CHRISTIAN SERVICE UNIVERSITY COLLEGE

THE INFLUENCE OF ACCOUNTING RESULTS ON SHARE PRICES OF COMPANIES LISTED ON THE GHANA STOCK EXCHANGE

BY
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NOBIS

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Dissertation submitted to the Department of Accounting and Finance, of the School of Business, Christian Service University College, in partial fulfillment of the requirements for the award of the Master of Science Degree in Accounting and Finance

JUNE, 2018

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

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Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the Christian Service University College.

ABSTRACT

The objective of this study is to examine the influence of accounting results on the share price of firms listed on Ghana Stock Exchange. Specifically, it is to investigate whether there are positive and significant correlations between earnings per share, dividend per share and price earnings ratio on one hand and share prices on the other hand in the context of the Ghanaian stock market. Publicly listed firms were selected from GSE on year to year basis for the analysis covering a period of ten years (i.e. 2006-2015). As a results, forty-one (41) different listed firms were selected covering the periods of 2006 to 2015. The study made use of unbalanced panel data to examine the correlation between earnings per share, dividend per share and price earnings ratio and share prices. The study used multiple regression model and regressed the share prices of the companies against selected variables (EPS, DPS, and P/E ratio) to determine the relationship or correlation between them. The results of the study indicate that earning per share and dividend per share have positive and statistically significant effect on the share prices of listed firms on the Ghanaian stock market. However, price earnings ratio was found to be positive correlation but not significant. This indicates that share prices are influenced by accounting results implying that, the annual financial statements issued by the firms listed on the Ghana Stock Exchange are used by the investing public to make investment decisions.

It is hoped that, compliance with International Financial Reporting Standards by listed firms be emphasized by Ghana Stock Exchange as well as the Securities and Exchange Commission to ensure that published financial statements represent faithfully what they purport to represent.

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DEDICATION

To my lovely mother, Madam Grace Duah and my wife Mrs. Abigail Kankam Twumasi, through whose sweat and hard knocks I learned to read and write. Again to all the entire family for their wonderful support and encouragement. Furthermore, to all my teachers, counselors and all who have ever taught me anything right from the beginning. Finally, to all those whose prayer have made what I am.



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Figure 1: Descriptive statistics of dependent and independent variables



CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background of the Study

The finance literature is replete with theories such as Efficient Market Hypothesis Theories, Signaling Models, Pecking Order Theories, Capital Asset Pricing Theories, Arbitrage Pricing Theories, Theories on Dividend Policy, etc. that suggest that share prices change in response to knowledge of a number of variables. Some of such variables includes: earnings, dividends, cash flow projections, net assets, returns on capital employed, debt to equity ratio, etc. and most of these variables are usually reported in the financial statements or are derived from information contained in the financial statements.

There is wide assertion in the finance literature that investment decisions are mostly influenced by corporate financial information released, and that capital market participants tend to follow closely the release of those corporate financial information. (Holthausen and Larcker, 1992; Myring, 2006; Cohen and Lys, 2006; Habib, 2008; Latridis and Valahi, 2008).

Fama (1970) suggested that capital markets may be classified into three forms as follows:

- 1. Weak form efficient markets: where security prices incorporate all relevant historical information.
- 2. Semi-storage-form efficient markets: where security prices reflect all relevant, publicly-available information.

3. Strong-form efficient market: where security prices incorporate all relevant information-public and private.

Financial accounting information can be seen as the outcome of accounting systems that measure and routinely disclose audited, quantitative data concerning the financial position and performance of an enterprise. Audited balance sheets, income statements, and cash-flow statements, along with supporting disclosures, form the foundation of the financial accounting reports to investors and indeed a wide range of accounting information users. Financial accounting information supplies a key quantitative representation of Individual Corporation that supports a wide range of contractual relationships. According to the Accounting Institute of Certified Public Accountants (AICPA. 2005), financial statements must properly reflect the organization's financial and economic reality, so that the users are not induced to take decisions on misleading information. Financial accounting information also enhances the information environment of the reporting entity and those associated with it. The quality of financial disclosure can impact firms' cash flows directly, in addition to influencing the cost of capital at which the cash flows are discounted.

Accounting information, is also critical to the analysis of temporal liquidity positions of equity markets.

Disclosure of accounting information arguably reduces information asymmetries amongst investors (Amihud and Mendelson, 1986). However, there are several disclosing methods available. The choice of the most adequate method depends on the nature and relative importance of the information to be disclosed.

1.2 Statement of the Problem

The daily prices of shares traded on the Ghana Stock Exchange are always made public through television or radio business news and the print media. It is therefore important to find out whether or not the results of performance indicated by the financial statements have any influence or bearing on the prices of the shares.

There are several factors that account for changes in share prices, which are not necessarily linked to performance measured by accounting numbers. The economic principle of supply and demand works in every market. In a situation where more shares or stocks are demanded than can be supplied, prices will most likely increase. Such an increases may not necessarily be as a result of good performance or fundamentals. Increases in share prices may be as a result of perception of good management, dividend announcements by the management of a company etc. Even though share prices are sometimes changed as a result of the information enumerated above, the key question to address is whether share prices change in accordance with the performance of listed companies as reported in their financial statements.

This study is motivated by the desire to determine the usefulness of the information disclosure in the Financial Statement about the firms published performance on companies listed on the Ghana Stock Exchange. This helps in explaining investment decisions and to ascertain whether or not published financial statements do have any influence on the market value of companies listed on the Ghana Stock Exchange. Is it the case that companies listed on the Ghana Stock Exchange publish quarterly financial statements only to satisfy legal and regulatory requirements and that such published financial statements are not used in making investments decisions? Or rather that the

published financial statements are actually used by investors to make various kinds of investment decisions?

Although a number of theories have been put forward in the literature to explain their pervasive presence, dividends, earnings per share and price earnings ratio remain one of the thorniest puzzles in corporate finance. This necessitated the researcher to carry out the study to establish the influence of accounting results (dividend per share, earnings per share and price earnings ratio on share prices of companies listed on Ghana Stock Exchange hence bridge the research gap.

1.3 Objectives of the Study

The general purpose of this study is to determine whether share prices are influenced by disclosure of share prices on companies listed on the Ghana Stock Exchange. Therefore, this study specifically aims to;

- Examine the effect of Dividend per Share (DPS) on share prices on Ghana Stock
 Exchange.
- 2. Determine the impact of EPS between share price and earnings per share in Ghana Stock Exchange.
- Identify the relationship between share price and Price Earnings Ratio on Ghana Stock Exchange.

1.4 Research Questions

The following research questions are to be investigated in this study:

- 1. What impact does dividend per share have on share price in Ghana?
- 2. Can share price be influence by earnings per share in Ghana?

3. What influence do price earnings ratio have on share price in Ghana?

1.5 Significance and Relevance

It will explain whether or not published financial statements have any significance with respect to investment decisions by investors. This study will be of importance to investors who may need to know the effect of dividend policy, earnings per share and price earnings ratio on share prices of companies listed at the Ghana Stock Exchange such that they can be able to make informed investment decisions. Managers will be able to know the information content of dividend policy and hence use dividends to convey important information to shareholders. The research will help in satisfying the shareholders expectations when they learn the relationship between dividend policy, earnings per share and price earnings ratio on share prices.

The research will help the Ghana Stock Exchange and Securities and Exchange Commission (SEC) to adopt different strategy in the country and formulate policies that will help curb exploitation by various companies and protect the public. It will also help the Ghana Stock Exchange and Securities and Exchange Commission (SEC) in formulation of policies that would protect shareholders from exploitation by firm managers by knowing the information content of dividend policies, earnings per share and price earnings ratio and the importance of this information for companies.

The study would be of great importance to scholars who may wish to use its findings as a basis of further research on the subject matter. The research will help them in reviewing literature thereby adding to the existing body of knowledge in the area of the influence of accounting results (dividend per share, earnings per share and price earnings ratio on share prices of companies listed on the Ghana Stock Exchange.

1.6 Scope and Limitation of the Study

In order to achieve the objectives of this study, the scope of the study only focus on the panel data of firms listed on Ghana Stock Exchange (GSE) from the period of 2003 to 2013 and investors due to availability of data.

Panel data was selected in order to minimize the effects of aggregation bias, from aggregating firms into broad groups and also to take explicit account of individual-specific heterogeneity.

The study the Influence of Accounting Results on Share Prices of Companies Listed on the Ghana Stock Exchange is too broad a topic which could not be covered under the limits of this study.

1.7 Organization of the Study

This research work will be organized into five chapters. Chapter one is the introduction and it addresses the following: background, statement of the problem, research questions, and objectives, significance of the research, hypothesis, research methodology and the organization. Chapter two is literature review which includes, introduction, theoretical framework, theories of efficient markets and their implications, evidence of market efficiency, strong form and semi strong form tests, evidence of weak form efficiency from developed market, evidence from emerging stock markets, semi strong form of efficient market hypothesis, evidence of weak form efficiency from less mature emerging markets, behavioural finance theory, accounting results and their influence on share price, earning per share and its influence on share price, dividend and its impact on share price, the effect of price earnings ratio, empirical studies, impact of financing activities on share price, the value relevance of firm's accounting results and summary of the chapter. Chapter three discusses the

methodology of the study and covers issues such as: research design, data type and sources, data collection, data processing and analysis. Chapter four discusses the data analysis and presentation of the findings. The fifth chapter presents the summary, conclusions and recommendations of the study.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is a review of literature of the influence of accounting results on share prices of companies listed on the Ghana Stock Exchange and address the issues to be covered. Some of the variables contained in financial statements identified to have some influence on stock prices include: Earnings per Share (EPS), Dividends per Share (DPS), Net Assets per Share, Debt to Equity, Price/Earnings ratio just to mention a few. This chapter is divided into three sections. Section one is the review of the theoretical framework of the study that discusses share price and market theories. The second section summarizes the justification of the accounting variables to be used as explanatory variables for this study and finally, the third section reviews the empirical evidence of the study.

