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COLLEGE OF ARTS AND SOCIAL SCIENCE

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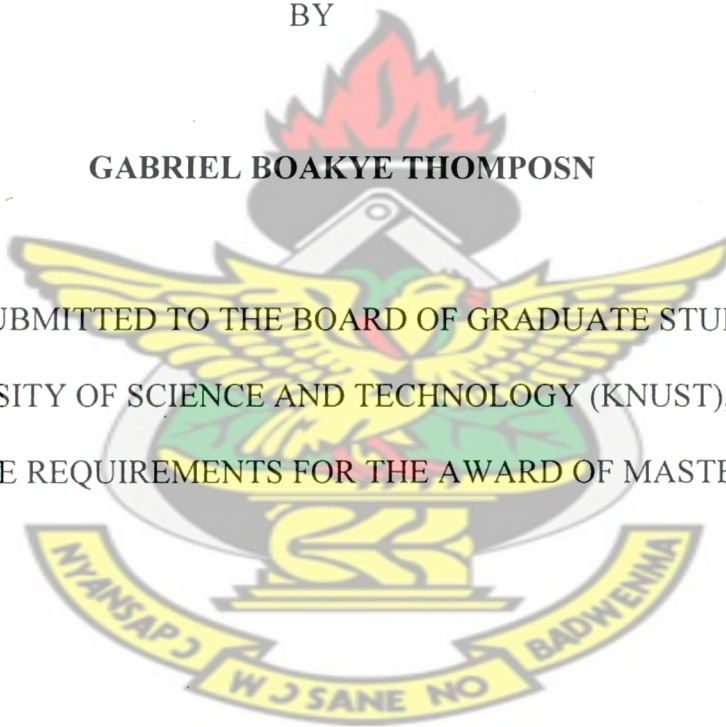
**ASSESSING THE IMPACT OF SOME CORPORATE ACTIONS ON SHARE PRICES
BEHAVIOUR OF COMPANIES LISTED ON THE GHANA STOCK EXCHANGE**

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BY

GABRIEL BOAKYE THOMPOSN

A DISSERTATION SUBMITTED TO THE BOARD OF GRADUATE STUDIES, KWAME
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AUGUST, 2009

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DECLARATION

I, Thompson Gabriel Boakye, the author of this dissertation, do hereby declare that, the work presented in this dissertation “Assessing the Effects of Corporate Actions on Share Price Behavior of Companies Listed at the Ghana Stock Exchange” was done entirely by me in the School of Business, Kwame Nkrumah University of Science and Technology (KNUST).

This work has never been presented either in whole or part for any other degree in this university or elsewhere.

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19-10-09

DEDICATION

This dissertation is dedicated to the Almighty God who has helped me to surmount the obstacles that came my way during the preparation of this work, my dear friends, Mr Seth Brako, Emmanuel Ocran, Naomi Owusu Yeboah and also to my supervisor, Mr Gordon Newlove Asamoah.

I humbly extend this dedication to all well wishers' as well as those whose support and encouragement have brought this work to this stage.



ACKNOWLEDGEMENT

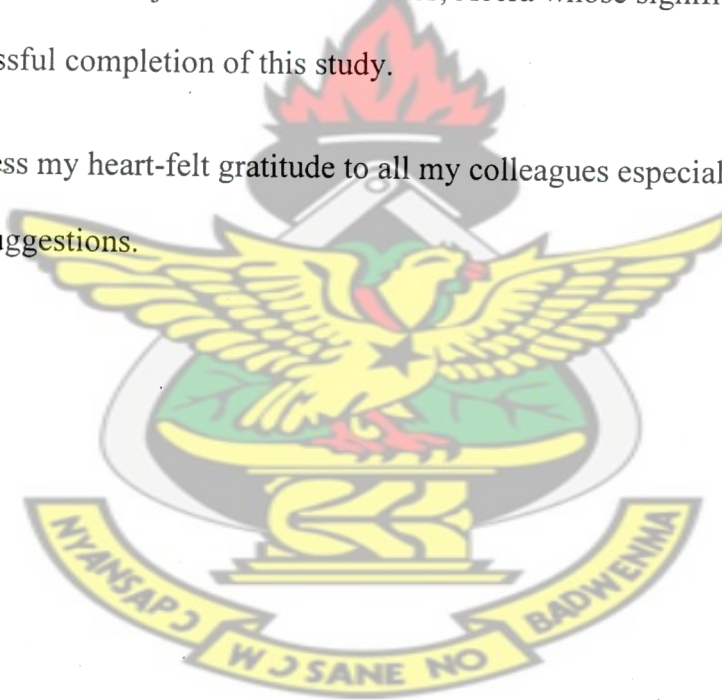
My sincere gratitude goes to my supervisor, Mr. Gordon Newlove Asamoah, who through his guidance, valuable criticism and brotherly encouragement, helped in the successful completion of this study.

I also wish to express my sincere thanks to Mr. Seth Brako of Atwima Kwawoma Rural Bank and Mr. Emmanuel Ocran of KNUST Finance Office for their support at various stages of the preparation of this work.

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I finally wish to express my heart-felt gratitude to all my colleagues especially for their encouragement and suggestions.



ABSTRACT.

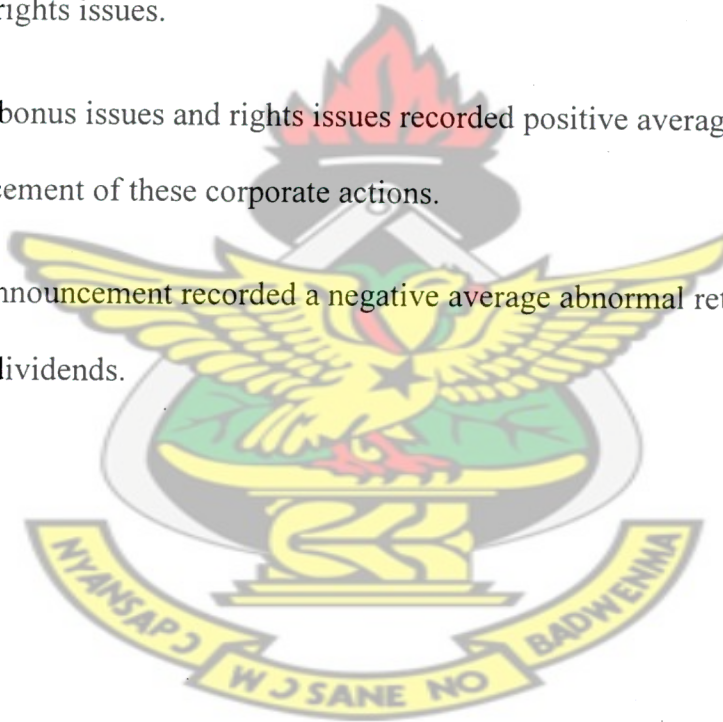
This study examines share price reaction to the announcement and subsequent implementation of bonus issues, dividends and rights issues at the Ghana Stock Exchange

Data on the shares of companies within the period 1999 to 2007 was analyzed using the event study methodology to investigate the specific objectives of the study.

In all four companies was studied for both the bonus issues announcement and dividend announcement while two companies share prices was studied for their movement in reaction to the announcement of rights issues.

The results show that bonus issues and rights issues recorded positive average abnormal returns following the announcement of these corporate actions.

However, dividends announcement recorded a negative average abnormal returns after the announcement of the dividends.



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TABLE OF CONTENTS

	PAGE
Declaration	i
Dedication	ii
Acknowledgement	iii
Abstract	iv
Table of Contents	v
List of Tables	ix
 CHAPTER ONE	
1.0 GENERAL INTRODUCTION	
1.1 Introduction	1
1.2 Background to the Study	1
1.3 Statement of the Problem	2
1.4 Objectives of the Study	3
1.5 Relevance of the Study	4
1.6 Scope of the Study	4
1.7 Organization of the Study	5

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction	6
2.2 Research Work on Corporate Action	6
2.3 Corporate Actions and its effects on Cash Flow and Value of the Firm	7
2.4 Corporate Actions-Providing Signals about a Firm's Profitability	10
2.5 Corporate Actions and the Efficient Market Hypothesis	12
2.6 Literature on Dividend Announcement	15
2.7 Literature on Rights Issues Announcement	21
2.8 Literature on Bonus Issues Announcement and Share Prices	23

CHAPTER THREE

3.0 METHODOLOGY AND ORGANISATIONAL PROFILE

3.1 Introduction	24
3.2 Method of Analysis	24
3.2.0 Event Study Methodology	24
3.2.1 The Standard Market Model	25
3.2.1.0 The Meaning of Alpha and Beta Values	26
3.2.1.1 Abnormal Returns on Stocks	27
3.3 Event Time Used	27

3.4 Organizational Profile	28
3.4.1 Brief Profile of the Companies used in the Study	28
CHAPTER FOUR	
DATA ANALYSIS AND DISCUSSIONS	
4.1 Introduction	33
4.2 Sample and Data Description	33
4.3 Monthly Stock and Market Returns	36
4.4 Analysis of Bonus Issues	37
4.5 Analysis of Dividend	50
4.6 Analysis of Rights Issues	61
CHAPTER FIVE	
4.0 SUMMARY, CONCLUSION AND RECOMMENDATION	
5.1 Introduction	69
5.2 Summary of Findings	69
5.2.1 Bonus Issues and Share Price Reaction	69
5.4.2 Rights Issues and Share Price Reaction	70
5.4.3 Dividend and Share Price Reaction	70
5.5 Conclusion	71
5.6 Recommendation	71
5.7 References	73
5.7 Appendix	76

LIST OF TABLES

4.01 Corporate Actions under Study	34
4.02 Companies, Corporate Actions and Announcement Date on GSE	35
ANALYSIS OF BONUS ISSUES	
4.03 Computation of the Monthly Stock Returns and Market Returns	37
4.04 GBL: Abnormal Returns on Stock Prices	43
4.05 ALW: Abnormal Returns on Stock Prices	44
4.06 SPPL: Abnormal Returns on Stock Prices	46
4.07 ABL: Abnormal Returns on Stock Prices	47
4.08 Companies Cumulative Average Abnormal Returns	49
ANALYSIS OF DIVIDENT ANNOUCEMENT	
4.09 Computation of the Monthly Stock Returns and Market Returns	50
4.10 SG-SSB: Abnormal Returns on Stock Prices	56
4.11 BAT: Abnormal Returns on Stock Prices	57
4.12 ALW: Abnormal Returns on Stock Prices	58
4.13 CAL: Abnormal Returns on Stock Prices	59
4.14 Companies Cumulative Average Abnormal Returns	60
ANALYSIS OF RIGHTS ISSUES	
4.15 Computation of the Monthly Stock Returns and Market Returns	61
4.16 ABL: Abnormal Returns on Stock Prices	65
4.17 MLC: Abnormal Returns on Stock Prices	66
4.18 Companies Cumulative Average Abnormal Returns	68

CHAPTER ONE

GERNERAL INTRODUCTION

1.1 Introduction

This study is aimed at finding out the impact that some corporate actions have had on share prices at the Ghana Stock Exchange. Indeed, since the establishment of the Ghana Stock Exchange in 1990, some of the companies listed on the exchange have undertaken various corporate actions in the bid to restructure their financial structure.

Was there a positive or negative share price reaction in response to these corporate actions? These and many other pertinent issues relating to corporate action will be addressed in this research project

1.2 Background to the Study

Corporate actions events are an integral feature of today's capital markets. They take place whenever changes are made to the capital structure or financial position of an issuer of a security that affect any of the securities it has issued.

Right issues, bonus issues, tender offers, conversions, takeovers, mergers, early redemptions and dividend payments are just a few examples.

It is estimated that about one million corporate actions take place every year worldwide. However, the Ghana Stock Exchange since its establishment have recorded a low level of corporate actions on the floor of the exchange.

Consequently, there has never been a systematic and quantitative analysis of the impact corporate actions have on the performance of the shares of the companies that undertook such corporate action at the Ghana Stock Exchange.

Again, in spite of all the significant gains made by the Ghana Stock Exchange since its establishment, the exchange is seen to react slowly to major corporate actions announced at the floor of the exchange.

Given that the stock market is efficient (efficient market hypothesis) meaning that market prices fully reflect all available information, it is expected that the announcement of any major corporate action at the floor of the exchange will have an impact on the underlying stock.

The study will therefore attempt to find out to what extent has the price of stock change in reactions to the announcement of a corporate action.

1.3 Statement of Problem

In recent years, there has been considerable interest by investors and the general public alike in the actions taken by companies.

Market participants increasingly recognize the advantages that accurate and timely corporate actions information can provide in the implementations of their trading strategies and in the provision of investment advice to their clients.

Indeed, by understanding these corporate actions and their effects, an investor can have a clear picture of what the actions indicate about a company's financial affairs and how the actions will influence the company's share prices.

Though quite a number of corporate actions have been undertaken at the Ghana Stock Exchange very little information is put out in the public domain in respect of these corporate actions by the listed companies.

Consequently investors are unable to fully access these corporate actions and what its impact will be on share prices and trading in general. In the light of this development, one will therefore want to determine whether the corporate actions that have been recorded at the Ghana Stock Exchange had any impact on the share price.

Thus the study aims at investigating the impact that these corporate actions undertaken at the Ghana Stock Exchange have had on the share prices of the companies involved in the corporate actions.

1.4 Objectives of the Study

The objectives of the study is divided into two; the main objectives and specific objectives.

1.4.1 Main Objective

The primary objective of the study is to establish whether there is a statistically significant reaction in share prices behavior following the announcement of a major corporate action at the Ghana Stock Exchange.

