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The response of stock prices to dividend news on the Ghana stock market: An empirical assessment

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ARTICLE INFO	A B S T R A C T
Received: 02-03-2015	An important assumption of the signaling hypothesis is that dividend change announcements
Revision: 26-03-2015	are positively correlated with share price reactions and future changes in earnings. However,
Accepted: 28-03-2015	Miller and Modigliani (1961) sustains that, dividend policy is irrelevant in arriving at a firm
Available online: 01-04-2015	value, if the capital market is perfect. The purpose of this paper is to assess the potency of the
	dividend irrelevance theory on the Ghana stock market by using the Johansen-Juselius
Keywords:	cointegration methodology on daily data of dividends, earnings and stock prices from
Cointegration:	January 2011 to December 2013. The results establish that equity prices in Ghana are not in
Composite index;	sync with dividend announcements. However, the incorporation of earnings in the
Equity prices.	cointegration model provides varying result. The findings indicate that equity price change movements in Ghana are not responsive to dividend news.
JEL Classification:	
G12; G14; G31.	

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1.0 Introduction

The Ghana equity market in 2013 experienced an outstanding performance of listed firms since its establishment in 1990. The GSE Composite Index, which measures the performance of the entire market, went up by 78.81%, obviously one of the best in Africa between 2010 to 2013. The Ghanaian bourse's first ten months in year 2013 indicated a bullish performance in capital market activity with the GSE-CI closing the month October at 2,099.90 (or a year-to-date rate of return of 75.3 percent). Compared to an opening index of 992.25 in January 2011, this represents a substantial rise in the Ghana Stock Exchange (GSE) over a relatively short period of time. The exceptional 2013 performance was buoyed largely by increased investor awareness and good operating results of many of the listed companies supported by the renewed investor confidence in the Ghanaian market and economy (Bank of Ghana, 2013).

For an embryonic market like Ghana, available literatures appear unclear about the possible responsiveness of stock price movements to dividend announcements. According to the dividend signaling hypothesis, dividend change announcements trigger share price increases because they convey information about management's assessment on firms' future prospects. However, Miller and Modigliani (1961) sustains that, dividend policy is irrelevant in arriving at a firm value, if the capital market is perfect. Thus, in a world of frictionless markets, dividend payout policies do not affect the market value (price) of the firm; and that the firm derives its value solely from the intrinsic profitability of its assets and the competence of its management team. Even though, the Ghana stock market is imperfect (Frimpong and Oteng-Abayie, 2008) assessing whether dividend payments affect the valuation of shares in such a frictionless market enables us more to ascertain with precision under what conditions dividend policy will matter in capital structure decisions of firms in a market with frictions such as transactions cost, taxes, asymmetric information, and other market imperfections. The beckoning question then is; does the behavior of the Ghana stock market follow the dividend signaling theory or the Miller and Modigliani (1961) hypothesis? This study seeks to fill the gap by empirically testing for stock price responsiveness to key fundamental variables. This issue is important due to its recognizable implications for risk diversification, asset pricing and efficient allocation of investment resources.

Equity prices may be considered non-responsive to dividend payments when the price movements show systematic departures from corresponding dividends. Such departures may be due to mispricing or speculative bubbles that drive prices away from fundamental values (e.g. dividends). The notion that dividends are irrelevant in determining the value or price of a firm appears to be a contradiction. After all, the discounted cash flow model and the rational valuation formula, assert that the fundamental price of an asset is the present value of all future cash flows associated with that security. Continuous departure of actual stock prices from fundamental values can be explained by the presence of rational expectations (RE) in stock prices. Rational expectations are characterized by the fact that positive abnormal returns are persistent and increasing due to the self-fulfilling beliefs of market participants, causing stock prices to diverge from their fundamental values. This assumption is usually motivated by Kahneman and Tversky (1974)'s representativeness heuristics. According to this heuristics, people expect even small samples of data to reflect the properties of the parent population. As a result, they draw overly strong inferences from these small samples and this lead to over-extrapolation of asset prices.

