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## Article

# On an ongoing corporate dividend dialogue: Do external influences also matter in dividend decision?

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## BANKING & FINANCE | RESEARCH ARTICLE

# On an ongoing corporate dividend dialogue: Do external influences also matter in dividend decision?

Josephat Lotto<sup>1\*</sup>

**Abstract:** Dividend policy is among the most debated topics in corporate Finance. Determinants of corporate dividend, most commonly firm specific determinants, have attracted much attention of the researchers. This paper mainly investigates the external determinants of dividend policy in Tanzania. The study also checks the influence of firm-specific factors that determine dividend decision of non-financial firms listed in Dar es Salaam Stock Exchange using a panel data analysis for a period 2008–2017. The paper reports that gross domestic product (GDP) and inflation have both statistically negative significant relationship with the firm payout ratio.

This implies that in a country where GDP is high, firms are less likely to consider paying dividends. During high GDP levels, the economic environment is potentially conducive for potential investment, and therefore re-investing the corporate profit is relatively a wise decision than distributing it back to owners as dividend.

Also in an inflationary environment, funds generated are often are not sufficient to replace a firm's assets as they become obsolete. Under these circumstances, a firm may be forced to retain a higher percentage of earnings to maintain the



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### ABOUT THE AUTHOR

Josephat Lotto is a Senior Lecturer in Finance and Corporate Governance at the Institute of Finance Management in Tanzania. He graduated with a PhD in Corporate Governance and Financial Strategies from the UK in 2012. He also holds MSc in Finance, MBA and CPA(T). Josephat's research interest lies at the heart of Corporate Governance and Financial strategies, where the current paper forms a part of the research agendas around the broad theme. He has published over 30 research papers in various academic journals, and he is a reviewer of several academic journals published by some reputable publishing houses such as Wiley & Sons, Inc, Taylor & Francis Group, which publishes quality peer-reviewed journals under the Routledge; Multidisciplinary Digital Publishing Institute (MDPI), Elsevier, IEEE Access and Springer Nature. Such Journals include International Journal of Finance and Economics, African Journal of Economics and Management Studies, Development Policy Review, The European Journal of Finance, Sustainability Journal and International Advances in Economics.

### PUBLIC INTEREST STATEMENT

Dividend policy is one of the prominent topics in corporate finance which has attracted many dialogues among researchers across the world, and still leaves a lot to be desired on the matter. This paper joins the debate and intends the public to understand, among other factors, the external factors influencing dividend policy in Tanzanian firms. The paper analyzes the dividend trends of non-financial firms registered in Dar es Salaam Stock Exchange. It is shown, in this paper, that when country's GDP is high and inflation is low, firms are less likely to consider paying dividends because the investment environment becomes more attractive under these conditions. During such moments, in maintaining their assets' earning power, firms may be forced to retain higher earnings, and that is why during such times less dividend should be expected by shareholders. Furthermore, the paper reports that firm-specific factors such as profitability, liquidity, firm size, leverage and firm growth are also influential in determining corporate dividend policy.

earning power of its asset base that is why during this time less dividend is expected by shareholders.

Furthermore, the paper reports that firm-specific factors such as profitability, liquidity, firm size, leverage and firm growth are also influential in determining corporate dividend policy. More specifically, large-sized firms, highly profitable firms are more likely to consider paying dividend. However, payment of dividend will all depend on whether the firm is liquid enough to afford that. On the other hand, high-growth and leveraged firms would not probably consider paying dividend, and will therefore, save money to finance their expansion and honor their debt obligations.

**Subjects: Corporate Finance; Investment & Securities; Business, Management and Accounting**

**Keywords: dividend payout; leverage; profitability; growth; liquidity; dividend puzzle**

### 1. Introduction

Dividend policy is one of the most debated topics and a fundamental theory of corporate finance which still reserves its prominent place. More than three decades ago, Black (1976) described dividend policy as a “puzzle,” and from there-on several authors engaged in attempting solving the dividend puzzle. The question of why firms pay dividends from their earnings remains unexplained, and this is known as the dividend puzzle in finance literature as pronounced by Khan and Salaria (2009). Many hypotheses have been drawn to shed some light on this puzzle, but the problem still exists. Allen et al. (2000) confessed that regardless of several theories put in place to explain their pervasive presence, dividends remain one of the persistent puzzles in corporate finance.