1.4.2 Specific Objectives

- To analyze the share prices reactions to bonus issues.
- To analyze the share price reactions to rights issues
- To analyze the share prices reactions to dividend announcement

1.5 Relevance of the Study

There have been very little studies on corporate actions at the Ghana Stock Exchange.

Perhaps this research project is the first or among the few projects that have been conducted in ascertaining the share prices reactions to corporate actions at the Ghana Stock Exchange.

The study will therefore be a major reference for future studies on corporate actions at the exchange. Specifically, the study will enrich the limited empirical evidence on the Ghanaian capital markets.

Again, the findings from this research are expected to help address and put to ease the boggling question of whether the Ghana Stock Exchange is efficient in terms of information assimilation.

1.6 Scope of the Study

The notion that corporate actions might have a strong implication for share prices and investor behavior is in general accepted by practitioners. However, this belief is usually founded on observations related to the most visible corporate actions types.

This study will consider the broader range of corporate actions that has taken place at the Ghana Stock Exchange and also seek evidence on whether the share price effects can be observed in the wider spectrum and whether these effects go beyond the announcement date.

The study provides assessment of the following corporate actions types:

- ✓ Right issues
- ✓ Dividend Payments
- ✓ Bonus issues

For each corporate actions type the analysis is base on a sample of data from listed companies at the Ghana Stock Exchange that have undertaken such corporate actions.

1.7 Organization of the Study

The research project is organized into five chapters.

Chapter one gives a general introduction to corporate actions including the objectives of the research, the scope of the research and the limitations to the study.

Chapter two of the study reviews literature on corporate actions in the global perspective and Ghana in particular.

It also includes a review of the various literatures on specific examples of corporate actions types.

The methodology which entails the methods of analysis and the sources of data used to achieve the objectives of the research project are presented in Chapter three.

In Chapter four, the results are presented and discussed.

The Summary of major findings, conclusions and recommendations are provided in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will consider the various writings undertaken by other researchers in the area of corporate actions.

A general overview of corporate actions is first presented.

This is followed by a review of the literature on the various corporate actions types that this researched seeks to study which include dividends, rights issues and bonus issues.

2.2 Research work on corporate action

A study by Oxera, an independent economics consultancy in Europe in 2004 revealed that corporate actions can have a significant impact on trading prices, trading volume and trade price volatility. The report, called "*Share prices and trading activity over the corporate action processing cycle*," studied five corporate action event types and how those events impacted share prices and trading activity.

The five event types were: takeovers, stock splits, spin offs, rights issues and exchange offers. Most of the impacts studied by Oxera (2004) were corporate action events relating to U.S. securities, but the rights issue events studied involved a wide array of securities from the U.S., Europe and Asia.

Oxera (2006) undertook another analysis of the risks involved in corporate action processing in the global securities markets.

The research work titled '*Corporate Action Processing: What are the Risks?*' was aimed at providing one of the first systematic attempts to quantify the major risks involved in processing corporate actions.

The results presented in that report highlighted the potentially significant monetary value of the different types of risks associated with corporate action processing. The main focus of the research was on the risks and costs arising within back-office operations.

In an article Posted by Investment n Trading Advisor on Monday, 20 August 2007 titled "Effects of Corporate Actions on Stock Prices: Part II", it was asserted that even though theory says there is no benefit of corporate actions, Practical cases refute the theory.

As per the theory, (Miller-Modigliani postulate), there is no value created by corporate actions or corporate restructuring. The reason is that the net value of the company remains the same.

2.3 Corporate Actions and its effects on Cash Flows and Value of the Firm

Corporate actions undoubtedly often affect the operational and financial structures of a company.

To the extent that these changes also affect the value of the firm, announcement of such corporate actions is likely to result in increased share price volatility and trading in secondary markets.

A takeover is a typical example of a corporate action type which has a clear implication for a firm's cash flows. This is because, following the takeover, firms may alter their activities and financing structure, often resulting in cost and/or revenue synergies.

For example, takeovers/acquisitions can create synergies by:

1. Eliminating staff duplication;
2. Combining facilities, allowing excess property and equipment to be sold;
3. Creating economies of scale in purchasing, marketing and research development; and
4. Reducing cost of capital

These implications for firm's cash flows would be (partly) incorporated into the share prices on the announcement day of the takeover/acquisition.

Notwithstanding the considerable debate in recent years about the actual merits of mergers and acquisition, empirical evidence suggests that on average, they have positive effects on the combined value of the two firms.

Andrade, Mitchell and Stafford (2001), studied a sample of US takeovers that took place between 1973 and 1998 found that over the three day announcement window (-1d, +1d), the combined value of the firms increased by an average of 1.8%.

It must however be pointed out that the value generated in the acquisitions does not however accrue symmetrically to the owners of the acquirer and target firm.

Particularly, takeovers, on average results in a significant positive impact on the share prices of the target companies, while the effect on the value of the acquirer is less clear.

In the same study, Andrade, Mitchell and Stafford (2001) showed that on average, during the announcement window, target companies exhibit 16.0% abnormal returns, while acquirers exhibit only -0.7% abnormal returns.

Oxera's research in 2006 confirmed the evidences of Andrade, Mitchell and Stafford (2001). In particular, for the sample of US takeovers, target companies have average announcement date returns of 7.44%. Oxera (2006) analysis also demonstrated that this adjustment in share prices can be captured through the measure of share price volatility. In particular, on the day of announcement, the volatility of the target shareholders returns is significantly higher than historical volatility before the tender offer is announced.

The effects of new corporate actions information can also be captured by measuring trading activities in secondary markets. For example, Holthausen and Verrecchia (1990) have showed that public announcements can influence traders' activity by altering their perception of the firms' value and that the magnitude of this effect is likely to depend on the degree of disagreement between the traders.

Therefore, announcements of corporate action are likely to increase trading activity relative to some period before the announcement, and the magnitude of this effect will depend on the information content of news and uncertainty associated with the interpretation of this information.

For example, if the given corporate actions have only minimal effects on the value of the firm, and this effect is relatively certain, there is likely to be only a minimal increase in trading activity on the day of announcement of the corporate actions.

At the same time, if the given corporate action has a potentially significant impact on the firms' value, and there is clear disagreement among investors as to the significance of the event, there is likely to be a significant increase in trading activity around the announcement date.

Indeed, other corporate actions types analyzed in this study also affect firms' cash flows.

Copeland, Lemgruber and Myers (1987) argue that spin-offs can increase the value of the firm through improved managerial incentives. At the same time, rights issues and exchange offers are likely to alter the firm's financial structure, affecting its financing costs and potentially its business strategy.

These corporate actions events can therefore have a potentially significant impact on share prices and trading activities on different corporate actions dates. The magnitude of the impact would depend on the degree to which these corporate actions alter the firms cash flows, and whether these events affects the value of the firms through other channels such as providing signals about future cash flows.

2.4 Corporate Actions- Providing Signals about a Firm's Profitability

Academic literature has over the years provided a considerable amount of evidence on the asymmetry of information held by the managers of the firm and its investors.

Managers are in particular sometimes unable to (credibly) communicate information about the current and future profitability of the firm to the firms' investors.

Therefore, in general, managers have more extensive and better information about the current profitability and future prospects of the firms than its investors.

Ross (1977), Leland and Pyle (1977) and Luo, Brick and Frierman (2002), among others have suggested that managers could use certain types of corporate actions to reduce this asymmetry of information.

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For example, increases in a firm's dividend payment can be considered a positive signal (since managers commit to high fixed payment in the future). Similarly, in certain circumstance,

increases in gearing can provide a signal about manager's views on firms' future cash flows.

At the same time, when new capital is raised, the market often interprets this as a negative signal about a firms potential and/or its current valuations.

Myers and Majluf (1984) in a seminal paper, argued that asymmetry of information between managers and investors – i.e. managers know more about the firm than outsiders – affects choice between internal and external capital, and debt and equity. In particular, the authors argued that firms' investment should be first financed by internal finance, and only when all internally generated funds have been used up should external capital be raised (pecking order theory).

Moreover, when firms raise external capital, they should first raise debt and then equity.

One important implication of this theory is that the issuing of new equity capital by firms is usually interpreted as a negative signal about its current and future profitability.

In the context of this research study, while corporate actions provide signals about the current and future profitability of firms, they can also result in considerable share price movement and changes in trading activity. For example, consistent with Myers and Majluf (1984), announcements of rights issues are likely to be interpreted as a negative signal about the firm's profitability.

Therefore on average, such corporate actions announcements are likely to be associated with negative share price reactions, increased volatility and trading activity.

Finally, there is some evidence that certain corporate actions alter the equity value of the firm by transferring value from debt to equity holders. For example, Galai and Masulis (1976) argued that the main source of positive abnormal shareholder returns following spin-offs is associated with the wealth transfer from bondholders to shareholders. However, the empirical evidence supporting this hypothesis is mixed.

2.5 Corporate Actions and the Efficient Market Hypothesis

The primary objective of a firm is the maximization of the market value of its shares. Companies therefore undertake corporate actions that are consistent with this objective. Investors subsequently would react quickly to such corporate action decisions and accordingly the market

price of the company's shares would adjust quickly to reflect the impact of each corporate action decision on the company's value.

The Efficient Market Hypothesis is a statement about how an asset's price should react to new information concerning the asset. In particular, corporate actions taken by the management of a company are relevant to the pricing of an asset, in this case share prices. The Efficient Market Hypothesis maintains that market prices of an asset (shares) fully reflect all available information.

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In 1978, Lorie and Brealey wrote: "One of the most important ideas in the field of investment is that capital markets are "efficient". The idea was considered bizarre in 1960 but by 1970 was very generally accepted'.

Fama (1960) has defined an efficient capital market as one in which the prices of securities 'fully reflect' all available information. This definition focuses on the relationship between market prices and information (corporate actions event), and requires that the reaction of market prices to new information (corporate actions announcements) be instantaneous and unbiased.

Fama(1960) provides a useful classification of market efficiency. He points out that the market may be efficient with respect to some sources of information but not with respect to others.

Notwithstanding, W. Beaver (1981), suggestion that the classification proposed by Fama is too broad.

Fama (2006) classifies the Efficient Market Hypothesis as follows:

Weak-form efficiency:

Excess returns can not be earned by using investment strategies based on historical share prices.

- Technical analysis techniques will not be able to consistently produce excess returns, though some forms of fundamental analysis may still provide excess returns.
- Share prices exhibit no serial dependencies, meaning that there are no "patterns" to asset prices. This implies that future price movements are determined entirely by information not contained in the price series. Hence, prices must follow a random walk

Semi-strong-form efficiency

- Semi-strong-form efficiency implies that share prices adjust to publicly available new information very rapidly and in an unbiased fashion, such that no excess returns can be earned by trading on that information.
- Semi-strong-form efficiency implies that neither fundamental analysis nor technical analysis techniques will be able to reliably produce excess returns.
- To test for semi-strong-form efficiency, the adjustments to previously unknown news must be of a reasonable size and must be instantaneous. To test for this, consistent upward or downward adjustments after the initial change must be looked for. If there are any such adjustments it would suggest that investors had interpreted the information in a biased fashion and hence in an inefficient manner.

Strong-form efficiency

- Share prices reflect all information, public and private, and no one can earn excess returns.

- If there are legal barriers to private information becoming public, as with insider trading laws, strong-form efficiency is impossible, except in the case where the laws are universally ignored.
- To test for strong-form efficiency, a market needs to exist where investors cannot consistently earn excess returns over a long period of time. Even if some money managers are consistently observed to beat the market, no refutation even of strong-form efficiency follows: with hundreds of thousands of fund managers worldwide, even a normal distribution of returns (as efficiency predicts) should be expected to produce a few dozen "star" performers.

Indeed, the information content of each successive classification is cumulative. Therefore, the second classification includes all previous price information as well as all other publicly available information, while the third classification includes all publicly available information and all privately held information.

2.6 Literature on Dividend Announcement

Despite extensive research being undertaken on the issue of dividend announcement and share prices, the effects of dividends on share prices remains one of the unresolved issues on finance (Correia, Flynn, Miana, and Wormald, 1993). Bhana(1991) found strong support for the hypothesis regarding the information content of dividends.

Van Rensburg, Slaney and Handy (1997) concluded that researches that study the impact of dividends announcement on share prices should guard against misrepresenting the economic

timing of shareholders return. Bhana (1997) found that a significant increase in a company's share price follows an announcement of a share dividend and concluded that investors interpret share dividends to be an unimportant signaling device.

Bhana (1998) found that the announcement of special dividends conveys value-increasing information to the market and that the gains from this positive information accrue to shareholders. As a matter of fact, dividend announcement usually are considered as the positive signal to the shareholders and its positive impact on the share prices is also expected.

Indeed since the days of Modigliani and Miller who initiated modern corporate finance theory (Modigliani and Miller (1958) and Miller and Modigliani (1961)), a lot of researches have made to explain market responses to dividend announcement by the firms. Ogden (1994), Stevens and Jose (1998), Kato and Loewenstein (1995), Ariff and Finn (1986) and Lee (1995) believes that the announcement of high dividend increases firm value that is dividends has a positive impact over share prices.

Other researches also found that the announcement of high dividends reduces a firm's value; that is, dividend announcement has a negative impact over share prices because of the high taxes that accompany dividends. These include Loughlin (1989) and Easton and Sinclair (1989).

There are a host of other researches who also believes that dividend policy and for that matter the announcement of a dividend by a firm makes no difference. Modigliani and Miller (1958) Black and Scholes (1974), Miller and Scholes (1978). In light of Modigliani and Miller's irrelevance

theory, it is surprising to find that dividend researchers also reports s strong empirical tie between dividends announcement and stock price changes.

