

Impact of Dividend Policy on Share Price A Case of Listed Firms on the Ghana Stock Exchange

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ABSTRACT: This article dissects the consequence of dividend policy (guideline) on prices of shares indexed on the Ghana Stock Exchange (GSE). The study considered fourteen (14) quoted firms which have made not less than one dividend payment in five (5) years, Dividend-price-ratio, dividend-payout-ratio, retention-ratio and earnings per share, Net Profit after tax, firm size, and growth of total assets being our explanatory variables. The purposively sampled data ranges from 2009 to 2018. Pooled regression, fixed-effect and random-effect tests were run since the data is panelled. Hausman's test was applied to select the most appropriate model. Therefore, fixed-effect results were selected. The empirical results obtained from the fixed-effect regression propounds a positive magnetism amidst market price per unit share and dividend-payout-ratio substantiating that an upswing in dividend for each share stimulates an upsurge in the market price for each share of a quoted firm. However, it was not noteworthy; that Dividend-price-ratio was negatively substantial at a 10% margin of error. Also, retention-ratio was negatively insignificant to determine the market price per unit share. Earnings per unit share remain the principal major determinant of share price; consequently, it has significant ascendancy on the market value of public listed firms on GSE. Besides, Net Profit after tax and firm size had a weighty influence in determining the price of a share.

Keywords: Dividend Payout-Ratio, Share Price, Bird in Hand Theory, Ghana Stock Exchange

I. Introduction

The well-established goal of corporations is to make the most productive use of company's resources to increase its stakeholders' interest and maximise shareholder wealth (Rao, 2014) [1]. Shareholders' assets are measured as the market value of their common stock holdings. Once firms make a profit, decisions have to be made on either dividend payout or retention for future investment to increase shareholders' value. The firm can dispense cash to owners in binary ways: remit dividends or redeem part of the shares owned by shareholders after deduction tax from profit. Undoubtedly, firms transacting in a given industry follow some denomination of dividend policy that serves as a financial gauge of the firm. The bid for the entity's share largely depends on the entity's dividend policy. Therefore, it is prudent for corporations to optimally have an equilibrium amid pay-ratio and retention-ratio (Khan et al., 2011) [2]. In Ghana, dividends acquired from a resident company is liable to be subjected to a final withholding tax of 8%. However, capital appreciation on shares on GSE are immune from tax liability. As a result, making some owners desire little dividends to more significant dividends to enjoy the boons accumulating on capital gains (Amidu, 2007) [3]. GSE is made of different industries, thus: Pharmaceutical, Insurance, Banking & Finance, Manufacturing, Distribution, and Food & Beverages. Therefore, the dividend decision of each firm and sector are at variance with each other. An optimal dividend policy decision has to be made in consideration of contributing factors such as investment opportunities of firms, financial necessities, expectations of shareholders, restraints on disbursing dividends, legal regulations, liquidity, financial condition, industry norms, inflation and interest rate (Foong et al., 2007) [4]. The optimal dividend guideline has consequences on shareholder's earnings and growth of a firm (Adelegan, 2008) [5]. It is prudent for firms to use a double edge dividend policy (guidelines) that strikes between owners' return and firms' growth to maximise the firm's stock price. The general influence of dividends on stock prices is reasonably healthier compared to that of retained earnings (Khan, 2013) [6]. Shareholders have better surety in the Net Profit after tax when a dividend announcement follows it.

Black (1976) [7] scholarship on dividend scribed, "The harder we look at the dividend picture, the more it seems like a puzzle with pieces that just do not fit together". For decades, financial academics have been hooked in designing and probing corporate dividend policy (guidelines); however, the harder they try, the more complicated it becomes. The

difficulty of the existing rapport within dividend guideline and share price is not solitary a challenge found in Ghana but also ubiquitously the world. The study of dividend guidelines (policies) and share price have engendered many contradictions between many researchers from different sovereign and financial markets. Most studies of dividend policy by researchers in Ghana centralised and pinpointed on dividend policy (guideline) implication on share price variability instead of the share price. In this regard, the preeminent intent of this scholarship is to probe the consequence of dividend policy on the prices of registered companies' shares. Following this pattern of reasoning, this article, therefore, seeks to achieve the following objectives:

1. To determine the relationship between dividend policy and share price
2. To examine the main determinants of the market price of shares on the GSE

The scope of this exercise covers 14 designated firms indexed on the Ghana Stock Exchange between 2009 and 2018.

