Determinants of Dividend Payout Policy of Commercial Banks: Evidence from Selected Commercial Banks in Ethiopia

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Abstract: The study is about investigation of determinants of dividend payout ratio of commercial banks in Ethiopia over the period 2010-2018. Nine years Panel data was obtained from audited financial statements of 8 selected commercial banks in Ethiopia. The study used six independent variables such as financial leverage, profitability, age of firm, corporate tax rate, operating cash and extent of shares distributed and one dependent variable which is dividend payout ratio. Both descriptive and inferential statistics were used in order to interpret the findings of the study. Random effect regression was used to investigate the impact of determinant factors on the dividend payout policy of commercial banks in Ethiopia. Correlation was also conduct to understand the relationship between dependent and independent variables. The correlation analysis shows that, Return on Equity (ROE), Corporate Tax Rate (CTR), and Number of Shares Distributed (NSD) have Negative relationships with Dividend Payout Ratio (DPO). While the remaining independent variables; Debt Ratio (DR), Age of Firm and Cash to Total Assets Ratio (CTA) have positive relationships with Dividend Payout Ratio (DPO). The key finding of this study shows that, financial leverage is significant variable at 1%, while corporate tax rate, cash balance and extent of shares distributed are significant variables at 10% significant level in determining dividend payout ratio of commercial banks in Ethiopia. on the other hand, profitability and age of firm are not statistically significant variables in determining dividend payout ratio in commercial banks of Ethiopia.

Keywords: Determinants, Dividend Payout, Commercial Banks

1. Introduction

Dividend policy refers to 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 of the company [20]. "It is the practice that management follow in making dividend payout decision or in other word the size and pattern of cash distribution over time to shareholders" [1]. Dividend policy is a one of the most debated topics and a core theory of corporate finance which still keeps its prominent place. Many researchers presented various theories and uncountable empirical evidences, but the issue is still unresolved and open for further discussion. It is among top ten unresolved problems in the finance literature and we have not an adequate explanation for the observed dividend behavior of the firms, [2, 3].

Dividend payout has always been a debatable subject in corporate finance. Dividend policy is one of the corporation financial decisions that have been of concern among researchers and practitioners [4]. Dividend decision is important for both the investors and corporations. It is the decision of organization management about what proportion of the earnings should be invested and what proportion should be distributed to shareholders as dividends. While making this decision the management considers available investment opportunities that would increase future earnings and if such opportunities are not available the management should distribute the earnings to shareholders. In other words, dividend policy is a decision made by an organization to determine the amount of dividend to be paid and the level of profit to be retained. The dividend paid will be a form of return to the shareholders who invest in the organization [5].

While the profit to be retained in the firm is known as retained earningthis is being reinvested by the firm in business operation or growth [6].

Declaration of dividends involves some legal as well as financial considerations. From the point of legal considerations, the basic rule is that dividend can only be paid out profits without the impairment of capital in any way. But the various financial considerations present a difficult situation to the management for coming to a decision regarding dividend distribution. Some of the most important determinants of dividend policy are: Type of Industry, Age of Corporation, Extent of share distribution, Need for additional Capital, Business Cycles, Changes in Government Policies, Trends of profits, Taxation policy, Future Requirements and Cash Balance [7].

Studies conducted in Ethiopia on Determinants of Dividend payout for example Theodros Kinfe [8]verified that, the main characteristics of firm dividend payout policy were that dividend payments related strongly and directly to firm size and lagged dividend per share, but negatively to the liquidity ratio. However, there is no relationship of profitability, leverage, and growth as independent variables with dividend payout.

"Study conducted Tadle Tesfaye [9] on the title of Determinants of dividend policy In Ethiopian private banks" indicated that study revealed that profit, leverage, and lagged dividend payment have positive and statistically significant impacts on dividend policy of Ethiopian private banks while retained earnings, loan loss provision, inflation have negative and statistically significant impact on dividend policy of Ethiopian private banks whereas liquidity and economic growth rate were found to be statistically insignificant and have no any impact on dividend policy of Ethiopian private banks.

A lot of research has been conducted in developed as well as developing countries in order to describe the determinant factors of firm's dividend policy. But even though many studies have been conducted, the results indicate that there are some differences between countries regarding which factors that have an impact on dividend payouts.