There are several traditional methods to detect the divergence of stock prices movements from fundamental values, such as, the present value model (PVM), variance bounds test (VBT), Phillip/Wu/Yu and West's two tests, etc. However, these methods have crucial shortcomings. Commonly employed methods compare actual prices to fundamentals, which are believed to determine price, using traditional unit root and cointegration. For instance, Rangel and Pillay (2007), Shiller (1981) and West (1987) find evidence of departure after comparing stock prices to dividends. Cointegration implies that stock prices and fundamental variables (e.g. dividend) determining asset prices are attracted to each other in the long-run, if they follow integrated processes of order one and the transversality condition holds (Campbell and Shiller, 1987).

Some studies (see for example: Horvath-Watson, 1995 etc.) have applied the unit roots and cointegration techniques to examine possible stock price divergence from their fundamental values. While some of the prior studies show consistent results others produce results of varying nature (see for example: Froot & Obstfeld, 1991). For instance, using the Dickey-Fuller stationarity test for the S&P 500 series, Diba and Grossman (1998a) found both dividend and price to be stationary at first difference, signifying a lack of evidence for stock price departures from their fundamental values. A follow-up test using cointegration revealed that both prices and dividends cointegrated. A similar conclusion was arrived at by Campbell and Shiller (1987) except that they opined the results are dependent on the discount factor used. Diba and Grossman (1998a) theorized that if stock prices and dividends are linearly cointegrated, then rational expectations (bubbles) are absent, and that actual prices are in line with their fundamental values.

In a related development, Blancard and Raymond (2004) show no cointegration between prices and dividends. Their results do not change when an additional earnings fundamental variable is included; however, it is inconsistent with Lee (1996) and Jirasakuldech *et al.*, (2008) who find that prices, dividends and earnings are cointegrated. Moreover, Abeyratna and Power (2002) do not show any significant relationships between dividend change announcements and subsequent share price reactions.

This paper proceeds as follows: Section 2 describes the Euler equation and rational valuation model. Section 3 presents the data and econometric techniques. Section 4 carries out the empirical analysis, and Section 5 concludes the paper and brings out some policy implications.

2.0 The Euler equation and the rational valuation model

The rational valuation model (RVM) provides a simple framework to test for rational bubbles in stock prices. Rational bubbles in stock prices are systematic departures from the fundamental price of an asset. To investigate how the market price of equities may deviate from their fundamental values, Cuthbertson & Nitzsche (2005) and Diba & Grossman (1998b) show that the market prices of assets are determined by future discounted dividends. Their models investigate for bubbles by analyzing the stationarity properties of the stock prices and their fundamentals. Their test is based on the assumption that for the no bubbles hypothesis to be accepted, dividend should be non-stationary in levels, dividend and unobservable variables are stationary in first difference, and price must be non-stationary in levels and stationary in first difference. The Euler equation is given by

$$P_t = \frac{1}{(1+k)} [P_{t+1} + D_{t+1}] E_t \tag{1}$$

where *k* denotes a constant real rate of return on the asset required by investors, P_t is the stock price at period *t*, D_{t+1} is the dividend for period *t* and E_t denotes the conditional expectation on the information at time *t*.

Equation (1) can be iterated forward under the rational expectation conditions (RE) to yield

$$P_t = P_t^f = \sum_{i=1}^{\infty} \frac{1}{(1+k)^i} E_t D_{t+1}$$
(2)

In this case it is assumed that the transversality condition holds (i.e. $\lim [(1/(1 + k)^i E_t D_{t+1})] = 0$, as $n \to \infty$. Equation (2) satisfies the discounted dividend model (DDM), which states that the fundamental value of an asset is equal to the present value of all expected dividend payments. The transversality condition ensures a unique price given by equation (2) which is denoted as the fundamental value P_t . And this rules out the possibility of any bubble. The entire class solutions, without imposing the transversality condition is $P_t^f + B_t$, where p^f is the fundamental value and $B_t = E_t \left(\frac{B_{t+1}}{1+k}\right)$.