II. LITERATURE

Theoretical Framework

Dividend Irrelevance

The general view before the publication of Miller and Modigliani (1961) [8] was that dividends highly stimulate market value stocks (Baker, 2009) [9]. Miller and Modigliani (1961) [8] aver that share worth is ascertained by its level of flow of corporate income (cash flows), which echoes a firm's investment policy, in preference to a fraction of a company's earnings disbursed as dividends. They also affirm that a company's future profitability is contingent on its investment decision, making share worth autonomous of the fraction of dividend paid by a company.

The underlying assumptions underlying Miller and Modigliani 1961 [8] theory includes the following:

1. In "perfect capital markets," no individual (firm) can influence the prevailing and dominant price of securities. Each stockbroker has commensurate and gratuitous hands-on details of prevailing prices and all extra pertinent features of shares. Besides no transaction cost, no securities transfer cost and not tax differential between capital gain and dividend.
2. "Rational behaviour": investors always desire an enormous fortune to less. They are unconcerned about whether a given augmentation to their wealth comes as cash payments or a growth in the market value of their possessions of shares (capital gain).
3. "Perfect certainty" Rational investor seeks an absolute assurance on the future cash flows and the future profits of every corporation.

Miller and Modigliani propounded out that cogent investors are unconcern of collecting capital appreciation or dividends on their shares. Modigliani and Miller also maintained that stockholders could procreate their homespun dividends if they appetite for cash, they can sell off the stock. On the contrary, they can utilise dividends to buy a stock if they do not wait long for money. The critical issue here is for a firm to get the most out of its market worth by creating an optimum investment policy. Black and Scholes (1974) [10] scrutinised the influence of dividend policy on share price beginning 1936 - 1966 of 25 firms indexed the New York Stock Exchange by using capital asset pricing model for analysing connections amongst Dividend-price-ratio and expected return. There was no significant association among Dividend-price-ratio and expected return. Besides, their studies show that there exists no evidence that dividend policies influence stock prices.

Dividend Relevance Theories

Bird in Hand Theory

Contrary to the postulation propounded by Miller and Modigliani, this school of thought claims, corporations' dividend policies (guidelines) are pertinent to their shares worth. This was the predominant conjecture during the spell Miller and Modigliani circulated their probe, with the case for dividends consequence being promulgated by Lintner (1956) [11] and Gordon (1963, cited in Stowe & Walker, 2014) [12]. They maintained that dividends are desired to capital appreciation under its certitude. An investor will favour taking delivery of a particular payment (dividend) instantly preference to abandoning an equal sum into an investment whose forthcoming expected worth is tentative. Current dividends, on this examination, typify a more consistent return compared to yet to come capital gains. Dividend income is more desirable as compared to two birds in the bush, capital gain (Norris, 2020)[13]. If dividends are superlative to

capital appreciation for investors, consequently, dividend policy executes an essential task in establishing the market worth of a company. Companies who disburse low dividends may encounter a plunge in share price as investors' commerce their shares for unlike companies with substantial dividend policy.

Signalling Theory

The signalling theory of dividends originated from Lintner's (1956) [11] scholarship, who publicised that the worth of a company's shares frequently variates when its dividend disbursements change. Due to the asymmetry of information amid management and owners, Dividend policy is often used as an apparatus of communicating germane info to shareholders about the corporation's prospects.

Bhattacharya (1979) [14] avers notwithstanding the tax detriment for dividends, and companies elect to expend dividends to propel positive hints and beacon to firm owners and outer investors. Baker (2009) [9] asserts that the point of supply of info and facts such as accounting data and prospect reports of a company is not utterly veracious since it does not give a real snapshot of the firm's profitable business prospects. This creates an asymmetry of information amongst shareholders and potential investors. The best way to sway both owners and outside investors about the future cash flows of the entity is by sending strong signals through dividend policy. Stock price alterations should complement unforeseen changes in dividend in the similar route, i.e. dividend upsurges convey auspicious news to the market and descents as grave news. Also, Allen and Michaely (2003) [15] observed that alterations should also complement dividend alterations in earnings in the same trajectory.