Mostof studies conducted in Ethiopia for instance Theodros Kinfe [8], Hailemariam. S [10], Chekole Demilie [11], Tadele Tesfay [9] and Elias Mitiku [12] revealed inconsistency results and did not consider cash balance, extent of shares distributed and corporate tax rate as determinant factors of dividend payout policy of commercial banks in Ethiopia. Thus this study tried to fill this knowledge gap and investigated the determinant factors of dividend payout ratio of commercial banks in Ethiopia by considering these variables as independent variables.

The study has the overall objectives of investigating determinants of Dividend Payout Ratio of Commercial Banks in Ethiopia and the following specific objectives.

1. To examine the determinants of dividend payout ratio of commercial banks in Ethiopia.
2. To investigate the effect of financial leverage on the dividend payout ratio of commercial banks in Ethiopia.
3. To examine the impact of profitability on the dividend payout ratio of commercial banks in Ethiopia.
4. To investigate the effect of age of firm on the dividend payout ratio of commercial banks in Ethiopia.
5. To examine the impact of corporate tax rate on the dividend payout ratio of commercial banks in Ethiopia.
6. To explore the effect of operating cash on the dividend payout ratio of commercial banks in Ethiopia.
7. To study the impact of Extent of shares distributed on the dividend payout ratio of commercial banks in Ethiopia.

2. Literature Review

"Study conducted by Gwahula Raphael & Wilson Mnyavanu [13], on the title of Determinants of Dividend Payout of Commercial Banks listed at Dar Es Salaam Stock Exchange" stated that, profitability, liquidity, Growth and financial leverage are statistically significant determinants of Dividend payout of commercial banks while firm size is not a statistically significant variable for dividend payout.

Chekole Demilie [11] has conducted research on internal determinants of dividend payout in Private commercial banks in Ethiopia. The study incorporated six variables such as profitability liquidity, leverage, growth, size, and previous year's dividend as determinants of dividend payout ratio. The findings of the study shows that, last year's dividend, bank size, and growth have statistically significant and positive relationship with bank's dividend payout. On the other hand, profitability and leverage have negative and statistically significant relationship with dividend payout ratio of private commercial banks in Ethiopia. However, the relationship of liquidity and dividend payout is positive but statistically insignificant.

In the research findings of BognaKaźmierska-Jóźwiak [14] with title of determinants of dividend policy: evidence from polish listed companies stated that, there is statistically significant and negative relationship between dividend payout ratio (DPO) and two analyzed factors: profitability (ROE) and leverage (LEV). The result shows that, dividend payout ratio is a negative function of profitability and leverage.

According to study conducted by Yong TeckMui and Mazlina Mustapha [15] stated that, investment opportunity, liquidity and firm size significantly influence the dividend payout of Malaysian listed firms.

Augustine Nwekemezie and Chinwe Gloria [16] Conducted study on the impact of financial leverage on dividend policy of selected manufacturing firms in Nigeria. They used a sample of 50 quoted companies that have dividend history and consistently published their audited annual financial report from 2011 to 2015. A pooled regression analysis was adopted in the study. The result revealed that long term leverage has a significant positive effect on firm's dividend policy. The study went further to reveal that interaction of age and profitability was significant in influencing dividend payout within the period under study.

FarukBostanci, EyupKadioglu and GuvenSayilgan [17] Investigated determinants of dividend payout decisions with a dynamic panel data analysis of Turkish stock market. The study analyzed the firm specific factors affecting the dividend payout decisions of the companies whose shares are traded on the Borsa Istanbul stock exchange. Panel regression is applied to 853 observations of yearly average of106 companies listed on the BorsaIstanbul between 2009 and 2015. The study finding revealed that, there is statistically significant positive relationship between the dividend payout of previous year, the company's return on equity and the market value/book value ratio, liquidity and the company's size.