Black (1976) stated that “The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don’t fit together,” and confirmed that dividend policy is one of the highly ranked unresolved problems in the finance literature, and he further insists the lack of adequate explanation for the observed dividend behavior of the firms. The same has been appreciated by Brealey and Myers (2005), (Brealey & Myers, 2003). Since Lintner (1956) and Miller and Modigliani (1961) came up with this debate, some of the questions which remain unresolved to-date include what are the factors that determine dividend policy? Is dividend policy determined dependently or independently?

Several theoretical and empirical work on dividend policy (e.g., Gordon, 1959; Lintner, 1956; Miller & Modigliani, 1961) are available but a consensus has not been reached on the debate. The good news is that, most of the authors consistently agree on the importance of corporate dividend policy on enhancing corporate value. An attempt to examine the factors that determine dividend policy has attracted massive empirical literature, most of which are from developed countries and few are from emerging economies; yet, many studies indicate conflicting results. For example, Eliasu (2014) and Pandey and Ashvini (2016) show that earnings and liquidity are positively related to the dividend payout ratio while Zameer et al. (2013) and Almeida et al. (2015) reveal that firms with increased earnings have little dividend payout.

Still, the questions on how companies set their earnings’ distribution and why do they pay dividends impose the problem in dividend policy, Baker et al. (2001). Allen et al. (2000), on their own words, concluded that “Although a number of theories have been put forward in the literature to explain their pervasive presence, dividends remain one of the thorniest puzzles in corporate finance.” Therefore, lack of compromising solution for dividend policy attract more work on this debatable area. Unlike in developed countries, very few studies on dividend policy have been conducted in emerging economies such as Tanzania. Meanwhile, it is not clear why dividend is

paid and what are the factors to be considered before corporate managers decide to pay dividend or not.

Various studies from different countries, economies, and business environments have conducted research on dividend policy, but due to the variation in legal frameworks and the tax and the accounting policies among the countries and across industries, no unified way of setting out dividend policy has yet to be established. Previous papers which attempted to study the factors influencing dividend policy in Tanzania such as Ally (2015), Ngole (2015), Gwahula and Mnyavanu (2018), and Epaphra and Nyantori (2018) focused on only firm-related factors. In practice, dividend policy is not only dependent on internal factors but rather the complete set of both internal and external factors such as gross domestic products (GDPs), interest rates, exchange rates, and countries' inflation level. This study contributes to the debate by uncovering both internal and external factors, which affect corporate dividend policy. The findings of this paper have implications for corporate finance and governance theories, academics, investors, regulators, and policy-makers in emerging markets. The rest of the paper is organized as follows: in the next section, the related literature and hypotheses are developed followed by another section which describes data and methodology. Furthermore, the empirical results are presented in the fourth section and, finally, the last section brings the paper to an end with a concluding remark.

### **1.1. Related literature and hypothesis development**

Handful theoretical and empirical studies on dividend policy are available. The issue of the dividend is very crucial in the financial market due to various reasons; first, dividends acts as a signal used by the public to reflect the firm's financial stability and growth prospects; and second, dividend policy plays a very essential role in determining the corporate capital structure. The theoretical position manifested by Lintner (1956) reveals that dividends are paid out of profits, that's why it is impossible for an unprofitable company to pay dividend. According to Lintner (1956), a firm's net earnings are an important factor influencing dividend payments. On the other hand, highly profitable firms will have greater ability to pay dividends. The view of some proponents of dividend policy is that market share price of a company responds to its declared changes in dividend policy, and this response is resulted from information content in dividend changes. According to Ross (1977), managers are believed to hold more information about the firm's operations than any other stakeholder, and therefore the information about dividend changes send signals to public about future profitability of the company. This is also supported by Myers and Majluf (1984) who claims that within the pecking order preferred by managers for internal financing, dividend policy is affected by profitability.

Other authors who have tested this contention have confirmed that profitability affects dividend policy; they include Pruitt and Gitman (1991) who reports that current and past year profits are important factors influencing dividend payments; Baker and Powell (2000) confirm that anticipated level of future earnings is the major determinant of dividend policy; Darling (1957) concludes that corporate dividend policy usually change with the change in its past profits, current profits, and expected future profits. Similarly, Ajmi and Hussain (2011), Huang et al. (2011), realized that, present and previous year profits do influence payment of dividend. Furthermore, several earlier empirical works from developed economies such as Jensen et al. (1992) and Fama and French (2002) have reported a positive relationship between profitability and dividend payouts, and empirical evidence from emerging countries such as Pandey (2001), and Aivazian et al. (2003) also support the direct association between corporate profitability and dividend policy.