2.2 Theoretical Framework

A share price is the price of a single share of a company's stock. Share prices in a publicly traded company are determined by market demand and supply. Share price is volatile because it largely depends upon the expectations of buyers and sellers. For the purpose of this study, the share price refers to the price of the stock at December 31, 2007 (closing price). On a long term perspective, the empirical study conducted by O'Hara, Lazdowski, Moldovean & Samuelson (2000) has proven that share price is directly related to the earnings of the firm as well as to the dividend declared by the firm. However, when viewed over short periods, the relationship between share price, earnings and dividends could be irrational.

According to Fama (1991), the movement of share prices in the stock market can be categorized into two main theories namely; the Efficient Market Hypothesis which essentially argue that all information affecting a share price is reflected immediately in its price. The behavioural finance which on the other hand contend that investors are not always rational and that their behaviour affects the share prices. These two theories are thus presented below:

Theory of market efficiency or the Efficient-Market Hypothesis (EMH) asserts that financial markets are 'informationally efficient', or that price on traded assets, for instance Stocks, bonds, or property, already reflect all known information. According to the theory, share prices on the market place react fully and instantaneously to all information available (Fama, 1991). The Efficient-Market Hypothesis (EMH) states that it is impossible to consistently outperform the market by using any information that the market already knows, except through luck. Information or news in the Efficient-Market Hypothesis (EMH) is defined as anything that may affect prices that is not known randomly in the future. However, a number of recent studies challenge this hypothesis by showing that past prices can predict future movements in prices and that investment strategies based on historical returns can generate subsequent risk-adjusted abnormal returns. These trading strategies are based on the notion that markets have a tendency to over react and under react at medium and long run horizons. (Lasfer et al, 2003; Bowman and Iverson, 1998).

According to Lo (1997), the market efficiency hypothesis stipulates that price changes are only expected to result from the arrival of new information. Given that there is no reason to expect new information to be non-random, period-to-period price changes are expected to be random and independent. In other words, they must not be forecast if

they are properly anticipated, i.e. if they fully incorporate the expectations and information of all market participants. It is expected that the more efficient a market, the more random the sequence of its price movements, with the most efficient market being the one in which prices are completely random and unpredictable.

In an efficient market information gathering and information based trading is not profitable as all the available information is already captured in the market prices. This may leave investors with no incentive as to the gathering and analyzing of information, for they begin to realize that market prices are an unbiased estimate of the shares' intrinsic worth (Fama, 1965; Lo 1997). Efficient Market Hypothesis (EMH) asserts that in an efficient market, prices at all times fully reflect all available information that is relevant to their valuation (Fama, 1970). Thus, security prices at any point in time are an unbiased reflection of all available information on the security's expected future cash flow and the risk involved in owning such a security. Fama (1970) classified the information items into three levels depending on how quickly the information is impounded into share prices: (i) weak form Efficient-Market Hypothesis (EMH), (ii) semi strong form Efficient-Market Hypothesis (EMH) and (iii) strong form Efficient-Market Hypothesis (EMH).

Weak form Efficient-Market Hypothesis:

According to Dryden, (1970) Jensen and Bennington (1970) if the market is efficient in the weak form, share prices reflect all past market information; hence information on past prices and trading volumes cannot be used for share valuation. Investigating the presence of any statistically significant dependence or any recognizable trend in share prices changes, is traditionally used to directly test weak form efficiency.

The weak form of the efficient market hypothesis is such in which the present stock price is as a result of all the past information in the history of the market.

ii. Semi strong form efficient-market hypothesis:

A semi strong-form efficient market is a market in which prices fully reflect all publicly available information. This form is concerned with both the speed and accuracy of the market's reaction to information as it becomes available. Event studies that examine how stock prices adjust to specific significant economic events have been used to directly test semi-strong form efficiency. Events normally tested are stock splits, initial public offerings (IPO), company announcements (especially earnings and dividend announcements) and other unexpected economic and other world events. The semi strong form of market efficiency deduces that the share prices reflect all available information both publicly and privately existing, Fama (1970). Various other methods have been employed to test the semi-strong efficiency. Researchers have tested the significance of price to earnings (PIE) and other ratios, the effect of firm size and many other characteristics that can be derived from publicly available information.

iii. Strong form efficient-market hypothesis

The strong form efficiency holds that prices are expected to reflect both public and private information. It seems to be more concerned with the disclosure efficiency of the information market than the pricing efficiency of the securities market. Tests for the strong form efficiency are mainly centered on finding whether any group of investors, especially those who can have access to information otherwise not publicly available, can consistently enjoy abnormal returns. According to Damodaran, (1996) Reilly and Brown (2003) this implies that no one 'having private or public information can out

beat the market, because the market automatically anticipates in an unbiased manner the stock prices and incorporates the effect of all these information on the share prices.

2.2.1. The Theory of Efficient Markets and their Implications

According to Kothari (2001) prices respond immediately to available information and the interest in the precision and speed with which the prices of securities fully reflect all available information. Kim and Shams Uddin (2007), weak form efficiency indicated that excess returns cannot be earned by using investment strategies based on historical shares prices and share prices exhibit no serial dependencies. This implies that future price movement are determined entirely by unexpected information and therefore random. According to Kan and Andreosso (2007), semi strong form efficiency showed that share prices adjust to publically available new information very rapidly and in unbiased fashion, such that no excess returns can be earned by trading on that information. Share prices reflect all information, public and private and no one can earn excess returns in strong form efficiency, Metghlchi (2007).

The above assertions were also supported by Groenewold et al (2003).

2.2.2. Evidence of Market Efficiency

In this section, results of empirical studies on market efficiency are discussed. Although NOBIS it has been noted previously that the forms of market efficiency are in a hierarchy, the discussion of the empirical work would be made in a descending order; strong-form, semi-strong and weak-form efficiency.

2.2.3 Strong-form and Semi-strong form Tests

Studies on the strong form of the Efficient-Market Hypothesis (EMH) have sought to find out whether stock prices fully reflect all available information. For empirical

purposes, the thrust of the research has been to determine whether any groups of investors, analysts or insiders have private information not reflected in stock prices. Earlier studies supported the strong form efficiency (Treynor, 1965; Sharpe, 1966; and Jensen, 1968); the majority of later studies reject the strong form efficiency (Worthington and Higgs, 2006; Dimson and Mussavian, 1998 and Frimpong and Oteng-Abayie, 2007 are examples). The semi-strong literature, on the other hand, examines the degree to which securities prices fully reflect one kind of publicly available information or another. Unlike the strong form of the Efficient-Market Hypothesis (EMH), the developed markets have been found to be reasonably semi-strong efficient. See for example, Ball and Brown, (1968); Fama et al, (1969) and Haugen et al, (1985), although a few other studies, for example, Bernard and Thomas (1990) depart from this conclusion.

2.2.4 Evidence of weak-form Efficiency from Developed Markets

Empirical work on the weak-form of Efficient-Market Hypothesis (EMH) is largely based on the theory of random walk. The random walk theory posits that stock prices actually involve two hypotheses: (1) successive price changes are independent; and (2) the price changes conform to some profitability distribution (see Fama, 1965). However, most of the studies do not report the distribution evidence. Fama (1965) is one of the exceptions in the early literature. An important early evidence of stock market efficiency is Fama (1965). He examined the validity of the independence assumption of the random walk model on the successive daily price changes of the 30 stocks of the Dow-Jones Industrial Average on the New York Stock Exchange from the end of the 1957 to September, 1962. After extensive analysis Fama concluded that: for all tests and or all differencing intervals the amount of dependence in the data seemed to be either extremely slight or else non-existent. Finally, there were some evidence of

bunching of large values in the daily differences but the degree of bunching seemed to be only slightly greater than would be expected in a purely random model. On the basis of all these tests it was concluded that the independence assumption of the random walk model seems to be an adequate description of the reality (Fama, 1965; 90).

However, Rosenberg, Reid & Landstein (1985) depart from the huge support for the efficiency of the U.S. markets. They have concluded that the prices on the New York Stock Exchange (NYSE) can be inefficient. In spite of these exceptions the early literature largely supported weak-form market efficiency on the U.S markets.

Solnik (1973) presents similar evidence for European markets. He found deviations that were slightly more apparent than in the U.S. In more recent works, however daily data on New York Stock Exchange (NYSE) and America Stock Exchanges (AMEX) from the Centre for Research in Security Prices (CRSP) makes it possible to estimate precisely the auto-correlation in daily and weekly returns. This has led to the growth of a new body of literature on volatility and predictability of stock returns. For example, Lo and MacKinlay (1988) find that weekly returns on size-grouped portfolios of New York Stock Exchange (NYSE) stocks show reliable positive autocorrelations. This autocorrelation is stronger for portfolios of small stocks. Fama (1991) suggests that this result may, in part, be due to the non-synchronous trading effect. Conrad and Kaul (1998) examined the auto correlations of Wednesday-to-Wednesday returns for size-based portfolios that trade on both Wednesday. This is to mitigate against the non-synchronous trading problem. But like Lo and MacKinlay (1988), they find positive weekly autocorrelations, and more so for portfolios of small stocks.

2.2.5 Evidence from Emerging Stock Markets

The market efficiency literature on less developed markets also present mixed results as on the mature markets. The majority of the literature is concentrated on weak-form efficiency and less on semi-strong from efficiency, and virtually no evidence on strong-form efficiency, Susmita and Clen (1999).

2.2.5.1 Semi Strong Form of Efficient-Market Hypothesis

Da Costa (1994) investigated stock market overreaction on the Sao Paolo Stock Exchange (Brazil) and found that the stock prices on the market are positively related to their large prices. According to DeBondt and Thaler (1985) overreaction occurs when individuals in revising their beliefs tend to attach greater weight to recent information and less weight to prior information. Overreaction therefore is a manifestation of market inefficiency. With evidence of a weighted index from a sample of 121 securities, Da Costa reports that in contrast to the US evidence, the magnitude of the overreaction effect was more pronounced in Brazil than in the US.

Individual studies on the Malaysian and Hong Kong markets also came to mixed conclusions. Dawson (1981) showed that the Kuala Lumpur Stock Exchange (KLSE) was not efficient in the semi strong form. Dawson (1982) finds similar evidence on the Hong Kong markets.

