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Influence of Dividend Payout on Share Price Movement

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Abstracts:

The effect of dividend payout on share price is a controversial issue in financial theory. The study investigated the influence of dividend payout on share price movement using data collected from Dar es Salaam Stock Exchange for the period of 2013-2017 to provide the way forward. The sample had 65 observations collected from twelve listed companies at DSE. Regression analysis through multilevel analysis was employed while controlling the influence of earnings per share (EPS), company size (SIZE) and dividend yield (DY). The study found that dividend payout has no influence; dividend yield has a negative significant influence while company size has positive significant influence on share price movements. Therefore; it was recommended that shareholders should not use dividend payout statistics of the company to gauge the performance of the company but they should use company size and dividend yield among other factors.

Keywords: Dividend payout, share price, share price movement

1. Introduction

Dividend payout is a measure of dividend policy (Higson, 1995:265) while dividend policy is defined as an action of managers to distribute portion of earnings after tax to shareholders in proportion of their holdings in the firm (Egbeonu et al., 2016). The decision of distributing dividends is dated back in sixteen century (Williston, 1888:100). Dividend payment has been said to have benefits to the company; one being attracting institution ownership which want cash to pay obligations when they become due (Ullah et al., 2012; Thanatawee, 2013, and Al- Gharaibeh et al., 2013). The literature is full of contradicting views about the effect of dividend policy especially its influence on share price. Gordon (1959) tested the relationship between dividend policy and share price movement and found a positive significant influence of dividends on share price controlling the influence of retained earnings. The debate which argued positive influence of dividend policy on share price movement is supported by Anton (2016), Oliver et al. (2016) and Ozuomba et al. (2016) because they found a positive significant influence of dividend policy share price movement. Miller and Modigliani (1961) challenged the argument of Gordon by arguing that dividend policy has no effect on share price movement because the share price of the company is determined by company earning power and investment strategies. With respect to Miller and Modigliani, dividend policy is irrelevant. The argument of Miller and Modigliani (1961) is valid under the assumptions of perfect capital markets, rational behaviour and perfect certainty and if the situation is different from these assumptions the claim of Miller and Modigliani (1961) does not hold. Sualekhhattak and Hussain (2017) supported this argument by finding that there is no influence of dividend policy on share price movement. Elton and Gruber (1970) raised another view in the debate about dividend policy on share price movement by stating that dividend policy has negative influence on share price. They mean a company with a dividend policy that pays more dividend; its shares are sold at low price because dividends are more taxable than capital gain. This line of thinking is supported by Kadioglu et al. (2015). This controversy is a problem to company shareholders in practice hence requiring more research. The company shareholders from different economies need to know the influence of dividend payment on share price so as to make appropriate decisions. Therefore, the study intended to investigate the influence dividend policy on share price so as to contribute on this debate using experience from Tanzania where the capital market is in emerging stage.

2. Literature Review

2.1. Conceptual Definition

Table 1 gives the definitions of key concepts/ variables used in the study and how their values are obtained since these variables are the composite function of other variables.

2.2. Theoretical Review

The influence of dividend payout on share price is explained by Tax – preference theory (Elton and Gruber, 1970), Signaling hypothesis (Bhattacharya, 1979), Agency theory (Easterbrook, 1984), Ownership– clientele hypothesis (Allen et al., 2000) and Gordon model (Gordon, 1963). Gordon model is mostly used in practice to explain the influence of dividend payout on share price. The theory was postulated by Gordon (1963) and it states that;

$$P_0 = \frac{EPS(1 - R_t)}{k - g} \dots \dots \dots i$$

Where

P_0 = the current share prices

EPS = is earnings per share,

R_t = is the retention ratio (1 – dividend payout)

k = is the cost of fund,

g = is the dividend growth rate,

By substituting $R_t = (1 - \text{dividend payout } (D))$ in equation (I), the equation becomes:

$$P_0 = \frac{EPS(1 - (1 - D))}{k - g} \dots \dots \dots ii$$

By opening brackets in equation (ii) it becomes:

$$P_0 = \frac{(EPS)D}{k - g} \dots \dots \dots iii$$

Where

D = is dividend payout.

Now; equation (iii) can be stated that increase in dividend payout results an increase in share price provided that earning per share, cost of fund and growth rate are kept constant. In other words, it can be stated that there is a positive influence of dividend payout on share price movement.