Diba & Grossman (1998)'s specification of the actual market price is thus,

$$P_t = \sum_{i=1}^{\infty} \left(\frac{1}{1+k}\right)^i E_t D_{t+i} + B_t = P_t^f + B_t$$
(3)

and B_t is the 'rational bubble'. Thus, the actual market price P_t deviates from its fundamental value P_t^f by the amount of the rational bubble B_t . It follows from equation (3) that if the value of the bubble (B_t) exceeds that of the fundamental value (P_t), the actual price (P_t) can deviate substantially from the fundamental value.

The solution of equation (3) is the sum of the fundamental component and the bubble term. The bubble process then follows a stochastic difference equation,

$$B_{t+1} - (1+k)B_t = k_{t+1} \tag{4}$$

The component k_{t+1} is a random variable and has expected future value of 0. A non-zero k_{t+1} means stock prices deviate from their fundamentals and the relationship breaks down. If the realization of k is negative, then the deviation will be negative and the negative deviation will increase gradually until it causes the stock price to be negative in the long run. Diba and Grossman (1998b) further theorized that a non-zero k_{t+1} will yield the following process:

$$(1 - L)^{n} [1 - (1 + k)L] B_{t} = (1 - L)^{n} k_{t}$$
(5)

Where, *L* denotes the lag operator and the bubble process is non-stationary in differences. Even though, Diba and Grossman (1998) employ the Dickey-Fuller test; this study employs the Augmented Dickey-Fuller and Phillip-Peron tests for unit roots and analyzes the autocorrelation patterns (for the obvious reasons as explained in section 3.01).

3.0 Data and methodology

In this study, we draw upon theoretical propositions and existing empirical work as motivation in selecting our data. Our set of data consists of daily Composite Index (*CI*) of the Ghana Stock Exchange Databank Stock Index (DSI) and its corresponding dividend yield (*DY*) and price earnings ratio (*PE*) of listed equities of the Ghana Stock Exchange from 4 January 2011 to 31 December 2013. This involves 717 observations. The dividends (*Dt*) are obtained from the relation $D_t = P_{t-1} X DY_t$ and earnings (*Yt*) are obtained $Y_t = P_{t-1} / PE_t$. The calculations are done in accordance with prior studies (see, for example, Jirasakuldech *et al.*, 2008; Rangel & Pillay, 2007).

The DSI was the first major share index on the GSE and its computation began on 12 November 1990. The index is composed of all the listed equities on the market. The choice of data period and use of composite indices rather than the All-Share Indices (ASIs) are influenced by two reasons. First, data for dividend yield and price earnings ratio are not available for most parts of the period prior to 2010, except 2009 and 2010. However, these datasets are readily available from 2011 to 2013. In order to have a large sample size, it is prudent to use the period 2011 to 2013. Using a data period from 2011 to 2013 could not allow us to use the ASI since the GSE effective from January 2011 no longer calculates ASI but CI. Also, because the composite index relies on the volume weighted average price (VWAP) other than just the day's closing price (as in the All-Share-Index) in its computation, it is believed the CI reflects the stock market's performance better than the ASI.

3.01 Unit root test

To avoid spurious results, unit root test of augmented Dickey-Fuller (ADF) and Phillip-Peron are performed to determine the time series properties of the data employed in the analysis. The auxiliary regression is run with an intercept and is specified as:

$$\Delta y_{t} = \varphi_{0} + \varphi_{1} y_{t-1} + \sum_{i}^{n} \pi_{j} \Delta y_{t-j} + \varepsilon_{t-1}$$
(6)

where, y_t is the variable whose time series properties are being investigated, Δ is the difference operator, and ε_t is the random error term with $t=1 \dots n$ assumed to be Gaussian white noise.