Indeed, Miller and Modigliani (1966) realize that dividends and dividends changes indirectly convey a considerable amount of information at least about management's expectations of long-run future profits. This earnings information itself is an integral part of the firms underlying operations and hence would affect firm's value, leading to what Miller and Modigliani (1966) termed a potentially "hopeless confounding of the real and purely informational effects".

Miller and Rock (1985) suggested a model with dividends providing information about unobservable earnings that as a result of information asymmetry between managers and investors, dividend can result in market price reaction.

Miller and Rock (1985) also motivated dividend announcement effects as occurring because dividends can serve the role of revealing both current and future earnings hence have impact over share prices. A host of theories have been developed to explain the observed pricing effects of dividend. These theories model dividend announcement as a means of conveying information from management to investors.

Charest (1978) found that the announcement of dividend increase generates an excess return. These abnormal returns were, in average, in the same direction as the change in dividends. Numerous empirical studies have examined whether dividend contain information and have impact over the shareholders wealth. Even though Petit (1972) found that dividend

announcements do convey valuable information, Watts (1973) and Gonedes (1978) came to the opposite conclusion. They contend that unexpected dividends changes communicate no information beyond that reflected in other contemporaneous variables such as earnings.

In 1976, Laud and Petit challenged Watts's findings but Watts (1976) rebutted these challenges. Some other empirical research however, leaves little doubt that the market does react to dividend announcement.

In 1978 and 1980, Litzenberger and Ramswamy respectively pointed out that if costless, tax sheltered opportunities do not exist and if "income related constraints are non binding and/or corporate supply adjustment are restricted, the before tax return on a security would be an increasing linear function of its dividend yield.

This implies that if a firm reduces/increases its dividend yield a lower/higher expected return would be required and the price of the firm's security should increase/decrease. Breman (1970), Rosenberg and Marathe (1979) and Blude (1980) also supported Litzenberger and Ramswamy (1979, 1980) and suggested that if risk (i.e. β) is held constant, before tax returns are an increasing function of dividend yield.

As a matter of fact, the debate on the role of dividends announcement in the valuation of shareholders wealth continues to be a theoretical puzzle despite the numerous empirical investigation. Ogden (1994), Stevens and Jose (1992), Kato and Loewenstein (1995), Ariff and Finn (1986) and Lee (1995) all observed a considerable positive association between stock price and dividend payment whereas Loughlin (1989) and Easton and Sinclair (1989) showed a

negative correlation concerning stock price and dividend payment. Asquith and Mullins (1983) examine the impact of initiation of a cash dividend by the firm and find a strong positive stock price reaction.

They interpret this to mean that investors welcome the dividends because it establishes a mechanism by which management can communicate private information about future cash flows. Richardson, Sefcik, and Thompson (1986) also arrive at a similar conclusion. Some recent studies are more conclusive about the market reaction towards dividend announcements.

Daine and Paul (2006) find that dividend elicit a greater change in price when the nature of the news goes against the grain of recent market direction during volatile times. Schleicher, Henryk and Roland (2003) provide the evidence that announced dividend changes bring new information to the market and that stock prices move in the same direction as dividends.

In addition they also find that stock prices react rather quickly to the new information. Newlove and Kwesie (2009) provide the evidence that investors do not benefit from dividend announcement at the GSE. Their paper was based on three listed companies at the Ghana Stock Exchange.

Shareholders also use earnings announcements in their valuation decisions. This has been shown by many authors: example Miller and Rock (1985) where dividends are residuals payments and hence any unexpected change is the result of a shock to earnings.

Asquith and Mullins (1986) suggest that dividends may be a better signal than earnings announcements due to managers' ability to manipulate earnings. Patell and Wolfson (1984) study analyze the stock price reactions to earnings and dividend announcements.

The study shows that most of the detected price reaction occurs within the first fifteen minutes after the earnings and dividend announcements. Akerlof (1970) implies that rivals' stock prices will react in a direction opposite to that of the announcing firm. Investors who are initially unable to distinguish between low- and high-quality firms will price shares by averaging values across all firms.

Once the dividend-initiation decision becomes public, the market will react favorably to the positive information. Asquith and Mullins (1983) argue that initial dividends are probably more unexpected than are subsequent dividend changes.

If dividend initiation is not anticipated, the market reaction on the announcement day should capture the full effect of the dividend change. Therefore, the impacts of dividend changes should be most evident at initiation.

Consistent with this reasoning, Asquith and Mullins (1983) and Richardson, Sefcik, and Thompson (1986) find large, significantly positive two-day abnormal returns in response to dividend initiation announcements.

2.7 Literature on Rights Issues Announcement

Both International and local researchers have all found that there is a significant negative share price response to the announcement of a rights issue (White and Lusztig, 1980; Asquith and Mullins, 1986; Mikkelsen and Partch, 1986; Smith, 1986; Dierkens, 1991; Pilotte, 1992; Youds, Firer and Ward, 1993; Bayless, 1994; Sant and Ferris 1994; Bohren, Eckbo and Michalsen, 1997; Bhana, 1998 and Horne, 1999).

A number of studies have focused on explaining the negative share price response to rights issue announcements. The majority of the findings in this area have produced information models (Myers and Majluf, 1984; Miller and Rock, 1985 and Asquith and Mullins, 1986) and management theories (Jensen and Meckling, 1976; Downes and Heinkel, 1982 and Masulis and Korwar, 1985).

More recently, researchers focused on finding explanations for the variances within the negative share price responses. They focused on firm-specific factors, which included the application of funds, capital structure, issue size, information asymmetry, growth opportunities and managerial ownership (McConnell and Mascarella, 1985; Masulis and Korwar, 1986; Asquith and Mullins, 1986; Mikkelsen and Partch, 1986; Youds, Firer and Ward, 1993; Bhana, 1998 and Korajczyk and Levy, 2001).

The evidence regarding rights issues is mixed in respect of the share price movement.

For example, Nelson (1965), examining all rights issues in the US for the period 1946-1957, finds that share prices six months after rights issues are not significantly different from prices six months prior to the rights offerings.

Scholes (1972), investigating US rights issues for the period 1926 – 1966, finds out that prices of shares generally rise before the issue, fall by 0.3% during the month of the issue, but do not change after the issue. Smith (1977), using monthly returns, finds no significant excess returns during the month of a rights offer.

White and Lusztig (1980) and Hansen (1988) document a negative reaction to rights offers announcement. Kothare (1991), investigating US rights issues for the period 1970-1987, reports negative (statistically significant) announcement period abnormal returns.

Eckbo and Masulis (1992), examining rights issues offering in the US for the period 1963-1981, report negative (marginally significant) announcement period abnormal returns.

Marsh (1979) analyze rights issues in the UK and finds large positive abnormal returns prior to the announcement of the issue, but a statistically insignificant setback in the months surrounding the issue itself. Loderer and Zimmermann (1988) investigate rights issues in Switzerland using monthly stock returns and report insignificant average abnormal returns. Kang (1990),

examining rights issues in Korea, finds a significant stock price increase during the period surrounding the announcement of a rights issue.

2.8 Literature on Bonus Issues Announcement and Share Prices

A bonus issue is a free issue of shares without a subscription price, made to existing shareholders in proportion to their current investment. Miller and Modigliani (1961) put forward that a bonus issue does not alter shareholders wealth. The total market value of the shares or the values of the shares that are held by each investor should remain unchanged.

Sloan (1987) also provided Australian evidence that bonus issues do not affect shareholders wealth. Peterson (1971) however put forward that in practice there may be an increase in share price following the announcement of a bonus issue.

Peterson (1971) maintained that such an increase can occur because the announcement of a bonus issue may have beneficial informational content. Bal et al (1977) in his study of the Australia Stock Market concluded that the announcement of a bonus issue on average has a positive effect on stock prices.

Chen et al(2007) confirms the views of Bal et al (1977) after studying China's stock market reaction to the announcement of a bonus issues.

CHAPTER THREE

METHODOLOGY AND ORGANISATIONAL PROFILE

3.1 Introduction

This chapter presents the various approaches used in analyzing the specific objectives of the research project.

A brief history of the Ghana Stock Exchange will also be discussed together with a profile of companies at the stock exchange that has undertaken the major corporate actions that this research seeks to study.

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3.2 Method of Analysis:

One of the best methods for examining the effects of a corporate action on share price behavior is to use the event study analysis method.

Therefore, this research extensively employs the use of the event study method.

3.2.0 Event Study methodology

An event study examines the behavior of firms' stock prices around corporate events.

The usefulness of event studies arises from the fact that the magnitude of abnormal performance at the time of an event provides a measure of the (unanticipated) impact of this type of event on the share prices.

Event study serves an important purpose in capital market research as a way of testing market efficiency.

Further, the event study describes a technique of empirical financial research that enables an observer to assess the impact of a particular event (e.g. corporate action event) on a firm's stock price (Bodie, et al, 1999).

The standard market model describe below is employed in the event study methodology to estimate abnormal share prices reaction to the announcement of the corporate action.

The analyses are performed using data derived from the share prices of some selected firms at the Ghana Stock Exchange from 1999 to 2007.

3.2.1 The Standard Market Model

It is necessary to calculate the response of the market to the corporate action event.

In essence, this response is the percentage change in share price in excess of (or below) what would normally be expected to occur. The standard market model is used as a basis for estimating the normal rate of return on a security.

The standard market model is specified as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + U_{it}$$

Where R_{it} = rate of return on security i in period t

R_{mt} = rate of return on the market index in period t

α_i = constant in regression equation (i.e. alpha value)

β_i = slope of regression equation (i.e. beta value of security i)

U_{it} = disturbance term (i.e. abnormal return)

Factors which affect the whole market such as war, drought, and monetary policy and exchange rate changes are captured by the term R_{mt} .

In this research the GSE All share index is used as the proxy of the market returns.

The remaining (that is the abnormal) return is attributed to company-specific factors such as the public release of information relating to the company.

Abnormal returns, AR, on security i at a later time t are measured by:

$$U_{it} = AR_{it} = R_{it} - \alpha_i - \beta_i R_{mt}$$

Two important parameters are estimated using the standard market models. These are the alpha (α_i) and beta (β_i) values. These values are needed in the computation of the abnormal returns on the stocks prices.

3.2.1.0 Meaning of Alpha and Beta Values

Alpha: The Alpha value has no effect or has nothing to do with the rise and fall of the market. It is the non-market related component of a security's abnormal return.

The value of alpha can either be positive or negative as seen in the calculated values. This is the nature of risky investment but over time, the alpha value should be zero, if the stock market is efficient.

A positive alpha value is indicative of a 'buy signal' i.e. share are cheap and a negative alpha value is indicative of a 'sell signal' or that share s are expensive. If a stocks alpha value is zero, it means shares are correctly priced.

Beta: The tendency of a stock to move up and down with the market is reflected in its beta value.

In other words, the Beta value measures the sensitivity of a portfolio, or a particular security to general market movements. A beta value of 1.0 indicates that, in general, if the market moves up by 10%, the stock will also move up by 10%, whilst if the market falls by 10%, the stock will likewise fall by 10%

3.2.1.1 Abnormal Returns on Stocks: Abnormal returns are the differences between a single stock or portfolio's performance in regard to the average market performance over a set period of time. In other words abnormal return is the return to a stock in excess of the return to a market portfolio. Usually a broad index, such as the GSE- All Share index is used as a reference for the average market performance.

For example if a stock increased by 5% because of some news which affected the stock price, but the average market only increased by 3%, then the abnormal return was 2% ($5\% - 3\% = 2\%$).

If the market average performs better than the individual stock then the abnormal return will be negative. The abnormal returns are assumed to reflect the stock market reaction to the arrival of new information such as the announcement of a corporate action.

3.3 Event Time Used

For each corporate actions type, the test involved estimating and examining abnormal returns for each company for twelve (12) months before the corporate action event announcement and six (6) months after the corporate action event announcement.

Each corporate action announcement date in the sample was labeled zero; points in time before the announcement are labeled -1, -2, -3, ... -12, and points in time after the corporate action event announcement are labeled +1, +2, +3, +6.

At each point in the event time, the company's abnormal returns and average abnormal returns are calculated. These average abnormal returns are then cumulatively summed up over event time. The share price reaction to the corporate action are analyzed by considering the averaged abnormal returns before the announcement (pre-announcement), within the announcement window and the post announcement period.

3.4 ORGANISATION PROFILE

3.4.1 Brief Profile of the Companies used in the study

This section will briefly discuss the companies that have been sampled for this study.

Firstly, an overview of the Ghana Stock Exchange is presented followed by an overview of the sampled companies, namely Aluworks Limited, Super Paper Products Limited, Accra Brewery Limited, Mechanical Lloyd Co, Limited Ghana Breweries Limited, CAL Bank Limited, and SG-SSB Bank.

The Ghana Stock Exchange: The Ghana Stock Exchange was incorporated in July, 1989 as a private company limited by guarantee under Ghana's Companies Code, 1963 (Act 179).

The Exchange was given recognition as an authorized Stock Exchange under the Stock Exchange Act of 1971 (Act 384) in October 1990, and trading on the floor of the Exchange commenced in November 1990.

In April, 1994, it converted into a public company limited by guarantee. It currently has sixteen Stock broking firms licensed to deal on the Exchange. The Exchange is governed by a Council with representation from Licensed Dealing Members, Listed Companies, the Banks, Insurance Companies, Money Market and the general public.

The council sets the policies of the Exchange and its functions include preventing fraud and malpractices, maintaining good order among members, regulating stock market business and granting listing.