Empirical Review

Numerous scholars have investigated the consequences of dividend policy (guidelines) on stock price fluctuations in the developed market. Hussainey et al. (2011) [16] inspected the affiliation amongst dividend policy and the share price variability on UK Stock extending from 1998-2007. Their study demonstrated that there exists a substantial negative link amid the payout ratio and variability of its stock price per unit and a positive connection amongst Dividend-price-ratio and the variability of the stock price per unit. The results supported dividend relevance theory since the chief contributing factor of the variability of the stock price was dividend-payout-ratio. The upper the payout-ratio, the less unstable a stock price. Ishfaq (2018)[17] explored the influence of dividend per unit share and earnings per share unit on the market worth of share unit of 12 textile-indexed companies on Pakistan stock exchange beginning 2005 - 2014. The results promulgated there exist noteworthy positive consequences of dividend per unit share on the stock price. Besides, the dividend per unit share and earnings per share unit had a strong association with each other. This outcome validates the findings of Sharif et al. (2015)[18]. Bhattacharya (1979) [14] reveal that disbursing dividend is regarded as a hint of the company's future earnings. He affirmed that if firms lessen their dividend, share prices are likely to fall. Hence, a firm will make more earnings on its shares when paying more dividend. Baah et al. (2014)[19] explored the industrywide contributing factor of dividend policy and its consequence on share prices of corporations indexed on Ghana Stock Exchange spanning from 2006-2011. Purposive sampling was utilised to sample twelve companies (12) from the various industry on the exchange. The results indicate that Dividend Payout has a statistically small and weak correlation amid it and Share Price.

AL-Malkawi (2007)[20] investigated the contributing factor of the dividend policy of Jordanian Corporations. One hundred sixty (160) firms indexed on Amman stock exchange beginning 1989 to 2000 were employed. His study outcome revealed is a positive correlation among profitability, age of the firm, size of the firm, and dividend policy. Furthermore, Khan et al., (2011)[2] descry that Dividend-price-ratio; earnings per share and return on equity have a direct association, whereas retention-ratio has an indirect association with stock prices. Franc-Dąbrowska et al. (2019)[21] scrutinised the link amongst dividend policy and share price variability using a fixed-effect model. 141 non-financial firms were carefully selected from Ho Chi Minh stock exchange beginning 2011-2016. Their results indicated a statistically noteworthy negative link among dividend payout, Dividend-price-ratio and share price variability.

This study propositions two hypotheses that are engendered from the following main hypotheses:

- "There is a positive association between the following independent variables (dividend-payout-ratio, Dividend-price-ratio, earnings per share, firm size,); and (market share price as an independent variable)".
- "There is a negative relationship between retention-ratio (as the independent variable) and market share price (dependent variable)".

From these above main hypotheses, the study objects to observe the following null hypotheses;

Dividend payout and Share prices

Onyango (2018)[22] indicated there exist a negative immaterial consequence of the dividend payout on market share price per unit of firms registered on Nairobi stock exchange. The findings indicated that dividend-payout-ratio does not signal share prices of listed Kenya firms; this is consonant with Miller and Modigliani (1961)[8].

H1: Dividend Payout insignificantly influences share Price.

Retention-ratio and Share prices

Al Masum (2014)[23] established a positively insignificant affiliation amid retention-ratio and share price of commercial banks registered on the Dhaka stock exchange. Though trivial, this indicates that investors want firms to retain their earnings for investment into viable, profitable projects.

H2: Retention-ratio inconsequentially influences Stock Prices.

III. METHODOLOGY

For this paper, panel regression technique was employed. The Microsoft excel and Eview 9 computerised software were utilised, which enhanced the accuracy of the model and gave a reasonable and appropriate judgement of our final analysis.

Population and Sample

The bull's eye population of this research comprises all the 36 listed firms on the Ghana Stock Exchange (GSE) for ten-year span beginning 2009 to 2018. The study adopted the purposive sampling to select fourteen (14) firms indexed on GSE aimed at a spell of 2009 to 2018. Firms selected for this study are firms that fit a particular profile. Firms selected were based on these following profiles;

1. Firms who have at least made one dividend payment in the five-years.
2. Firms with a locally denominated financial report (Ghana Cedis).