The augmentation terms are added to convert the residuals into white noise without affecting the distribution of the statistics under the null hypothesis of a unit root. As noted by Alba (1999), the ADF and PP tests have a null unit root against the alternative of trend stationary. The usefulness of the PP test over the ADF is that the latter allows for the possibility of hetereoskedasticity error terms (Hamilton, 1994). The ADF test adjust the DF test to take care of possible serial correlation in the error terms by adding the lagged difference terms of the regressand. Phillips-Peron (1989) use non-parametric statistical methods to take care of the serial correlation in the error terms without adding lagged difference terms.

3.02 Cointegration test

Two variables will be cointegrated if they have a long term relationship between them. In order to select the lag length for the cointegration, the VAR lag order selection criterion, based on SIC and AIC is used (though unreported). We examine a bivariate cointegration between prices and dividends (P_t and D_t , respectively) and multivariate cointegration among prices, dividends and earnings (P_t , D_t and Y_t , respectively). The use of dividends as a fundamental variable is justified by the Euler equation and RVM (See Cuthbertson and Nitzsche, 2005). Similarly, earnings is included as an additional fundamental variable due to the substantial evidence of earnings as an important determinant of equity pricing. If stock prices and fundamental variables are integrated of order one and cointegrated, then it means prices movements are responsive to fundamental variables. On the other hand, if price series contains explosive bubbles that drive prices away from their fundamental values, then one should expect the absence of cointegration between stock prices and fundamental variables that determine prices.

The Johansen-Juselius (Johansen, 1998; Johansen and Juselius, 1992) multivariate cointegration vector autoregressive approach is used because of its unique applicability of providing estimates of all cointegrating relationships that may exist within a vector of non-stationary variables or a mixture of stationary and non-stationary variables (Gujarati and Porter, 2009).

Following Johansen (1998), a *q*-dimensional vector autoregression (VAR) of order *k[VAR (k)]* can be specified as follows:

$$Z_t = d + \prod_{i=1}^{k} \theta_i Z_{t-1} + \dots + \prod_{i=1}^{k} \theta_i Z_{t-k} + \varphi_t (t = 1 \dots T)$$
(7)

This expression can be rewritten as,

$$\Delta Z = d + \prod_{k} \theta_{k} Z_{t-k} + \sum_{i=1}^{k-1} \theta_{i} \Delta Z_{t-i} + \varphi_{t}$$
(8)

Where Δ is the difference operator, \prod and θ_i are *q-by-q matrices* of unknown parameters and φ_t is a Gaussian error term. The relationship between stock prices and dividends; and among prices, earnings, and dividends in Ghana is contained in the impact *matrix* \prod . A full column rank of the *matrix* \prod implies that all variables in Z_t are stationary. On the other hand, when the *matrix* \prod has zero column rank, the expression is a first differenced VAR involving no long-run elements. If the rank of \prod is however intermediate, it means that $0 < \operatorname{rank}(\prod) = r < q$, there will be *r* cointegrating vectors that make the linear combinations of Z_t become stationary or integrated.

Of the two Johansen cointegration tests, the maximum likelihood equation procedure provides a likelihood ratio test, called a trace test, which evaluates the null hypothesis of, at most, *r* cointegrating vectors verses the general null of *q* cointegrating vectors. The next, likelihood ratio test is the maximum eigenvalue test, which evaluates the null hypothesis of *r* cointegrating vectors against the alternative of (r + 1) cointegrating vectors. The trace test and maximum eigenvalue test equations are shown below:

$$J_{trace} = -T \sum_{i=r+1}^{n} ln(1 - \hat{\lambda}_i)$$
(9)

$$J_{max}(r,r+1) = -Tln(1 - \hat{\lambda}_{r+1})$$
(10)

4.0 Empirical analysis

4.01 Descriptive statistics

To be able to understand fully the overall behavior of the Ghana stock market, we present some stylized evidence of the Ghana stock market composite index, as well as, the two fundamental variables of interest –dividends and earnings in Table 1. All discussions in this section refer to Table 1.