2.2.5.2 Evidence of Weak-form Efficiency from 'Less mature Emerging

Markets'

Gandhi, Saunders & Woodward (1980) found that, in comparison with the New York Stock Exchange (NYSE), prices and quantities on the Kuwaiti stock market were more volatile. They further observed that there were significant potential gains for Kuwaiti investors and therefore, concluded that the market was inefficient. This conclusion was

challenged by Butler and Malaikah (1992). In a comparative study of 71 securities from Kuwaiti (36) and Saudi Arabia (35) using serial correlation tests, they found that only 13 of the computed serial correlation coefficients from the Kuwaiti market were significant at 95% confidence level. It was also observed that the magnitudes of the coefficients were not large enough to support any profitable mechanical trading rules based on them.

In study of the Nairobi Stock Exchange (NSE), Dickinson and Muragu (1994), using a sample of 30 securities found results that compare quite well with those found in mature markets. At lag they found only one serial correlation coefficient to be statistically significant. They therefore concluded that: "Overall, this study provides evidence that small markets such as the Nairobi Stock Exchange (NSE) provide empirical results consistent with the weak-form efficiency. The evidence holds for the Nairobi Stock Exchange (NSE) irrespective of the prices used in conducting the market study" (Dickinson and Muragu, 1994, pp 148).

This conclusion largely supports Parkinson's (1987) earlier finding on the market that the slight deviations from randomness he found could not be used to derive any profitable trading rules, given the 'practicalities' of the market.

Osei (1998), using the law of one price and the random walk test, established that the Ghana Stock Exchange is 'weak-form' inefficient. Simons and Laryea (2004) examined the efficiency of selected African stock markets using weekly and monthly data series from 1990 to 2003. They employed both non parametric and parametric tests to ascertain weak form efficiency of these markets. Their results indicate that with the exception of South Africa (which exhibits features of weak form efficiency), the stock markets in their sample (Ghana, Mauritius and Egypt) are weak form inefficient. Other recent studies have concluded that the Ghana Stock Exchange is weak form inefficient.

Examples of such studies are: Frimpong and Oteng-Abayie, (2007); Ntim et al, (2007), and Appiah-Kusi and Menyah, (2003) etc.

2.2.6 Behavioural Finance Theory

The assumption that investors are rational and behave in a rational manner is at the core of the Efficient-Market Hypothesis (EMH). Over the years another school of thought has emerged. This school of thought hypothesizes that investors are not always rational and therefore the study of market efficiencies and security pricing should take into account the behaviour of investors. This school of thought has evolved into a branch of finance known as behavioural finance.

According to Sewell (2005), behavioural finance is the study of the influence of psychology on the behavioural of financial practitioners and the study of subsequent effect of markets. Belsky and Gilovich (1999) also defined the term behavioural finance as behavioural economics in that "Behavioural economics combines the twin disciplines of psychology and economics to explain why and how people make seemingly irrational or illogically decisions when they spend, invest, save and borrow. Much of economic and financial theories presume that individuals acts rationally and consider all available information in the investment decision-making process.

2.3 Accounting Results and their Influence on Share Prices (Emperical Studies)

2.3.1 Earnings per Share (EPS) and its influence on Share Prices

In an attempt to include income and equity information in the same measurement, a computation known as Earnings per Share (EPS) has been developed. The mention of EPS immediately comes to mind closely related terms like net profit, profitability, and

outstanding common shares. A firm's profitability takes on additional meaning when the number of shares outstanding is taken into consideration. Thus EPS, together with its changes from period to period, is an important measure of an entity's profitability. The presentation of earnings per share on the face of the income statement is required for enterprises whose ordinary shares or potential ordinary shares are publicly traded and by enterprises that are in the process of issuing shares or potential ordinary shares in the public securities market (Valix and Peralta, 2009). In short, public enterprises are required to present earnings per share. Non-public enterprises are not required to present earnings per share; nevertheless, such enterprises are encouraged to present earnings per share to achieve comparability in financial reporting.

A study involving three financial variables which included EPS was undertaken by O'Hara, et al (2000). Their objective was to find some corporate financial measures that would correlate with share price that on average generates returns higher than the S&P 500 index over an extended period of time. The researchers concluded, among others, that companies which increased their earnings per share on a consistent basis should see a strong positive correlation between earnings per share and share price.

According to the Dechow (1994) earnings displayed a stronger association with returns than the cash flows. Further Dechow proposed that when a firm is experiencing changes in working capital requirement and investing and financing activities, cash flows may have severe matching and timing problems and as such would be less able to reflect performance.

Cheng, Liu & Schaefer (1996) found that both earnings and earning changes are value relevant. They use both levels and changes to investigate the effect of earnings performance on the information content of cash flows. They suggest that market looks to cash flows as an alternative source of information if inadequacies are provided in the

earnings number. A number of studies on the use of accounting data to explain changes in stock prices have been conducted by accounting and finance researchers.

The origin of accounting results impact on stock prices can be found in the seminal work of Ball and Brown (1968). They used net income and earnings per share as proxies for income and concluded that of all the information about an individual firm which becomes available during a year, one half or more is captured in that year's income number as disclosed by the annual income report. The annual income report has a considerable effect on stock prices. It however does not rate highly as a timely media since most of its content (about 85% to 90%) is captured by more prompt media which perhaps include interim reports. Lev (1989) reviewed two decades of empirical research on the usefulness of earnings and earnings research and came to the interesting conclusion that: "while earnings appear to be used by investors the extent of its usefulness is rather limited. This is indicated by the weak and inter-temporally unstable contemporaneous correlation between stock returns and earnings and by the very modest contribution of earnings to the prediction of stock prices and returns' Lev (1989) attributes the weak earnings returns correlation to:

- Low information content (quality) of currently reported earnings and other financial variables. The low information content is probably due to biases induced by accounting measurement and valuation principles and in some cases to manipulation of reported data by managers.
- Methodological shortcomings of the returns/earnings paradigm and
- Investor irrationality (noise trading).

The study then, suggested that capital market research should shift its focus to the examination of the role of accounting measurement rules in asset valuation. Following

from the above conclusion, the present study will ascertain whether earnings, among other accounting results have any significant relationship with stock prices.

Bernard and Thomas (1990) investigated the possibility that stock prices fail to reflect fully the implications of current earnings for future earnings. Specifically, they entertained the hypothesis that prices fail to reflect the extent to which the time-series behavior of earnings deviates from a naive expectation: a seasonal random walk, where expected earnings are simply earnings for the corresponding quarter from the previous year. It is well known that earnings forecast errors based on such a naive model are correlated through time. In contrast, in a market that fully impounds all prior earnings information, forecast errors should not be auto correlated. By assuming that stock prices are at least partially influenced by the above naive earnings expectations, we are able to predict with a significant degree of accuracy the three-day reaction to future earnings announcements (up to four quarters ahead), given only current earnings and information about the (historical) time-series behavior of earnings. In contrast to the welldocumented positive relation between unexpected earnings for quarter t and postannouncement drift for quarter t + 1, the authors found a negative relation between unexpected earnings of quarter t and the abnormal returns around the announcement of earnings for quarter t + 1.

Bernard (1992) reviewed evidence on market efficiency with respect to accounting earnings. His study included evidence indicating that the average initial response to earnings announcements is an under reaction. He also documented that there is evidence that has been interpreted to indicate that extreme stock price movements may represent over reactions to earnings. Myring (2006) asserted that assessing the usefulness of financial information has become the primary goal of accounting research. In his study,

he used earnings-returns relationship to examine the usefulness of earnings in an international setting. Specifically, Myring (2006) examined the monthly market reaction to unexpected earnings defined by both change in earnings per share (CEPS) and analyst forecast errors (AFE). The results of analyses using data from the entire time period pooled by accounting regimes reveal a significant market reaction to the announcement of earnings (either AFE or CEPS) in all regimes. This indicates that investors view accounting information as value relevant and react when earnings do not meet expectations.

In addition, analyst forecast errors appear to have incremental explanatory power over the change in EPS in most regimes. This suggests that investors around the world act efficiently to incorporate analyst earnings forecasts into earnings expectations. Results of the multi-period analysis reveal a trend toward increased significance of the reaction to the earnings release. This implies that in recent years, investors are more likely to react to the release of earnings. In addition, the results suggest that investors are more likely to incorporate analyst forecasts into earnings estimates in recent year.

According to Habib (2008) the Financial Accounting Standards Board (FASB) contends that the primary focus of financial reporting should be on earnings rather than cash flows because 'information about enterprise earnings based on accrual accounting generally provides a better indication of an enterprise's present and continuing ability to generate favourable cash flows than information limited to the financial aspects of cash receipts and payments.' Some accountants believe, however, that cash flows, not earnings are primary source of information that affects the relative market prices of its securities.

Lee (1974) argues that investor's information demand is best served by cash flow analysis because cash portrays the ability of the enterprise to survive, is not contaminated by innumerable measurement problems, and facilitates the prediction of future dividends, credit and loan payments. The results from Habib (2008) provide evidence that both earnings and cash flows are value-relevant in New Zealand. Furthermore, both earnings and cash flows have incremental information content with respect to security returns. This finding could be attributed to the value-enhancing role that dominant owners play in such an environment. This study finds that earnings lose relevance when earnings permanence is incorporated into the regression model. However, there is no corresponding increase in the cash flow variable.

2.3.2 Dividend and its impact on Share Prices

Miller and Modigliani (1961) had long established that the value of firm can be determined by using a number of approaches such as: the discounted cash flow approach, the current earnings plus future investment opportunities approach, the stream of dividends approach and the stream of earnings approach.

Bhattacharya (1979) concluded that the payment of cash dividend functions as a signal of expected cash flow of firms in an imperfect information setting. This then influences holds. In his study however, the incorporation of other sources of information for example accountants report was ignored on the grounds that taken by themselves, they are fundamentally unreliable "screening" mechanism because of the moral hazard involved in communication profitability.

Miller and Rock (1985) intimated that "in a world of rational expectations, the firm's dividend (financial) announcements provide just enough pieces of the firm's sources and uses statement for the market to deduce the unobserved piece, to wit, the firm's

current earnings. The market's estimate of current earnings contributions in turn to estimate of the expected future earnings on which the firm's market value largely hinges.

