



Case Report

Determinants of dividend payout: A case of banking sector in Ethiopia

Dakito Alemu Kesto^{1*} and J. Ravi²

¹Addis Ababa University, P.O. Box 1176, Addis Ababa University, Addis Ababa, Ethiopia.

²Department of Commerce and Management Studies, College of Arts and Commerce, Andhra University, India.

*Corresponding author. E-mail: dalemu22@gmail.com

Received August, 2015; Accepted September, 2015.

Investors expect return on investment which is in the form of capital gains and/or dividend. The objective of the study was to ascertain what accounts for dividend payout in the Ethiopian banking industry taking profit after tax, shareholders fund and liquidity as determinants of dividend payout. Both primary and secondary data collected were analyzed using descriptive and multiple regressions model, and generalized moment method (GMM) of estimation. The result showed that profitability and lagged value of last year dividend had a significant positive effect on the level of current dividend payout of the banking sector in Ethiopia at 1% and 10% respectively. Contrary to this, the impact of Liquidity on the level of dividend payout of the banking industry had a negative effect at 1% significance level as it can be expected in the banking sector because their total operations are based on liquid cash so even in case of high liquidity banks prefer to maintain a substantial amount of liquid cash to smooth out operations. Similarly, shareholders' fund had negative effects on the level of dividend payout of the banking sector in Ethiopia though insignificantly. Moreover, the dividend is distributed to investors mostly in the form of cash as they rarely distribute stock to investors and also the average dividend paid by banks over the study period was 546 million birr. To conclude, the findings were similar and supported by previous studies' results undertaken by different researchers globally.

Key words: GMM, dividend payout, Profitability, Shareholders Fund, Liquidity.

INTRODUCTION

Every investor expects return on investment which is in the form of capital gains and/or dividend. Dividend is a share of the after-tax profit of a company, distributed to its shareholders according to the number and class of shares held by them. A dividend is the money that a company pays out to its shareholders from the profits it has made, either in the form of cash or by issuing of additional shares as in script dividend. Dividend can also be said to be distributable earnings of a company. The earnings, which are not distributed, constitute retained earnings. It is the board of directors of a company that decide whether or not to declare dividend. The decision on dividend payout and retained earnings constitute the dividend policy. Dividend policy is one of the most

debatable issues in modern corporate finance and still a puzzle. Dividend policy is one of the top ten unsolved issues in corporate finance (Brealey et al. 2005). Dividend policy is a decision that considers the amount of profits to be retained by the company and that to be distributed to the shareholders of the company. In theory, there are different types of dividend policy model. The Constant or fixed policy model is where a company pays out a fixed amount of its profit after tax as dividend. Thus, the company maintains a fixed payout ratio of dividend. The Progressive policy model is where payment of dividend is on a steady increase usually in line with inflation. This could result in increasing dividend in money terms. Every effort is made to sustain the increase even though marginal.

The Residual Dividend Policy model is where dividend is just what is left after the company determines the retained profits required for the future investment. This policy gives preference to its positive Net Present Value (NPV) projects and paying out dividends if there are still left over funds available. And where some firms decide not to pay dividend, the policy is termed the Zero dividend policy. This is especially common in newly formed companies that rather require capital to execute its projects. All the profit is thus retained for expansion of the business. Companies pay dividend for a number of reasons. Dividend payout determines the value of a company's shares.

In an efficient capital market, a variation in the payout ratio is generally followed by changes in the price of shares. Dividend can also be used to control the action of managers. Managers, once they have satisfied the entire obligation contracted by the company with fund generated by operations, they can use the remaining cash flows for their own benefit (Jose and Stevens, 2001).

Dividend policy can be used as a way of reducing free cash flow but this is conditioned by the existence of alternatives for the control of managers' behavior. Companies with big investment opportunities have fewer resources for dividends since cash flows which remain free are necessary for the financing of future investment projects. Dividend payout can help to reduce the agency costs associated with the separation of ownership and control which occurs in companies. When the ownership of the company is highly diversified, individual investors have few incentives to control the actions of managers and if they do, the result is high costs for the company. The dividend policy forces the managers to go increasingly to the capital market, submitting their behavior to the evaluation made by the market (Jose et al. 2001).