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The market capitalization as at December, 31 2006 was 112,496.01 billion cedis. An indication of the value of listed companies with about 1,003.81 million shares was traded between November 1990 and December, 31 2006.

The main index is GSE All-Shares index. This index is published by Ghana Stock Exchange.

The types of Securities traded and number of listings include ordinary Shared (Common Stock), and Debt Securities which are subdivided into Corporate and Government.

Trading is carried out on the Floor of the Exchange under the Continuous Auction Trading system (CAT).

Over the counter trading is however allowed in AngloGold Ashanti Ltd's shares. Trading is done in lots of 100 shares. Settlement is manual but centralized. Currently, the settlement period is T+3(business days). It is also delivery versus payment. The seller (Stockbroker) of a security is

responsible for the validity of all documents delivered. A minimum of 1.5% and a maximum of 2.5% are charged as commission on the value of shares traded.

Aluworks Limited: Aluworks Limited was incorporated on 24 February, 1978 and converted to a public company on 29 June, 1996. With ALW as its share code, it was listed on the GSE on 29 November, 1996.

Aluworks Limited is into the production and sale of aluminum-based products, which consist of aluminum sheet-in-coil, circles, flat sheets, corrugated roofing sheets, aluminum louver blades and other related activities.

The company has 100 million authorized number of shares with 41,677,911 issued number of shares and a stated capital of ₵50.02 billion as at 31 December, 2005. (GSE Fact Book 2006).

Super Paper Products Limited: SPPC was incorporated on 23th May, 1967 as a private company. It went public in December 1990 and was subsequently listed on the Ghana Stock Exchange on 2nd May, 1992. Super Paper Company Products Limited has authorized number of shares of 100 million with 19.44 million issued. The stated capital as at December 31st 2001 was 892 million cedis.

Accra Brewery Limited: Accra Brewery Limited was incorporated in April, 1975.

Before that it had been known as Overseas Breweries Limited dating back to 1931. Overseas Brewery Limited owns 69.20%. ABL's nature of business is in the brewing of beer, malt drinks, and the manufacture of aerated club soft drinks.

The company was provisionally listed on the Ghana Stock Exchange on 12th November, 1990 and formally listed on the 20th of December, 1991.

The company has one million authorized number of shares of which 166,292,776 has been issued. As at 31 March 2001 which is the company's year end, it had a stated capital of 32,206 million.

Mechanical Lloyd co. limited: The Company was incorporated in the 1960's as Technical Lloyd Limited. It was renamed Mechanical Lloyd limited and incorporated as such on 7th April, 1970.

The name was again changed to Mechanical Lloyd Company limited on 13th of January, 1983. The company is the exclusive agents for the sale and servicing of BMW's cars and Motor Cycles, Ford Vehicles, Agricultural Machinery, Land Rovers and Lucas product in Ghana.

Mechanical Lloyd Company Limited was listed at the Ghana Stock Exchange on the 10th of May, 1994. The company has 100 million authorized number of shares of which 40,076,740 has been issued and a stated capital of 2,666,894,000

Ghana Breweries limited: The Company was incorporated on 30th April, 1992. Its core business is in the brewing of Beer, Non Alcoholic malt drinks and soft drinks.

On 17th July, 1998 the company was listed at the Ghana Stock Exchange with the share code GBL (ordinary shares of no par value).

Ghana Breweries Limited has 30 million authorized numbers of shares, 21,688,664 issued and a stated capital of 66,540 million.

Cal Bank Ghana Limited: Continental Acceptances Limited was the company's original name when it was incorporated as a limited liability in March 1989.

The bank secured its banking license in June 1990 and begun operating in the July of 1990.

CAL was granted the universal banking license in 2004 and formally listed on the Ghana Stock Exchange (GSE) November 2004.

It has 1 billion authorized shares with over 165 million of them been listed on the stock market, CAL Bank has a share capital of GH¢8,008,000.00.

SG-SSB: SG-SSB Ltd is a privately owned publicly listed company on the Ghana Stock Exchange with 38 networked branches across the country and a member of the Societe Generale Group.

The bank was incorporated on 7th February, 1975 as a private limited liability company with the name Society Guarantee Trust Limited and was solely owned by the Social Security and National Insurance Trust.

The bank name was changed to Social Security Bank by SSNIT in 1976. In 1995, the bank was listed at the Ghana Stock Exchange and adopted its current name SG-SSB in March 2004

The Bank operates in the Retail, Corporate and Small and Medium scale Enterprise banking markets and is currently ranked the fourth in the country.

CHAPTER FOUR

DATA ANALYSIS, MAIN FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of the stock prices and other relevant data to ascertain whether indeed there were share price reactions to a particular corporate action.

Firstly, the returns on the shares together with the returns on the market index (GSE All Share index) are calculated for the estimation period in a particular corporate action. This is followed by the computations of the beta and alpha values of the shares using special computer software.

The beta and alpha values together with the stock and alpha values are used to compute for the abnormal returns in the event window which reflect the existence of a reaction to the share price behavior following the announcement of a particular corporate action.

4.2 Sample and data Description

The corporate action types and sample selection used to develop the analysis in this study are described below.

The sample covers only three corporate action types namely, dividend announcement, bonus issue and rights issue which are described in the table below.

Table 4.01 Corporate Actions under Study

Corporate Action Type	Description
Bonus issue	These are new shares issued by a company to its existing shareholders, usually in a mathematical proportion to the number of shares already held. It is equivalent to rights issues with a zero subscription price. A company is able to make a bonus issue by using the balance of reserves (such as a share premium reserve) and/or retained profits.
Rights issues	A 'rights' issue is an issue of new shares to existing shareholders. Under the terms of a rights issue, shareholders receive the right to an additional number of shares in a fixed ration to the number of shares already held. Provided that each shareholder accepts the offer, there is no dilution of any shareholder's ownership percentage in the company.
Dividends	A dividend is a cash payment made on a quarterly or semi-annual basis by a company to its shareholders. It is a distribution of after-tax profit. When dividend is announced, a company's share price will change. This change will reflect the market's attitude to the dividend that has just been declared.

The sample used in this study included all announcements of rights issues, bonus issues and dividend payments by selected firms at the Ghana Stock Exchange during the period 1999 -2007.

The sample was identified through a search of the Ghana Stock Exchange publications, the daily press (all major newspapers were considered) and the fact books of the Ghana Stock Exchanges.

The announcement day investigated is the day of the first public announcement of the corporate action in the press. To ensure that this was the first day that the information became public, the announcement was confirmed or corrected by reviewing each firm's official record at the Ghana Stock Exchange.

The table below is a summary of the companies and the corporate actions type and the date of corporate action.

Table 4.02 Companies, Corporate actions and Announcements Dates on the Ghana stock exchange

Listed Company	Stock Code	Corporate Action Type	Announcement Date
Accra Brewery Ltd	ABL	Rights issues	11 th October, 2000
Mechanical Lloyd. Ltd	MLC	Rights issues	27 th October 2004
Ghana Breweries Ltd	GBL	Bonus issues	15 th October, 2000
Super Paper Products Ltd	SPPL	Bonus issues	19 th September, 2000
Aluworks Ltd	ALW	Bonus issues	30 th July, 2000
Accra Brewery Limited	ABL	Bonus issues	19 th July, 2001
British American Tobacco co. Ltd	BAT	Dividend payment	6 th January, 2005
SG- SSB Bank	SG-SSB	Dividend payment	9 th March 2005
Cal Bank Ltd		Dividend payment	April 30 th 2007
Aluworks Ltd	ALW	Dividend Payment	12 th April, 2005

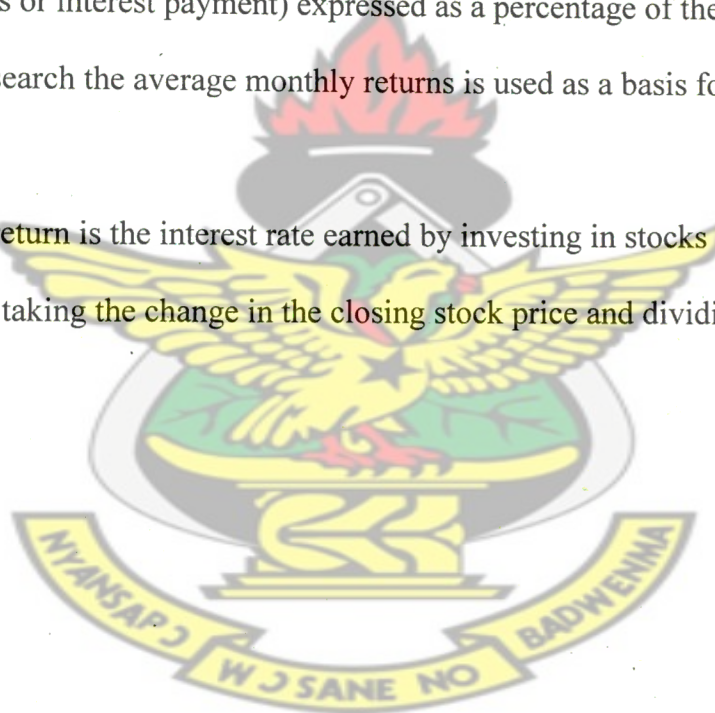
4.3 Monthly Stock and Market Returns

Table 4.03, 4.10, and 4.17 shows the stock's monthly returns and the market return computed based on the monthly share prices of the individual company's and the GSE All Share index respectively.

The return of an investment is measured as the total gain or loss experienced on behalf of its owners over a given period of time.

It is commonly stated as the change in the assets value (capital gain or loss) plus any cash distribution (dividends or interest payment) expressed as a percentage of the beginning of period investment. In this research the average monthly returns is used as a basis for analysis.

The stock's monthly return is the interest rate earned by investing in stocks for just one month and it is computed by taking the change in the closing stock price and dividing it by its value the previous month.



4.4 ANALYSIS OF BONUS ISSUES

Table 4.03 The Monthly Stock Returns And Market (GSE-All Share Index) Returns

DATE	GBL(%)	ALW(%)	SPPL(%)	GSE(%)	DATE	ABL(%)	GSE(%)
Jan-99	-12.89	8.50	0.13	6.13	Jan-00	2.31	-0.26
Feb-99	-9.40	-5.95	-1.26	0.29	Feb-00	1.06	0.35
Mar-99	13.27	4.91	-1.35	-5.32	Mar-00	2.28	1.65
Apr-99	-0.93	1.03	0.00	-1.33	Apr-00	4.47	8.75
May-99	-1.47	0.00	0.00	-0.48	May-00	5.25	0.02
Jun-99	-0.49	-1.19	-1.91	-2.29	Jun-00	1.73	-0.52
Jul-99	-2.26	-6.01	-14.73	-1.08	Jul-00	12.73	0.60
Aug-99	-15.29	-1.45	-9.54	-0.75	Aug-00	2.54	-0.02
Sep-99	4.67	-2.45	-2.50	-1.94	Sep-00	0.56	3.59
Oct-99	-4.69	-0.12	0.00	-1.05	Oct-00	0.38	0.63
Nov-99	-3.94	-0.26	0.00	-1.29	Nov-00	0.42	-0.01
Dec-99	-3.33	-0.05	-16.67	-1.49	Dec-00	0.00	0.89
Jan-00	0.00	-0.01	0.00	-0.26	Jan-01	-4.88	-0.42
Feb-00	0.00	0.00	0.00	0.35	Feb-01	-1.55	0.27
Mar-00	0.00	-0.06	0.00	1.65	Mar-01	6.78	3.88
Apr-00	0.00	-1.19	0.00	8.75	Apr-01	0.00	0.20
May-00	-1.48	4.62	0.00	0.02	May-01	0.00	-0.05
Jun-00	-2.00	1.11	0.00	-0.52	Jun-01	0.00	1.36
Jul-00	0.00	0.00	0.51	0.60	Jul-01	0.00	3.58
Aug-00	-2.20	0.00	2.81	-0.02	Aug-01	0.00	0.86
Sep-00	-1.40	-4.73	0.00	3.59	Sep-01	-28.70	0.39
Oct-00	0.00	30.40	41.44	0.61	Oct-01	-28.76	0.70
Nov-00	0.00	28.01	14.56	0.02	Nov-01	0.00	-0.15
Dec-00	0.00	1.98	2.69	0.89	Dec-01	0.00	-0.04
Jan-01	0.00	9.03	5.38	-0.42	Jan-02	0.00	-0.18
Feb-01	0.00	11.02	7.56	0.27	Feb-02	0.03	0.78
Mar-01	-2.16	34.86	1.25	3.88	Mar-02	0.44	3.34
Apr-01	-1.58	1.69	0.0	0.2	Apr-02	1.52	3.04

Discussion of table 4.03:

The table above shows the monthly returns on both the stock prices and the GSE-All share index.

The returns are computed by taking the change in the closing stock price (index) and dividing it by its value the previous month. As indicated, the return of an investment indicates the total gain or loss experienced over a given period of time.

In the table, GBL's return of -2.20 in the month of August 2000 indicates that there was a loss of 2.20 percent on its stock invested in July 2000. The General market also suffered a loss of .02 % within the same period.

Regression Analysis for the Computation of Alpha and Beta Values

The result of the linear regression analysis of the monthly stock and market (GSE-All share index) returns using spreadsheet is tabled and discussed below.