The Jacque-Bera tests shown in Table 1 reject the null hypothesis of normality at a 1% significance level. Even though both dividends and earnings show positive mean growth rates of 0.11% and 0.15% respectively, the level of unsystematic risk associated with the dividend variable is greater as a result of the higher standard deviation of 23.53% compared to 9.97% for earnings. Investors could therefore easily suffer the risk of uncertainty about the prospects of investing in the stock market due to such high standard deviations. If this uncertainty is based on overconfidence, investors will overestimate the precision of their forecasts (Daniel *et al.*, 1998) and their actions or inactions could push stock prices to react abnormally to earnings or dividend news.

The positively skewed P_t , D_t and Y_t implies that for the sample period, the Ghana stock market was characterized by many small losses and a few extreme gains. Generally, investors should be attracted by the positive skewness because the mean return falls above the median. This is because relative to the mean return, positive skewness amounts to a limited, though frequent, downside compared with a somewhat unlimited, but less frequent, upside. Also, in the sample period, stock prices, P_t exhibit leptokurtic features (i.e. being more peaked than normal). This means that, prices on the Ghana stock market have distributions that show a greater percentage of small deviations from the mean return (more small surprises) and a greater percentage of extremely large deviations from the mean return (more big surprises). Most investors would perceive a greater chance of extremely large deviations from the mean as increasing risk. Also, The Ljung-Box Portmanteau test statistics identifying the presence of twenty-sixth and thirty-sixth-order autocorrelation indicates the existence of temporal significant linear dependencies at 1% significance level. This statistics suggests that departures from fundamental values are found to be more likely when price changes follow the same direction.

The presence of excess kurtosis, skewness, and non-normality of returns implies stock prices show systematic departures from their fundamental values (Yanik and Ayturk, 2011; and Nartea *et al.*, 2013). The evidence of skewness, excess kurtosis, non-normality and autocorrelation in the dataset, as represented in Table 1, is indicative of the likelihood existence of stock price departures from fundamental values in the Ghana equity market.

Table 1: Summary statistics of stock prices, dividends and earnings								
Panel A: Overall sample period (4th Jan. 2011 to 31st Dec. 2013)								
	Ν	Mean	St Dev.	Min	Max	Skewness	Kurtosis	Jacque-Bera
P_t	715	0.1049	0.5719	-2.7054	2.7033	0.332	7.0367	497.9118*
D_t	714	0.1051	23.532	-322.20	460.650	6.081	261.106	1986308*
Y_t	714	0.1534	9.9657	-168.74	183.286	2.140	277.6456	2244593*
Panel B: Autocorrelation of Overall sample period								
	$ ho_1$	$ ho_2$	$ ho_3$	$ ho_4$	$ ho_5$	Q (26)	Q (36)	
P_t	0.180	0.183	0.130	0.107	0.151	242.97*	307.82*	
D_t	-0.006	-0.016	-0.001	-0.001	0.007	92.965*	118.92*	
Y_t	-0.053	0.038	0.010	-0.002	-0.001	153.73*	154.32*	

Notes: P_t denotes GSE-CI, D_t denotes dividends, and Y_t denotes earnings. Min. and Max. Refer to minimum and maximum value, respectively. Asymptotic standard error of coefficient is $(6/N)^{1/2}$. Jacque-Bera tests statistics test for departure from normality. * indicates significance at 1%.

4.02 Unit root and cointegration results

Following the descriptive statistics, we further examine the time series properties of stock prices, earnings and dividends by looking at unit root and cointegration analysis.