There is limited research on determinants of dividend policy in developing economy, particularly in Ethiopian firms, no matter the debate that exist on any difference between banks and non-financial firms. According to Carstens et al. (2004), which investigated the effect of the existence of regulations, constraining the actions of banks may make the governance of these institutions different from non-financial firms. Whatever dividend policy model is adopted by a company, there are so many factors that account for the payment of dividend. In reality, the decision related to how much to pay, how to pay and when to pay dividend are all determined by several considerations.

Therefore, the objective of this study was to assess the factors that account for dividend payment among Ethiopian banks. Specifically, the study examines whether the volume of profits made, the ability to pay which is measured by the amount of cash held by the company and the amount of money shareholders have invested into the company are the functions of dividend payment. Moreover, the study also explored using primary data to address when, why and by what means does the banking sector in the country distribute dividend to its shareholders.

Thus, the study examined the factors which affect the dividend payout of the banking sector in Ethiopia and the means of dividend distribution.

MATERIALS AND METHODS

The study is exploratory in nature that investigates the determinants of dividend policy in context of Ethiopian banking industry, which was based on both primary and secondary data collected using questionnaire and from annual reports of the firms. The population for the study comprises of all the nineteen (19) banks functioning in Ethiopia as of June, 2013. In order to arrive at a suitable sample for the study, the researcher introduced two filters such as banks with regular annual report and account for the study period, and banks with dividend payout history throughout the period of the study. By applying these filters only six banks was left as a sample for the study. They are Commercial Bank of Ethiopia (CBE), Awash International Bank (AIB), Dashen Bank (DB), Construction and Business Bank (CCB), Zemen Bank (ZB) and Wegagen Bank (WB). The Study used both the primary and secondary data collected through questionnaires and document review. Audited Financial Statement of the sampled banks for all the years covered by the study, 2009-2013, were collected from the national bank of Ethiopia.

LITERATURE REVIEW

In early 90s; in order to establish more market based monetary management system, National Bank of Ethiopia (NBE) introduced financial reforms. These reforms were introduced to increase the competition, allow free entry of private banks, standardize accounting and auditing system, strengthen NBE supervision and manage the financial sector more efficiently. As a result, the banking firms increased from only three banks owned by government to 19 public and private banks. In these reforms government wholly privatized the banks and partially liberalized the interest rates though the ultimate decision making is in the hand of the government in deciding the minimum and maximum interest rate on both lending and saving. As a result, banking industry became much more profitable than other sectors since the interest rate on the deposit and lending is much different which ranges on average from 5.5% to 14% respectively. On top of this, the financial regulation is very strict and not open for international banks so that banks in Ethiopia run their operation with no or little competition.

There are a number of types of dividends that can be issued, including the following:

- i. Cash dividend: - this is the most common form of dividend, paid solely in cash.
- ii. Stock dividend: - this is the issuance of additional shares to investors. Despite the appearance of handing out something of value, a stock dividend merely increases the number of shares held by the same investors, and so does not constitute a transfer of value.
- iii. Property dividend: - this is a payment in the form of a non-cash asset, such as the products that a company manufactures.
- iv. Script dividend: - this is a promise to pay investors a cash

dividend at a later date, and so is essentially a promissory note.
 v. Liquidating dividend: - this is a dividend issued when the board of directors intends to liquidate a business and return all remaining net assets to investors in the form of cash.

Though there are a number of dividend distribution approaches to owners, the most popular type of income distribution in Ethiopia is cash. As proven by the primary data, the common approach of dividend distribution to owners' in the banking sector of Ethiopia is cash dividend. The primary data collected through questionnaire showed that, all in all (100%) banking sector in Ethiopia distribute dividend only in the form of cash. This may be because of the fact that there is no secondary market for the investors to sell the stock if they need to finance their budget deficit for the dividend distributed from the stock dividend. Thus, the firms as well as investors prefer cash dividend than stock dividend.