Collection of Data

The data was acquired and sourced out of annual financial statements of companies registered on GSE and other germane pieces of information (share price) for all listed firms from GSE website. Pooled panel database was made from the available annual financial statements comprising of a comprehensive income statement, statement of financial position, a statement in changes in equity, statement of cash flow, and their share prices from GSE.

Model

The regression model scrutinises the association between share price and dividend policies. [Dividend-price-ratio, Dividend-payout-ratio, Retention-ratio and Earnings per share], with some additional contributing factors: firm size, growth and Net Profit after tax.

Model Specification

Panel data regression was utilised to test the influence of dividend policy on the share price. This model was selected because our data contains observations of multiple events obtained across multiple spells for the same firms.

Also, with panel data, we can control:

1. Unobserved or immeasurable sources of individual heterogeneity that differs across individuals but not overtime.
2. Omitted variable bias.

The appropriate model for this research was selected based on the Hausman test.

H_0 =Random-effect appropriate

H_1 =Fixed-effect appropriate

Econometric Model

The estimated model for this study postulates that Market share price is dependent on several explanatory and control variables: Dividend-price-ratio, Dividend-payout-ratio, Retention-ratio and Earnings per share are considered as

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explanatory variables. The control variables considered the firm size and Net Profit after tax. Below are the models for the studies;

Model (1) utilised to predict the consequence of dividend on the market share price.

$$MPS_{it} = \alpha_i + B_1DPR_{it} + B_2DP_{it} + B_3EPS_{it} + B_4PAT_{it} + B_5G_{it} + B_6SZ_{it} + e_{it} \dots\dots (i)$$

Where, MPS_{it} = Market price per unit share, DPR_{it} = Dividend-payout-ratio, DP_{it} = Dividend-price-ratio, EPS_{it} = Earnings per share PAT_{it} = Net Profit After Tax G_{it} = Asset Growth rate, SZ_{it} = Firm size and e_{it} = Error term.

Model (2) utilised to predict the consequence of Retention-ratio on the market share price.

$$MPS_{it} = \alpha_i + B_1RR_{it} + B_2EPS_{it} + B_3PAT_{it} + B_4G_{it} + B_5SZ_{it} + e_{it} \dots\dots (ii)$$

Where, MPS_{it} = Market price per unit share, EPS_{it} = Earnings per share, RR_{it} = Retention – ratio, PAT_{it} = Net Profit After Tax, G_{it} = Asset Growth rate, SZ_{it} = Firm size and e_{it} = Error term.

Table 1 Contributing Factors Taken for the Consequence of Dividend Policy on Stock Prices

NO.	FACTORS	SYMBOL	FORMULA
1	Market price per unit share	MPS	$\frac{\text{Highest price} + \text{lowest price}}{2}$
2	Dividend-payout-ratio	DPR	$\frac{\text{Dividend}}{\text{Net income}}$
3	Retention-ratio	RR	$\frac{\text{Net income} - \text{Dividend}}{\text{Net income}}$
4	Dividend-price-ratio	DY	$\frac{\text{Dividend per share}}{\text{market price per share}}$
5	Net profit after tax	PAT	Operating income – Interest – Taxes
6	Earnings per unit share	EPS	$\frac{\text{Net profit available for equity shareholders}}{\text{Number of equity shares}}$
7	Return on equity	ROE	$\frac{\text{Net income}}{\text{shareholders equity}}$
8	Asset Growth Rate	G	$\frac{\text{Total assets}_t - \text{Total assets}_{t-1}}{\text{Total assets}_t}$
9	Firm size	SZ	Natural log of if total assets

IV. DISCUSSION OF RESULTS

Discussion of Regression Results

The nature of the data is a panel. Fixed-effect and random-effect models of regression analysis was utilised to investigate our model. Subsequently, Hausman-test was carried out to ascertain whether or not the fixed-effect or random-effect model outcomes is the better of the two models to predict our dependent variable. With P-value of Hausman-test being less than 0.05, fixed-effect results were elected for elucidation.