The results in table 2 indicate that stock prices, earnings, and dividends possess unit roots at 1% significance in their levels. This happens with both trend and constant plus trend. This suggests that all series do not have mean reverting properties, giving an indication of the presence of bubbles, which drive stock prices away from fundamental variables, at their levels. However, stock prices and fundamental variables are differenced stationary, rejecting the null hypothesis of unit roots at the 1% significance level. This suggests that stock prices and fundamental variables are realizations of a I(1) process. The above results indicate that price deviations from fundamental variables are periodic and not continuous.

Table 02: ADF and PP unit root tests for stock prices, dividends, and earnings							
Al levels							
	$ au_{\mu}$	$ au_{ au}$	$ au_{\mu}$	$ au_{ au}$			
P_t	2.4662(2)	-0.057(2)	1.8641(17)	-0.3239(17)			
D_t	-1.885(2)	-2.218 (2)	-2.7346(2)	-2.9908(1)			
Y_t	2.4662(2)	-0.0571(2)	1.8641(17)	-0.3239(17)			
First difference							
ΔP_t	-6.903(5)*	-14.6334(1)*	-25.7653(17)*	-25.3902(16)*			
ΔD_t	-22.31(1)*	-22.2955(1)*	-29.0658(10)*	-29.0406(10)*			
ΔY_t	-6.903(5)*	-14.6334(1)*	-25.7653(17)*	-25.3902(16)*			
Notes: * denotes rejection of null hypothesis at the 104 level of significance. The numbers within parenthesis for the ADE statistics							

Notes: * denotes rejection of null hypothesis at the 1% level of significance. The numbers within parenthesis for the ADF statistics represents the lag length of the dependent variable used to obtain white noise residuals. The lag lengths for ADF equation were selected automatically using Schwarz Information Criterion (SIC) [19]. The numbers within brackets for the PP statistics represent bandwidth selected automatically using Bartlett kernel based on Newey-West method. $\Delta = \text{first}$ difference operator. τ_{μ} and τ_{τ} are constant and constant & trend, respectively.

4.03 Cointegration analysis

Given that stock prices, earnings, and dividends are I(1), the cointegration hypothesis among the variables is examined using the methodology developed in Johansen (1991) and Johansen (1995) in order to specify the relationship between stock prices and fundamental variables to ascertain the certainty or otherwise of price responsiveness to fundamental variables on the Ghana stock market.

The results in Panel A of Table 3 indicate that the null hypothesis of no cointegrating vector (r = 0) cannot be rejected by both trace statistics and maximum eigenvalue statistics at the 5% significance level. Thus, although stock prices and dividends were found to be I(0), they are not cointegrated over the sample period. The results mean that stock prices and dividends do not have any long-run equilibrium relationship. Thus, stock prices do not respond to dividend news in the long term.

However, the use of earnings, in addition to dividends varies the results in Panel B. The λ_{trace} and λ_{max} test statistics provide evidence of a cointegrated relationship between equity prices and fundamental variables. The null hypothesis of r = 0 is rejected in favor of r = 1 by both λ_{trace} and λ_{max} test statistics at the 5% significance level. Evidence of a cointegrated relationship is indicative of equity price responsiveness to fundamental variables. However, this conclusion should be interpreted with some caution in view of the weaknesses associated with earnings in determining the value of a stock. While companies report total and per-share earnings, these "bottom-line" numbers may include extraordinary items that are nonrecurring. Higher earnings will lower the P/E ratio and perhaps suggest that the stock is undervalued, especially if the average P/E ratio is higher. If the gain is excluded and EPS are lower, the P/E ratio will be higher. The higher P/E ratio may indicate that the stock is not undervalued.