2.3. Empirical Review

Habib et al. (2012) tested the influence of dividend payout on share price movement using data from companies operating in Pakistan while employing cross sectional regression analysis. The study found that while controlling the influence of dividend yield, company size, growth and debt; dividend payout has a negative significant influence on share price movement. In line with the finding of Habib et al. (2012), Lashgari and Ahmadi (2014) examined the influence of dividend payout on share price movement by analysis data collected from 470 listed companies in Tehran Stock Exchange using multiple regression on panel data. It was found that dividend payout has a negative significant influence on share price movement while controlling the influence of leverage, earning volatility and company size on share price movement. Contrary to the findings of (Habib et al., 2012, and Lashgari and Ahmedi 2014, Luvembe et al., 2014) examined the influence of dividend payout on share price movement using data collected from listed banks in Kenya. The study used both secondary and primary data where the secondary data were for the period of 2006 – 2010. While controlling the influence of capital structure, corporate earnings, and capital market investments on share price they found that dividend payout has a positive significant effect on share price movement.

Chenchehene and Mensah (2015) investigated the influence of dividend payout on share price using data from 25 retail companies in United Kingdom for the period of 2004 -2008. By employing multiple regressions while controlling the effect of earnings, profitability, share price, firm size, leverage and investment it was found that dividend payout has positive insignificant effect on share price movement. The result is contrary to the findings of (Habib et al., 2012; Lashgari and Ahmedi, 2014 and Luvembe et al., 2014). Chelimo and Kiprop (2017) investigated the influence of dividend payout on share price movement using data from companies listed at Nairobi Stock Exchange for the period of 2006 – 2015. The data were analysed using dynamic regression analysis technique while controlling the influence of dividend yield, earning per share and inflation rate on share price movement and found that dividend payout has a positive significant effect on share price movement. The result is in line with the findings of Luvembe et al. (2014). In line with Chenchehene and Mensah (2015), Raphael (2018) examined the influence of dividend payout on share price movement using data from listed companies at Dare es Salaam Stock Exchange from the period of 2013 – 2017 and analyzing data using multilevel analysis approach. While controlling the effect of company size, retained earnings, earnings per share, debt to equity ratio and found that dividend payout has positive insignificant influence on share price movement.

2.4. Research Gap

The theory which states the influence of dividend payout on share price movement (Gordon model) shows that dividend payout has a positive influence on share price movement. The researchers on testing the theory has found different results such that (Luvembe et al., 2014), (Chenchehene and Mensah, 2015) and (Chelimo and Kiprop, 2017) found a positive significant influence which support the theory. Habib et al. (2012) and Lashgari and Ahmadi (2014) had found that dividend payout has a negative significant influence while Raphael (2018) found that dividend payout has no influence on share price movement. In such situation it is difficult to state the validity of this theory in explaining the influence of dividend payout on share price movement hence calling further studies to be conducted so as to enquire the validity of it.

2.4.1. Research Hypotheses

Using the view of Gordon model and the findings of (Luvembe et al., 2014), (Chenchehene and Mensah, 2015) and (Chelimo and Kiprop, 2017) it can be hypothesized that:

- H_0 = Dividend payout has significant influence on share price,
- H_1 = Dividend payout has no influence on share price movement,

2.4.2. Conceptual Framework

Gordon model depict the influence of dividend payout on share price movement but a number of factors influence the relationship between dividend payout and share price movements, these factors need to be controlled (limited) so as to obtain the real influence of dividend payout on share price movements. These factors are earnings per share (Gordon, 1963), dividend yield (Habib et al., 2012) and company size (Chenchehene and Mensah, 2015). This relationship pictorially can be represented in figure 1 below.

3. Methodology

The study used data collected from companies listed at Dar es Salaam Stock Exchange- DSE for the period of 2013 – 2017. Purposeful sampling was used to collect panel data because they are few companies listed at Dar es Salaam stock exchange which publish their reports annually. Hence the sample had sixty-five (65) annual observations extracted from income statements and balance sheets. Descriptive analysis, diagnostic tests and panel data modeling through multilevel analysis techniques were used to analysis data. Depending on the properties of data multilevel analysis takes one of the following models:

Model 1: The random intercept model

$$P_{it} = (\beta_0 + u_{0i}) + \beta_1 DP_{it} + \varepsilon_{it} \dots \dots \dots i$$

Model 2: Random slope model

$$P_{it} = \beta_0 + (\beta_1 + u_{1i})DP_{it} + \varepsilon_{it} \dots \dots \dots ii$$

Model 3: Random intercept and slope model

$$P_{it} = (\beta_0 + u_{0i}) + (\beta_1 + u_{1i})DP_{it} + \varepsilon_{it} \dots \dots \dots iii$$

The data were tested for all three models and the model with the best fit (with smaller value of minus twice log like hood - 2LL) was selected (Field, 2009). The model that fitted our data well was used to analyse the data by applying the control variables.