Abdul Rehman & Haruto Takumi [18] Conducted research to examine the determinants of dividend payout ratio in the largest stock exchange of Pakistan. The effect of debt to equity ratio, operating cash flow per share, profitability, market to book valueratio, current ratio and corporate tax on dividend payout ratio was analyzed for the year 2009 for 50 companies that announced dividend in 2009. Relation of debt to equity ratio, profitability, current ratio and corporate tax was found to be positive with dividend payout ratio while operating cash flow per share and market to book value ratio has a negative relationship with dividend payout ratio. Profitability, debt to equity and market to book value ratios were found to be the significant determinants of dividend payout ratio in Pakistan.

Gustav Hellström & Gairatjon Inagambaev [19] Examined Determinants of Dividend Payout Ratios on Study of Swedish Large and Medium Caps. The purpose of the study was to determine if there is a relationship between company's selected factors and the company's dividend payout ratio. The second purpose was to determine whether there are any differences between large and medium caps regarding the impact of the company selected factors. The data used in the study were secondary data collected during a time period of five years, between 2006 and 2010. The finding indicates that, some of the company selected factors have an impact on the company's dividend payout ratio and there are some differences between large and medium caps. The dividend payout ratios of large caps have a significant relationship to free cash flow, growth and risk. While the dividend payout ratios of medium caps have a significant relationship to free cash flow, leverage, risk and size.

Then based on the above mentioned literatures the current study framed the following conceptual framework.
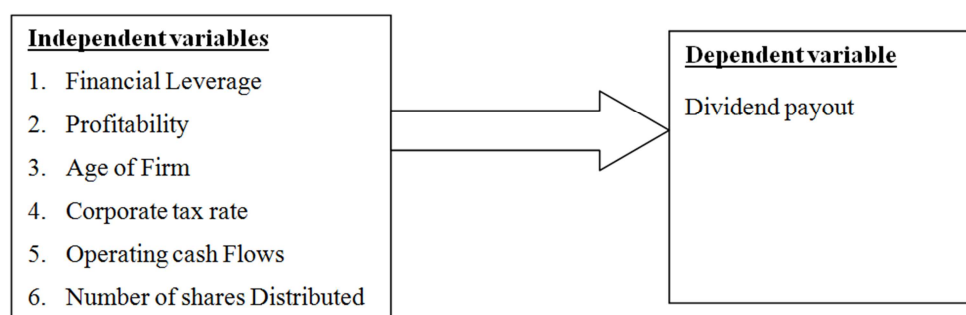
Source: researcher assembly

Figure 1. Conceptual framework.

3. Description of Variables

3.1. Dependent Variable

As a measure of dividend policy Dividend payout ratio was used in this study. In order to determine dividend payout ratio of commercial banks the following formula was used:

$$DividendPayout(DPO)Ratio = \frac{dividendpershare}{Earningpershare}$$

3.2. Independent Variables

For the purpose of examining the determinants of dividend payout ratio as independent variable six variables such as financial leverage, profitability, firm age, corporate tax rate, operating cash flow, and number of shares distributed were considered.

Financial leverage:
It measures the proportion of total fund supplied by creditors. As a measure of financial leverage debt ratio was used. This was computed as follows:

$$DebtRatio(DR) = \frac{TotalLiabiilities}{TotalAssets}$$

Profitability:
In order to measure profitability of firms different ratios can be used. This includes profit margin, return on Assets (ROA) and Return on Equity (ROE). In the current study Return on Equity (ROE) was used to measure profitability of commercial banks in Ethiopia. the following formula was used to compute Return on Equity (ROE).

$$ReturnonEquity (ROE) = \frac{NetIncome}{Stockholders'Equity}$$

Age of Corporation:
Newly established enterprises require most of their earnings for plant improvement and expansion, while old companies which have attained a longer earnings experience can formulate clear cut dividend policies and

may even be liberal in the distribution of dividends [7]. In order to measure the statistical relationship between dividend payout ratio and age of corporation, this variable was incorporated through counting operating life of sampled Commercial Banks.