2.3.3 The Effect of Price Earnings Ratio on Share Price

Researchers have shown that the price earnings ratio of a firm has predicting power over the next period's returns. Basu (1977) tested the claim that low P/E ratio firms tend to outperform those with a high P/E ratio. His research included over 1400 industrial firms that were traded on the NYSE between September 1956 and August 1971. He computed the P/E ratio for each stock by taking the market capitalisation as the numerator, and the denominator was the reported annual earnings before extraordinary items. He formed portfolios of low and high P/E ratios and observed their performance. During the 25 years, the portfolios with low P/E ratios earned higher returns than the high P/E securities. This assertion was also supported by Hirschey and Nofsinger (2010). Basu further interprets the results as not an upfront failure of the efficient market hypothesis. Rather, he explains that P/E ratio information was not fully reflected in security prices in as rapid a manner as demanded by the semi-efficient form of EMH. These lags and frictions are part of market mechanisms. Several studies have been conducted by researchers on the effects of accounting variables on share price. As mentioned earlier, this was originated by Ball and Brown (1968). Below are some of the literatures by other researchers:

Harkavy (1953) investigates the relationship between retained earnings and stock prices. He finds, as of a given of time, there is a propensity for stock prices to differ in a straight line with the ratio of distributed earnings. The results also show that the price

of firm's stock that retained large ratio of its earnings is higher than the price of stock of firm that retained small proportion of its earnings.

Friend and Puckett (1964) distinguish between the effect of dividends and retained earnings on stock prices. The results show that the effect of dividends on stock prices is greater than the effect of retained earnings in several times for three industries which are in contrast with Harkavy (1953). In particular, earnings retention is more important than dividends for growth industries. Therefore, firm's managers should increase dividend payments in order to increase firms' stock prices and encouragement current investors to keep their investments or attracting more investors.

Naamon (1989) investigates the effect of cash dividends and retained earnings on common stock prices in Jordan. The results show a high significant and positive relationship between both cash dividends policy and earnings retention, and stock prices, which is in line with Power and MacDonald (1995). Particularly, the effect of cash dividend on stock prices is higher than the effect of retained earnings, which is consistent with Gordon (1959), Friend and Puckett (1964) while in contrast with Harkavy (1953). In addition, according to the views of both firms' managers and investors, the amount of realized earnings, liquidity and the preferences of investors concerning cash dividends or retained earnings are the most important determinants of dividend policy.

Nishat (1992) makes a comparison between the effect of cash dividends and the retained earnings on stock price. The results show that common stock price affected by cash dividends and retained earnings, which is similar to Naamon (1989) and Power and MacDonald (1995); however, the impact of cash dividends on share price is higher than the effect of earnings retention, which is in line with Gordon (1959), Friend and Puckett (1964) and Naamon (1989) while contradicts with Harkavy (1953).

Power and MacDonald (1995) investigate the effect of dividends and retained earnings on the prices of shares. They find there is a relationship amongst the prices of shares, dividend and retained earnings, which is similar to Harkavy (1953); Gordon (1959); and Friend and Puckett (1964). Pradhan (2003) examines the effect of dividends and retained earnings on stock prices in Nepal. He reaches to results similar to Gordon (1959), Friend and Puckett (1964); Naamon (1989) and Nishat (1992) while contradicts with Harkavy (1953).

Khan (2009) examines the effect of cash dividends and retained earnings on stock price for 96 firms listed on the Dhaka Stock Exchange over the period from 2000 to 2006. The results show that the stock price is affected by both cash dividends and retained earnings, however, the effect of cash dividends is greater than that of retained earnings which is in line with Gordon (1959), Friend and Puckett (1964) and Naamon (1989) while contradicts with Harkavy (1953).

The usefulness of accounting data in business evaluation was, also, evidenced by Ou and Penman (1989b), Ohlson (1989, 1995) and Penman (1996). They explained a company's internal value by using accounting parameters and concluded that they can be used to identify stocks or shares that have not been properly evaluated. They also, expressed the view that the book value and earnings from the primary accounting variables are used to interpret share or stock prices. Their findings are, also, supported by the empirical studies conducted by Lev (1996) and Francis and Schipper (1996), who examined data from the US market during the latest decades. They have also; found that the explanatory power of accounting variables has declined.

On the other hand, Collins, Maydew and Weiss (1997) have expressed the opinion that the combined relevance of earnings and book values is progressively increasing over time. On the contrary, the relevance of extraordinary earnings appears to have

decreased. They used an evaluation framework suggested by Ohlson (1995) which expresses a stock's value as a function of earnings per share and the book value per share. They applied regression analysis on stratification data and used R^2 as a measure of relevance. Their results are supported by the findings of Ely and Waymire (1996) and Francis and Schipper (1996), who concluded that the assumption of the relevance of accounting values could not be rejected. However, Lev (1996) reached entirely different conclusions suggesting that the relevance of earnings has declined over the years. Brown, Lo and Lys (1999) have provided similar evidence and have asserted that results which are contrary drawn by other studies are due to erroneous measurements of the \mathbb{R}^2 .

Finally, Hayn (1995) suggested that small enterprises are more likely to report losses compared with larger enterprises. Therefore, their retention of earnings is less, which according to Ohlson's framework of assessment, leads to an increasing significance of book values in relation to earnings for the assessment of prices. In general, smaller companies are more likely to include other companies the value of which is led by the potential growth of their earnings (e.g. increase of excessive earnings observed in new companies) rather than their realizable earnings.

This way, more emphasis is given on book values when valuation involves small NOBIS businesses. Hayn (1995) and Collins, Pincus & Xie (1999) examined the explanatory power of losses. They found that these are not taken into account by investors as seriously as earnings. Their results are reinforced by the findings of Hayn (1995) who proved that the companies that present negative earnings have lower earnings response factors than those with positive earnings, assuming that this is due to the fact that stock holders always have the option of liquidation.

Similar findings are those of Basu (1997) who found out that bad news have a smaller impact on prices than good news and that if we fail to consider this diversified effect, we may face lower coefficients of determination R^2 . The above suggests that the relevance of extraordinary profits should be reduced. In addition, extraordinary profits presented by companies are likely to be more temporary than main results. Basu, also, proved that the asymmetric response to bad and good news reduces the ability of earnings to interpret various performances. Kang (2003) has also found similar results. On the other hand, Elliot and Douglas (1996) and Hayn (1995) found out that negative profits and extraordinary results can have a negative impact on the relevance of earnings. A decline in the relevance of earnings had been observed lately, as companies show negative profits and extraordinary results more often. The above are in line with the results reached by Barth et al. (1997), Burgsthler & Dichev (1997), and Collins et al. (1997) who suggest that more emphasis needs to be paid on book values compared with earnings when the latter are negative or when part of them are characterised as extraordinary.

With regard to the ability of losses to explain price variations, Barth et al. (1996), Burgstahler and Dichev (1998) and Collins, Pincus and Xie (1997), after using the method of regression analysis on stratification data, report that relevance transfers from earnings to book values when earnings are negative or when companies face financial difficulties.

A different approach was followed by Garcia-Ayuso, Monterry and Pineda (1998), who examined the form of the functional relation between share or stock prices and companies' book values and earnings. They reached the conclusion that there is a convex relationship between share or stock prices and companies' earnings and book values. This relationship depends on the relative prices of earnings and book values

rather than just on the Return On Earning (ROE), as was suggested by Burgsthaler and Dichev (1998). Barth, Beaver and Landsman (1996) showed that the explanatory power of earnings varies depending on acompany's likelihood to declare bankrupt. An interesting essay is that of Canibano, Garcia-Ayuso and Sanchez (1999), who discovered that the amount of a company's intangible assets is associated with the price variation of its stocks.

Finally, Lev (1996) found out that in the case of high-technology businesses, accounting data cannot explain share or stock price variations because the data of these companies change rapidly. Similar results were reached by Lev (1997) and Amir and Lev (1996), who showed that accounting data are of limited importance to investors when the companies under valuation operate in the services or high technology sector, investing in intangible assets such as research and development, human resources and trademark development. Amir and Lev (1996), also, reported that earnings, book values and cash flows are highly irrelevant when the companies under valuation operate in the mobile telephones sector, which are intangible asset-intensive. If the above findings become generalised to other intangible asset-intensive industries, given that the presence of such companies increases every year, we should expect a temporal decline in the relevance of earnings, book values or both.

Collins, Maydew and Weiss (1997) have discovered that the joint explanatory power of earnings and book values has not declined in the last forty years. To the contrary, they asserted that their explanatory power has increased in the same period. This conclusion is reached by several other authors as Barth, Beaver and Landsman (1998) and Keener (2011), while Burgstahler and Dichev (1997) suggested that the function which describes the relationship between share prices and earnings and book values is convex.

Holthausen and Watts (2001) also concluded that earnings and book values do not affect in the same manner share or stock prices. Other studies (Hirschey et al., 2001; Graham et al., 2002) have identified a variety of relationships between the above parameters. Finally, a number of researchers have provided evidence that the effect of earnings and book values on share or stock prices is different for different industries (Hughes, 2000; Boone, 2002; Zhao, 2010) or different countries (Filip and Raffournier, 2010; Alsaman, 2003; Habib, 2004; Goodwin and Ahmed, 2006).

Chandra and Ro (2008) found that the value relevance of earnings and revenues remained constant over time, while Jenkings, Kane and Velury (2009) have proved that future business expectations kept value relevance of earning high. Canibao, Garcia-Ayuso and Rueda (1999) examined accounting data taken from Spanish companies, showing that the joint explanatory power of earnings and book values has not declined in the latest decades. However, their results demonstrated a slight decline in the marginal explanatory power of book values in relation to earnings.