4. Findings

4.1. Descriptive Analysis

Table 2 shows the descriptive statistics of variables used in this study. The statistics of interest to describe data was the minimum, maximum and mean value of each variable and standard deviation which measures the spread of the value of each variable around the mean value. The negative sign for the minimum dividend payout implies that a particular company made a loss but still paid dividends from retained earnings of previous years. Mathematically, dividend payout is calculated by dividing total dividend distributed to shareholders by net earnings obtained in that particular year (Arnold, 2005). Therefore, if the net earning is a loss then, the value of dividend payout would be a negative sign.

4.2. Diagnostic Tests

Before the models were run, the data were assessed to see if the assumptions of regression analysis are adhered or not. These assumptions are linearity, multicollinearity, and normality of residuals, homoscedasticity and serial correlation. The results of the diagnostic tests show that the data are normally distributed (Figure 2) and there was no multicollinearity problem (Table 3) among the predictors. But the assumptions of homoscedasticity and serial correlation are violated as shown in Figure 3 and Table 4 respectively. To overcome the consequences of heteroscedasticity and serial correlation the outcome was transformed by applying as \log_{10} (MSP).

4.3. Model Fits

The result of analysis in Table 5 shows that the random intercept model has the best fit because its fit as indicated by -2LL of 1247.466 is the smallest compared with other model fits. Hence it was chosen to estimate the parameters of the model by adding control variables (Field, 2009).

4.4. Estimation of Model Parameters

The results of regression analysis using random intercept model in Table 6 while treating EPS, SIZE and DY as moderating variables shows that dividend payout has positive significant influence on share price ($B = 0.224, p = 0.047$).

5. Discussion

The results established by this study shows that dividend payout has positive significant influence on share price movement for which these results concur with Gordon's model or the relevant theory which argue that dividend payout has a positive influence on share price. Further support the work of Luvembe et al. (2014), Chenchehene and Mensah (2015) and Chelimo and Kiprop (2017) who claimed to find a positive significant influence of dividend payout on share price movement. Further, the findings contravene the work of Habib et al. (2012) and Lashgari and Ahmadi (2014) who claimed that dividend payout has a negative significant influence on share price movement and the work of Raphael (2018) who argues that dividend payout has no influence on share price. The result generally, implies that investors, managements and regulators should use dividend payout to gauge the performance of a share. Moreover; as far as the theory concerns; by itself, it is adequate to explain to movement of share price

6. Conclusion

The purpose of the study was to investigate the influence of dividend payout on share price movement for companies listed at Dar es Salaam Stock Exchange (DSE). The study found that dividend payout has an influence on share price. The study contributes to the theory by applying EPS, SIZE and DY as moderators the approach which is different from most of the studies where these variables are treated as control variables. Further, it was concluded that investors should depend on dividend payout to determine the performance of a share. In future studies on this topic can center on determining the more factors moderating or mediating the effect of dividend payout on share price, analyzing the influence of dividend payout by applying other theories, increase the period of study, using other sets of control variables with the purpose of validating this finding.

Dividend payout (DP)	It is the number of dividends paid to stockholders in relation to total net income of a company (Myers, 2003).
Earnings per share (EPS)	- It is a gauge to know if the company is doing well or not. It is obtained by dividing the net income of the year to number of shares (Brealey et al., 2001).
Company size (SIZE)	It is a measure of company efficiency which is measured by company annual sales (Chenchehene and Mensah, 2015).
Share price (P)	It is the price of company' share resulting from interaction of the agents of a private ownership economy through markets (Debreu, 1959)

Table 1: Definitions of Key Terms

Source: Author's Compilation

	N	Minimum	Maximum	Mean	Std. Deviation
P ₀	65	275	16468	4,124.11	4,151.036
DP	65	-8.74	44.89	1.356	6.080
EPS	65	-3051.617	1,055.510	242.630	528.006
DY	65	0	1.938	0.125	0.303033
SIZE	65	16,092	2,276,407	523,761.06	498,168.853

Table 2: Descriptive statistics

Source: Data analysis with SPSS

Collinearity Statistics		
	Tolerance	VIF
DP	0.764	1.310
EPS	0.907	1.102
SIZE	0.761	1.314
DY	0.701	1.292

Table 3: Multicollinearity Check

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.527 ^a	0.278	0.243	3612.575	0.678