Corporate tax:

Articles shred by Smritich [7] and Abdul Rehman&Haruto Takumi [18] defined that, corporate tax rate is one determinant factor for dividend policy. As it is indicated corporate taxes affect dividends directly in as much as they reduce the residual profit after tax available for shareholders and indirectly, as the distribution of dividends beyond a certain limit is itself subject to tax. In order to measure the statistical relationship between dividend payout ratio and corporate tax, corporate tax rate was incorporated and computed using the following formula.

$$CorportaeTaxRate = \frac{corportaeTax}{ProfitBeforeTax}$$

Operating Cash Flows

As it is stated by researchers for instance, Smritichand [7], Gustav Hellström & Gairatjon Inagambaev [19] and Abdul Rehman & Haruto Takumi [18] operating cash flow is also one determinant factor in the dividend policy of a corporation. If the working capital of a company is small liberal policy of dividend cannot be adopted. The agency theory also argued that, when free cash flow increases dividend should be paid in order to reduce agency cost of a corporation. In the current study operating cash to total assets ratio was used as a proxy of operating cash flows.

Extent of Shares Distributed

Article shared by Smritichand [7] explained that, closely held company is likely to get consent of the shareholders for the suspension of dividends or for following conservative dividend policy. But a company with a large number of shareholders widely scattered would face a great difficulty in securing such assent. Reduction in dividends can be affected but not without the co-operation of shareholders. In order to measure the statistical relationship between dividend payout ratio and extent of shares distributed, number of shares distributed and owned by shareholders was considered as one independent variable.

In order to test the statistical relationship between dependent variable and independent variables the researcher hypothesized the following null and alternative hypotheses.

Null Hypotheses

$H0_1$=There is no significant relationship between Financial Leverage and dividend payout.

$H0_2$=There is no significant relationship between profitability and dividend payout.

$H0_3$=There is no significant relationship between age of firm and dividend payout.

$H0_4$=There is no significant relationship between corporate tax and dividend payout.

$H0_5$=There is no significant relationship between operating cash and dividend payout.

$H0_6$=There is no significant relationship between extent of shares distributed and dividend payout.

Alternative Hypotheses

HA_1=There is a significant relationship between Financial Leverage and dividend payout.

HA_2=There is a significant relationship between profitability and dividend payout.

HA_3=There is a significant relationship between age of firm and dividend payout.

HA_4=There is a significant relationship between corporate tax and dividend payout.

HA_5=There is a significant relationship between operating cash and dividend payout.

HA_6=There is a significant relationship between extent of shares distributed and dividend payout.

4. Materials and Methods

4.1. Study Design

Research design is arrangement of conditions for collection, analysis and interpretation of data in a manner to combine relevance to the research purpose with economy in procedure [20]. Both inferential and descriptive statistics were employed in order to analyze and interpret the main results of the study. Random effect regression was used to investigate the impact of determinant factors on the dividend payout policy of commercial banks in Ethiopia. Pearson Correlation was also conducted to understand the relationship between dependent and independent variables. This study used secondary data obtained from audited annual financial reports (profit and loss statement and financial position statement) of selected Commercial Banks operated in Ethiopian Financial System from 2010-2018 for a period of 10 years.

4.2. Methods of Data Collection

In order to obtain necessary data for the study secondary sources of data were used for the accounting period of 2010 to 2018. These were obtained from audited financial statements specially profit or loss statement (income statement) and balance sheet (statement of financial position) of selected commercial banks in Ethiopia. Because of unavailability of 9 years data 8 banks were selected purposively from 17 private commercial banks in Ethiopia. The selected banks were DashenBank (DB), Nib International Bank (NIB), ZemenBank (ZB), Awash International Bank (AIB), Hibret Bank (HB), Abay Bank (AB), Lion International Bank (LIO) and Cooperative Bank of Oromia (CBO). The necessary ratios used in the study were computed using excel spread sheet by taking required data from audited financial statements of selected banks.

4.3. Method of Data Analysis

In this study to analyze and interpret the data, both descriptive statistics and inferential statistics analysis were employed. Using Descriptive statistics such as mean,

maximum, and minimum were explained to determine the average values, the highest, lowest values of observation respectively. In addition, standard deviation was also used to measure the degree of dispersion from the mean value. In order to examine the relationship between dependent variable and independent variables correlation analysis was employed. On the other hand, for the purpose of investigating and measuring the impact of independent variables (financial leverage, profitability, age of corporation, corporate tax, operating cash and extent of shares distributed) on the dependent variable (dividend payout) random effect model estimation technique was used. Hausman test was conducted to select whether fixed effect or random effect is appropriate model for the study and the result indicates random effect model is the appropriate. StataMP 13 software was used for the purpose of running regression.