Company Code: **GBL**

Regression Statistics	
Multiple R	0.202569938
R Square	0.04103458
Adjusted R Square	0.002675963
Standard Error	4.605310736
Observations	27

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	22.688455	22.688455	1.0697617	0.310901285
Residual	25	530.22217	21.208887		
Total	26	552.91063			

	Coefficients	Standard Error	t Stat	P-value
Intercept	-	0.8871642	-	0.1731352

	1.244029313		1.4022537	
X Variable 1	0.382297461	0.3696221	1.0342929	0.3109013

Discussion of results

The GSE-All Share index (market) explains 4.1% change in the stock return of GBL. The calculated significant level is 31.09 percent which is more than the 5 percent p-value hence the 4.1 % change in GBL stock return explained by the market is insignificant and can thus be attributed to chance.

The alpha and beta values for GBL are -1.244 and -0.82 respectively. The level of significance of both alpha and beta values are 17. 3 percent and 31.09 percent respectively which are well above the p-value of 5%.

Therefore both alpha and beta are insignificant in explaining any change in the returns of GBL.

Company Code: ALW

Regression Statistics					
Multiple R	0.153809285				
R Square	0.023657296				
Adjusted R Square	-0.015396412				
Standard Error	10.5998848				
Observations	27				

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	68.06206	68.06206	0.605763	0.443691967
Residual	25	2808.939	112.3576		
Total	26	2877.001			

	Coefficients	Standard Error	t Stat	P-value
Intercept	3.825615956	2.041955	1.873506	0.072735

X Variable 1	0.662142566	0.850746	0.778308	0.443692
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Discussion:

The market explains 2.4 percent change in ALW stock returns. Since the above 44.4% significant level is more than 5% p-value, the 2.4% change in ALW stock return explained by the GSE All share index is insignificant and can be attributed to chance.

The alpha and beta values for ALW are 3.826 and .662 respectively. The alpha value has a level of significant of 7.3% which is well above the 5% p-value hence is insignificant in explaining any change in the ALW stock return.

The beta value of 0 .662 is also insignificant with a 44.4% significant level which is also above the 5% p-value.

Company Code: **SPPL**

Regression Statistics

Multiple R	0.147561572
R Square	0.021774418
Adjusted R Square	-0.017354606
Standard Error	10.08991467
Observations	27

ANOVA

	df	SS	MS	F	Significance F
Regression	1	56.65294966	56.65295	0.556477	0.462640277
Residual	25	2545.159454	101.8064		
Total	26	2601.812403			

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.9818756	1.943714901	0.505154	0.617875

X Variable 1	0.604101913	0.809816164	0.745974	0.46264
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Discussion:

The market explains 2.2 percent change in the stock return of SPPL. The calculated level of significant is 46.3% and is more than the 5% p-value which means that the 2.2 percent change in SPPL return explained by the market is insignificant and can be attributed to chance.

The alpha and beta values are 0.9818 and .604 respectively. Both have a level of significant above the 5% p-value (61.8% and 46.3%) hence are insignificant in explaining any change in SPPL returns

Company Code: **ABL**

Regression Statistics					
Multiple R	0.187728847				
R Square	0.03524212				
Adjusted R Square	-0.003348195				
Standard Error	8.631759997				
Observations	27				

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	68.04284	68.04284	0.913237	0.348407131
Residual	25	1862.682	74.50728		
Total	26	1930.725			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-1.876540021	1.962454	-0.95622	0.348117
X Variable 1	0.805027322	0.842401	0.955635	0.348407

Discussion of results

The GSE-All Share index (market) explains 3.5percent change in the stock returns of ABL. The level of significant is 34.8% which is more than the p-value of 5% hence the 3.5% change in ABL returns explained by the market is insignificant and can be attributed to chance.

The alpha and beta values are 1.877 and .805 respectively and both have a level of significant of 34.8 % which is above the 5 percent p value hence insignificant in explaining any change in the returns of ABL.

Alpha(α) and Beta(β) Values of Stocks

	GBL	ALW	SPPL	ABL
Alpha Value (α)	-1.244	3.826	0.9818	1.8765
Beta Value (β)	-0.3823	0.662	0.604	0.805

ABNORMAL RETURNS ON STOCK

Table 4.04, 4.05, 4.06 and 4.07 shows the computation of the abnormal returns on the stock prices using the standard market model formula explained in the methodology.

COMPUTATION OF ABNORMAL RETURNS OF STOCKS

Table 4.04 GBL: Abnormal return of Stocks

Month	GBL Return	GSE Return	α	β	μ
Oct-99	-4.69	-1.05	-1.244	-0.382	-3.852
Nov-99	-3.94	-1.29	-1.244	-0.382	-3.190
Dec-99	-3.33	-1.49	-1.244	-0.382	-2.660
Jan-00	0.00	-0.26	-1.244	-0.382	1.144
Feb-00	0.00	0.35	-1.244	-0.382	1.377
Mar-00	0.00	1.65	-1.244	-0.382	1.875
Apr-00	0.00	8.75	-1.244	-0.382	4.586
May-00	-1.48	0.02	-1.244	-0.382	-0.225
Jun-00	-2.00	-0.52	-1.244	-0.382	-0.955
Jul-00	0.00	0.60	-1.244	-0.382	1.474
Aug-00	-2.20	-0.02	-1.244	-0.382	-0.961
Sep-00	-1.40	3.59	-1.244	-0.382	1.209
Oct-00	0.00	0.59	-1.244	-0.382	1.469
Nov-00	0.00	0.04	-1.244	-0.382	1.258
Dec-00	0.00	0.89	-1.244	-0.382	1.584
Jan-01	0.00	-0.42	-1.244	-0.382	1.083
Feb-01	0.00	0.27	-1.244	-0.382	1.349
Mar-01	-2.16	3.88	-1.244	-0.382	0.565
Apr-01	-1.58	0.20	-1.244	-0.382	-0.257

Discussion of table 4.04 :

The average abnormal return for GBL stock before the announcement of the Bonus issues is -0.01 percent. This indicates that the market performed better than the stock of GBL. Within the announcement period, the abnormal return calculated for the stock of GBL is 1.469 percent indicating that the stocks of GBL performed better than the overall market index.

Further, an average abnormal return of .93 percent also characterized the post announcement period also indicating a better performance of the stock against the average market return

Table 4.05 ALW: Abnormal Returns On Stock Prices

Month	ALW Return	GSE Return	α	β	μ
Jul-99	-6.010	-1.079	3.826	0.662	-9.122
Aug-99	-1.449	-0.754	3.826	0.662	-4.777
Sep-99	-2.449	-1.945	3.826	0.662	-4.988
Oct-99	-0.123	-1.050	3.826	0.662	3.254
Nov-99	-0.259	-1.290	3.826	0.662	--3.231
Dec-99	-0.046	-1.493	3.826	0.662	-2.883
Jan-00	-0.010	-0.242	3.826	0.662	-3.676
Feb-00	0.000	0.329	3.826	0.662	-4.044
Mar-00	-0.063	1.651	3.826	0.662	-4.982
Apr-00	-1.190	8.749	3.826	0.662	-10.808
May-00	4.622	0.024	3.826	0.662	0.781
Jun-00	1.111	-0.522	3.826	0.662	-2.369
Jul-00	0.000	0.602	3.826	0.662	-4.224

Aug-00	0.000	-0.018	3.826	0.662	-3.814
Sep-00	-4.734	3.586	3.826	0.662	-10.933
Oct-00	30.404	0.634	3.826	0.662	26.158
Nov-00	28.007	-0.007	3.826	0.662	24.186
Dec-00	1.980	0.830	3.826	0.662	-2.395
Jan-01	9.027	-0.362	3.826	0.662	5.441

Discussion of table 4.05:

The average abnormal return for the stocks of ALW before the announcement of bonus issue was -4.44 percent which means the stock was performing poorly than the market averages. The abnormal return for the announcement period is also negative which also indicates a poor performance of the stocks of ALW.

However, the stocks of ALW performed better than the GSE All Share index (market) after the announcement of the bonus issues.

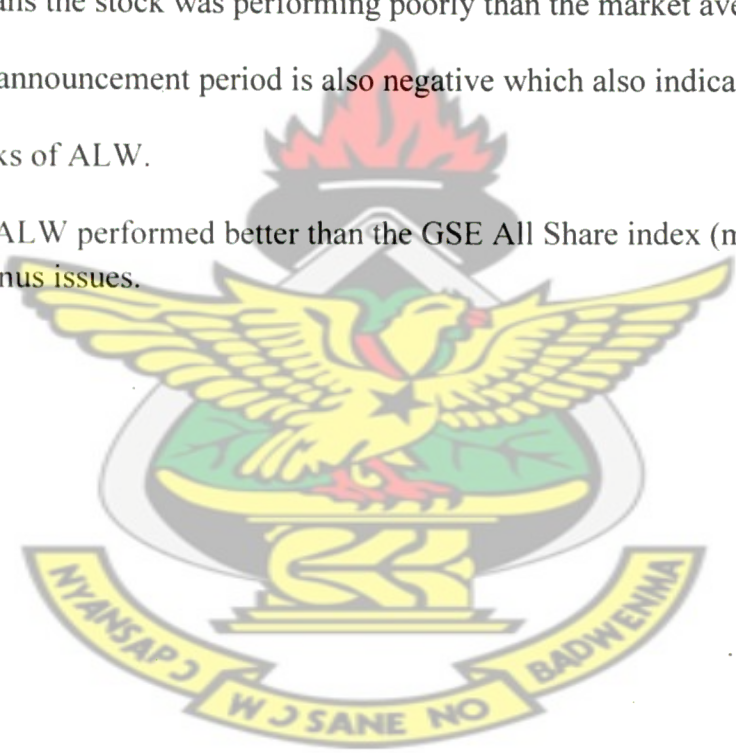


Table 4.06 SPPL: Abnormal Returns On Stock Prices

Month	SPPL Return	GSE Return	α	β	μ
Sep-99	-2.5	-1.945	0.982	0.604	-2.307
Oct-99	0	-1.050	0.982	0.604	-0.348
Nov-99	0	-1.290	0.982	0.604	-0.203
Dec-99	-16.667	-1.493	0.982	0.604	-16.747
Jan-00	0	-0.261	0.982	0.604	-0.824
Feb-00	0	0.347	0.982	0.604	-1.192
Mar-00	0	1.651	0.982	0.604	-1.979
Apr-00	0	8.749	0.982	0.604	-6.267
May-00	0	0.024	0.982	0.604	-0.996
Jun-00	0	-0.522	0.982	0.604	-0.667
Jul-00	0.513	0.602	0.982	0.604	-0.833
Aug-00	2.806	-0.018	0.982	0.604	1.835
Sep-00	0	3.586	0.982	0.604	-3.148
Oct-00	41.439	0.608	0.982	0.604	40.090
Nov-00	14.561	0.019	0.982	0.604	13.568
Dec-00	2.686	0.891	0.982	0.604	1.166
Jan-01	5.384	-0.422	0.982	0.604	4.657
Feb-01	7.560	0.275	0.982	0.604	6.412
Mar-01	1.254	3.879	0.982	0.604	-2.070

Discussion of table 4.06:

From the table, the average abnormal return before the announcement of the bonus issues is -2.54% indicating that the stocks of SPPL underperformed compared to the GSE index.

The announcement period also recorded a negative abnormal return of -3.15 percent.

The stocks however recorded an average abnormal return of 10.64% after the announcement thus indicating a better performance of the SPPL stocks against the market index.

Table 4.07 ABL – Abnormal Returns on Stock Prices

Month	ABL Return	GSE Return	α	β	μ
Jul-00	12.732	0.602	1.877	0.805	10.371
Aug-00	2.538	-0.018	1.877	0.805	0.675
Sep-00	0.557	3.586	1.877	0.805	-4.206
Oct-00	0.382	0.634	1.877	0.805	-2.006
Nov-00	0.417	-0.007	1.877	0.805	-1.454
Dec-00	0.000	0.891	1.877	0.805	-2.594
Jan-01	-4.875	-0.422	1.877	0.805	-6.413
Feb-01	-1.549	0.275	1.877	0.805	-3.647
Mar-01	6.780	3.879	1.877	0.805	1.780
Apr-01	0.000	0.201	1.877	0.805	-2.039
May-01	0.000	-0.051	1.877	0.805	-1.836
Jun-01	0.000	1.364	1.877	0.805	-2.975

Jul-01	0.000	3.579	1.877	0.805	-4.758
Aug-01	0.000	0.859	1.877	0.805	-2.568
Sep-01	-28.704	0.388	1.877	0.805	-30.893
Oct-01	-28.757	0.697	1.877	0.805	-31.195
Nov-01	0.000	-0.153	1.877	0.805	-1.754
Dec-01	0.000	-0.039	1.877	0.805	-1.845
Jan-02	0.000	-0.181	1.877	0.805	-1.731

Discussion of table 4.07:

The stocks of ABL recorded an average abnormal return of -1.2%, -4.76% and -11.70% before, during and after the bonus issue announcement indicating an under performance of the stocks of ABL compared to the GSE All share index

CUMULATIVE AVERAGE ABNORMAL RETURNS OF STOCKS OF COMPANIES

The cumulative average abnormal returns has been calculated for the 12 months preceding the corporate action and 6 months after the event.