Table 4: Autocorrelation Check

Model	Fits (-2LL)
Random intercept model	1247.466
Random slope model	1261.304
Random intercept and slope model	1248.466

Table 5: Model Fits

Source: Data Analysis with SPSS

Parameter	Estimate	Std. Error	t	Sig.
DP	0.224114	0.110421	2.030	0.047
EPS	0.000112	7.565826E-5	1.479	0.152
SIZE	3.526747E-7	1.486374E-7	2.373	0.021
DY	-5.201159	0.524155	-9.923	0.000
DP * EPS	0.000703	9.130504E-5	7.699	0.000
DP * SIZE	3.295813E-8	1.663238E-7	0.198	0.844
DP * DY	-0.222845	0.151990	-1.466	0.147

Table 5: Estimates of Fixed Effects

a. Dependent Variable: LOGMSP

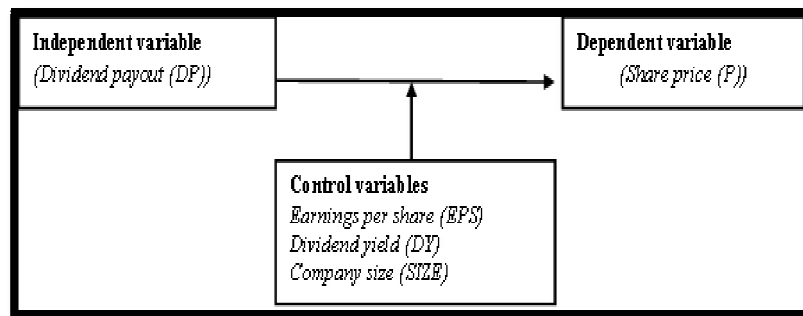


Figure 1: Conceptual Framework

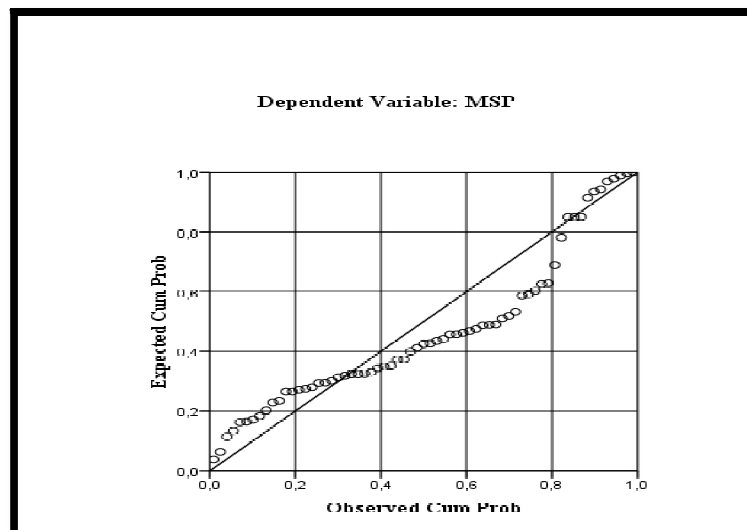


Figure 2: Normality Check

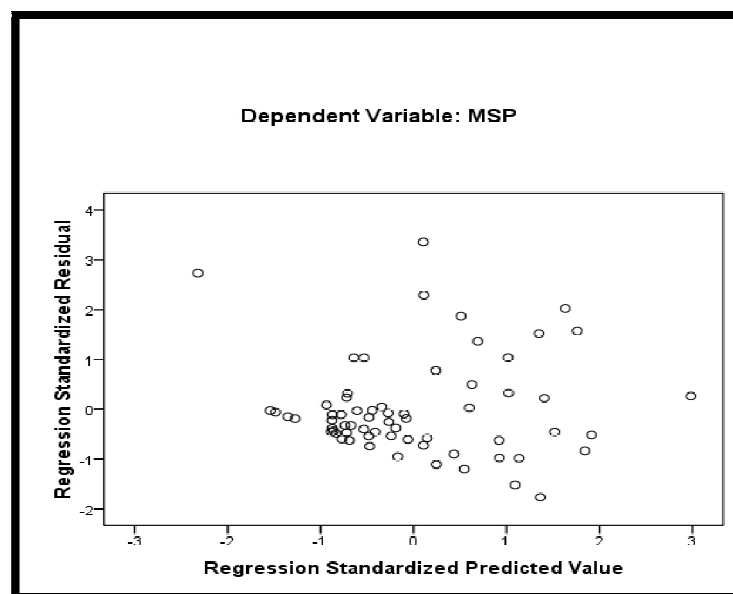


Figure 3: Homoscedasticity Check

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