The variables used for the study are summarized below.

Table 1. Summary of variables.

Variables	Definitions and Formula	Category
Dividend payout (DPO)	Dividend per share/ earnings per share	Dependent
Financial leverage (DR)	Total liabilities/ total assets	Independent
Profitability (ROE)	Net income/ stockholders' equity	Independent
Age of a Firm (AGE)	Number of operating life of firm	Independent
Corporate tax Rate (TR)	Corporate tax/profit before tax	Independent
Operating cash flows (CTA)	Operating cash flow/ total assets	Independent
Extent of shares distributed (NSD)	Number of shares owned by shareholders	Independent

4.4. Model Specification

The model used in this study is adopted from the common characteristics of panel data regression expression, which involves the pooling of observations on a cross section of units over several time periods and provides results that are simply not detectable in pure cross sections or pure time series studies.

The model is expressed as:

$$Y_{jt}=\alpha_0+b_1x_{1jt}+b_2x_{2jt}+b_3x_{3jt}+\ldots\ldots+\mu_{jt}$$

Where:

Y_{jt}=dependent variable of company j at time t
X_{jt}=independent variable of company j at time t
α_0=intercept for x variable for j company at time t
b_1-b_3=co-efficient for the independent variables x of companies, denoting the nature of the relationship with dependent variable y
μ_{jt}=residual

The above general model modified in compact form of this study as follows:

$$DPO_{jt}=\beta_0+\beta_1DR_{jt}+\beta_2ROE_{jt}+\beta_3AGE_{jt}+\beta_4TRX_{jt}+\beta_5CTA_{jt}+\beta_6NSD_{jt}+\mu_{jt}$$

Where:
DPO_{jt}=dividend payout ratio of firm j at time t
DR_{jt}=Debt Ratio of firm j at time t
ROE_{jt}=Return on Equity of firm j at time t
AGE_{jt}=Age of firm j at time t
TRX_{jt}=Corporate tax rate of firm j at time t
CTA_{jt}=Cash to Total Assets ratio of firm j at time t
NSD_{jt}=Number of Shares Distributed of firm j at time t
β_0=intercept
β_1, β_2, β_3, β_4, β_5 and β_6=slope coefficients
μ_{jt}=residual

5. Results

5.1. Descriptive Statistics

Descriptive statistics such as mean, maximum, and minimum were explained to determine the average values, the highest, lowest values of observation respectively. In addition, standard deviation was also used to measure the degree of dispersion from the mean value.

Table 2. Descriptive Statistics.

Variables	Obs	Mean	Std. Dev.	Min	Max
DPO	72	.4905379	.2600901	0	1.525907
DR	72	.859641	.0453982	.6550711	.9331195
ROE	72	.2012279	.0759027	-.0240957	.453632
AGE	72	11.75	6.297216	1	23
TR	72	.1503902	.0512498	0	.2725216
CTA	72	.26564	.1154815	.104353	.5789397
NSD	72	3611230	3956082	108142	1.83e+07

Source: stata output, 2019

As it is indicated in the above table, the mean value scored for dividend payout ratio (DPO) for sampled banks is 0.49. Meaning that, on average 49% of earning per share is paid in the form of dividend during the study period. The mean value of Debt ratio (DR) of 0.85 indicates that, on average 85% of assets of sampled banks are financed with debt source of financing and the remaining 15% of assets are financed with internal source of financing. This indicates that private commercial banks in Ethiopia are highly leveraged firms. With regard to profitability

measured by Return on Equity (ROE), the mean value of 0.20 indicates that, sampled banks were earned a net income of 20% of equity funds.

On the other hand sampled banks have on average 12 years operating life, 15% corporate tax rate, operating cash balance is 26% of total assets and on average 3, 611, 230 shares are distributed to shareholders during the period under study.

5.2. Comparative Analysis for Sampled Banks

The following section tried to summarize the comparative analysis for dividend payout ratio, debt ratio (DR), Return on Equity (ROE), Cash to Total Assets (CTA) and Number of Shares Distributed (NSD) among sampled Banks over the period under study.