The earlier studies on dividend policy such as French (2001) recognize the influence of corporate growth on the choice of dividend policy. According to their view, the dividend policy is dependent on whether the firm has any available investment opportunity, and the relationship between the internal rate of return of the firm and its cost of capital. According to French (2001), argument growing firms, whose internal rate of return is greater than its cost of capital, would have sufficient profitable investment opportunities and, therefore, payment of dividend will not be considered as the priority because doing so would not be consistent with the value-maximization principle. However, in case of

declining firms where internal rate of return is less than cost of capital, the firm will be maximizing value of share by distributing a 100% of earnings as dividends to their shareholders.

Mueller (1972) proposed a formal theory that a firm has a relatively well-defined life cycle, which is fundamental to the firm life cycle theory of dividends. The theory explains that as firms pass through the various stages in their lives, they tend to alter the dividend policy depending on the financial needs of each stage. Implied in this theory is the fact that firms that are in their growth stages are less likely to pay more dividends as compared to firms that are at their maturity stages. Old firms, therefore, because they do not have a lot of growth opportunities to fund, are expected to pay more dividends.

According to Fama and French (2001), a growing company is presented with the number of promising opportunities which require capital to finance, and retained earnings is one of the corporate's cheapest source of project financing. It therefore follows that high growth companies pay low dividends or adopt no dividend policy and low growth firms do pay more dividends.

Capital structure has long been considered as one of the factors with a strong impact on dividend policy. According to Pal and Goyal (2007), the demand for external finance by the company usually comes into place because of the financial limitation from the internal sources of the firm. Rozeff (1982) also recognizes dividend policy as a determinant of external financing cost, financial constraints resulted from the financial leverage and the agency cost of outside ownership. According to Rozeff (1982) a highly leveraged firm pays low dividend to their shareholder due to cash flow obligations to their financiers. When a firm secures finance through leverage, it accumulates a fixed financial obligation including payments of interest and the principal. This means that the firm needs to sustain enough cash to pay for those obligations which will lower the amount of un-distributable profit. And that is why a high level of financial leverage results in low dividend payments (Al-Malkawi, 2007). The higher the internal flows have given the investment requirements, the lesser will be the demand for borrowings and vice-versa. Thus, the higher the dividend the higher will be the borrowing demand. Baker et al. (2001) also pointed out that firms with less external financing in its capital structure experiences smaller dividend payout ratios and that firms with higher levels of debt need higher liquidity to allow payoffs on potential implicit claims. To avoid such costs, firms normally rely on equity as their alternative source of finance.

Another vital factor which influences corporate earning distribution is liquidity. It is very imperative to compare a firm's liquidity position with its payment of dividend. Rationally, a firm will choose to pay dividend as long as its cash position is not questionable, and that availability of the profit itself does not merit payment of dividend. Liu and Hu (2005) proposed that firms have residual cash when its dividend is less than the free cash flow, and that if cash dividend is great than the free cash flow then that firm needs additional financing to meet the cash dividend requirement. A weak corporate liquidity position implies less sufficient cash dividend due to cash shortage.

Alli et al. (1993) argue that dividend payments depend more on cash flows, which reflect the company's ability to pay dividends, than on current earnings, which are less heavily influenced by accounting practices. While Amidu and Abor (2006) found a direct and significant relationship between cash flow and dividend payout ratios, Anil and Kapoor (2008), on the other hand, consider cash flow as an important determinant of dividend payout ratio.

Literature, such as Al-Najjar and Hussainey (2009), recognizes firm size as a crucial factor which influences corporate dividend policy. Others such as Ho (2003) argue that large-sized companies have more ability to pay dividends, rather than smaller-sized ones. This is consistent with Aivazian et al. (2003) who compounded that the larger firms have easy access to the financial market for possible project financing, compared to smaller firms; therefore, payment of dividend may not be a

serious constraint because they are not faced with financial limits when it comes to financial potential profitable investments. This view is in line with Adedeji (1998) who appreciates the ability of large firms to secure easily and cheaply external financial source for funding new projects.

