Liquidity Reactions towards Dividend Announcements and Information Efficiency on the Ghana Stock Exchange.

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Abstract: This study attempts to examine liquidity (stock returns) reaction to subsequent dividend announcements and information efficiency in the Ghanaian Market with a sample of 11 major companies from those listed on the Ghana Stock Exchange (GSE). While employing event studies to measure the event impact, one may find the techniques to outperform the market. This study employs event study methodology. More specifically, it employs the market model in generating abnormal returns surrounding subsequent dividend announcements. The liquidity levels of the studied stocks are very low. Findings show that there is a little informational content of dividend announcements on the Ghana Stock Exchange. The Ghanaian investors hardly consider dividend announcements as favorable news. The stock returns cannot however be conclusively be said to react positively to subsequent dividend announcements in GSE.

1. Introduction

An investment is the current commitment of dollars for a period of time in order to derive future payments that will compensate investors for (1) the time the funds are committed, (2) the expected rate of inflation during this time period and (3) the uncertainty of the future payments (Reilly and Brown, 2011). Investors globally have purchased one financial asset or the order with the expectation of receiving positive returns in the future. The search for positive returns on investments is made on two main markets; the capital market and the money market, and the selection of stocks on these markets is made on the basis of information. Returns on the capital market are received in two ways, through dividends and capital appreciation. Companies generally declare a share of their profits to their shareholders as returns on their equity investments. However for mostly listed companies on the Ghana Stock Exchange, investors can also look forward to capital appreciation in addition to their dividend.

Capital appreciation basically is an increase in the business wealth of a firm and is usually associated with an increase in the market price of the asset (Sunderland and Canwell 2004). Positive firm announcements are reflected especially rapidly in stock prices, mostly anticipated at the time of publication. Negative information can cause stronger price fluctuations by increasing insecurity about prospects for the future (Schuster 2006). Information likely to affect the pricing of a company includes the economy of the country in which it is based, the industry the company is operating and the earnings and dividends announced by the company. An appreciation of the effect of the information flow on the price leads to the theories surrounding market efficiency. How effective is a market? Would information generated about a company be immediately reflected in its pricing? Is the market a weak market, semi strong market or strong market?

The Ghana stock exchange is the only stock market in Ghana and was established in 1990. It has created the opportunity for investors to meet and trade on their financial assets such as shares and bonds. With 35 companies listed on its official list as at 31st December, 2014 (GSE Official List 2014), various listing requirements are provided by these companies including quarterly earnings report and disclosures (GSE Listing Rule Book, 2009), this information is readily accessible using sources such as the Ghana Stock Exchange Official List and press releases by the companies. Dividend payments, stock issues and earnings announcement are such information that is available. Liquidity on a market has been a focus and subject of debate in financial literature for many years. Academicians and researchers have developed many theoretical models and published many articles to explain or provide information about the various aspects of liquidity. In addition to the concept of liquidity is dividend payment by companies on the stock market.

Researchers have over the years also postulated the reasons or the motivations for companies and the dividends that they pay. Modigliani and Miller’s work in 1961 led the way to various theories about the relevancies of dividends. Other studies that have been done show that ‘considerable evidence exists to support the hypothesis that the payment of dividends provides information that helps investors and
2. Literature Review

Theoretical Review

The objective of the theoretical review is to examine and review the various perspectives and theories related to the concept of Dividend. There are a vast array of materials and arguments about dividends of which all cannot be presented. However a few theories would be presented such as the “bird in hand” argument, dividend irrelevance hypothesis, tax preference argument, signaling effects and clientele effects.

The “Bird in hand” argument

The basic assumption here is that a high dividend payment results in an increase in the value of the firm. This argument suggests that investors will prefer to receive dividends now that to wait for some future gain in the future. This is because payment of dividends by companies now is a more certain venture that would result in a reduction of the cost of capital and hence the share value of the company. There has been criticism of this theory with M&M (1961) arguing that consideration to be given as to the value of a share should be the operational risk of the company and not how a dividend is shared (Al-Malkawi et al., 2010).

Dividend Irrelevance Hypothesis

This hypothesis postulated in 1961 by Modigliani and Miller was of the opinion that investors are not concerned about a company’s dividend policy as it relates to the value of a share. They postulated that the value of a firm was rather dependent on the earnings of the company which was a function of the investment policies. These hypothesis are however based on assumptions that do not exist in real life, such as the existence of a perfect market that the firm would operate in, the absence of taxes and the non-existence of risk (Al-Malkawi et al., 2010).