Table 24.2.1 Hausman Test for Model One

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	52.320414	6	0.0000

Hausman-test was run for selecting the best model that predicts our dependent variable (fixed and random-effects model). The verdict of preferential amongst fixed and random-effect model is grounded on Prob-value of Hausman-test. With Prob-value of the Hausman-test less than 0.05, then the fixed-effects model will be selected as the best model. Contrarily, prob-value of the Hausman test of more than 0.05, the fixed-effects model will be selected for examination. In this scholarship, the Prob-value of Hausman-test was lower than 0.05; hence the fixed-effects model was utilised.

Table 34.2.2 Fixed-Effect Regression Outcomes of contributing factors of Dividend Policy (Dividend-payout-ratio) influence on Share Prices (Model One)

Dependent Variable: SHARE_PRICE

Method: Panel Least Squares

Sample: 2009 2018

Periods included: 10

Cross-sections included: 14

Total panel (unbalanced) observations: 133

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-23.80696	14.11440	-1.686714	0.0944
DIVIDEND-PAYOUT-RATIO	0.094142	0.160735	0.585698	0.5592
DIVIDEND-PRICE-RATIO	-13.98989	8.334309	-1.678590	0.0960
EARNING PER SHARE	6.194379	1.089962	5.683113	0.0000
NET PROFIT AFTER TAX	-3.25E-08	8.51E-09	-3.817786	0.0002
FIRM SIZE	3.312891	1.660698	1.994879	0.0485
GROWTH OF TOTAL ASSETS	-1.697721	3.003222	-0.565300	0.5730

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.808552	Prob(F-statistic)	0.000000
Adjusted R-squared	0.776362		

Here we will estimate a market price per unit share, taking into consideration the influence of dividend on the share price. Table 4 above evince the details of regression analysis using fixed-effect regression. The results of 14-indexed GSE firm's reveals dividend-payout-ratio having an inconsequential positive relationship through the period of ten years beginning 2009-2018 with the share price. After analysing the regression outcomes, it is lucid share price has a positively strong association with firm size and earning per share, whereas growth on assets demonstrates negatively nugatory correlation with the stock market price. Also, Dividend-price-ratio and Net profit after tax have a negatively striking correlation with the share price. The model has an R square of 0.8085 reveals almost 80.85% alteration independent variable is a result of alteration in explanatory variables. Thus, the model explains 80.85 per cent of the dependent variable.

Test of Hypothesis One

Given Prob-value for fixed -effects regression (p-value=0.5592), the outcome reveals dividend-payout-ratio influences on the market price per unit share of indexed firms in Ghana positively. Nevertheless, in an inconsequential way. With Prob-value higher than 0.05, we assent to the null hypothesis and establish that dividend payment has a positive and immaterial influence on the market prices of shares of companies indexed firms on the GSE.

Table 4 4.2.4 Hausman-Test for Model Two

Correlated Random-Effects - Hausman-Test

Equation: Untitled

Test cross-section random-effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	68.048190	5	0.0000

Hausman-Test was run to ascertain the best model for Model 2 of this research. A prob-value of lower than 0.05 was obtained. Consequently, fixed-effect regression is favoured for model2.

Table 5 4.2.5 Fixed-Effect Regression Outcomes of contributing factors of Dividend Policy (Retention-ratio) Influence on Share Prices. (Model Two)

Dependent Variable: SHARE_PRICE

Method: Panel Least Squares

Sample: 2009 2018

Periods included: 10

Cross-sections included: 14

Total panel (balanced) observations: 140

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-27.59505	13.24472	-2.083475	0.0393
RETENTION-RATIO	-0.065013	0.157840	-0.411890	0.6811
EARNING PER SHARE	5.666409	0.942913	6.009469	0.0000
NET PROFIT AFTER TAX	-3.25E-08	8.25E-09	-3.935922	0.0001
FIRM SIZE	3.702263	1.564868	2.365862	0.0196
GROWTH OF TOTAL ASSETS	-2.304684	2.909460	-0.792134	0.4298

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.804887	Prob (F-statistic)	0.000000
Adjusted R-squared	0.775862		

Fitness of Model 2

The regression examination of model 2 revealed the R-square of the model to be 0.8048. The model explicates 80.48% of the deviations in the dependent variable as displayed directly above in Table 5. The model is statistically consequential; with prob-value for the model is 0.00.