Table 3. Comparative Analysis.

COMPANY / Average values	DB	NIB	ZB	AIB	HB	AB	LIB	CBO
DPO	0.385212	0.639583	0.533186	0.572733	0.642149	0.308408	0.518017	0.325014
DR	0.889729	0.836434	0.850744	0.886626	0.881138	0.79709	0.841134	0.894234
ROE	0.261374	0.177188	0.229725	0.22746	0.207614	0.103563	0.184029	0.218871
CTA	0.279562	0.254332	0.339409	0.204656	0.193337	0.2973	0.327257	0.229267
NSD	1,161,707	2,219,503	410,655	1,434,023	8,825,613	2,217,806	4,776,263	7,844,267

Source: researcher computations made from financial reports of sampled banks, 2010-2018

As it is presented in the above table, the average value of dividend payout ratio of sampled banks ranges from 30.8% scored for Abay Bank (AB) to 64.2% scored for Hibret Bank (HB), average Debt ratio ranges from 79.7% scored for AbayBank (AB) to 89.4% scored for Cooperative Bank of Oromia (CBO), average Return on Equity (ROE) ranges from 10.35% scored for Abay Bank (AB) to 26.13% scored for Dashen Bank (DB), average cash to Total Assets Ratio (CTA) ranges from 19.3% scored for Hibret Bank to 33.9% Zemen Bank (ZB), Number of shares distributed ranges from 410, 655 shares to 8,825,613 shares scored for Zemen Bank (ZB) AND Hibret Bank (HB) respectively.

5.3. Correlation Analysis

For the purpose of understanding the relationships between dependent and independent variables Pearson correlation was conducted as it is depicted in the following table.

Table 4. Correlation Matrix.

DPO		DR	ROE	AGE	TR	CTA	NOS
DPO	1.0000						
DR	0.621	1.0000					
ROE	-0.1172	0.6026	1.0000				
AGE	0.122	0.4725	0.1921	1.0000			
TR	-0.2191	0.2715	0.6604	-0.1280	1.0000		
CTA	0.3782	-0.4195	0.0334	-0.5302	0.3174	1.0000	
NSD	-0.287	0.3366	-0.0755	0.0945	-0.3268	-0.4717	1.0000

Source: Author's stata output, 2019

The above correlation matrix table shows that, Return on Equity (ROE), Corporate Tax Rate (CTR), and Number of Shares Distributed (NSD) have Negative relationships with Dividend Payout Ratio (DPO). While the remaining independent variables; Debt Ratio (DR), Age of Firm and Cash to Total Assets Ratio (CTA) have positive relationships with Dividend Payout Ratio (DPO). The magnitude of their relationship is indeed at 62.1%, -11.72%, 12.2%, -21.91%, 37.82% and -28.7% for Debt Ratio (DR), Return on Equity (ROE), Age of Firm, Corporate Tax Rate (TR), Cash to Total Assets ratio (CTA), and Number of Shares Distributed (NSD) respectively.

The strength of the correlation is interpreted using the guide that Evans J. D [21] suggests for the absolute value of correlation coefficients. The interpretation of strength of correlation coefficient is shown in the table below.

Table 5. Interpretations of strength of correlation coefficient.

Value of coefficient	Relation between variables
0.00 – 0.19	Very weak
0.20 – 0.39	Weak
0.40 – 0.59	Moderate
0.60-0. 79	Strong
0.80 – 1.00	Very strong

Source: Evans, 1996

Based on the above guideline, Financial Leverage measured by Debt Ratio (DR) has strong relationship with dividend payout ratio (DPO) ratio of commercial banks in Ethiopia. profitability measured by Return on Equity (ROE) and Age of Firm have a very weak relationship With Dividend payout ratio of Sampled Commercial Banks in Ethiopia. While the remaining variables Corporate Tax Rate (TR), operating cash balance measured by Cash to Total Assets Ratio (CTA) and Extent of Shares Distributed measured by number of shares distributed (NSD) have weak relationship with Dividend Payout ratio (DPO) of sampled commercial banks in Ethiopia.