The Signaling Effect

Signaling effect is the idea that investors are able to infer information about a company’s future plans based on signals received as a result of dividends announcements. An increase in dividend payment might signal that managers of firms are bullish about their company’s future prospects. A constant dividend payment or even a reduction may present signals that suggest that managers are not optimistic about the future potential of the company. As a result of asymmetric information which means managers of firms know more about the company than shareholders, shareholders look to actions by managers to pick up on any signal that might suggest the future direction of the company. A positive dividend would lead to investors seeking more of the shares with an increase in price the result, while a negative dividend signal would result in the
offloading of the shares with the price falling. Dividend signaling is a key concept used by proponents of inefficient markets (Al-Malkawi et al., 2010).

**Clientele effect**

The basic argument in the clientele effect is that investors are attracted to a certain type of stock as a result of the policies of the company. Policies such as Dividend and tax may ensure that a certain group of investors who are okay with the policies are attracted the stock. Hence, a change in the policy by the company may result in some old clientele departing and some new ones coming in. This may result in price appreciation or reduction depending on the net effect of the clientele (Al-Malkawi et al., 2010).

**Dividend Concept**

In their book, Dividend Policy: Theory and Practise, Frankfurter, Wood and Wansley (2009) defined dividend as a “distribution of earnings, past or present, in real assets among the shareholders of the firm in proportion to their ownership”. They went on to further explain the three areas of the definition above which was that dividends must be distributed from earnings, must be in the form of real assets which is not necessarily cash even though it is more convenient and easily divisible. Their third area of the definition was that dividend must be shared according to their holdings in the corporation.

Dividends are usually paid after tax has been deducted, which means that in some countries shareholders are tax doubled as a result of their dividend been classified as income to them. Even though this results in a liability to the shareholder, dividend payments are still very welcome by the shareholders while non-payments or even cuts are considered bad news and indicative of some bad times ahead. Baker (2009), wrote of the term “Dividend Puzzle” as coined by Black in 1976, to explain the potential relevance of dividends involving taxes, agency costs and asymmetric information and their paradoxes.

**Dividend Announcement**

Shim and Siegel (2008) pointed to a number of dividend dates that are very important to understand. Declaration date is the date on which the Board of Directors declare the dividend. Following this declaration and date, the payment of dividend becomes a legal liability to the corporation. The date of record is the date on which the stock holder is entitled to receive the dividend. Ex-Dividend date is the date on which the right to the dividend leaves the shares. Usually the market price of the stock takes into account the fact that the stock has gone ex-dividend and decreases by approximately the amount of dividend. Date of payment is the date on which the company distributes the dividend cheques to its shareholders.

**Dividend announcement and Price movements.**

Share prices are driven theoretically by the same economic factors of demand and supply. If demand for a stock is higher than the supply, the price will move up. Alternatively, when large funds withdraw from the market and start selling heavily, prices come down sharply. The demand for any share price on its part is driven by fundamentals including current performance and expected performance. If there are any policies likely to affect the performance of the company in the near future, then price movement is affected by that news (Sabnavis 2008). Schuster (2006), quoted Ball and Brown 1968 in their look at market reactions to the accounting numbers in the Wall Street Journal, that “the major part of new information is anticipated in stock prices in the preceding months. He also quoted Dimson and Mussavian (2000) that the market “appears to anticipate the information, and most of the price adjustment is complete before the event is revealed to the market. When news is released, the remaining price adjustment takes place rapidly and accurately”. In their paper, Patell and Wolfson (1983) concluded that the initial price reaction is evident in the first pair of price changes following the release of earnings or dividend announcement and that dividend announcement induce much less activity than do earnings although the response to dividend changes is comparable to the earnings announcement effect.

**Market response to dividend announcement**

Researches into the market response to dividend announcement have been done into various stock markets and the response has been varied. Some have viewed the announcement as containing signals that informs investors about the future probability of their investments in a firm (Osei, 2002). This has led many researchers to examine the information content of dividends and to find out the effect of such an announcement. Results from Patell and Wolfson (1983) showed that dividend and earnings announcement resulted in some activity even though dividend announcement results in less activity than earnings announcement do. Bayezid and Tanbir (2010) also provide evidence that the effect of dividend announcement is much stronger than for earnings announcements. Bashir, Ali and Hussain (2013) studies however revealed that stock price reaction to dividend announcement are not statistically significant and that dividend announcement does not convey any information due to strong contribution of insider trading as well as other influencing factors in the capital market.
3. Methodology

Research Design

To conduct this research, event study methodology was used to determine the effect of dividend announcement on share prices. The event study methodology was introduced by Fama, Fisher, Jensen and Roll (1969) and many researchers have chosen to use this methodology especially when examining security price behavior around events such as earnings announcement and others. Researchers to have successfully used this method to determine share price movement to new information include Aga and Kocamann (2008), Dey and Radhakrishna (2008), Cox and Weirich (2002). The event study have been used for two main reasons; (1) to test the null hypothesis that the market efficiently incorporates information and (2) examine the impact of some event on the wealth of the firm’s security holders. Binder also discussed the event study methodology in his paper “The event study methodology since 1969” which provided a framework for conducting event studies. The methodology used was deductive and a mixture of both qualitative and quantitative analysis.