Test of Hypothesis Two

The insignia of the constant reveals a negative correlation amidst market prices per share and Retention-ratio. This implies that an upsurge in Retention-ratio triggers a transposed reaction on the market price per unit share indexed on the Ghana Stock Exchange. Given Prob-value for fixed-effects regression (p -value=0.6811), our outcome designates that Retention-ratio influences negatively on the market price per unit share of registered corporations in Ghana. Nonetheless, in an inconsequential way. As a result of prob-value being higher than 0.05, the null hypothesis assents; it is established that Retention-ratio has a negative and insignificant consequence on the prices of shares of corporations registered on the GSE

Independent Variables

Since the Fixed-effect regression, is choosing as the best fit for both model 1 and model 2. There are various Beta coefficients used to explain the independent variables.

Dividend-payout-ratio

Dividend-payout-ratio exerts a positive influence on the market price per unit share. The model's outcome revealed a positive beta of 0.094142, which hints there exist a positive connection existing amongst dividend-payout and share price. Nonetheless was not noteworthy in predicting the price of a share. This means that share price would rise with an increase in the company's dividend-payout-ratio. The constant suggests that an upsurge in dividend-payout-ratio will cause a 0.094142-unit upsurge of the share price. The prob-value of t-statistics (p =0.5592), which is higher than 0.05 makes dividend-payout-ratio statistically irrelevant. While dividend-payout-ratio exert a positive influence on share price, it is statistically inconsequential and can be attributed to chance. This outcome is analogous to the outcome of Baah et al. (2014) [19], which reveals a feeble positive association amid stock market price and dividend-payout-ratio. This finding suggests that dividend-payout-ratio exert no influence on share price, and there exists a weak positive connection amongst dividend-payout and share price. Hence, dividend-payout-ratio cannot be used to predict share prices of listed firms.

Dividend-price-ratio

The Dividend-price-ratio reveals a negative correlation with the market price per unit share. The beta coefficient of Dividend-price-ratio of -13.98989 indicating the high Dividend-price-ratio of a firm, the lesser the share price of a firm. The prob-value of t-statistics (p =0.09) is higher than 0.05 making Dividend-price-ratio statistically inconsequential in predicting the model. Though the results contradict literature, the findings are inconsonant with Hussainey et al. (2011)[16] whose findings illustrated that share price is negatively associated with Dividend-price-ratio.

Retention-ratio

From table 5, there exists a negative link amongst retention-ratio and market price of shares. The beta coefficient is -0.065013 indicating the higher retained earnings of a firm, the lower its share price. The prob-value of t-statistics (p =0.6811) is more than 0.05 makes retained earnings ratio statistically immaterial in predicting the model. This result corroborates the outcome of Al Masum (2014)[23], which reveals an inconsequential negative rapport amongst retention-ratio and share price.

Earnings Per Share

Earnings per share have a positive beta coefficient in both models of this paper with both Betas prob-value lower than 0.05. This implies there exist a substantial positive connection amid earnings per share and the share price. 1% of upturn

in earnings will result in 6.194379 upswings in the share price. This outcome is inconsonant with findings of Sharif et al. (2015)[18] which reveals a significant positive link amid share price and earnings per share.

Net-Profit after tax

Net profit after tax has a negative beta coefficient Beta with prob-value lower than 0.05. This suggests there exist a substantial negative connection among Net Profit after tax and the stock price. The finding is consistent with the results of Al-Masum (2014) [23] and Sharif (2015)[18], which shows a significant negative association among share price and Net Profit after tax.

Firm Size

Firm size has a positive beta coefficient in both model 1 and model 2 of this paper with both Betas prob-value lower than 0.05. This reveals a strong positive association amongst firm size and the stock price. The result is inconsistent with the study of Ilaboya and Aggreh (2013) [24]. This paper has shown that the changes in firm size instigate share price to increase. This finding is compatible with the results of Al-Shawawreh (2014) [25], which indicates a significant positive association amongst share price volatility and firm size.

Growth of Total Asset

Asset growth has a constant negative of -1.697 with prob-value of 0.5730. The beta -1.697 means that the asset growth creates a negative control on share price, but it is statistically irrelevant. The 14 companies used in this model has shown evidence that the growth of asset had made the share prices to fall as more money is retained to increase the firm's total assets.