5.4. Econometrics Results

In order to investigate the impact of explanatory variables (Financial leverage, profitability, age of firm, corporate tax rate, operating cash and extent of shares distributed) on dependent variable (DPO) random effect regression was conducted. All the classical linear regression assumptions were conducted and fulfilled. The result of regression output is presented in the following table.

Table 6. Random Effect Regression Result.

VARIABLES	(1) DPO
DR	2.854***
	(1.033)
ROE	-0.738
	(0.587)
AGE	0.00415
	(0.00889)
TR	-1.458*
	(0.870)
CTA	0.587*
	(0.327)
NSD	-1.91e-08*
	(1.09e-08)
Constant	-1.321*
	(0.803)
Observations	72
Number of id	8
R Squared	0.432

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Source: stata output, 2019

The above table presents the random effect model result of stata output used to investigate the impact of determinant factors (financial leverage, profitability, age of firm, corporate tax rate, operating cash and extent of shares distributed) on dividend payout ratio of commercial banks in Ethiopia.

The R-squared shows that, the explanatory variables jointly account for 43.2% of variation in dividend payout ratio of commercial banks in Ethiopia while the remaining 56.8% of variation in the dividend payout ratio of commercial banks in Ethiopia are caused by other variables not included in this model.

The stata output result showed that, the regression co-efficient of Debt Ratio (DR), Return on Equity (ROE), Age of Corporation, corporate tax Rate (TR), Operating cash (CTA) and Extent of shares distributed (NSD) at 2.854, -0.738, 0.004,-1.458, -0.587 an -1.91 respectively. This implies that, DR and age of corporation have positive relationship with dividend payout ratio of sampled commercial banks in Ethiopia. This means that there is a direct relationship between these two variables and dividend payout ratio. While the remaining determinants such as profitability, corporate tax rate, operating cash balance and extent of shares distributed have negative coefficients. This indicates that there was an inverse relationship between these four independent variables and dividend payout.

Based on the result, all determinant variables incorporated in the study except profitability and age of corporation has significance impact on dividend payout. Among the determinant factors incorporated in this study Financial Leverage measured by Debt Ratio (DR) is significant at 1% significant level. Whereas the remaining determinants incorporated in this study such as corporate tax rate, operating cash balance and extent of shares distributed has significant effect on dividend payout at 90% confidence interval level.

6. Discussion of Findings

The following section discussed the main results found through random effect regression output and the test of hypotheses.

Financial Leverage and Dividend payout

Test of null hypothesis 1 (HO_1): there is no significant relationship between financial leverage and dividend payout

As it is presented in table 6 above, the random effect regression result is inconsistent with null hypothesis developed by the researcher. Opposing to the null hypothesis financial leverage measured by Debt Ratio (DR) has regression coefficients of 2.854 and significant at 1% significant level. This shows that, there is positive and significant impact of financial leverage on dividend payout ratio of sampled commercial banks in Ethiopia. This implies that, a unit change in Financial Leverage measured by Debt Ratio (DR) had resulted 2.854 unit changes on dividend payout in the same direction.

Decision: Therefore the result did not support the null hypothesis and the alternative hypothesis is accepted. So that financial leverage has a positive and significant impact on dividend payout ratio of sampled commercial banks in Ethiopia.

Profitability and Dividend payout

Test of null hypothesis 2 ($H0_2$)=There is no significant relationship between profitability and dividend payout.

As it is shown in table 6 above, the random effect regression result shows that coefficient of -0.738 and insignificant result for profitability measured by return on equity was scored. This is consistent with null hypothesis and the result supports to accept the null hypothesis.

Decision: Therefore the result supports the null hypothesis 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.

Age of Corporation and Dividend payout

Test of null hypothesis 3 ($H0_3$)=There is no significant relationship between age of firm and dividend payout.

The study has also investigated whether there is significant relationship between age of corporation and dividend payout ratio of commercial banks in Ethiopia or not. The random effect regression output indicated that, coefficient of 0.004 and insignificant result for age of corporation. This implies that, a unit change in the age of corporation had resulted 0.004 unit changes on dividend payout in the same direction. Even though the coefficient indicates positive impact but it affects dividend payout ratio insignificantly. This is consistent with null hypothesis and the result supports to accept the null hypothesis.