Some organizations avoid issuing dividends, on the grounds that they pay taxes on income and then shareholders pay taxes on the dividends received, which is double taxation of the same income. According to Income Tax Proclamation No. 286/2002 in Ethiopia, businesses and investors are supposed to pay tax both on capital gain and income distributed to owners in the form of dividend. As a result, companies or banks in Ethiopia are indifferent in making the decision of whether to distribute dividend to owners or retain the income so as to generate capital gain to the investors since taxes are levied on both capital and dividend. But it is logical to distribute dividend to owners if the bank has no investment alternatives, having positive net present value than reinvesting the income as the tax rate on capital gains are slightly greater than tax on dividend.

The earliest major attempt to explain dividend behavior of companies has been credited to Lintner (1956), who conducted his study on American Companies in the middle of the 50s. Since then there has been an ongoing debate on dividend policy in the developed markets resulting in mixed, controversial and inconclusive results. Bhattacharyya et al. (2004), performed to bit analyses of managerial compensation and dividend payout in US firms over the period 1992-2001, and found that executive compensation is positively associated with earnings retention and negatively related to dividend payout.

Jose (2001), with data from between 1991- 1998 of 484 European banks belonging to 22 countries found a positive relationship between earnings and dividends such that an increase in profit enables higher payments. In market oriented countries, financial entities will try to increase their market presence through their dividend policy in order to have a good company reputation.

Ayub (2003), investigated the long-term return behavior of dividend-changing firms and concluded that about 23 per cent additional profit is only transformed into dividend while the remaining profit of about 77 per cent are utilized for additional investment. The higher retention shows that firms adopt a self-financing way for growth and expansion. He also finds that a large number of shares held by the board lead to high dividends or low retention, which leads to low reserve funds. He concluded that if ownership in a company is largely concentrated in the hands of directors, then chances are that

dividend would be higher, because the dividend will go into the pockets of directors. Therefore, the study was designed to assess the factors that determine the level of dividend payout of the banking industry in Ethiopia.

MEFHODOLOGY

Model specification

Both descriptive and econometric analyses were used. Dividend payout was regressed on Profit after tax, shareholders fund and liquidity. The data obtained was fitted to the equation by general moment method (GMM) regression estimation method. The reason for the use of GMM was to reduce the effect of lagged value of the dependent variables on the other explanatory variables. Using this regression model, each variable was added to the model in view of its estimation power over the dependent variable. The relationship between the dependent and the independent variables was determined using dynamic panel data. Multiple regressions were used for the regression analysis and inferences were drawn based on the dynamic panel data regression analysis. Table 1 summarized the variables and their respective proxy. The model is given as

$$DPO_{j,t} = f(PAT_{j,t}, SHF_{j,t}, LIQ_{j,t}, DPO_{j,t-1}) \text{ ----(1)}$$

Where;

$DPO_{j,t}$ = Dividend Payout of firm j at time t;
 $DPO_{j,t-1}$ = Lagged value of Dividend Payout of firm j at time t-1;
 $PAT_{j,t}$ = Profit After Tax or net income of firm j at time t;
 $SHF_{j,t}$ = Shareholders Fund of firm j at time t.
 $LIQ_{j,t}$ = Change in Liquidity (represented by cash, and bank balances with both central bank and other banks excluding deposit with foreign banks) of firm j at time t.

From equation (1) above, the following equation in linear form was generated:

$$DPO_{j,t} = \beta_0 + \beta_1 PAT_{j,t} + \beta_2 SHF_{j,t} + \beta_3 LIQ_{j,t} + \beta_4 DPO_{j,t-1} + \varepsilon_t \text{ ----(2)}$$

Where: β_0 , = Intercept; β_1 , β_2 , β_3 , β_4 = Slope coefficients; ε_t = error term

RESULTS

This section presents and discusses the result in relation to dividend payout, profit after tax, shareholders fund and liquidity. The descriptive analysis in Table 2 showed that, the average dividend paid by banks over the study period was 546 million birr and the annual net income was 812 million birr which was moderately high as compared to other business sectors in the country, this is because of the fact that the level of risk and return has positive relation. Table 2 shows that the

Table 1. Variables description.

