dividend payouts. The last year dividends of the banks have a positive impact which offers support in defining dividend policy. The researchers conducted by Dakito and Ravi (2015) shows that previous year dividend has a positive impact and depicts highly significant relationship.

However, other studies which are conducted by (Maladjian, 2013) and Chekole Damile (2016) shows that the previous year's dividends are the most essential factor in influencing dividend payments of the researched banks. Previous dividend payment serves as a bench mark and a signal about next season expectation about the level of profits.

E. Industry growth and dividend payout ratio

The study shows that industry growth and Ethiopian private banks dividend payout ratio has a negative value and statistically not significant relationship. The coefficient of industry growth has -0.0012525 coefficient and p-value of 0.691 which is statistically not significant at one percent of level of significance. Al Shabibi and G Ramesh (2011) shows the same result in which the industry growth and type does not matter in deciding whether or not to pay a dividend.

F. Inflation and dividend payout

Inflation has a negative relationship but not statistically significant with dividend payout of private commercial banks of Ethiopia. The level of inflation coefficient: -0.001699 with the p = 0.497. Its impact is not significant; inflation does not appear to influence dividend payout ratio of the banks. During the period of inflation banks have face different challenges. As inflation become higher, companies may adopt conservative economic policies. They prioritize liquidity and capital preservation than dividend distribution. In addition inflation increased the operational cost. Nsikan Edet, A. Atairet and Francis Anoka. (2014) explained that companies have retained part of their earnings to avoid the reduction of their scale of operation and to compensate for the reduction in purchasing power. So, they would not be willing to pay much dividend. They conclude that the relationship between inflation rate and dividend payout is negative.

G. GDP Growth Rate and Dividend Payout

There is a positive relationship and statistically significant value between GDP growth rate and dividend payout of private commercial banks in Ethiopia. The result revealed that the country's GDP growth rate and dividend payments are positively related. The coefficient of GDP growth rate is 0.4533 and p-value of 0.764.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The final chapter constitute the conclusion and recommendation part, which is mainly linked with the analysis presented in chapter four. Summary of the findings are discussed in the conclusion section and recommendation is given based on the findings. In addition, the research suggested possible areas of further research.

5.2 Conclusion

The dividend payment of banks is the distribution of their profit among their shareholders in proportion to their ownership. To make the distribution banks consider various determinant factors. In line with this, in this research the main determinants are examined. This study empirically examined the data for a sample of ten private banks out of thirty private banks operating in Ethiopia by using a twenty year data for the period of 2005-2024. However, all banks under the study period, has not been operational and has not distribute cash dividends. So, unbalanced data tools have been implemented and five hypotheses were made to verify the appropriateness of the variables and the model and answer the research questions. The result of the study indicated that among the independent variables, profitability was found to be a statistically significant determinant of the dividend payout decision in the Ethiopian private. The sign of the coefficient was negative and statistically significant. Banks at the initial phase or at the growth stage prefer to retain their earning than distributing to the shareholders. The relationship between the dividend payout ratios of banks liquidity is positive but not significant. When Ethiopian banks hold excess cash they tend to pay better for the shareholders. The regression result of previous year dividend shows a positive and significant impact on dividend policy of Ethiopian private banks.

The banking industry growth and the dividend payout ratio have a negative value and statistically not significant relationship. Even if the industry is growing positively, it does not help the individual firm to distribute an abundant dividend for the shareholders. Inflation of the nation is one of the macroeconomic variable which has a negative relationship and statistically not

significant and with dividend payout of private commercial banks of Ethiopia. Because, inflation has reduce the purchasing power of the firm, increase the costs of materials, personnel and spending. This leads to a stagnant dividend or a lower dividend. There is a positive relationship and statistically significant value between GDP growth rate and dividend payout of private commercial banks in Ethiopia. This implies that when the GDP grows, it shows the economy is expanding which leads higher corporate profits. When the companies earn high profit they may increase their dividend payments to the shareholders.

5.3 Recommendation

Dividend theory is the highly debatable topic in corporate finance. Even if numerous researches have been conducted in this topic, few studies had previously been conducted by measuring the impact of macro variables like inflation, GDP growth. Dividend income is often considered as a source of regular income, which can be attractive for investors and individuals who seek passive income. However, it is necessary to consider factors before investing in the stocks. According to the findings of the study, profitability, banks growth and industry growth has not been a guarantee to positive dividend year to year. Rather it is recommended for individual investors to use detailed information on the factor that affect dividend payout before their investment decision.

Furthermore, bank managers, bank directors and board of directors require considering the factors that have impact in the dividend payout decisions. Researchers and academic professionals who conduct research in the similar topic can consider the additional variables such as leverage, capital structure, foreign exchange volatility, internal risk factors of the firm and other important variables.

5.4 Suggestions for Further Research

Researchers can use this research as reference in their effort of analyzing the determinants of dividend payout ratio in the banking industry. It is recommended that further similar study can be conducted by taking large sample size with more variables which might be helpful to assess the potential determinants of dividend payout in commercial banks of Ethiopia. Future researcher can conduct on the determinants of dividend payout by comparing Ethiopian banks with other

African banks. In different studies, most researchers use the company specific variables such as: liquidity, profitability, leverage and others. However, the impact of other macroeconomic factors can be used as determinants for dividend payout ratio.

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