Table 4.08 COMPANIES CUMULATIVE AVERAGE ABNORMAL RETURNS

ABNORMAL RETURNS						Cumulative Average
Month Relative to Announcement Date	GBL	ALW	SPPL	ABL	Average	
-12	-3.852	-9.122	-2.307	10.371	-1.227	-1.227
-11	-3.190	-4.777	-0.348	0.675	-1.910	-3.137
-10	-2.660	-4.988	-0.203	-4.206	-3.014	-6.151
-9	1.144	-3.254	-16.747	-2.006	-5.216	-11.367
-8	1.377	-3.231	-0.824	-1.454	-1.033	-12.400
-7	1.875	-2.883	-1.192	-2.594	-1.199	-13.599
-6	4.586	-3.676	-1.979	-6.413	-1.870	-15.469
-5	-0.225	-4.044	-6.267	-3.647	-3.546	-19.014
-4	-0.955	-4.982	-0.996	1.780	-1.288	-20.303
-3	1.474	-10.808	-0.667	-2.039	-3.010	-23.313
-2	-0.961	0.781	-0.833	-1.836	-0.712	-24.025
-1	1.209	-2.369	1.835	-2.975	-0.575	-24.600
0	1.469	-4.224	-3.148	-4.758	-2.665	-27.265
1	1.258	-3.814	40.090	-2.568	8.742	-18.524
2	1.584	-10.933	13.568	-30.893	-6.669	-25.192
3	1.083	26.158	1.166	-31.195	-0.697	-25.890
4	1.349	24.186	4.657	-1.754	7.109	-18.780
5	0.565	-2.395	6.412	-1.845	0.684	-18.096
6	-0.257	5.441	-2.070	-1.731	0.346	-17.750

4.5 ANALYSIS OF DIVIDENT ANNOUCEMENT

TABLE 4.10: COMPUTATION OF STOCK AND MARKET RETURNS

DATE	SG-SSB(%)	BAT (%)	ALW(%)	GSE (%)	DATE	CAL (%)	GSE (%)
Jan-03	2.920	0.721	-0.386	196.185	Jan-05	1.746	-0.508
Feb-03	2.450	9.253	-4.587	3.189	Feb-05	0.000	-0.508
Mar-03	35.373	0.045	10.026	8.929	Mar-05	0.000	-3.564
Apr-03	16.977	16.591	6.610	7.910	Apr-05	-1.357	-4.135
May-03	5.615	28.840	-3.030	5.624	May-05	-4.587	-3.807
Jun-03	3.398	14.977	0.000	8.413	Jun-05	0.000	-1.029
Jul-03	0.987	0.647	0.000	12.119	Jul-05	-12.318	-11.503
Aug-03	3.545	5.276	0.000	10.223	Aug-05	-25.776	-8.560
Sep-03	13.570	21.162	-0.385	7.046	Sep-05	-3.967	0.507
Oct-03	64.961	16.439	0.386	7.273	Oct-05	0.000	0.085
Nov-03	26.292	5.387	0.000	9.490	Nov-05	-1.667	0.063
Dec-03	12.242	38.707	0.000	11.894	Dec-05	-9.813	-2.237
Jan-04	-0.689	37.257	0.000	6.821	Jan-06	-0.856	-1.329
Feb-04	1.887	8.551	-3.958	13.452	Feb-06	-10.353	0.276
Mar-04	21.657	3.325	73.970	26.783	Mar-06	8.131	0.403
Apr-04	16.001	15.579	78.491	18.529	Apr-06	13.791	0.461
May-04	7.058	5.420	4.785	8.224	May-06	0.117	0.518
Jun-04	2.630	0.010	-0.985	3.287	Jun-06	0.000	1.013
Jul-04	0.682	-0.020	-1.802	1.833	Jul-06	0.000	0.180
Aug-04	-7.272	-2.274	-8.829	9.148	Aug-06	-1.352	0.734
Sep-04	2.155	2.321	-9.754	-8.424	Sep-06	-4.799	0.877

Oct-04	-10.230	-0.493	0.000	-1.312	Oct-06	-1.305	0.461
Nov-04	0.000	-0.793	0.000	-2.257	Nov-06	0.132	0.575
Dec-04	0.000	0.000	0.000	-0.867	Dec-06	14.173	0.354
Jan-05	0.000	-4.296	0.000	1.130	Jan-07	7.152	0.170
Feb-05	0.000	-32.150	-24.917	-0.469	Feb-07	-2.918	0.479
Mar-05	-3.086	-10.000	-17.910	-3.602	Mar-07	1.376	0.625
Apr-05	-4.459	-0.684	1.435	-4.135	Apr-07	12.973	1.234
May-05	0.000	0.688	0.000	-3.807	May-07	6.044	0.579
Jun-05	-11.538	-1.709	-18.485	-1.029	Jun-07	2.000	1.963
Jul-05	-58.739	-9.565	-1.890	-11.503	Jul-07	15.106	1.625
Aug-05	-14.833	-11.304	0.000	-8.560	Aug-07	9.612	1.688
Sep-05	1.203	-15.185	0.000	0.507	Sep-07	1.794	3.512
Oct-05	0.000	1.899	-3.329	0.085	Oct-07	1.333	2.607
Nov-05	-0.403	6.071	3.538	0.063	Nov-07	0.348	3.022
Dec-05	-7.700	-6.223	-0.077	-1.802	Dec-07	2.541	5.929

Regression Analysis for the Computation of Alpha and Beta Values

COMPANY NAME: SG-SSB

Regression Statistics	
Multiple R	0.131665
R Square	0.017336
Adjusted R Square	-0.01157
Standard Error	18.05593
Observations	36

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	195.5481	195.5481	0.59981	0.444003198
Residual	34	11084.57	326.0167		
Total	35	11280.12			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	2.749443	3.126822	0.879309	0.385406
X Variable 1	0.071655	0.092521	0.774474	0.444003

Discussions of results of regression

The GSE-All Share index (market) explains 1.7% change in the stock returns of SG-SSB. The significant level is 44.4 percent which is above the 5 percent p-value hence the 1.7 percent change in SG-SSB stock return explained by the market is insignificant and can be attributed to chance.

The alpha and beta values for SG-SSB are 2.749 and 0.072 respectively. Both the alpha value and beta value have a level of significant above the 5percent p-value hence are both insignificant in explaining any change in SG-SSB returns.

COMPANY NAME: **BAT**

<i>Regression Statistics</i>	
Multiple R	0.07086291
R Square	0.00502155
Adjusted R Square	-0.0242425
Standard Error	13.8469986
Observations	36

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	32.90141	32.90141	0.171594	0.681300436
Residual	34	6519.139	191.7394		
Total	35	6552.04			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	3.74329678	2.397943	1.561045	0.127774
X Variable 1	0.02939206	0.070954	0.41424	0.6813

Discussion of results of regression

With an R square of 0.005, the market explains only .5% change in the stock returns of BAT.

Since the above 68.13 percent significant level is more than the 5 percent p-value, the 0.5% change in BAT's returns explained by the market is insignificant and can be attributed to chance.

The alpha value is 3.743 and beta value is 0.029 with a level of significant of 12.8% and 68.13 % respectively. These values are above the 5% p-value hence are insignificant in explaining any change in BAT's stock returns.

COMPANY CODE: ALW

<i>Regression Statistics</i>	
Multiple R	0.126745041
R Square	0.016064305
Adjusted R Square	-0.01287498
Standard Error	19.51712206
Observations	36

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	211.449	211.449	0.555104	0.461359282
Residual	34	12951.21	380.9181		
Total	35	13162.66			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.508331745	3.379862	0.44627	0.658231
X Variable 1	0.07451189	0.100009	0.745053	0.461359

Discussion of results of regression

The market accounts for 1.6% change in the returns of Aluworks. The analysis of variance resulted in a significant level of 46.13% which is insignificant in explaining the 1.6% change in Aluworks returns.

The alpha and beta values for Aluworks are 1.508 and 0.075 respectively. With 65.8%, which is far above the p-value of 5 percent, Aluworks alpha value is insignificant in determining its stock return. The beta value also has a significant level of 46.1 percent which is also above the 5 percent p-value hence insignificant in explaining the stock’s returns.

COMPANY CODE: CAL

<i>Regression Statistics</i>	
Multiple R	0.59615111
R Square	0.35539614
Adjusted R Square	0.3364372
Standard Error	6.37371864
Observations	36

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	761.5256	761.5256	18.74557	0.000124707
Residual	34	1381.226	40.62429		
Total	35	2142.751			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.78318064	1.064583	0.735669	0.466977
X Variable 1	1.5053123	0.347678	4.329616	0.000125

Discussion of results of regression

The market explains 35.5 percent of CAL’s stock return. This analysis shows a zero percent significant level which is far below the 5 percent p-value hence CAL’s stock return explained by the market is significant and cannot be attributed to chance.

The alpha value and beta value are 0.7831 and 1.505 respectively. Since the alpha value is 46.7 percent and well above the 5 percent p-value, it is insignificant in explaining any change in CAL’s stock return. The beta value of 1.505 is however significant with a zero percent significant level which falls below the 5 % p-value.

Alpha(α) and Beta(β) Values of Stocks

	SG-SSB	BAT	ALW	CAL
Alpha Value (α)	2.749	3.743	1.508	.783
Beta Value (β)	0.072	0.0294	0.0745	1.505

COMPUTATION OF ABNORMAL RETURNS OF STOCK

Table 4.10 SSG SSB - Abnormal Returns On Stock Prices

MONTH	STOCK RETURN	GSE RETURN	α	β	μ
Mar-04	21.657	26.783	2.749	0.0717	16.988
Apr-04	16.001	18.529	2.749	0.0717	11.924
May-04	7.058	8.224	2.749	0.0717	3.719
Jun-04	2.630	3.287	2.749	0.0717	-0.355
Jul-04	0.682	1.833	2.749	0.0717	-2.198
Aug-04	-7.272	9.148	2.749	0.0717	-10.677
Sep-04	2.155	-8.424	2.749	0.0717	0.010
Oct-04	-10.230	-1.312	2.749	0.0717	-12.885
Nov-04	0.000	-2.257	2.749	0.0717	-2.587
Dec-04	0.000	-0.867	2.749	0.0717	-2.687
Jan-05	0.000	1.130	2.749	0.0717	-2.830
Feb-05	0.000	-0.469	2.749	0.0717	-2.715
Mar-05	-3.086	-3.602	2.749	0.0717	-5.577
Apr-05	-4.459	-4.135	2.749	0.0717	-6.911
May-05	0.000	-3.807	2.749	0.0717	-2.476
Jun-05	-11.538	-1.029	2.749	0.0717	-14.214
Jul-05	-58.739	-11.503	2.749	0.0717	-60.663
Aug-05	-14.833	-8.560	2.749	0.0717	-16.968
Sep-05	1.203	0.507	2.749	0.0717	-1.583

Discussion of table 4.10:

The stocks of SG-SSB recorded an average abnormal return of -0.36%, -5.58% and -17.14% before, within and after the announcement of the dividend indicating that the returns on the stocks of SG-SSB was less than the average returns on the stock market.

Table 4.11 BAT - Abnormal Returns On Stock Prices

MONTH	BAT RETURN	GSE RETURN	α	β	μ
Jun-04	0.010	3.287	3.743	0.029	-3.828
Jul-04	-0.020	1.833	3.743	0.029	-3.816
Aug-04	-2.274	9.148	3.743	0.029	-6.282
Sep-04	2.321	-8.424	3.743	0.029	-1.178
Oct-04	-0.493	-1.312	3.743	0.029	-4.198
Nov-04	-0.793	-2.257	3.743	0.029	-4.470
Dec-04	0.000	-0.867	3.743	0.029	-3.718
Jan-05	-4.296	1.130	3.743	0.029	-8.071
Feb-05	-32.150	-0.469	3.743	0.029	-35.880
Mar-05	-10.000	-3.602	3.743	0.029	-13.639
Apr-05	-0.684	-4.135	3.743	0.029	-4.307
May-05	0.688	-3.807	3.743	0.029	-2.944
Jun-05	-1.709	-1.029	3.743	0.029	-5.423
Jul-05	-9.565	-11.503	3.743	0.029	-12.975
Aug-05	-11.304	-8.560	3.743	0.029	-14.799
Sep-05	-15.185	0.507	3.743	0.029	-18.943
Oct-05	1.899	0.085	3.743	0.029	-1.846
Nov-05	6.071	0.063	3.743	0.029	2.326
Dec-05	-6.223	-1.802	3.743	0.029	-9.913

Discussion of table 4.11: The stocks of BAT recorded negative average abnormal returns within the three periods under discussion indicating that the stocks return of BAT were on average less than the average returns on the GSE-All share index.

Table 4.12 ALW - Abnormal Returns On Stock Prices

MONTH	STOCK RETURN	GSE- INDEX RETURN	α	β	μ
Apr-04	78.491	18.529	1.508	0.075	75.593
May-04	4.785	8.224	1.508	0.075	2.660
Jun-04	-0.985	3.287	1.508	0.075	-2.739
Jul-04	-1.802	1.833	1.508	0.075	-3.448
Aug-04	-8.829	9.148	1.508	0.075	-11.023
Sep-04	-9.754	-8.424	1.508	0.075	-10.630
Oct-04	0.000	-1.312	1.508	0.075	-1.410
Nov-04	0.000	-2.257	1.508	0.075	-1.339
Dec-04	0.000	-0.867	1.508	0.075	-1.443
Jan-05	0.000	1.130	1.508	0.075	-1.593
Feb-05	-24.917	-0.469	1.508	0.075	-26.389
Mar-05	-17.910	-3.602	1.508	0.075	-19.148
Apr-05	1.435	-4.135	1.508	0.075	0.237
May-05	0.000	-3.807	1.508	0.075	-1.222
Jun-05	-18.485	-1.029	1.508	0.075	-19.916
Jul-05	-1.890	-11.503	1.508	0.075	-2.535
Aug-05	0.000	-8.560	1.508	0.075	-0.866
Sep-05	0.000	0.507	1.508	0.075	-1.546
Oct-05	-3.329	0.085	1.508	0.075	-4.843

Discussion of table 4.12:

The average abnormal returns on the stocks of ALW before the announcement of the dividends was -0.08 % thus indicating that the returns on the stocks was slightly lower than the average returns on the stock market in general represented by the returns on the GSE index.