Variables	Proxy	Used by
Liquidity	Cash from operations	Kanwal and Sujata (2008)
Profitability	Net income after tax	Hafez and Attiya javed (2009)
Last year dividends	Last year dividends	Linter (1956), Baker, Farrelly and Edelman (1985), Eriotis, Vasiliou and Zisis (2007), Aivazian, Booth, Cleary (2003), Kania and Bacon (2005),
Ownership structure	Owners investment	

Table 2. Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
Dividend Payout	546000000	1250000000	0	5920000000
Profit After tax	812000000	1420000000	-9141926	6110000000
Shareholders Fund	2150000000	2640000000	90500000	11000000000
Liquidity	4040000000	4380000000	221000000	17500000000

Source: Stata 12.0 Output File.

Table 3. Correlation coefficient.

	lgDPO	DPO	PAT	SHF	LIQ
lgDPO	1.0000	-	-	-	-
DPO	0.9090	1.0000	-	-	-
PAT	0.7839	0.8907	1.0000	-	-
SHF	0.8683	0.8793	0.6232	1.0000	-
LIQ	0.4847	0.3304	0.6112	0.0788	1.0000

Source: Stata 12.0 Output File

Table 4. Model Summary

Model	R	R Square	Adjusted R Square
1	0.994	0.99	0.98

a. Predictors: (Constant), Profit after tax, lagged DPO, Shareholders fund, Liquidity. b. Dependent Variable: Dividend Payout. Source: Stata 12.0 Output File

dividend payout of the sampled banks during the study period ranges from 0 to 5 billion Ethiopian birr. The profit after tax lies between -9 million and 6 billion birr. The result also indicates that on average Ethiopian banks pay out 546 million birr as dividend, while the profit after tax have a mean of 812 million Ethiopia birr. The shareholders fund lies between 90.5 million and 11 billion. The liquidity lies between 221 million and 17.5 billion with a mean value of 4.04 billion Ethiopia birr.

As shown in Table 3, the coefficient of correlation between the dependent variable and the independent variables are strong whereas, the coefficients among the independent variables are less than 0.90 which indicates the absence of multicollinearity problem. Moreover, the model summary shows that, both R square and adjusted R square is large which indicates that the independent variables explained the dependent variable at 98%.

The following are the results of general moment method (GMM) regression analysis obtained by using "STATA 12.0". Table 4 presented the overall model output. Value of R^2 , 0.99 showed that the overall model explains 99% variation in the dependent variable, dividend payout. Value of R^2 shows that suggested model provides the substantial explanation about the dependent variable. In other word, Table 4 presented the analysis of variance of the model under study, and was used to test the overall significance of the regression. Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis. The result in Table 4 indicates that the value of the coefficient of correlation (R) is 0.994. This shows a strong positive correlation. The coefficient of determination (R-square) stood at 0.99. This indicates that 99% of the total variation of dividend payout is accounted for by profit after tax, shareholders fund, previous

Table 5. Regression coefficient

DPO	Coef.	Std. Err.	P>z	[95% Conf. Interval]	
PAT	1.008089	.1747625	0.000	.6655607	1.350617
SHF	-.0689879	.1237223	0.577	-.3114791	.1735033
LIQ	-.0973992	.0331022	0.003	-.1622783	-.0325201
lagDPO	.376413	.2017048	0.062	-.0189211	.771747
_cons	1.66e+08	2.34e+08	0.478	-2.93e+08	.25e+08

Source: Stata 12.0 Output File

dividend payout, and liquidity while the remaining 1% is accounted for by other variables. The adjusted R-square of 0.98% compliments the high explanatory power of the R-square. Contrary to this, the coefficient of the constant term, which incorporate missing variable, is insignificant. Hence, the results of GMM regression analysis were meaningful. Arellano-Bond dynamic panel-data estimation model, probability of Chi-square value is .000 which depicts that relationship is highly significant. Overall, figures shows that results are quite explanatory. In Table 5, results about the different independent variables shows that; profitability and last year dividend have strong positive relationship with the dividend payout, while liquidity has strong negative impact on dividend payments. Moreover, ownership structure shows negative effect on dividend payout but insignificant.