Sources of Data

The main data used in this research are the announced dividends and daily share price data. The dividends and share price data are sourced from the official list of the Ghana Stock Exchange and company press releases issued from the Ghana Stock Exchange. The dividend announcement date which is the date the board announces the dividend was sourced from official press releases by the Ghana Stock Exchange. The market capitalization which referenced the size of the listed companies was also sourced from the official list of the Ghana Stock Exchange. The GSE Composite index was also sourced from the official list. The period of the research that is used for this period is a five year period from January 1st 2014 to December 31st 2014. This fall within the period right from the full automation of the Ghana Stock Exchange to the last full year of dividend announcements by the companies. This period is considered sufficient as a sample for the research. Some data are also sourced from the annual report of the companies and the websites of these companies. In order for a company to be included in the research it must have issued dividends in the period of the research consistently and have sufficient data. Those with insufficient data were not included in the research.

The considerations for a company to be included in a sample included (i) the shares should be listed and be actively trading as at January 1st, 2014 and over the sample period to 31st December, 2014; (ii) there should have been dividend announcement for the firms selected and (iii) the firms selected must have share price data over the sample period.

Data Analysis

The study seeks to understand the effect of dividend announcement on the liquidity of the Ghana Stock Exchange as measured by the stock price reaction of the firms listed and the analysis was inspired by Binder’s event study methodology and its adoption by Kakiya et al (2013). This analysis was also adopted by James M. Njuru in his paper “Test for under reaction to stock dividend Announcements at NSE”. The average stock price returns of the stocks before the dividend announcement up the day of announcement would be determined and the average stock return after dividend would be determined to determine any abnormal level of return that can be attributed to the dividend announcement.

Using capital market data, an event study measures the impact of a specific event on the market. The usefulness of such a study comes from the fact that given rationality in the market place, the effect of an event will be reflected immediately in security prices. Thus a measure of the event’s impact can constructed using security prices observed over a relatively short period. In this study, the problem of calculating and analyzing abnormal return is considered. The abnormal return is calculated using actual return of a stock less the market return on the same day. This facilitates the use of abnormal returns around the event day in the analysis. The fashion of abnormal return for both positive growth and negative growth firms are similar trend. The abnormal return occurs in the pre as well as in post-announcement period. That is, stock price reaction to the firm’s dividend is not instantaneous, which contradicts the efficient market hypothesis.

The study used dividend announcement dates for the whole sample period, daily closing stock prices for the period [-15, to +15] around each dividend announcement day of every stock, prices of the GSE CI in the [-15, to +15] time window for each dividend announcement day of every stock and number of shares traded each day for each company in the sample period. The selection of sample has primarily been guided by two factors, availability of dividend announcement for the sample period, and the time to time revision and replacement of stock in GSE. Using capital market data, an event study measures the impact of a specific event on the market.
4. Presentation of Results

Effect of Dividend Announcement
The present study covers a period of one calendar year from January 2014 to December 2014 and the results are based on a sample of firms, listed on the Ghana Stock Exchange. The data set contains daily data from the different sectors of 11 dividend paying stocks over the 31 window period i.e. -15 day to +15 day relative to the dividend announcement, which is listed on the Ghana Stock Exchange for the period. Three basic time series data have been employed in this study. These are, dividend announcement dates for the whole sample period, daily closing stock prices for the period [-15, to +15] around each dividend announcement day of every stock, returns of the GSE CI in the [-15, to +15] time window for each dividend announcement day of every stock.

Almost GCE return does not differ from the market return. The return behavior of this company prior to the event day and after the event day is consistent with the market index. The price path on the event day also followed with the market movement. The dividend announcement of the company doesn’t seem to have any influence in the price. By this is news, one can earn little amount of return but it doesn’t fulfill the transaction cost. Liquidity therefore did not change both in pre- and post- announcement. This means that, liquidity remained unchanged after the dividend payment announcement.

GOIL returns moved differently from the market returns in the post announcement days but at the same time it involved with heavy loss than that of the market index. The returns of GOIL therefore remained unchanged after the announcement day. This implied that the liquidity of the stock was not affected by the dividend announcement.

BOPP returns moved differently from the market returns in the post announcement days but at the same time it involved with heavy loss than that of the market index. There is no negative abnormal return found pre as well as post announcement period. The above chart proves the BOPP returns movement is parallel with the market movement. The returns of the stock reduced after the dividend announcement was made. Therefore, the announcement of dividend payment by BOPP reduced the liquidity of the stock.