V. SUMMARY AND CONCLUSION

Summary of Findings

This study resulted in the following key findings:

1. Dividend-payout-ratio affects the market share price positively having a beta constant of 0.094142 with a prob-value of 0.5592. Hence, it can be averred that most of the firms registered on the GSE reveal statistically inconsequential and frail link amidst their Dividend Payout and Share Price (Baah et al., 2014) [19].
2. Unexpectedly, Dividend-price-ratio exerts a negative consequence on the share price. The influence of Dividend-price-ratio is significant, according to the beta coefficient of -13.98989 found in the model. Beta was statistically insignificant at 5%; however, it was substantial at 10% level. Our study outcome corroborates the findings of Al-Masum (2014)[23]. His results indicate that Dividend-price-ratio reveals a widespread negative influence on the share price.
3. Retention-ratio affects the market price of share negatively with a beta constant of -0.065013 and prob-value of 0.6811, making it statistically immaterial.
4. Expectedly, Earnings per share manifested a positively substantial beta coefficient in both models of this paper with both Betas prob-value lower than 0.05. This suggests there exist a significant positive association between them changes in earnings per share and the stock price.
5. Net profit after tax has a negative beta coefficient Beta with prob-value lower than 0.05. This denotes there exist a noteworthy negative connection amongst Net Profit after tax and the stock price.
6. Firm size has a decisive beta factor, with betas prob-value lower than 0.05. This implies that there is a positively momentous correlation amid firm size and the stock price. Thus, Firm size has a positive influence on determining the share price of a firm. Big size firms listed on the Ghana stock exchange tend to have higher share prices.
7. Asset growth has a negative beta constant of -1.697, which is statistically irrelevant with prob-value of 0.5730.

Conclusion

The scholarship conducted to discern the consequence of dividend policy on stock prices of firms registered on the Ghana stock exchange. The outcome of the Fixed-effect analysis revealed that among the explanatory variables, the main determinants of the market price of a share of firms registered on the GSE are only earnings per share, Net Profit after tax and firm size having a statistically noteworthy impact on firms listed on GSE. One per cent rise in the amount of earning per share triggers a 6.194% upward drive in the shares market value. Whiles, a 1% increase for Net Profit after tax brings about 3.25% downward drive in the price of a stock. Similarly, a 1% rise in the value of firm size will cause a 16.17% upward to drive in the value of stock market value. Disparate from above-cited variables dividend-payout-ratio,

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Dividend-price-ratio, retention-ratio along with the growth of asset revealed statistically irrelevant association towards the stock market price of indexed firms on GSE.

Recommendations

1. The influence of Dividend-price-ratio on share price is substantial at a level of 10%. Therefore, the companies should be willfully thorough in setting up their dividend policy.
2. As shareholders, investors and managers of indexed firms are concerned with the appreciation of the market value of their shares. Via this scholarship, we may get assistance regarding the contributing factors that incite variation in stock market prices and insight of factors to considered significant by investors and managers in decision making during investment.
3. Management of quoted firms should try to improve their earnings per share, Net Profit after tax and firm size since they have an essential consequence on the share price.
4. The GSE market is characterised by asymmetrical information. The Ghana stock market experiences a semi-strong form of efficiency; hence, available market information is not reflected in the price of stocks. Steps should be taken to ensure information symmetry on the stock market.