DISCUSSION

The beta value gives in Table 5, the contribution or relevance of each of the independent variables. The highest beta figure is 1.008 which indicates that the profit after tax variable has a strong correlation with dividend payout rather than shareholders' fund, which has a less beta value of -0.068. As shown in Table 5 the dividend payout of banking sector in the country is affected by net profit, owners' capital, liquidity balance of the company and the previous dividend paid by the banks. Given the variables under consideration, net profit, and lagged value of dividend affect the dividend policy of the sector positively at 1% and 10% significance level. Whereas, liquidity level negatively affects the banks current dividend at 1% significant level.

According to the findings liquidity is one of the variables that had a highly significant (p value= .003) but negative relationship with the dividend payout, suggesting that the firms that have a better liquidity position pay low dividends. The finding was confirmed by Barclay et al. (1995), that high return on equity stimulates the firms to reinvest more, as dividend payment reduce the amount of funds available for reinvestment, so firms pay low dividends. Another explanation for this relationship may be that banks have high need of liquid cash as compared to any other industry, because their total operations involve either payment or receipts of cash. On top of this, banks try to lend more in order to increase their returns. So in order to achieve smooth flow of operations and increase the future returns, banks tend to maintain high level of liquidity. In

such situations negative relationship between the liquidity and dividend payout can be expected.

One of the very important variable that had highly significant (p - value 0.000) and positive relationship with the dependent variable was the profitability. This finding proved that the earning of banking industry in Ethiopia was very high since 2009. This might be because of the fact that the industry was more flexible in their lending and leasing policies that generates huge income in form of interest receipts. Moreover, the banking industry in Ethiopia was able to resist financial crises of the year of 2008/2009 and also profitable, this is mainly because the banking sector is not liberal and highly regulated by NBE. As a result of this, firms in the industry were profitable since there were no strong competitors from the international bankers and thus, the banking industry is solely kept free only for local investors. From the theory point of view, in the absence of strong competition, it is easy for the businesses to make profit with little efforts. Hence, the firm earning high also distribute more. The finding about the profitability was in line with other researchers' findings such as Kohli et al. (2011); Rodríguez-Pose A and Gill N, (2005). In a similar vein, the finding of Rozeff MS (1982), showed positive relationship of profitability and dividend payout which means that firms that were highly profitable have easy access to external market, can raise funds at lower cost as compared to less profitable firms and ultimately distribute more as dividends.

Previous year dividend has a positive impact and its p -value 0.062, depicts highly significant relationship. This finding reflected that previous dividend payment history of any firm in the banking sector in Ethiopia had an impact on the future dividend payment. In other word, if past records show that firms pay high dividend, then such a payment behavior can be expected about the future and other round holds true. The potential reason for the positive relation between banks previous dividend history and the level of current payout is that, most banks in Ethiopia uses incremental dividend policy. This means that, even though they do not generate large profit, the banks keep on paying higher dividend so as to keep their goodwill from the investors. Moreover, as shown in the descriptive analysis, the level of the profit of the banking sector in the country was periodically increased. Obviously, as the level of profit increases, the amount of dividend paid to owners will also increases as long as there is no promising investment opportunities that need huge amount of investment in the current period which is similar to other studies. Since the

finding shows a significant positive relation between level of current dividend and net income, this might be because of the fact that the banks either do not have huge investment opportunities or they use loan to finance. Considering the dividend payout policies, such a dividend payment behavior provides support to the smooth dividend payout policy. These firms don't reduce the level of dividend but try to increase the payout ratio which is the same as to the other researchers' findings such as Rehman A, (2012).