Over time, as goods and services become more expensive the value of money will subsequently fall, and the purchasing power of people will also come down. This is the situation in an inflationary environment. Inflation can be defined as the persistent rise in aggregate level of prices of goods and services in an economy. According to Adrangi et al. (2000), consistent price rise wears out the purchasing power of money and other financial assets with fixed values creating serious economic distortions and uncertainty, and they point out that some portion of inflation rate will be anticipated by economic agents and capital markets. However, the unanticipated portion of inflation may surprise equity markets and affect returns. McGuigan et al. (2010) argue that in an inflationary environment, funds generated by depreciation often are not sufficient to replace a firm's assets as they become obsolete. Under these circumstances, a firm may be forced to retain a higher percentage of earnings to maintain the earning power of its asset base.

Classical economic fluctuation concerns the absolute volatility of economic output; for example, GDP declines during an economic downturn. Growth economic fluctuation, however, is based on changes in the economic growth rate. The GDP growth rate represents the market value of all the goods and services produced within the boundary of a country in a specified period of time. When the real economic activity of the economy increases, it leads to increase the corporate earning of the different companies, which ultimately leads to increase the dividend payout ratio (Ghafoor et al., 2014). Based on these arguments, one may come up with the following hypothesis:

## **2. Methodology**

### **2.1. Data**

This paper employed secondary data which has been collected from the audited annual reports of listed firms in Dar es Salaam Stock Exchange (DSE) for a period between 2008 and 2017. The annual reports have been sourced from the website of the listed firms, DSE publications and data base of African-listed firms' annual reports. A company was selected as long as it has complete accounts from 2008. Most companies lacked some information required prior to 2008 so the period before 2007 would not be useful for this purpose.

Out of the total 29 firms listed in DSE, 13 financial firms (banks and other financial institutions) were excluded from the sample because their regulations regarding dividend payments are different from other firms like manufacturing and industrial firms. Out of the remaining sample of 16 firms, five of them were removed from the sample as they either did not have complete information or they were not listed in the exchange market continuously for the period of the study. In general, only 11 non-financial firms continuously listed for the period of the study and were making profit qualified to form a composition of the sample of this study.

### **2.2. Analytical design**

This paper used a panel data analytical design which involves the pooling of observations on a cross-section of firms listed in DSE over a period of 10 years. To check the significance of relationship between dividend payout and explanatory variables (profit, liquidity, growth, leverage, firm size, GDP per capita, and inflation), the study employed the random-effect regression analysis, and to examine the likeliness of the proposed hypotheses and the significance of the individual explanatory variable t-test was used. Before running multiple regressions, panel data were subjected to regression diagnostic tests such as multicollinearity and heteroscedasticity.

### **2.3. Regression diagnostic tests**

Before running regression, we perform regression diagnostic tests such as multicollinearity and heteroscedasticity. Multicollinearity, according to Omáš (2012), is a condition where the

explanatory variables are virtually linear dependent. In Table 1, we can observe that the highest correlation among all the variables is +0.57, which is the correlation between inflation and GDP. However, an absolute value larger than 0.8 is preferred to be enough to cause multicollinearity as recommended by Studenmund (2011). Considering that +0.57 is far from 0.8, we conclude that there is no problem of multicollinearity among our variables.

After the test for multicollinearity, we also performed a Wald test for heteroscedasticity. The concern of heteroscedasticity is the homogeneity of variance of the residuals. This is one of the conditions to be met before normal regression is run. The results of Wald test are presented in Table 2. The results demonstrate a chi-squared value that is greater than the critical value, meaning that we could reject the hypothesis for homoscedasticity.

According to Halbert (1980), the homoskedasticity assumption is needed to show the efficiency of Ordinary Least Squares (OLS). From the test conducted, we reject  $H_0$  and accept  $H_a$  at  $\text{Prob} > \text{chi-squared} = 0.000$ , and conclude that there is heteroskedasticity. Thus, the usual regression t-statistics and confidence intervals are no longer valid for inference problem. Using regression estimator without adjustment will render estimations biased. To solve this problem, the regression estimators are improved by finding heteroskedasticity-robust estimators of the variances using a fixed-effect robust regression method.