2.4 Impact of Financing Activities on share prices

Bradshaw, Richardson & Sloan (2006) examined the relation between firms' external financing activities, future stock returns, future profitability and analysts' forecasts and provided the following summary: 'the key innovation of our research design is the use of statement of cash flows data to construct a comprehensive and parsimonious measure of the net amount of cash generated by corporate financing activities'. Their primary findings are that there exists a negative and statistically significant relation between net external financing and future stock returns and future profitability and a positive relation with optimism in analysts' forecasts. These results in turn imply that the relevant information in financing activities is that the firm raised (or repaid) funds,

rather than the specific means by which the firm raised (e.g. debt versus equity) or repaid (dividends and stock repurchases versus interest and repayment of debt) funds. The overall results on the relation between external financing and future stock returns and future profitability imply that investors do not correctly infer the negative relation between financing activities and future performance. These findings were confirmed by Cohen and Lys (2006).

Latridis and Valahi (2008) find that financial measures, such as leverage, profitability, liquidity and growth, affect the decision to voluntarily adopt an accounting policy or regulation. Firms may voluntarily abide by an accounting regulation in order to influence their financial performance and suit their corporate plans. For example given that International Accounting Standard (IAS) 1 enhances the quality of financial reporting, firms with higher leverage might be inclined to voluntarily adopt International Accounting Standard (IAS) 1 in order to favorably affect their financial position. Firms that voluntarily disclose in accordance with International Accounting Standard (IAS) 1 generally are firms that perform well and particularly tend to exhibit higher profitability and growth. Such firms tend to provide voluntary accounting disclosures about their financial performance and display high manager's remuneration and stock returns. Also firms that raise equity capital appear to voluntarily adopt International Accounting Standard (IAS) 1.

The study also indicates that large firms, which are more visible in the stock market, voluntarily abide by the reporting requirements of International Accounting Standard (IAS) 1 in order to provide evidence of quality in their reported financial numbers and positively influence investors. Holthausen and Lacker (1992) support the contention of Ou and Penman (1989b) that financial statement items can be combined into one

summary measure to yield insights into the subsequent movement of stock prices. Ou and Penman (1989b) selected the potential financial statement items for their model from a comprehensive set of 68 accounting ratios which texts on fundamental analysis had emphasized prior to the beginning of their sample period. Holthausen and Larcker (1992) dropped 8 of the 68 ratios and used the remaining ratios for their model. Among the ratios used in both studies are the Earning per share, Dividend per share, Net Assets per share, Price earnings ratio, Debt/Equity ratio.

2.5 The Value Relevance of Firms' Accounting Results

For financial information to be value relevant, accounting numbers must be related to current company value. If there is no association between accounting numbers and company value; accounting information cannot be termed relevant, and hence, financial reports are unable to fulfill one of its primary objectives (Baisland, 2009). The construct of value relevance can be defined in a number of ways. According to Sushma Vishnani, Bhupesh Kr. Shah (2008) "Value relevance" implies ability of the financial information contained in the financial statements to explain the stock market measures. Barth, Beaver and Landsman (2001) simply state that, "value relevance research examines the association between accounting amounts and equity market values". Francis and Schipper (1999) defined four following approaches for studying the value relevance of accounting information:

- (a) The Fundamental analysis view of value relevance.
- (b) The Prediction view of value relevance.
- (c) The Information view of value relevance.
- (d) The Measurement view of value relevance.

The first approach to study the value relevance of accounting information is fundamental analysis which ensures determining natural value of corporate shares regardless of the price at which the shares are traded in capital market. According to this approach, accounting information causes change in share price trend in a similar way and with the same direction of market prices through its inherent value. In this approach, it is assumed that the market is not efficient enough, and the value relevance of financial statement content is deduced from measurement of revenues resulted from trading strategies (buying and selling) based on accounting information. Therefore, relying on inefficient market information, investors can attain unusual returns through public accounting information. This issue shows that accounting information is considered relevant only if the portfolio formed by this information creates significant coefficient with unusual returns (Bauman, 1996).

In the second interpretation of value relevance of accounting information which mainly common in fundamental researches field, those values are considered relevant that can be used for upcoming value evaluation of firm and foreseeing returns of the coming years. In this regard, in case financial statement information helps forecasting the inherent value characteristics (which originated from valuing theories), it is considered as relevant values. Consequently, the information that can be used for profit forecast, cash profit of shares and the upcoming cash flows is relevant. Most of the researches conducted in this field, underlie the profit forecasting (Francis and Schipper, 1999).

The third interpretation of the term accounting information is that the information considered as value relevant which is used by investors for share pricing (Francis and Schipper, 1999).

Price-based studies, examines financial statements as brief values that affected the firm up to a specified date. On the other hand, return-based studies, examines accounting

figures capability in control and record of those events which affected the firm within a period (Easton and Somoners, 2002). Given that accounting figures have relevant value only when they are considered relevant by investors in their evaluations of the firm and consider them reliable for reflection in share price, the measurement view to value relevance is considered in this study. Study of value relevance of accounting information with measurement approach does not need efficient background of market. In another way, it is not necessary in such study to assume that the stock market value is real and assessed without any predilection. The sole required background in such researches is that the share price (or share return) reflects the group belief of investors (Gjerde, Kniosfla and Saettem, 2007).

Summarily, Francis and Schipper (1999) offer four interpretations of value relevance. The first interpretation is that financial statement information influences stock prices by capturing intrinsic share values toward which stock prices drift. Under the second interpretation, Francis and Schipper (1999) state that financial information is value relevant if it contains the variables used in a valuation model or assists in predicting those variables while interpretation three and four are based on value relevance as indicated by statistical association between financial information and prices or returns.

2.6 The Conceptual Framework OBIS

Scope

The Framework addresses:

- > The objective of general purpose financial reporting
- > Qualitative characteristics of useful financial information
- Financial statements and the reporting entity

- > The elements of financial statements
- Recognition and derecognition
- > Measurement
- > Presentation and disclosure
- > Concepts of capital and capital maintenance.

2.6.1 The Objective of general purpose financial reporting

The primary users of general purpose financial reporting are present and potential investors, lenders and other creditors, who use that information to make decisions about buying, selling or holding equity or debt instruments, providing or settling loans or other forms of credit, or exercising rights to vote on, or otherwise influence, management's actions that affect the use of the entity's economic resources.

The primary users need information about the resources of the entity not only to assess an entity's prospects for future net cash inflows but also how effectively and efficiently management has discharged their responsibilities to use the entity's existing resources (i.e., stewardship).

The IFRS Framework notes that general purpose financial reports cannot provide all the information that users may need to make economic decisions. They will need to consider pertinent information from other sources as well.

The IFRS Framework notes that other parties, including prudential and market regulators, may find general purpose financial reports useful. However, these are not considered a primary user and general purpose financial reports are not primarily directed to regulators or other parties.

Information about a reporting entity's economic resources, claims, and changes in resources and claims

Economic Resources and Claims

Information about the nature and amounts of a reporting entity's economic resources and claims assists users to assess that entity's financial strengths and weaknesses; to assess liquidity and solvency, and its need and ability to obtain financing. Information about the claims and payment requirements assists users to predict how future cash flows will be distributed among those with a claim on the reporting entity.

A reporting entity's economic resources and claims are reported in the statement of financial position.

Changes in Economic Resources and Claims

Changes in a reporting entity's economic resources and claims result from that entity's performance and from other events or transactions such as issuing debt or equity instruments. Users need to be able to distinguish between both of these changes.

Financial Performance Reflected by Accrual Accounting

Information about a reporting entity's financial performance during a period, representing changes in economic resources and claims other than those obtained directly from investors and creditors, is useful in assessing the entity's past and future ability to generate net cash inflows. Such information may also indicate the extent to which general economic events have changed the entity's ability to generate future cash inflows.

The changes in an entity's economic resources and claims are presented in the statement of comprehensive income.

Financial Performance Reflected by Past Cash Flows

Information about a reporting entity's cash flows during the reporting period also assists users to assess the entity's ability to generate future net cash inflows and to assess management's stewardship of the entity's economic resources. This information indicates how the entity obtains and spends cash, including information about its borrowing and repayment of debt, cash dividends to shareholders, etc. The changes in the entity's cash flows are presented in the statement of cash flows.

Changes in economic resources and claims not resulting from financial

performance

Information about changes in an entity's economic resources and claims resulting from events and transactions other than financial performance, such as the issue of equity instruments or distributions of cash or other assets to shareholders is necessary to complete the picture of the total change in the entity's economic resources and claims. The changes in an entity's economic resources and claims not resulting from financial performance is presented in the statement of changes in equity.

Information about use of the Entity's Economic Resources

Information about the use of the entity's economic resources also indicates how efficiently and effectively the reporting entity's management has used these resources in its stewardship of those resources. Such information is also useful for predicting how efficiently and effectively management will use the entity's economic resources in future periods and, hence, what the prospects for future net cash inflows are.

2.6.2 Qualitative characteristics of useful Financial Information

The qualitative characteristics of useful financial reporting identify the types of information are likely to be most useful to users in making decisions about the reporting

entity on the basis of information in its financial report. The qualitative characteristics apply equally to financial information in general purpose financial reports as well as to financial information provided in other ways.

Financial information is useful when it is relevant and represents faithfully what it purports to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable.

Fundamental Qualitative Characteristics

Relevance and faithful representation are the fundamental qualitative characteristics of useful financial information.

Relevance

Relevant financial information is capable of making a difference in the decisions made by users. Financial information is capable of making a difference in decisions if it has predictive value, confirmatory value, or both. The predictive value and confirmatory value of financial information are interrelated. Materiality is an entity-specific aspect of relevance based on the nature or magnitude (or both) of the items to which the information relates in the context of an individual entity's financial report.

Faithful Representation

General purpose financial reports represent economic phenomena in words and numbers. To be useful, financial information must not only be relevant, it must also represent faithfully the phenomena it purports to represent. Faithful representation means representation of the substance of an economic phenomenon instead of representation of its legal form only. A faithful representation seeks to maximise the underlying characteristics of completeness, neutrality and freedom from error.

A neutral depiction is supported by the exercise of prudence. Prudence is the exercise of caution when making judgements under conditions of uncertainty.

Applying the Fundamental Qualitative Characteristics

Information must be both relevant and faithfully represented if it is to be useful.

Enhancing Qualitative Characteristics

Comparability, verifiability, timeliness and understandability are qualitative characteristics that enhance the usefulness of information that is relevant and faithfully represented.