However, a positive abnormal returns of 0.24 percent was recorded within the announcement period meaning that the returns on the stocks of ALW was higher than the normal returns on the market represented by the returns on the GSE.

ALW stock returns however, dipped compared to the returns of the market with average abnormal returns of -5.15%.

Table 4.13 CAL - Abnormal Returns On Stock Prices

MONTH	STOCK RETURN	GSE- INDEX RETURN	α	β	μ
Mar-06	0.081	0.403	0.783	1.505	-1.308
Apr-06	0.138	0.461	0.783	1.505	-1.340
May-06	0.001	0.518	0.783	1.505	-1.561
Jun-06	0.000	1.013	0.783	1.505	-2.308
Jul-06	0.000	0.180	0.783	1.505	-1.054
Aug-06	-0.014	0.734	0.783	1.505	-1.902
Sep-06	-0.048	0.877	0.783	1.505	-2.151
Oct-06	-0.013	0.461	0.783	1.505	-1.490
Nov-06	0.001	0.575	0.783	1.505	-1.648
Dec-06	0.142	0.354	0.783	1.505	-1.174
Jan-07	0.072	0.170	0.783	1.505	-0.968
Feb-07	-0.029	0.479	0.783	1.505	-1.534
Mar-07	0.014	0.625	0.783	1.505	-1.709

Apr-07	0.130	1.234	0.783	1.505	-2.511
May-07	0.060	0.579	0.783	1.505	-1.594
Jun-07	0.020	1.963	0.783	1.505	-3.718
Jul-07	0.151	1.625	0.783	1.505	-3.078
Aug-07	0.096	1.688	0.783	1.505	-3.227
Sep-07	0.018	3.512	0.783	1.505	-6.051

Discussion of table 4.13: From the table, the average abnormal returns recorded for the stocks of stocks of CAL were negative before, within and after the announcement indicating that the returns on the stocks of CAL underperformed compared to the returns on the general market index.

Table 4.14 COMPANIES CUMULATIVE AVERAGE ABNORMAL RETURNS

Month Relative to Announcement Date	ABNORMAL RETURNS					Cumulative Average
	SG SSB	BAT	ALW	CAL	Average	
-12	16.988	-3.828	75.593	-1.308	21.861	21.861
-11	11.924	-3.816	2.660	-1.340	2.357	24.218
-10	3.719	-6.282	-2.739	-1.561	-1.716	22.502
-9	-0.355	-1.178	-3.448	-2.308	-1.822	20.680
-8	-2.198	-4.198	-11.023	-1.054	-4.618	16.062
-7	-10.677	-4.470	-10.630	-1.902	-6.920	9.142
-6	0.010	-3.718	-1.410	-2.151	-1.817	7.325
-5	-12.885	-8.071	-1.339	-1.490	-5.946	1.379
-4	-2.587	-35.880	-1.443	-1.648	-10.389	-9.010

-3	-2.687	-13.639	-1.593	-1.174	-4.773	-13.784
-2	-2.830	-4.307	-26.389	-0.968	-8.624	-22.407
-1	-2.715	-2.944	-19.148	-1.534	-6.585	-28.992
0	-5.577	-5.423	0.237	-1.709	-3.118	-32.111
1	-6.911	-12.975	-1.222	-2.511	-5.905	-38.015
2	-2.476	-14.799	-19.916	-1.594	-9.696	-47.712
3	-14.214	-18.943	-2.535	-3.718	-9.852	-57.564
4	-60.663	-1.846	-0.866	-3.078	-16.613	-74.177
5	-16.968	2.326	-1.546	-3.227	-4.854	-79.031
6	-1.583	-9.913	-4.843	-6.051	-5.597	-84.628

4.6 ANALYSIS OF RIGHTS ISSUES

The table below shows the monthly returns on the stocks of ABL, MLC and the GSE All share index which are computed from the monthly share prices and index figures show in Appendix one.

TABLE 4.15 MONTHLY STOCK RETURNS AND GSE INDEX RETURNS

ACCRA BREWERY LTD			MECHANICAL LLOYD LTD		
DATE	ABL	GSE	DATE	MLC	GSE
Jan-99	-5.412	6.125	Jan-03	0.741	2.844
Feb-99	-0.518	0.289	Feb-03	0.792	3.189
Mar-99	-11.607	-5.316	Mar-03	3.843	8.929
Apr-99	-4.545	-1.330	Apr-03	9.270	7.910
May-99	-3.704	-0.479	May-03	13.678	5.624

Jun-99	-5.769	-2.287	Jun-03	27.415	8.413
Jul-99	-2.041	-1.079	Jul-03	3.603	12.119
Aug-99	-28.910	-0.754	Aug-03	28.564	10.223
Sep-99	-6.583	-1.945	Sep-03	4.038	7.046
Oct-99	-0.154	-1.050	Oct-03	4.792	7.273
Nov-99	5.762	-1.290	Nov-03	0.258	9.490
Dec-99	7.937	-1.493	Dec-03	3.647	11.894
Jan-00	2.402	-0.261	Jan-04	6.012	6.821
Feb-00	1.059	0.347	Feb-04	10.565	13.452
Mar-00	2.280	1.651	Mar-04	42.230	26.783
Apr-00	4.466	8.749	Apr-04	130.259	18.529
May-00	5.255	0.024	May-04	18.804	8.224
Jun-00	1.726	-0.522	Jun-04	0.000	3.287
Jul-00	12.732	0.602	Jul-04	0.000	1.833
Aug-00	2.538	-0.018	Aug-04	86.600	9.148
Sep-00	0.557	3.586	Sep-04	-46.410	-8.424
Oct-00	0.382	0.608	Oct-04	0.000	-1.312
Nov-00	0.417	0.019	Nov-04	0.000	-2.257
Dec-00	0.000	0.891	Dec-04	0.000	-0.867
Jan-01	-4.875	-0.422	Jan-05	0.000	1.130
Feb-01	-1.549	0.275	Feb-05	-2.151	-0.508
Mar-01	6.780	3.879	Mar-05	-1.099	-3.564
Apr-01	0.000	0.000	Apr-05	-6.154	-4.135

Regression Analysis for the Computation of Alpha and Beta Values

COMPANY CODE: ABL

Regression Statistics	
Multiple R	0.287209829
R Square	0.082489486
Adjusted R Square	0.04720062
Standard Error	7.273311968
Observations	28

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	123.6589	123.6589	2.33755	0.138364284
Residual	26	1375.428	52.90107		
Total	27	1499.087			

	Coefficients	Standard Error	t Stat	P-value
Intercept	-1.01676081	1.384475	-0.7344	0.469276
X Variable 1	0.806192626	0.527301	1.528905	0.138364

Discussion of regression analysis

The GSE-All Share index (market) explains 8.2% change in the stock returns of ABL. The level of significance is 13.84 percent which is more than the p-value of 5 percent which indicates that the 8.2 percent change in ABL returns explained by the market is insignificant and can be attributed to chance.

Again, the alpha and beta values of ABL are -1.017 and 0.806 respectively. With 46.9 percent, which is far above the p-value of 5 percent, ABL's alpha value is insignificant in determining its stock return.

Similarly, the beta value has a significant level of 13.8 percent which is also more than the 5 percent p-value hence insignificant in explaining any change in the stock's return.

Regression Statistics	
Multiple R	0.63702567
R Square	0.4058017
Adjusted R Square	0.38294792
Standard Error	24.7298568
Observations	28

ANOVA

	df	SS	MS	F	Significance F
Regression	1	10859.23	10859.23	17.75644	0.000267165
Residual	26	15900.71	611.5658		
Total	27	26759.94			

	Coefficients	Standard Error	t Stat	P-value
Intercept	-3.7572635	6.002898	-0.62591	0.536831
X Variable 1	2.72546727	0.64679	4.213839	0.000267

Discussion of regression analysis

The R square value is 0.405 which means that the market explains 40.5 percent change in the returns of MLC stocks. The analysis of variance results in a level of significant of zero percent which is far below the 5% p-value and therefore the 40.5% change in MLC stock's return explained by the market is significant and cannot be attributed to chance.

The alpha and beta values of the stock are -3.757 and 2.725 respectively. Since the alpha value is 5.7 percent and well above the 5 percent p-value, it is insignificant in explaining any change in the returns of MLC. The beta value of 2.73 is however significant with a zero percent significant level which falls below the p-value of 5 percent.

Alpha(α) and Beta(β) Values of Stocks

	ABL	MLC
Alpha Value (α)	-1.017	-3.756
Beta Value (β)	0.806	2.725

COMPUTATION OF ABNORMAL RETURNS ON STOCK PRICES

Table 4.16 and 4.17 below shows the computation of the abnormal returns on the stocks of ABL and MLC

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Table 4.16 ABL - Abnormal Returns On Stock Prices

MONTH	ABL RETURN	GSE RETURN	α	β	μ
Oct-99	-0.154	-1.050	-1.017	0.806	1.709
Nov-99	5.762	-1.290	-1.017	0.806	7.819
Dec-99	7.937	-1.493	-1.017	0.806	10.158
Jan-00	2.402	-0.261	-1.017	0.806	3.630
Feb-00	1.059	0.347	-1.017	0.806	1.796
Mar-00	2.280	1.651	-1.017	0.806	1.966
Apr-00	4.466	8.749	-1.017	0.806	-1.569
May-00	5.255	0.024	-1.017	0.806	6.253
Jun-00	1.726	-0.522	-1.017	0.806	3.163
Jul-00	12.732	0.602	-1.017	0.806	13.265
Aug-00	2.538	-0.018	-1.017	0.806	3.569
Sep-00	0.557	3.586	-1.017	0.806	-1.316

Oct-00	0.382	0.608	-1.017	0.806	0.909
Nov-00	0.417	0.019	-1.017	0.806	1.419
Dec-00	0.000	0.891	-1.017	0.806	0.299
Jan-01	-4.875	-0.422	-1.017	0.806	-3.518
Feb-01	-1.549	0.275	-1.017	0.806	-0.754
Mar-01	6.780	3.879	-1.017	0.806	4.670
Apr-01	0.000	0.000	-1.017	0.806	1.017

Discussion of table 4.16: The average abnormal returns for the stocks of ABL before, within and after the corporate actions are 4.20%, 0.90% and 0.52% respectively.

This means that the returns on the stocks of ABL were performing better than the average returns on GSE All share index.

Table 4.17 MLC - Abnormal Returns On Stock Prices

MONTH	MLC RETURN	GSE RETURN	α	β	μ
Oct-99	0.048	7.273	-3.757	2.725	-16.013
Nov-99	0.003	9.490	-3.757	2.725	-22.100
Dec-99	0.036	11.894	-3.757	2.725	-28.617
Jan-00	0.060	6.821	-3.757	2.725	-14.770
Feb-00	0.106	13.452	-3.757	2.725	-32.795
Mar-00	0.422	26.783	-3.757	2.725	-68.804
Apr-00	1.303	18.529	-3.757	2.725	-45.432
May-00	0.188	8.224	-3.757	2.725	-18.465

Jun-00	0.000	3.287	-3.757	2.725	-5.201
Jul-00	0.000	1.833	-3.757	2.725	-1.237
Aug-00	0.866	9.148	-3.757	2.725	-20.306
Sep-00	-0.464	-8.424	-3.757	2.725	26.249
Oct-00	0.000	-1.312	-3.757	2.725	7.331
Nov-00	0.000	-2.257	-3.757	2.725	9.907
Dec-00	0.000	-0.867	-3.757	2.725	6.119
Jan-01	0.000	1.130	-3.757	2.725	0.677
Feb-01	-0.022	-0.508	-3.757	2.725	5.121
Mar-01	-0.011	-3.564	-3.757	2.725	13.457
Apr-01	-0.062	-4.135	-3.757	2.725	14.964

Discussion of table 4.17: An average abnormal return of -20.6 percent was recorded on the stocks of MLC before the corporate action event indicating an under performance of the stocks of MLC compared to the market's returns.

However, the stocks recorded an average abnormal return of 7.33% within the announcement period and 8.37% after the announcement of the rights issues indicating a better performance of the stocks of MLC than the average returns of market index.

COMPANIES CUMULATIVE AVERAGE ABNORMAL RETURNS

The table below shows the cumulative average abnormal return for the two companies involved in the rights issues.

Table 4.18 CUMULATIVE AVERAGE ABNORMAL RETURNS OF STOCKS

Month Relative to Announcement Date	Abnormal returns			Cumulative Average
	ABL	MLC	Average	
-12	1.709	-16.013	-7.152	-7.152
-11	7.819	-22.100	-7.140	-14.293
-10	10.158	-28.617	-9.229	-23.522
-9	3.630	-14.770	-5.570	-29.092
-8	1.796	-32.795	-15.500	-44.592
-7	1.966	-68.804	-33.419	-78.011
-6	-1.569	-45.432	-23.501	-101.511
-5	6.253	-18.465	-6.106	-107.618
-4	3.163	-5.201	-1.019	-108.636
-3	13.265	-1.237	6.014	-102.623
-2	3.569	-20.306	-8.368	-110.991
-1	-1.316	26.249	12.466	-98.524
0	0.909	7.331	4.120	-94.404
1	1.419	9.907	5.663	-88.741
2	0.299	6.119	3.209	-85.532
3	-3.518	0.677	-1.421	-86.953
4	-0.754	5.121	2.184	-84.769
5	4.670	13.457	9.064	-75.706
6	1.017	14.964	7.990	-67.715

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides summary results obtained from this study which analyzed the impact of some corporate actions namely bonus issues, rights issues and dividend announcement on share price behavior at the Ghana Stock Exchange.