The movement of CAL stock returns was differently from the market returns throughout, and also at the same time it suffered heavy losses than that of the market index. The movement of the CAL returns in the pre-announcement days remained similar to the movement in the post announcement day. Meanwhile, the returns dropped significantly some few days after the announcement of dividend payment. It can be deduced that the information from announcement day caused the fall in the returns but judging from the movement of the returns in both the pre- and post-announcement days coupled with the parallel movement to the market returns, it cannot be conclusively argued that the announcement of dividend payment influenced the liquidity of the stock.
The movement of the CMLT is also parallel to that of the market returns. From the Chat above, it can be seen clearly that the movement of the stock liquidity is not influenced by any specific day. This is very strange but it also implied that, the stock prices did not change significantly throughout the window period.

A little abnormal return is found in pre-announcement period, thus, immediately before announcement but prior to the event day, scrip movement correlated with the market. The returns moved a little upwards right after the announcement day but remained parallel to that of the market returns. There is no opportunity exists to earn superior return from the market. This announcement cannot yield handsome returns (liquidity) to the market participants.

The above chart reveals, there is no correlation between the scrip movement and index movement. But during the announcement day market and stock return movement coincides diminutive. Based on this news drift, it is difficult to record a significant return, which is also clear from the above chart. Meanwhile, immediately after the announcement day, the EGL stock returns dropped sharply implying decrease in liquidity. This may likely be due to the information from the announcement even though the market also dropped slightly.

**Discussion**

Share prices are driven theoretically by the same economic factors of demand and supply. If demand for a stock is higher than the supply, the price will move up. Dimson and Mussavian (2000) argued that the market “appears to anticipate the information, and most of the price adjustment is complete before the event is revealed to the market. The findings of the present study basically highlight as to how the information from the announcement of dividend payment affects the liquidity of the stocks. It is simply not true, that dividend announcement data can provide a profitable guide to investment timing or improve a portfolio’s rate of return. Information is reflected in stock prices so rapidly that published data tells the investor virtually nothing about the future change in stock prices. Not only do stock returns reflect the firm’s dividend data when published but they also anticipate future dividend growth to some extent.

The study was undertaken to find out whether the announcement of dividend result is having any influence on the stock return. There are variety of factors that influence the movement of share price and hence the return. The performance of the company as disclosed by the dividend result is one among them. In this study it was tested whether the announcement of result is having any influence in liquidity measured as the company returns. Normally a higher dividend than the previous year dividend should be welcomed by the market. This should be associated with greater return after the result is announced. All higher return after the announcement cannot say to be due to the dividend results. To find out the impact of results on returns, the impact of other factors in returns is to be segregated. The impact of other factors in return is taken from the index which is nothing but the market return. The announcement of dividend is unique and specific to a company.

From the stock return behavior of 11 companies studied (7 are discussed above), the return behavior of only one company moved with the market return. The announcement of results is said to have an impact only when there is an abnormal return after the announcement of dividend results. Hence it can be concluded that the announcement of corporate dividend result does not have any impact on the stock return behavior of companies. By taking this
announcement of dividend results, no one can outperform and there is no strategy exists in the market. Also it is clear from the above analysis that it seems very difficult to find future path based on the announcement effects.

5. Conclusions and Recommendation

Conclusions
Findings derived from sample of the present study clearly show that dividend announcement have significant impact on stock returns. Announcement of increase in dividend payments results into rise in stock price and announcement of decrease in dividend payments accounts for decline in stock price around the time of the dividend announcement. The findings of the study comprehend the research work done by the renowned scholars whose references are given at the end on the said topic. From the above analysis it is concluded that there is conclusive relationship exist between dividend announcement and stock returns. The study therefore failed to reject the null hypothesis since there is no enough evidence to reject it.

It has been found that there are some firms whose abnormal return were negative on the dividend announcement date but became positive immediately after the dividend announcement date. There are some other companies, whose abnormal returns were positive on the dividend announcement date and some days before and after the announcement date. There are no instances where dividend announcement day return was negative but it remained positive before and after the dividend announcement date. Overall results indicate that impact of dividend on dividend announcement date and few days after were positive. These results confirm the theoretical background regarding the impact of dividend on the stock returns. It shows that dividend distribution is relevant for future liquidity determination.

Recommendation
As this study provides a detailed analysis of dividend announcement impact on stock returns, it can be helpful for investors and investment managers in understanding the behaviour of market with regard to dividend announcement. The study of dividend announcements in several developed markets conclude that investors react more to dividend announcement that somehow contradict the conclusive findings of this study. Therefore it is recommended that investors should not only depend on the announcement of dividend since it provides limited amount of information. The managers of the firms should also note that the movement of liquidity (increases or decrease) has no relationship with the movement in the market.

Further Studies
This study can be further expanded in future in other areas like impact of merger/acquisitions, stock splits, stock repurchase and their impact on stock prices. Future researches could look into the impact of dividend change announcements on firms’ performance. Other methods may be applied to investigate this issues to bring out conclusive findings.

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