Comparability

Information about a reporting entity is more useful if it can be compared with a similar information about other entities and with similar information about the same entity for another period or another date. Comparability enables users to identify and understand similarities in, and differences among, items.

Verifiability

Verifiability helps to assure users that information represents faithfully the economic phenomena it purports to represent. Verifiability means that different knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation.

Timeliness

Timeliness means that information is available to decision-makers in time to be capable of influencing their decisions.

Understandability

Classifying, characterizing and presenting information clearly and concisely makes it understandable. While some phenomena are inherently complex and cannot be made easy to understand, to exclude such information would make financial reports incomplete and potentially misleading. Financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyse the information with diligence.

Applying the enhancing Qualitative Characteristics

Enhancing qualitative characteristics should be maximised to the extent necessary. However, enhancing qualitative characteristics (either individually or collectively) cannot render information useful if that information is irrelevant or not represented faithfully.

The Cost Constraint on Useful Financial Reporting

Cost is a pervasive constraint on the information that can be provided by general purpose financial reporting. Reporting such information imposes costs and those costs should be justified by the benefits of reporting that information. The IASB assesses costs and benefits in relation to financial reporting generally, and not solely in relation to individual reporting entities. The IASB will consider whether different sizes of entities and other factors justify different reporting requirements in certain situations.

2.6.3 Financial Statements and the Reporting Entity

Objective and Scope of Financial Statements

The objective of financial statements is to provide information about an entity's assets, liabilities, equity, income and expenses that is useful to financial statements users in assessing the prospects for future net cash inflows to the entity and in assessing

management's stewardship of the entity's resources. This information is provided in the statement of financial position and the statement(s) of financial performance as well as in other statements and notes.

Reporting Period

Financial statements are prepared for a specified period of time and provide comparative information and under certain circumstances forward-looking information.

Perspective adopted in Financial Statements and going Concern Assumption

Financial statements provide information about transactions and other events viewed from the perspective of the reporting entity as a whole and are normally prepared on the assumption that the reporting entity is a going concern and will continue in operation for the foreseeable future.

The reporting entity

A reporting entity is an entity that is required, or chooses, to prepare financial statements. It can be a single entity or a portion of an entity or can comprise more than one entity. A reporting entity is not necessarily a legal entity. Determining the appropriate boundary of a reporting entity is driven by the information needs of the primary users of the reporting entity's financial statements.

Consolidated and unconsolidated financial statements

Generally, consolidated financial statements are more likely to provide useful information to users of financial statements than unconsolidated financial statements.

2.6.4 The elements of financial statements

Financial statements portray the financial effects of transactions and other events by grouping them into broad classes according to their economic characteristics. These broad classes are termed the elements of financial statements.

The elements directly related to financial position (balance sheet) are:

Assets Liabilities Equity

The elements directly related to performance (income statement) are:

Income Expenses

The cash flow statement reflects both income statement elements and some changes in balance sheet elements.

Definitions of the Elements Relating to Financial Position

Asset. An asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.

Liability. A liability is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

Equity. Equity is the residual interest in the assets of the entity after deducting all its liabilities.

Definitions of the Elements Relating to Performance

Income. Income is increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.

Expense. Expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

The definition of income encompasses both revenue and gains. Revenue arises in the course of the ordinary activities of an entity and is referred to by a variety of different names including sales, fees, interest, dividends, royalties and rent. Gains represent other items that meet the definition of income and may or may not, arise in the course of the ordinary activities of an entity. Gains represent increases in economic benefits and as such are no different in nature from revenue. Hence, they are not regarded as constituting a separate element in the IFRS Framework.

The definition of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the entity. Expenses that arise in the course of the ordinary activities of the entity include, for example, cost of sales, wages and depreciation. They usually take the form of an outflow or depletion of assets such as cash and cash equivalents, inventory, property, plant and equipment. Losses represent other items that meet the definition of expenses and may or may not, arise in the course of the ordinary activities of the entity. Losses represent decreases in economic benefits and as such they are no different in nature from other expenses. Hence, they are not regarded as a separate element in this Framework.

2.6.5 Recognition of the elements of financial statements

Recognition is the process of incorporating in the balance sheet or income statement an item that meets the definition of an element and satisfies the following criteria for recognition:

It is probable that any future economic benefit associated with the item will flow to or from the entity; and the item's cost or value can be measured with reliability.

Based on these general criteria:

An asset is recognized in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably.

A liability is recognized in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably.

Income is recognized in the income statement when an increase in future economic benefits related to an increase in an asset or a decrease of a liability has arisen that can be measured reliably. This means, in effect, that recognition of income occurs simultaneously with the recognition of increases in assets or decreases in liabilities (for example, the net increase in assets arising on a sale of goods or services or the decrease in liabilities arising from the waiver of a debt payable).

Expenses are recognized when a decrease in future economic benefits related to a decrease in an asset or an increase of a liability has arisen that can be measured reliably. This means, in effect, that recognition of expenses occurs simultaneously with the recognition of an increase in liabilities or a decrease in assets (for example, the accrual of employee entitlements or the depreciation of equipment).

2.6.6 Measurement of the elements of financial statements

Measurement involves assigning monetary amounts at which the elements of the financial statements are to be recognized and reported. The IFRS Framework acknowledges that a variety of measurement bases are used today to different degrees and in varying combinations in financial statements, including:

- ➤ Historical cost
- Current cost
- > Net realisable (settlement) value
- Present value (discounted)

Historical cost is the measurement basis most commonly used today, but it is usually combined with other measurement bases. The IFRS Framework does not include concepts or principles for selecting which measurement basis should be used for particular elements of financial statements or in particular circumstances. Individual standards and interpretations do provide this guidance, however.

2.7 Summary of Chapter

This present study intends to discover whether or not there is a positive and significant correlation between share price and dividend per share, earnings per share and price earnings ratio in Ghana. Extant literature has been presented on accounting variables that have effect on share prices. In the next chapter, the process of how the prices of selected shares listed on the Ghana Stock Exchange will be observed over a ten-year period from 2003 to 2013 against the annual accounting results recorded over the period spanning from December 31st 2003 to December, 31st 2013. The variables that will be used as a proxy for the accounting results include the following: Earning per share, Dividends per share, Price Earnings ratio. These variables have been chosen because

texts on fundamental analysis have emphasized their usefulness in explaining corporate performance.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter will discuss research approaches, sample and sampling techniques, the techniques for collecting data will also be presented. Finally, the trust worthiness of the research regarding validity and reliability are discussed in this chapter as well.

3.2 Research Design

In this study, the researcher associates with the post positivism paradigm that tends to generate knowledge through figures or quantification. In other words, this paradigm is associated with quantitative research. A choice of cross sectional and time series approach is adopted for this study. The inclusion of time series in this study also looks at drawing data from the sampled population from the period of 2003 to 2013. The use of these approaches would help the researcher to generalize from the study population and make inferences about some attributes of the study population.

3.3 The Population and Sample

3.3.1 The Study Population

The population of the study comprises the entire companies publicly listed on Ghana Stock Exchange between the periods of 2003 to 2013. Currently there are thirty-four (34) companies publicly listed on Ghana Stock Exchange. However, between the periods of 2003 to 2013, forty-one (41) different firms have been listed on Ghana Stock Exchange. The difference is as a results of firms which are no longer listed or currently existed on the Ghana Stock Exchange (GSE).

3.3.2 The Study Sample

Targeted method or remove systematic sampling method was used in this study. A target sample is a sampling technique that involves selecting from a study population using certain criteria. A lot of the listed firms have inadequate data needed for this study and as results only listed firms that fit into the following criteria were selected and used for the study:

- 1. The company has data on earning per share, dividend per share and price earnings ratio from the period of 2003 to 2013.
- 2. The company has more than three years' experience in the stock market.
- 3. The company is a dividend-pay and those not paying cash dividend are excluded.

According to AL-Malkwai (2007) the exclusion of listed companies based on non-dividend paying would lead to a well-known selection bias problem. Moreover, the number of firms that were used to examine whether there is a positive correlation between earnings per share, price earnings ratio and dividend per share were not the same each year. The companies that were entered may leave the sample each year, as a result the number of firms is different from year to year (unbalanced data), and thus there is no survival bias in the data.

Consequently, forty-one (41) different firms were selected for the study covering 2003 to 2013 from the Ghana Stock Exchange. These listed firms were selected from the various sectors of the economy of Ghana, and these are manufacturing and brewery, banking, insurance, mining and petroleum sectors for the period of 2003-2013.

3.4 Instrumentation

Data collection is the means by which the relevant information can be gathered which will be used in answering the research hypothesis. The sources from where the relevant information can be collected are primary and secondary data sources. This study adopted the secondary source of data.

3.4.1 Secondary Data Source

The main source of data used for this study is solely the audited annual financial statements reports of listed companies on the Ghana Stock Exchange (GSE). This panel data method (i.e. listed firms' accounting information, end of year share prices, etc.) used by the researcher for the study was obtained from the Education division of the Ghana Stock Exchange. The desk survey (literature review) forms an essential aspect of the research since it sets the pace for the development of field survey instruments using questionnaires, and interview (Fadhley, 1991). Secondary data will be identified and collected in books, articles, journals and from databases and internet sources.

The secondary data for this research was collected from two sources; mainly internal and external sources. Internal Secondary Sources comprise data published within a company or organization, such as annual reports, information booklets, brochures, magazines, annual dividend reports, financial reports and contract registers. Wahab (1996) described external secondary sources of data gathering as primary literature sources. Accordingly, they are the most accurate sources of information as it publishes original research.