Contrary to the profitability and previous year dividend, ownership structure had negative relationship with level of current dividend payout though statistically insignificant. The finding was similar to the previous studies such as Hafeez Ahmed and Attiya Javed, (2009). This is because of the fact that, as the level or number of owners increases, the proportion of dividend distributed to each stockholders' decreases.

CONCLUSION

A number of studies have been conducted on determinants of dividend payout and have suggested different findings about the determinants of dividend payout of both financial and non-financial institutions. The purpose of this study was to investigate the determinants of dividend policy of the Ethiopian banking sector. The panel dynamic regression model was estimated using the generalized moment method (GMM) since the lagged value of the dependent variable was taken as explanatory variable so as to avoid the potential problem of multicollinearity that might exist between the lagged value and the other explanatory variables. Given the explanatory variables under this study, net income and previous dividend history has significant positive effect on the dividend payout whereas; level of liquidity has significant negative effect. However, the effect of shareholders fund on the dividend payout of the banking sector is negative and insignificant. This indicates that, as the level of shareholders fund increases, the amount of dividend paid to the owner decreases.

The effect of Liquidity is negative as it can be expected in the banking industry because their total operations are based on liquid cash so even in case of high liquidity banks prefer to maintain a substantial amount of liquid cash to smooth out operations. On the other hand, the level of previous dividend and current net income has direct relation with the level of dividend payout which is in line with the previous studies. Thus, highly profitable firms also distribute more in form of dividends. Positive relationship of last year dividend and current profits to current period dividends can be explained in context of signaling theory and information asymmetry.

ACKNOWLEDGEMENT

I would like to thank the editorial board members of AshEse Journal of Business Management (AJBM) for their constructive

comments and suggestions towards making this paper real and complete. At last, but not least, I am grateful to staff members of National Bank of Ethiopia and finance and investment officers of all public and private banks of Ethiopia.

Conflict of interest

Authors have none to declare

REFERENCES

- Adesola WA, (2004). *An Empirical study of dividend policy of quoted firms in Nigeria*; An unpublished M.Sc Thesis, University of Calabar.
- Ayub, (2003). The First Indigenization Decree and the Dividend Policy of Nigerian Quoted Companies. *The Journal of Modern African Studies*, vol. 16(2).
- Barclay, Michael J, Clifford W. Smith, and Ross L. Watts, (1995). The Determinants of Corporate Leverage and Dividend Policies." *Journal of Applied Corporate Finance*, 7: 4-19.
- Bhattacharyya N, (2002). 'Dividend policy: a review ' ; *I. H School of Business*, University of Manitoba, Winnipeg, Canada.
- Brealey et al., (2005). *Principles of Corporate Finance*, McGraw-Hill, New York.
- Carstens et al., (2004). Banking crises in Latin America and the political economy of financial sector policy. Document presented at the seminar *Gobiernos y Bancos: Responsabilidades y Límites*. Inter-American Development Bank, Annual Meetings, Lima, Peru (March).
- Ethiopian Income Tax Proclamation No. 286/2002.
- Hafeez Ahmed and Attiya Javed, (2009). The Determinants of Dividend Policy in Pakistan. *International Research Journal of Finance and Economics Issue*, 29: 110-125.
- Jose ML and Stevens JL, (2001): Capital Market Valuation of Dividend Policy, *Journal of Business Finance and Account*. 16(5): 65.
- Kohli et al., (2011). *Asia 2050: realizing the Asian century*, Emerging Markets Forum.
- Linter J, (1956). Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes. *The American Economic Review*, 46(2): 97-113.
- Rehman A, (2012). Determinants of Dividend Payout Ratio: Evidence from Karachi Stock Exchange (KSE). *Journal of Contemporary Issues in Business Research*, 1(1): 20-27.
- Rodríguez-Pose A and Gill N, (2005). On the 'economic dividend' of devolution. *Regional Studies*, 39(4): 405-420.
- Rozeff MS, (1982). Growth, Beta and Agency Cost as Determinants of Dividend Payout Ratio. *The Journal of Financial Research*, (3): 249-259.
- www.nbe.gov.et