Reference

- [1] Rao, J. R. M. C. M. P. (2014). *Contemporary Financial Management*. 14th edition. Watson, D. and Head, A. (2010). *Corporate Finance: Principles and Practice*. 5th edition.
- [2] Khan, K. I., Amir, M., Qayyum, A., Nasir, A., & Khan, M.I. (2011). Can dividend decisions affect the stock prices: A case of dividend-paying companies of KSE. *International Research Journal of Finance and Economics*, Volume 76(2011), pp. 67-74.
- [3] Amidu, M. (2007). How does dividend policy affect the performance of the firm on the Ghana stock exchange? *Investment Management and Financial Innovations*, 2:104 -112.
- [4] Foong, S., N. Zakaria and H. Tan (2007). Firm performance and dividend related factors: the case of Malaysia. *Labuan Bulletin of International Business and Finance*, 5 (1), 97-111.
- [5] Adelegan, O. (2008). The Impact of Growth Prospect, leverage and firm size on dividend behaviour of corporate firms in Nigeria. Available <http://www.csae.ox.ac.uk/conferences/2000-oia/pdfpapers/adelegan.pdf>. Accessed on February 05, 2013.
- [6] Khan, A. and K. Khan. (2013). Dividend Policy and Stock Prices – A Case of KSE-100 Index Companies.
- [7] Black F (1976). The dividend puzzle. *Journal of Portfolio Management* 2(2):5-8.
- [8] Miller, M. H. and F. Modigliani. (1961). Dividend Policy, Growth and Valuation of shares. *Journal of Business* . 4 (34): 411-433
- [9] Baker, H. K. (2009). Dividend Irrelevance Theory, in Dividend and Dividend Policy. *John Wiley & Sons*.
- [10] Black, F., & Scholes, M. (1974). The effects of Dividend-price-ratio and dividend policy on common stock prices and returns. *Journal of Financial Economics*, 1(1), 1-22.
- [11] Lintner, J. (1956). The distribution of incomes of corporations among dividends retained earnings and taxes. *American Economic Review*, 46 (2), 97-113.
- [12] Stowe, J.D, Walker, M (2014) The Effect of Executive Stock Options on Corporate Financial Decisions, *Journal of Financial Research*, 10.1111/j.1475-6803.1980.tb00038.x, 3, 1, (69-83).
- [13] Norris, E. (2020) Capital Gains vs Dividend Income: The Main Differences. Available from: <https://www.investopedia.com/ask/answers/033015/there-difference-between-capital-gains-and-dividend-income.asp>. Retrieved 09/09/2020.
- [14] Bhattacharya, S. (1979), "Imperfect information, dividend policy, and the bird in the hand fallacy". *The Bell Journal of Economics*, Vol. 10, No. 1, pp. 259-270.
- [15] Allen, Franklin, and Roni Michaely, 2003, Payout policy, *Handbook of the Economics of Finance* 1A.

- [16] Hussainey, K., C. Mgbame & M. Aruoriwo (2011). Dividend policy and share price volatility: UK evidence. *Journal of Risk Finance*, 12 (1), 22-64.
- [17] Ishfaq, A. (2018). Impact of Dividend Per Share and Earnings Per Share On Stock Prices: A Case Study From Pakistan (Textile Sector)
- [18] Sharif, T., Purohit, H., Pillai, R. (2015), analysis of factors affecting share prices: The case of Bahrain stock exchange. *International Journal of Economics and Finance*, 7(3), 207-216.
- [19] Baah, B. K., Tawiah, R. and Opoku, E. (2014) Industry Sector Determinants of Dividend Policy and its Effect on Share Prices in Ghana. *International Journal of Economics, Business and Finance* Vol. 2, No. 5, August 2014, pp. 1 - 19, ISSN: 2327 - 8188.
- [20] Al-Malkawi, H. (2007), "Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model". *Journal of Economic & Administrative Sciences* Vol. 23, No. 2, December 2007 (44-70).
- [21] Franc-Dąbrowska, J., Madra-Sawicka, M., and Ulrichs, M (2019) Determinants of dividend payout decisions - the case of publicly quoted food industry enterprises operating in emerging markets., *Economic Research-Ekonomska Istraživanja*, DOI: 10.1080/1331677X.2019.1631201.
- [22] Onyango B. E. (2018) The relationship between dividend-payout-ratio and the share prices of companies listed at the Nairobi securities exchange. *International Journal of Economics, Commerce and Management*. Vol (6) page 615-642.
- [23] AlMasum, A. (2014) Dividend Policy and Its Impact on Stock Price - A Study on Commercial Banks Listed in Dhaka Stock Exchange.
- [24] Ilaboya, O. J and Aggreh, M. (2013) Dividend Policy and Share Price Volatility. *J. Asian Dev. Stud*, Vol. 2, Issue 2, (June 2013) ISSN 2304-375X.
- [25] Al-Shawawreh, F. K. (2014). The impact of dividend policy on share price volatility: Empirical evidence from the Jordanian stock market. *European Journal of Business and Management*, 6(38), 133-143.