Table 3: Results of Johansen Cointegration Test							
Hθ	H_1	Eigenvalue Stat.	λ_{trace}	5% CV Stat.	λmax	5% CV	VAR
Panel A: Bivariate cointegration between P_t and D_t							
r = 0	r = 1	0.0158	11.9650	15.4947	11.2347	14.2546	4
$r \leq 1$	r = 2	0.0010	0.7307	3.8415	0.7307	3.8415	
Panel B: Multivariate cointegration among P_t , D_t and Y_t							
r = 0	r = 1	0.0507	47.9094**	29.7971	37.0169**	21.1316	
<i>r</i> ≤1	r = 2	0.0141	10.8926	15.4947	10.1111	14.2646	
r≤2	r = 3	0.0011	0.7815	3.8415	0.7815	3.8415	

Notes: VAR is order of the var lag selection. H_0 and H_1 denote the null and alternative hypothesis and r denotes the number of cointegrating vectors. Both Trace and Max-Eigenvalue test indicate no cointegration between P_t and D_t at the 0.05 level. ** denote significance at 5% significance level signifying 1 cointegration among P_t , D_t and Y_t .

The acceptance of the null hypothesis, signifying no cointegration between P_t and D_t is somewhat surprising for a nascent market such as Ghana. Thus, changes in prices of stocks of equities listed on the Ghana stock exchange are unaffected by changes in dividends paid by these equities to shareholders in the long term. It can therefore be inferred that Ghanaian equity investors do not overreact to dividend announcements.

5.0 Conclusion and policy implications

The goal of this study is to establish whether or not equity prices in Ghana respond their fundamental variables. In order to do this, we employ the general descriptive statistics to test for some features like skewness, autocorrelation and non-normality of the variables used. We also test for the unit root and cointegrating relationship between stock prices and key fundamental variables (earnings and dividend). Thus, the rejection of

the null hypothesis of no cointegration could be construed as evidence of stock price divergence from fundamental factors. The paper shows strong evidence in support of equity price deviations from fundamental values in the Ghana equity market, as indicated by the cointegration results between price and dividends. However, the introduction of earnings as an additional determinant of stock price alters the result. We report that the Ghana equity market has return distributions that depict excess kurtosis, skewness, non-normality and autocorrelations.

Results from the cointegration test between price and dividends run athwart the common knowledge about stock prices reaction towards dividend announcements. Generally, prices movements respond to dividend news (as indicated by the signaling theory), but the acceptance of the null hypothesis of no cointegration indicates that prices (or investors) on the equity market do not respond to dividend news. The results, however, seem to be a general phenomenon in underdeveloped and emerging equity markets as similar results were found for Singapore and Malaysia as well (see Rangel and Pillay, 2007). This phenomenon usually occurs due to market infancy and inefficiency. In order to avert the occurrence, proper steps must be taken by the Securities and Exchange Commission (SEC) and the government of Ghana to ensure the Ghana stock market is well integrated with other markets by way of increasing cross-listings to attract investors who are more income oriented and would be driven by dividend pay-out policies. The findings fuel the uncertainty about investor forecasts and valuation of equity prices on the Ghana Stock Exchange.

A critical policy implication of the key finding is its impact on capital structure decisions of firms listed on the Ghana stock exchange. Because prices on the stock market are unaffected by signals from dividend news; listed firms must concentrate on best practices to arrive at optimal capital structure decisions without necessarily adjusting dividends. Quoted firms should therefore not entertain any fears of plowing back dividends for fear of sending the wrong signal. Perhaps, as the market becomes more efficient investors will be responsive to dividend announcements and firms can revise their capital structure decisions through dividend policies. Otherwise, in the current state, there is no need to maintain dividend policy at the expense of optimal capital structure. The findings may also be indicative of the fact that dividend pay-out policies adopted by the listed firms over the years are unattractive to investors, and therefore, regular review of existing policies for ones that will resonate well with investors is recommended.

Results of this study presents a picture about the entire stock market, and that, individual stocks may show results that are coterminous or dissimilar to that of the overall market. It is therefore recommended for further studies to delve into the assessment of equity prices response to dividend news, and the risk-adjusted performance for individual listed firms.

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