Decision: Therefore the result supports the null hypothesis that age of corporation 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 age of corporation has not statistical significant effect on dividend payout ratio of commercial banks in Ethiopia.

Corporate tax and Dividend Payout

Test of null hypothesis 4 ($H0_4$)=There is no significant relationship between corporate tax and dividend payout.

As it is indicated on table 6 above on the random effect regression result, the coefficient scored for corporate tax rate is -1.455 and significant at 10% significant level. This implies that, a unit change in the corporate tax rate had resulted -1.455 unit changes on dividend payout in the opposite direction.

Decision: Therefore the result opposes the null hypothesis that corporate tax rate has a negative and 10% significant impact on dividend payout ratio of commercial banks in Ethiopia. This implies that the increase or decrease in the corporate tax rate has 10%statistical significant effect on dividend payout ratio of commercial banks in Ethiopia.

Operating Cash Balance and Dividend payout

Test of null hypothesis 5 ($H0_5$)=There is no significant relationship between operating cash and dividend payout.

As indicated by different researchers operating cash flow is also one determinant factor in the dividend policy of a corporation. This study also tried to investigate the impact of operating cash flow measured by cash to asset ratio on the dividend payout ratio of commercial banks in Ethiopia. As it presented on table 6, the random effect regression output indicates there is coefficient of 0.587 and significant at 10% significant level. This implies that, a unit change in the operating cash to total assets ratio had resulted 0.587 unit changes on dividend payout in the same direction.

Decision: Therefore the result opposes the null hypothesis that operating cash has a positive and 10% significant impact on dividend payout ratio of commercial banks in Ethiopia. This implies that the increase or decrease in the corporate tax rate has 10% level statistical significant effect on dividend payout ratio of commercial banks in Ethiopia.

Extent of shares distributed and Dividend payout

Test of null hypothesis 6 ($H0_6$)=There is no significant relationship between extent of shares distributed and dividend payout.

As it is elucidated in the methodology part researchers argued that extent of shares distributed is one determinant factor in the dividend policy of a corporation. This study also endeavored to investigate the impact of shares distributed on the dividend payout ratio of commercial banks in Ethiopia. As it is presented on table 6, the random effect output regression result indicates that, extent of shares distributed has regression coefficients of -1.91 and significant at 10% significant level. This implies that, a unit change in the number of shares distributed had resulted 1.91 unit changes on dividend payout in the opposite direction.

Decision: Therefore the result opposes the null hypothesis that extent of shares distributed has a negative and 10% significant impact on dividend payout ratio of commercial banks in Ethiopia. This implies that the increase or decrease in the number of shares distributed has 10% level statistical significant effect on dividend payout ratio of commercial banks in Ethiopia.

7. Conclusion

Overall this study was conducted on 9 years data of the year 2010-2018 form eight commercial banks in Ethiopia in order to investigate determinants of dividend payout ratio of commercial banks in Ethiopia. The collected data were analyzed interpreted and the following conclusions are drawn.

The correlation analysis indicates that, return on Equity (ROE), Corporate Tax Rate (CTR), and Number of Shares Distributed (NSD) have Negative relationships with Dividend Payout Ratio (DPO). While the remaining independent variables; Debt Ratio (DR), Age of Firm and Cash to Total Assets Ratio (CTA) have positive relationships with Dividend Payout Ratio (DPO).

The strength of correlation indicates that, Financial Leverage has strong relationship with dividend payout ratio (DPO). Return on Equity (ROE) and Age of Firm have a very weak relationship With Dividend payout ratio. While the remaining variables Corporate Tax Rate (TR), operating cash balance and Extent of Shares Distributed have weak relationship with Dividend Payout ratio (DPO) of sampled commercial banks in Ethiopia.

The random effect regression result shows that, financial leverage is significant variable at 1%, while corporate tax rate, cash balance and extent of shares distributed are significant variables at 10% significant level in determining dividend payout ratio of commercial banks in Ethiopia. On the other hand, profitability and age of firm are not statistically significant variables in determining dividend payout ratio in commercial banks of Ethiopia.

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