3.5 Research Model and Variables

In the researcher's quest to study whether there is a positive correlation between share prices and earning per share, retained earnings and dividend per share, the researcher developed research models for this study. These regression models developed by the researcher would help increase the accuracy of the correlation between the dependent variable (share price) and the independent variables (earning per share, price earnings ratio and dividend per share). Below is the regression model:

The relationship between Share price and Cash Dividend per share

$$P = \beta 0 + \beta 1 DPS_{it} \tag{1}$$

The relationship between Share price and Earnings per Share

$$P = \beta 0 + \beta 2 EPS_{it} \tag{2}$$

The relationship between Share price and Price earnings ratio

$$P = \beta 0 + \frac{\beta 3 P}{E} \ ratio_{it}$$
 (3)

The equation below represents one multiple regression model. Individually, the variables are expressed in a three single linear regression models as showed above:

$$P_{it} = \beta 0 + \beta 1 DPS_{it} + \beta 2 EPS_{it} + \beta 3 P/E \ ratio_{it} + \varepsilon_{it}$$
 (4)

Where:

 P_{it} = Share price

Bo = Constant or autonomous variable

 DPS_{it} = dividend per share

 EPS_{it} = Earnings per share

P/E Ratio_{it} = Price earnings ratio

 ε_{it} = random variable referred to as the error term.

The model may be considered solely for multiple correlation between the actual and predicted price, in which case no meaning can be given to the regression coefficients. Alternatively, the equation may be read to mean that the coefficients $\beta 1$, $\beta 2$ and $\beta 3$ represent the value the market places on earnings, retained earnings and dividends respectively, a possible objective being the measurement of the relative importance of the three variables.

3.5.1 The Dependent Variable

Share price is the dependent variable used in this study. Share price (pi,t) equals the market value and the exchange value of share (pi) at the time (t) and by the Stock Exchange or the application of information available. In this study, the share price of the sampled companies were attained from 2003-2013 based on the last trading price as at the close 31st December each year.

Share price (P): is the raw share price that is quoted at end of the financial year on the GSE.

3.5.2 Independent Variables Nobles

The independent variables used in the study based upon theoretical and practical considerations includes three (3) variables namely earnings per share, price earnings ratio and dividend per share. These variables were derived and computed from the audited annual financial statements of the sampled companies for the period from 2003 to 2013.

Earnings per Share (EPS)

Earnings per share equals earnings after tax before dividends, divided by the number of shares average of 10 years. EPS is express below:

$$EPS = \frac{Earnings \ after \ Interest \& Tax \ and \ before \ dividend}{No \ of \ shares \ issued} \tag{2}$$

Price Earnings Ratio

To calculate this variable, share price is divided by the earnings per share.

$$PE = \frac{Share\ Price}{Earnings\ per\ share} \tag{3}$$

Where PE = Price earnings.

Dividends per share (DPS)

This variable is computed by dividing dividends paid to ordinary shareholders by number of shares outstanding. Algebraically, this represented as below:

$$DPS = \frac{D}{No.of \ Shares} \tag{4}$$

Where D = Dividends

Table showing variables, their measurement and definitions

Variable	Code	Measurement and Definition			
Earnings per Share	EPS	Earnings after Interest & Tax and before dividend Number of shares issued			
Price Earnings Ratio	PE	Share Price Earnings per share			
Dividends per share	DPS	No. of Shares			

3.6 Procedure for analysing data and testing Hypotheses

This study adopted the use of unbalanced panel data that is cross-sectional and time series in nature in order to examine the empirical correlation between earnings per share, price earnings ratio and dividend per share. Moreover, the correlation coefficients are used to test the strength and the direction of the relationship between variable. Hence, this study adopted t test and F test as a means of checking for significance of the multiple variables. To test for whether the individual variable is significant or not the t test was used. Contrariwise, F test was used to check if the correlation or relationship between the dependent and the set of all independent variables is significant or not. Therefore, this study adopted quantitative methods to examine the relationship between share price, earnings per share, dividend per share and price earnings ratio.

The data gathered in this research was analysed statistically by the use of a computer programme, EViews version 9.0. They were then edited, scored, coded and tabulated using a scoring key prepared by the researcher. Results data of observed samples were analysed using descriptive statistics, namely, mean, standard deviation, minimum and maximum ranges. Multiple regression analysis will be used to find out whether accounting results have influence on the share price of publicly listed firms on Ghana stock exchange (GSE) using earning per share (EPS), price earnings ratio (P/E Ratio) and dividend per share (DPS) as variables.

3.7 Procedure for Testing Hypotheses in the study

The table below indicates how each hypothesis will be tested:

Table 3.3: Procedure for Testing Hypotheses in the study

NULL	DEPENDENT	INDEPENDENT	STATISTICAL	
HYPOTHESIS	VARIABLES	VARIABLES	ANALYSIS	
H01:	Share Price	Dividend per	Multiple	
There is no positive		share	regression analysis	
and significant			will be used to	
correlation between		3/3	find out whether	
share price and			accounting results	
dividend per share of			have influence on	
	(C) (A)		the share price of	
firms listed on Ghana			publicly listed	
Stock Exchange.	100		firms on Ghana	
H02:	Share Price	Earnings per share	stock exchange	
There is no positive			(GSE) using EPS,	
and significant			E/P Ratio and DPS	
correlation between		July	as variables. In	
share price and	Non		addition, f test is	
earning per share of	NOBI		used as a means of	
firms listed on Ghana			checking for	
Stock Exchange.			significance of the	

H03:	Share Price	Price earnings	multiple variables	
		ratio	and test to test for	
There is no significant			whether the	
correlation between			whether the	
share price and price			individual variable	
siure price and price			is significant or	
earnings ratio of firms				
listed on Ghana Stock			not.	
Exchange.				
Exchange.		14		

Source: Author's own.

3.8 Summary of Chapter

In this chapter, the researcher has examined the research paradigm relating to this study. Discussions behind the use of the methodology were given as this study is quantitative in nature. The researcher study population for this study is Ghana Stock exchange. A targeted method of remove approach was used to select from the list of firms. As a results, forty-one (41) firms were selected based on the criteria set by the researcher.

In the next chapter, the researcher would look at the results of the analysis of the panel data used a primary data for this study.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter offers findings in relating to the research hypothesis. The findings were obtained from the panel data presented in frequency tables. The previous chapter discussed the means of ascertaining the data used for the study. This chapter discusses the analysis of data collected. The data for the analysis were obtained from the Educational division of the Ghana Stock Exchange and financial statements of publicly listed firms on the Stock Exchange in Ghana. This study aimed to examine whether there is a positive correlation between share price, earnings per share, dividend per share and price earnings ratio. Each hypothesis is evaluated based on the data available on the listed firms. This section is categorized into two sections.

In the first section of this chapter, descriptive statistics was used to analyse the data gathered on the publicly listed firms used for this study that are presented in tables and text forms. And the second part also lends itself to inference statistics.

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4.2 Descriptive Statistics of Data

Table 4.1: Descriptive Statistics of dependent and independent variables

	N	Minimum	Maximum	Mean	Std. Deviation
Share Price	204	0.03	45.48	3.362	7.924
Dividends per Share	204	0.001	3.050	0.134	0.362
Earnings per Shares	204	-0.009	10.403	0.323	0.968
Price Earnings Ratio	204	0.05	693.00	21.1375	52.325
Valid N (list wise)	204				

Table 4.1 and figure 1 presents the minimum, maximum, mean and standard deviation of all variables utilized in the analysis of the correlation between share prices, dividends per share, earnings per share, and price earnings ratio. From Table 4.1 and figure 1, the first explanatory variable is dividends per share. Its value ranges from a minimum of 0.0003 to a maximum of 3.0500. This means that some firms paid smaller dividends whiles some firms pay a huge amount of cash dividends. Dividend per share has mean value equal to 0.1338, and a standard deviation equal to 0.3622, implying that high variations in terms of cash dividends per share on the market across the period of the study (i.e. from 2003-2013).

Earnings per share is the second independent variable used in this study. Its values varies from -0.0087 to 10.4034; indicating that some firms suffer from losses and did not earn profit at all, while some firms earned a large amount of earnings. Its mean is 0.323, indicating that each share has, (on average) a little amount earnings or profit, and a standard deviation is 0.968, suggesting high variations among firms listed on the Ghana Stock Exchange over the period of study.

Price earnings ratio is the third predictor variable used in the study. It ranges from 0.05, signifying high risk of shares, expectation of low dividends and low expectation of growth; to 693.00, an indication of that some of the firms' share have low risk, expectation of dividend is high and some firms are expected to achieve growth while paying out a high proportion of their income. In fact, P/E ratio is a measure of investors esteem for its company. It has a mean of 21.1375 and a standard deviation of equal to 52.3251 suggesting a high variation amongst firms under study.

The outcome or dependent variable in this study is share price at the close of the financial year. Share price values ranges from the minimum of 0.3, which denotes that some firms have share price less than its par value, to the maximum of 45.48, with its mean equal to 3.3617, suggesting that the firms listed on the Ghana Stock Exchange have a greater than the face values and standard deviation measuring 7.9240, representing very high variations amongst listed firms listed on the Ghana Stock Exchange in terms of closing prices of their shares.

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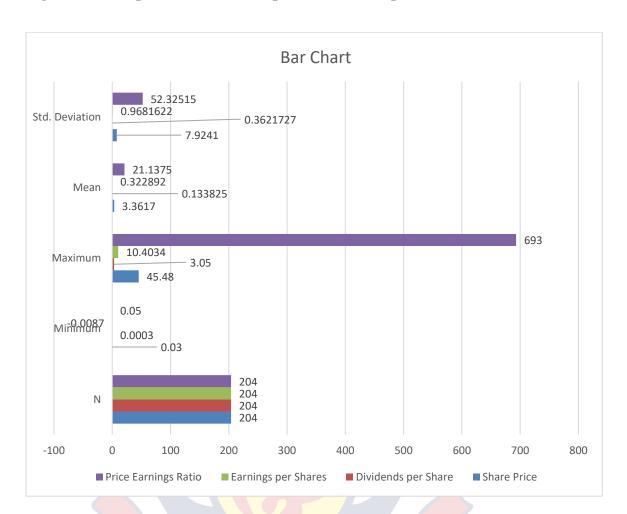


Figure 1: Descriptive Statistics of dependent and independent variables

4.3 Hypotheses Testing

Before proceeding to discuss the testing of hypothesis, the correlation coefficients between the predictor variables will be presented to show the strength and the direction of the relationship between any pair of predictor / explanatory variables, as well as the dependent / outcome variable.