#### 2.4. Model specification

In specifying the empirical model, the independent variables may explain much of what is different about an observation, a firm, or a year, but there is probably some unmodeled heterogeneity. According to Lotto (2018), usually the heterogeneity which is left unmodeled goes into the error term. The true problem occurs when some firms (or, less commonly, time periods) share some unmodeled heterogeneity. In this case, we would like to be able to explain everything that makes each firm different, but usually this is unmanageable, so something must be done to eliminate this shared and thus systematic heterogeneity from the error term. Since this study uses panel data, to solve the potential problem of heterogeneity either a fixed-effect or random-effect regression model should be employed. To decide between fixed-effects or random-effects, a Hausman test, where the

**Table 1. Correlation Matrix for the DPO regression**

	DPO	PROF	LEV	SIZE	GROW	LDPO	LnGDP	LIQ
DPO	1.000							
PROF	0.179	1.000						
LEV	-0.520	-0.188	1.000					
SIZE	-0.184	-0.105	0.121	1.000				
GROW	0.014	0.047	0.048	0.129	1.00			
LDPO	0.217	0.116	-0.343	-0.192	-0.153	1.00		
LnGDP	0.1491	-0.084	0.112	0.123	-0.009	0.228	1.00	
PI	-0.126	0.089	-0.118	-0.069	-0.009	-0.097	-0.572	
LIQ	0.014	0.047	0.048	0.129	0.075	0.067	0.05	1.00

**Table 2. Wald test for Heteroskedasticity**

**Modified Wald test for groupwise heteroscedasticity in random-effect regression model**  
 **$H_0: \sigma^2(i) = \sigma^2$  for all  $i$**   
**Variables: fitted values of dividend payout ratio**

Chi2(8)	258.25
Prob >chi2	0.000



null hypothesis is that the preferred model is random effects versus the alternative fixed-effects (Greene, 1980), is used. To do this, the Hausman test was conducted. The Hausman test shows whether the unique errors are correlated with the regressors; the null hypothesis is that they are not correlated. If the probability of chi-squared in the Hausman test output is less than 0.05, then fixed-effects is preferred otherwise random-effect is preferable. When this test was run, the chi-squared is found to be 0.0876 which is greater than 0.05; hence, the study chose to apply random-effect regression model. Random-effects model considers the differences between individual firm effects. The rationale behind random-effects model is that, unlike the fixed-effects model, the variation across firms is assumed to be random and uncorrelated with the predictor or independent variables included in the model. The result of the Hausman test is presented in Table 3

The empirical model takes the following form:

$$Y_{it} = \alpha + \beta X_{it} + \mu_{it}$$

where  $y_{it}$  is the dependent variable,  $\alpha$  is the intercept term,  $\beta$  is a  $k \times 1$  vector of parameters to be estimated on the explanatory variables, and  $x$  is a  $1 \times k$  vector of observations on the explanatory variables. The variable description is provided in Table 4.

The following multiple regression model is specified;

$$DPO = f(\text{PROF, GR, SIZE, LEV, LIQ, LDPO, INF, GDP})$$

$$DPO = \beta_0 + \beta_1 \text{PROF} + \beta_2 \text{LEV} + \beta_3 \text{LDPO} + \beta_4 \text{SIZE} + \beta_5 \text{GR} + \beta_6 \text{LIQ} + \beta_7 \text{INF} + \beta_8 \text{GDP} + \mu$$

where DPO = Dividend payout; PROF = Profitability; LIQ = Liquidity; GR = Growth; SIZE = Firm Size; LEV = Leverage; LDPO = Lagged dividend Pay out; INF = Inflation; GDP = Gross domestic Product per capita;  $\mu$  = error term.

### 3. Empirical evidence

This section discusses the findings presented in Table 3. Table 5 shows the regression results of pooled ordinary least squares, random-effects and fixed-effects models on determinants of dividend

**Table 3. Hausman Test**

Coefficients			(b-B)	Sqrt(diag(v_b-v_B)) S. E
	(b) fe	(B) re		
PROF_d1	-0.001	0.000	-0.001	.
LEV	-0.200	-0.351	0.151	0.165
SIZE	-0.593	-0.01	-0.583	0.185
GROW	0.060	0.037	0.022	.
LDPO	-0.902	-0.688	-0.224	.
LnGDP	1.016	0.365	0.651	0.203
LIQ	0.050	0.047	0.052	0.034
PI	-0.000	0.000	-0.000	.

b = Consistent under  $H_0$  and  $H_a$ ; obtained from xtreg.

B = inconsistent under  $H_0$ ; efficient under  $H_0$ ; obtained from xtreg.