The chapter also presents some conclusions on the results and the relevant recommendations.

5.2 Summary of Findings

5.2.1 Bonus Issues and Share Price Reaction

Table 5.0

Period	Average Abnormal Returns				Average
	GBL	ALW	SPPL	ABL	
Pre-Announcement	-0.015	-4.446	-2.544	-1.195	-2.050
Announcement	1.469	-4.224	-3.148	-4.758	-2.665
Post Announcement	0.931	6.440	10.637	-11.665	1.586

From Table 5.0 abnormal returns for the four companies analyzed averaged at -2.665 per cent at the announcement period. This means that the announcement of the bonus issue did not result in a positive share price movement.

Before the announcement of the bonus issue, abnormal returns for the four companies averaged at -2.050 percent indicating a negative trend in share price movement even before the announcement.

An average abnormal return of 1.586 percent also characterized the post announcement period which affirms that the announcement of the corporate action have a positive influence on the shares of the companies that undertook the corporate action.

5.2.2 Rights Issues and Share Price Reaction

<u>Average Abnormal Returns</u>			
Period	ABL	MLC	Average
Pre-Announcement	4.203	-20.624	-8.210
Announcement	0.909	7.331	4.120
Post Announcement	0.522	8.374	4.448

Before the announcement of the rights issues, the calculated average abnormal returns of the two companies were -8.21 percent.

Following the announcement and post announcement period, the abnormal returns calculated for the two companies averaged 4.120 percent and 4.448 percent respectively.

Thus both the announcement and post announcement period witness a positive influence on share price movement.

5.2.3 Dividend announcement and Share Price Reaction

Dividend

<u>Average Abnormal Returns</u>					
Period	SG SSB	BAT	ALW	CAL	Average
Pre-Announcement	-0.358	-7.694	-0.076	-1.536	-2.416
Announcement	-5.577	-5.423	0.237	-1.709	-3.118
Post Announcement	-17.136	-9.358	-5.155	-3.363	-8.753

The abnormal returns for the four companies studied averaged -3.118 percent despite the announcement of the dividend by the companies. This means that the announcement of the dividend by the companies did not have any positive influences on the share prices.

The pre announcement averaged abnormal returns calculated for the four companies was -2.416 percent and the averaged post announcement return was -8.753 percent.

Thus it can be said that dividend announcement did not result in any positive share price movement.

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5.3 CONCLUSION

The event study methodology was employed to investigate the stock price behavior in response to the announcement of three major corporate actions (Bonus Issues, Dividends, and Rights Issues) at the Ghana Stock Exchange.

The study has revealed that bonus issues and rights issues resulted in a positive share price reaction after the announcement.

The announcement of dividends however results in a negative share price movement.

5.4 RECOMMENDATION

Since corporate actions can have significant impact on the profitability of a firm, it is important for the Ghana Stock Exchange to improve upon the processing and management of such events.

Companies due to undertake a corporate action on the floor of the exchange should ensure that shareholders are duly notified of the events as well as the ramification of such events explained to them. Further, there should be a lot of feasibility studies on the general market conditions before embarking on any corporate action.

I will also recommend for the automation of corporate action processing on the stock exchange.

Thus there should be a Corporate Action Management System which should automate the routing of corporate actions messages within an organization and the Ghana Stock Exchange to ensure that events are responded to in an efficient and time responsive manner.



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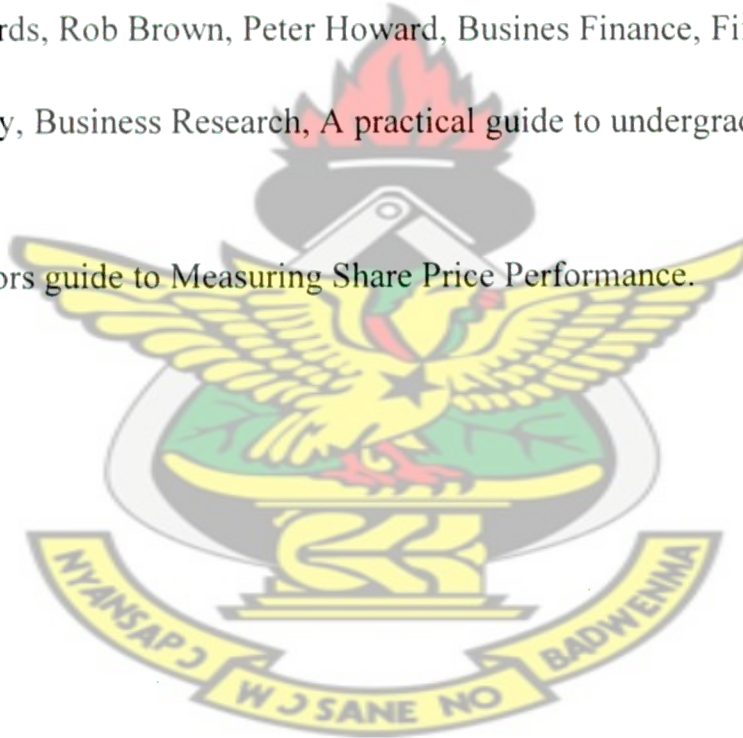
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APPENDIX

MONTHLY STOCK PRICES AND GSE ALL SHARE INDEX FIGURES

BONUS ISSUES ANALYSIS

STOCK PRICES					STOCK PRICE		GSE INDEX
DATE	GBL	ALW	SPPL	GSE INDEX	DATE	ABL	
Jan-99	1897	2,809	251	878.49	Jan-00	465	739.43
Feb-99	1718	2,642	247	881.03	Feb-00	470	742.00
Mar-99	1946	2,771	244	834.19	Mar-00	481	754.25
Apr-99	1928	2,800	244	823.10	Apr-00	502	820.24
May-99	1900	2,800	244	819.16	May-00	529	820.44
Jun-99	1891	2,767	239	800.43	Jun-00	538	816.15
Jul-99	1848	2,600	204	791.79	Jul-00	606	821.06
Aug-99	1565	2,563	185	785.82	Aug-00	622	820.92
Sep-99	1638	2,500	180	770.54	Sep-00	625	850.35
Oct-99	1562	2,497	180	762.45	Oct-00	627	855.75
Nov-99	1500	2,490	180	752.61	Nov-00	630	855.68
Dec-99	1450	2,489	150	741.37	Dec-00	630	863.31
Jan-00	1450	2,489	150	739.43	Jan-01	599	859.66
Feb-00	1450	2,489	150	742.00	Feb-01	590	862.02
Mar-00	1450	2,487	150	754.25	Mar-01	630	895.46
Apr-00	1450	2,458	150	820.24	Apr-01	630	897.26
May-00	1429	2,571	150	820.44	May-01	630	896.80
Jun-00	1400	2,600	150	816.15	Jun-01	630	909.03
Jul-00	1400	2,600	151	821.06	Jul-01	630	941.57
Aug-00	1369	2,600	155	820.92	Aug-01	630	949.65
Sep-00	1350	2,477	155	850.35	Sep-01	449	953.34
Oct-00	1350	3,230	219	855.52	Oct-01	320	959.99
Nov-00	1350	4,135	251	855.68	Nov-01	320	958.52
Dec-00	1350	4,217	258	863.31	Dec-01	320	958.14
Jan-01	1350	4,597	272	859.66	Jan-02	320	956.41
Feb-01	1350	5,104	292	862.02	Feb-02	320	963.84
Mar-01	1321	6883	296	895.46	Mar-02	322	996.03
Apr-01	1300				Apr-02	326	1,026.31

**MONTHLY STOCK PRICES AND GSE ALL SHARE INDEX FIGURES
DIVIDENT ANNOUCEMENT ANALYSIS**

STOCK PRICES

STOCK PRICE

DATE	SG -SSB	BAT	ALW	GSE INDEX	DATE	CAL	GSE INDEX
Jan-03	4,086	1,008	3,686	1,416.82	Jan-05	3,400	6,855.63
Feb-03	4,186	1,102	3,517	1,462.01	Feb-05	3,400	6,820.77
Mar-03	5,666	1,102	3,869	1,592.55	Mar-05	3,400	6,577.69
Apr-03	6,628	1,285	4,125	1,718.51	Apr-05	3,354	6,305.70
May-03	7,000	1,655	4,000	1,815.16	May-05	3,200	6,065.66
Jun-03	7,238	1,903	4,000	1,967.87	Jun-05	3,200	6,003.22
Jul-03	7,310	1,916	4,000	2,206.35	Jul-05	2,806	5,312.69
Aug-03	7,569	2,017	4,000	2,431.90	Aug-05	2,083	4,857.90
Sep-03	8,596	2,443	3,985	2,603.26	Sep-05	2,000	4,882.52
Oct-03	14,180	2,845	4,000	2,792.59	Oct-05	2,000	4,886.67
Nov-03	17,908	2,998	4,000	3,057.60	Nov-05	1,967	4,889.77
Dec-03	20,100	4,159	4,000	3,421.2577	Dec-05	1,774	4,780.39
Jan-04	19,962	5,709	4,000	3,654.62	Jan-06	1,759	4,716.88
Feb-04	20,338	6,197	3,842	4,146.25	Feb-06	1,576	4,729.91
Mar-04	24,743	6,403	6,683	5,256.73	Mar-06	1,705	4,748.98
Apr-04	28,702	7,400	11,929	6,230.76	Apr-06	1,940	4,770.89
May-04	30,728	7,801	12,500	6,743.18	May-06	1,942	4,795.59
Jun-04	31,536	7,802	12,377	6,964.84	Jun-06	1,942	4,844.19
Jul-04	31,751	7,800	12,154	7,092.48	Jul-06	1,942	4,852.93
Aug-04	29,442	7,623	11,081	7,741.31	Aug-06	1,916	4,888.56
Sep-04	30,077	7,800	10,000	7,089.17	Sep-06	1,824	4,931.44
Oct-04	27,000	7,762	10,000	6,996.18	Oct-06	1,800	4,954.16
Nov-04	27,000	7,700	10,000	6,838.28	Nov-06	1,802	4,982.67
Dec-04	27,000	7,700	10,000	6,779.01	Dec-06	2,058	5,000.32
Jan-05	27,000	7,369	10,000	6,855.63	Jan-07	2,205	5,008.84
Feb-05	27,000	5,000	7,508	6,823.45	Feb-07	2,141	5,032.86
Mar-05	26,167	4,500	6,164	6,577.69	Mar-07	2,170	5,064.29
Apr-05	25,000	4,469	6,252	6,305.70	Apr-07	2,452	5,126.80
May-05	25,000	4,500	6,252	6,065.66	May-07	2,600	5,156.48
Jun-05	22,115	4,423	5,096	6,003.22	Jun-07	2,652	5,257.70
Jul-05	9,125	4,000	5,000	5,312.69	Jul-07	3,052	5,343.17
Aug-05	7,772	3,548	5,000	4,857.90	Aug-07	3,346	5,433.33
Sep-05	7,865	3,009	5,000	4,882.52	Sep-07	3,406	5,624.17
Oct-05	7,865	3,066	4,834	4,886.67	Oct-07	3,494	5,770.80
Nov-05	7,833	3,252	5,005	4,889.77	Nov-07	3,824	5,945.21
Dec-05	7230	3050	5001	4801.64	Dec-07	3,854	6,297.71

MONTHLY STOCK PRICES AND GSE ALL SHARE INDEX
FIGURES
RIGHTS ISSUES ANALYSIS

DATE	MLC	GSE INDEX	DATE	ABL	GSE
Jan-03	272	1416.82	Jan-99	804	878.49
Feb-03	274	1462.01	Feb-99	800	881.03
Mar-03	285	1592.55	Mar-99	707	834.19
Apr-03	311	1718.51	Apr-99	675	823.10
May-03	354	1815.16	May-99	650	819.16
Jun-03	450	1967.87	Jun-99	613	800.43
Jul-03	467	2206.35	Jul-99	600	791.79
Aug-03	600	2431.90	Aug-99	427	785.82
Sep-03	624	2603.26	Sep-99	398	770.54
Oct-03	654	2792.59	Oct-99	398	762.45
Nov-03	656	3057.60	Nov-99	421	752.61
Dec-03	680	3421.26	Dec-99	454	741.37
Jan-04	721	3654.62	Jan-00	465	739.43
Feb-04	797	4146.25	Feb-00	470	742.00
Mar-04	1133	5256.73	Mar-00	481	754.25
Apr-04	2609	6230.76	Apr-00	502	820.24
May-04	3100	6743.18	May-00	529	820.44
Jun-04	3100	6964.84	Jun-00	538	816.15
Jul-04	3100	7092.48	Jul-00	606	821.06
Aug-04	5785	7741.31	Aug-00	622	820.92
Sep-04	3100	7089.17	Sep-00	625	850.35
Oct-04	3100	6996.18	Oct-00	627	855.52
Nov-04	3100	6838.28	Nov-00	630	855.68
Dec-04	3100	6779.01	Dec-00	630	863.31
Jan-05	3100	6855.63	Jan-01	599	859.66
Feb-05	3033	6820.77	Feb-01	590	862.02
Mar-05	3000	6577.69	Mar-01	630	895.46
Apr-05	2815	6305.70	Apr-01	630	897.26
May-05	2700	6065.65679	May-01	630	896.8
Jun-05	2700	6003.219785	Jun-01	630	909.03