Test:  $H_0$ : Difference in coefficient not systematic.

Chi (8) = 12.42.

Prob>chi2 = 0.0876.

v\_b-v\_B is not positive definite.

**Table 4. Variables Description and Expected relationships**

Variable		Description	Expected sign
Dependent Variable	Dividend Payout ratio	Total dividend/Net Income	
Independent Variables	Profitability	Net income/Total equity	Positive
	Leverage	Debt/Assets	Negative
	Lagged dividend	Previous year dividend/ share equity	Positive
	GDP per capita	LnGDPpc	Positive
	Firm size	Natural log of total assets	Positive
	Liquidity	Current Assets/Current Liabilities	Positive
	Growth	(Current sales—previous sales)/previous sales	Negative
	Inflation	Consumer price index	Negative

**Table 5. A Regression Results Table**

Regressor	Pooled Regression Model		Random-Effect (Robust Model)		Fixed-Effect (Robust Model)	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
PROF	0.133	3.45***	0.057	4.23***	0.393	2.87**
LEV	0.192	1.57	-0.092	-2.12**	-0.152	1.89**
SIZE	-0.051	-1.67*	0.035	2.12**	-0.041	-1.75*
GROWTH	0.024	1.12	0.039	2.45**	0.094	1.94*
LDPO	0.033	2.64**	0.043	1.97*	0.018	2.98**
GDP	-0.162	-1.23	-0.364	-1.98*	-0.179	-2.13**
LIQ	0.014	1.23	0.015	3.45***	0.047	2.94**
INF	0.181	1.17	0.172	1.23	0.276	1.45
Constant	0.171	0.12	0.148	2.12**	0.239	3.67***
Adj.R2	0.67		0.71		0.63	
F-stats	145.34(0.000)		58.50(0.000)		187.98(0.000)	
Durbin-Watson	2.34		4.25		1.87	

Note: \*, \*\*and \*\*\* indicate significant at 10%, 5% and 1% respectively.

policy. As previously pointed out, the Hausman test specifies that the random-effects model fits more for this study. Similarly, as shown in Table 5, the random-effects model is the best model to explain the factors affecting dividend policy, because it records the highest adjusted  $R^2$  value of 71%. This shows that the nine factors examined in this paper explain about 71% of the determinants of dividend policy. Of these factors, both leverage and firm growth are negatively statistically significant at 5% significant level while firm size, profitability, liquidity, and previous year dividend all have positive statistically significant relationship with dividend payout ratio at 5%, 1%, 1% and 10% significant level, respectively.

The statistically significant positive relationship shown in Table 5, between profitability and dividend payout, suggests that highly profitable firms will have greater ability to pay dividends. This finding is consistent with the signaling theory of dividends, according to which

more profitable firms pay handsome dividends reflecting to the market their better financial performance.

On the similar vein, a positive relationship which liquidity holds with dividend payout was expected because rationally a firm chooses to pay dividend as long as its cash position has no problem, and that availability of the profit itself does not merit payment of dividend. Liu and Hu (2005) proposed that firms have residual cash when its dividend is less than the free cash flow, and that if cash dividend is great than the free cash flow then that firm needs additional financing to meet the cash dividend requirement Alli et al. (1993) argue that dividend payments depend more on cash flows, which reflect the company's ability to pay dividends, than on current earnings, which are less heavily influenced by accounting practices. While Amidu and Abor (2006) found a direct and significant relationship between cash flow and dividend payout ratios, Anil and Kapoor (2008), on the other hand, consider cash flow as an important determinant of dividend payout ratio.

On the other hand, the paper finds a negative effect of growth (investment) opportunities on corporate earnings distribution decision aligning with the pecking order and transactions cost theories. The message derived from these theories are that high-growth firms require more money to finance their expansion; therefore, they are more likely to save internally generated earnings for financing investment projects rather than paying dividends, because it is more costly to consider external financing options. In fact, all the firms that experience above-average growth rates are expected to have low dividend payout ratios; since, in line with the residual theory of dividends, a greater number of profitable investment opportunities should result (other things being equal) in a greater need for earnings retention. Al-Malkawi (2007), Juma'h and Pacheco (2008), and Foroghi et al. (2011) reported consistent findings.

Likewise, the paper shows that debt level negatively influences dividend policy. This negative relationship implies that the use of debt into corporate capital structure and payment of dividends are considered as substitute tools in controlling agency-related problems, and this may as well indicate that highly leveraged firms tend to preserve internal funds to honor their debt obligations and lower external financing costs instead of paying the cash to shareholders as dividend, in-line with transactions cost theory. Since the firms' focal priority is to the debt holders, the amount of money which would be distributed to shareholders as dividends will depend on the balance available after honoring debt obligations. This finding is in line with Al-Malkawi (2007), Kowalewski et al. (2007), Ramli (2010), and Al-Shubiri (2011a).

Regarding the firm size, the results show that large firms pay higher dividends. This finding is in line with the Fama and French (2001), Holder et al. (1998), and Jensen et al. (1992). It should also be clear that large firms have a better access and easier, cheaper way of raising funds compared to small firms, therefore, other things remain the same; large firms are more likely to afford paying higher dividend to shareholder.

The empirical analysis of this paper also considered the dividend paid during the previous year as the important determinant of current corporate dividend payments. The results presented in Table 3 show that the previous year's dividend payout has a positive and significant relationship with the current dividend payout. This relationship is consistent with dividend smoothing hypothesis pioneered by Lintner (1956) and implies that companies increase their dividend payout ratios referring to previous dividends as a benchmark and are reluctant to reduce them when they forecasted a sustainable future cash flow growth.

Apart from the internal factors, there are also external factors which affect the earning distribution of the firm, and among which are inflation and GDP. Table 5 shows a positive significant relationship between dividend payout and GDP, indicating that the higher the GDP per capita, the lower the dividend payout. This implies that in a country where GDP is high, shareholders are less likely to consider or expect dividend payments. During high GDP levels, the economic environment

is potentially conducive for investing, and therefore reinvesting the corporate profit is relatively a wise decision than distributing it back to owners as dividend.

Table 5 also shows insignificant positive relationship between inflation and dividend payout. This result is contrary to the expectation that there is a negative relationship between inflation and payout policy. Overall, the paper reveals that factors affecting the corporate dividend decisions of firms listed in DSE do follow similar patterns to those in more developed economies.

#### 4. A concluding remark

This paper mainly aimed at examining the determinants of dividend payout policy of selected listed firms in DSE using a data set covering a period between 2008 and 2017. According to the empirical results, both leverage and firm growth have a statistically significant negatively relationship with corporate dividend payout while firm size, profitability, and previous year dividend all have positive statistically significant relationship with dividend payout ratio.

The positive relationship between profitability and dividend payout suggests that highly profitable firms will have greater ability to pay dividends, and this is generally consistent with a theoretical position manifested by Lintner (1956). Similarly, a positive relationship between firm's growth opportunity and dividend payout can be explained with the help of signaling theory. In fact, since these firms have positive expectations about the future, they may increase their dividend payments and exhibit indicative information to their shareholders about their optimistic expectations. Likewise, the result may be due to the possibility that firms with high investment opportunities may have easy access to other external financing options, and do not highly depend on internal financing for future investment.

Regarding the firm size, the results show that large firms pay higher dividends. The paper concludes that large firms have better access and easier cheaper way of raising funds compared to small firms; therefore, other things remain the same, large firms are more likely to afford paying higher dividend to shareholders.

The paper also reveals a negative relationship between leverage and corporate dividend payout, which means that firms with heavy debt in their capital structures tend to consider servicing their debt obligations as the top priority over dividend payments. Since the firms' focal priority is to pay debts, the amount of money which would be distributed to shareholders as dividends will depend on the balance available after honoring debt obligations.

The empirical analysis of this paper also shows that the previous year's dividend payout has a positive and significant relationship with the current dividend. This relationship is consistent with dividend smoothing hypothesis which implies that companies increase their dividend payout ratios based on the previous dividends they paid to their shareholders, and they become reluctant to reduce the level of dividend previously paid especially when they have forecasted the future cash-flow growth.

While the paper has earmarked the factors, which affect corporate managers' decision on dividend policy, corporate managers are advised to observe the following; *first*, to consider preferences of investors toward developing corporate dividend policy because they are the core beneficiaries of the policy; *second*, to strive paying dividend whenever economically viable because it signals firm's positive reputation, and most shareholders believe so much on bird-in-hand theory of dividend; *third*, although borrowing is considered as a control tool for agency-related problems, managers are advised to limit excessive borrowing as this may put the firm in financial melt-down.

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