Table 4.2: Correlations Coefficients of dependent and independent variables

	-				Price
		Share	Dividend	Earnings	Earnings
		Price	per Share	per Shares	Ratio
Share Price	Pearson Correlation	1	0.695**	0.765**	-0.024
	Sig. (2-tailed)		0.000	0.000	0.737
	N	204	204	204	204
Dividend per Share	Pearson Correlation	0.695**	1	0.453**	-0.043
	Sig. (2-tailed)	0.000		0.000	0.544
	N	204	204	204	204
Earnings per Shares	Pearson Correlation	0.765**	0.453**	1	-0.070
	Sig. (2-tailed)	0.000	0.000		0.321
	N	204	204	204	204
Price Earnings Ratio	Pearson Correlation	-0.024	-0.043	-0.070	1
	Sig. (2-tailed)	0.737	0.544	0.321	
	N	204	204	204	204

^{**.} Correlation is significant at the 0.01 level (2-tailed).

From table 4.2 are displayed the Pearson correlation coefficients between the variables used in this study. From the table 4.2, one would notice that the correlation coefficient between the share price of firms at the closing price and dividends per share is 0.695**, which denotes a strongly positive and highly significant. That is, the higher the dividend per share, the higher the closing price of the firm's share and the lower the dividend per share, the lower the closing price of the firm's share.

The highest correlation is 0.765 between share price at closing price and earning per share. This confirms the studies done by other researchers on the effect of cash dividend on the share price at the close of financial year. (Naamon, 1989; Nishat, 1992; Power and MacDonald, 1995; Pradhan, 2003; Khan, 2009, Troudi & Milhem, 2013).

To be able to test this hypothesis and the rest of the hypothesis, the following multiple regression model is adopted.

$$P_{it} = \beta 0 + \beta 1 DPS_{it} + \beta 2 EPS_{it} + \beta 3 P/E \ ratio_{it} + \varepsilon_{it}$$
 (1)

Where:

P_{it} = Share price at the end of the financial year

 DPS_{it} = Dividend per share

 EPS_{it} = Earnings per share

P/E Ratio_{it} = Price earnings ratio

 ε_{it} = random variable referred to as the error term.

4.3.1 Hypothesis One

H01: There is no positive and significant correlation between share price and dividend per share of firms listed on Ghana Stock Exchange.

Hypothesis one was tested using regression analysis to examine whether there is a

positive and significant correlation between share price and dividend per share.

The results of the correlation between the independent variable (dividend per share) and the dependent variable (share price) in model 1 are depicted in Table 4.3.

Table 4.3: Regression Coefficients of explanatory variable (dividend per share)^a

Unstandardized Standardized					95.0% Confidence			
		Coefficients		Coefficients			Interval for B	
			Std.			_	Lower	Upper
Model		В	Error	Beta	t	Sig.	Bound	Bound
1	(Constant)	1.174	0.402		2.919	0.004	0.381	1.967
	Dividend per Share	9.604	0.887	0.439	10.829	0.000	7.855	11.353

N = 204.a. Dependent Variable: Share Price

From table 4.3, it can be seen that, dividend per share has a significant value of 0.000 associated with the *t* test for dividend per share. As a results, the correlation between dividend per share and share price is positive and significant, suggesting that the dividend per share might lead to an increase in the price of shares of the firms. The slope coefficient of this variable is 9.604, implying that a 1-unit increase in the dividends per share would have an increase of 9.604 units in the closing price of the listed firms' share, cetaris parisbus. Consequently, for firms listed on Ghana Stock Exchange, the higher the dividend per share, the higher the share price at the closing price of the firms' share and the vice versa. The result of this study is in line with other studies conducted by the following researchers. (Naamon, 1989; Nishat, 1992; Power

and MacDonald, 1995; Pradhan, 2003; Khan, 2009, Troudi & Milhem, 2013). These researchers found out that there is a positive correlation between dividend per share and share at the closing price.

Therefore, the result of the coefficient of the dividend per share as identified in Table 4.3 supports H1 hypothesis. Normally, the higher the dividend per share, the higher the share price and the lower the dividend per share the lower the share price at the end of the financial year. As a result, based on the discussion above regarding the correlation between the dividend per share and the closing price of the firm's share, the following hypothesis can be formulated.

4.3.2 Hypothesis Two

H02: There is no positive and significant correlation between share price and earning per share of firms listed on Ghana Stock Exchange.

The second hypothesis was tested using regression analysis to examine whether there is a positive and significant correlation between share price and earnings per share. The results of hypothesis two is depicted in table 4.4.

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Table 4.4: Regression Coefficients of explanatory variables (earnings per share)^a

		Unstand	dardized	Standardized		_	95.0% Co	nfidence
Coefficients		Coefficients	fficients		Interval for B			
			Std.			-	Lower	Upper
Model		В	Error	Beta	t	Sig.	Bound	Bound
2	(Constant)	1.174	0.402		2.919	0.004	0.381	1.967
	Earnings per Shares	4.652	0.332	0.568	13.999	0.000	3.997	5.307

N = 204.a. Dependent Variable: Share Price

Table 4.4 indicate that there is significant value associated with the t test for earnings per share of 0.000 that is a p>0.01. Therefore, there is a positive and highly significant correlation between share price and earnings per share. Thus in the Ghana Stock Exchange, the lower the earnings per share, the lower the closing prices at the share of listed firms.

The slope coefficient of this variable is 4.652 which indicate a higher and a larger NOBIS significant. Earnings per share has the highest value in terms of *t* test value among all the variables. This means that earnings per share have more effect on the closing price of shares of listed firms in the Ghana Stock Exchange.

The results of this study are consistent with studies conducted by Pan (2007), Salih (2010), Gordon (1959) and Troudi & Milhem (2013). These researchers discovered that there is a positive correlation between earnings per share and share price. Therefore, table 4.4 which shows the results of the coefficient of earnings per share supports the

H2 hypothesis which states that there is a positive correlation between share price and earning per share of firms listed on Ghana Stock Exchange.

4.3.3 Hypothesis Three

H03: There is no significant correlation between share price and price earnings ratio of firms listed on Ghana Stock Exchange.

Table 4.5: Regression Coefficients of explanatory variables^a

		Unstand	dardized	Standardized			95.0% Co	nfidence
		Coeff	icients	Coefficients			Interval	for B
		_	Std.			-	Lower	Upper
Model		В	Error	Beta	t	Sig.	Bound	Bound
3	(Constant)	1.174	0.402		2.919	0.004	0.381	1.967
	Price Earnings Ratio	0.005	0.005	0.035	0.960	0.338	-0.006	0.016

N = 204.a. Dependent Variable: Share Price

Table 4.5 shows that there is a significant value associated with *t* test for the price NOBIS earnings ratio of 0.338. One can conclude that the correlation between price earnings ratio is positive but not significant, suggesting that the higher the price earnings ratio might not show a higher closing price of share of firms than firms with lower price earnings ratio listed on the Ghana Stock Exchange. The *t* value of price earnings ratio of 0.960 is the smallest among the other variables. Therefore, the results of the coefficient of price earnings ratio for the table 4.5 does not support H3 hypothesis.

Therefore, we accept the null hypothesis that *H03* which states that there is no significant correlation between share price and price earnings ratio of firms listed on Ghana Stock Exchange.

4.4 Estimated Regression Equation

The correlation between the share price of listed firms at the close of financial year and all the set if independent/explanatory/predictor variables is provided by the following estimated regression equation.

$$P = 1.174 + 9.604 DPS + 4.652 EPS + .005 PE$$
 (5)

Table 4.6: Model Summary of Equation (4)

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
4	0.860^{a}	0.739	0.735	4.07994

a. Predictors: (Constant), Price Earnings Ratio, Dividend per Share, Earnings per Shares

Table 4.4 reports how strong the multiple independent variables are related to the dependent variable with $R = 0.860^a$. Thus a good level of prediction. The model has a high explanatory power as the adjusted R^2 is 73.9 meaning nearly 74% of the variability in the share price of listed firms can be explained by the linear relationship between (earning per share, dividend per share, and price earnings ratio) as predictor/independent variables and the share price of listed firms as dependent variable. Whereas 26% of the variability in the share price of the listed firms are caused by factors not included in the estimated model.

4.5 Testing for Overall Significance

To test for the overall significant of the results, F test can be used to check for significant value association. The F test also known as (the overall significance) was also used to determine whether a significant correlation exist between the dependent variable and all the set of independent variables. Table 4.5 depicts the ANOVA of the model developed in this study.

Table 4.7: ANOVA^b for Equation (1)

		Sum of				
Mod	el	Squares	Df	Mean Square	F	Sig.
4	Regression	9417.465	3	3139.155	188.584	0.000^{a}
	Residual	3329.188	200	16.646		
	Total	12746.653	203			

a. Predictors: (Constant), Price Earnings Ratio, Dividend per Share, Earnings per Shares

b. Dependent Variable: Share Price

From table 4.5 shows a p value less than 0.05 and 0.01 (p>0.05, 0.01). Thus, the probability of the F statistics (F-Statistics = 0.000) indicate that the explanatory variables in the model are jointly significant at the one percent (1%) level of significance. This imply that even though one of the explanatory variables namely price earnings ratio on its own may not be significantly explain price variations, however, all of them put together are significantly in explaining changes in prices of shares.

4.6 Discussion of Findings

The study established that accounting variables used in this model (EPS, DPS and PE ratio) have joint significance in explaining share prices. Two out of three independent variables namely dividend per share and earning per share, individually are significant in explaining share prices. These two variables also have a positive correlation with share prices. However, P/E ratio, has a positive correlation with prices even though it is not significant in explaining share prices. This may imply that investors may be using these variables for some other reasons other than determining share prices. The study thus finds that share prices are influence by accounting results.

Therefore, the null hypotheses, H0₁ and H0₂ are rejected which are that:

- 1. There is no positive and significant correlation between share price and dividend per share of firms listed on Ghana Stock Exchange.
- 2. There is no positive and significant correlation between share prices and earnings per share of firms listed on Ghana Stock Exchange.

Instead, the alternative hypotheses, H0₁ and H0₂ are accepted. Thus:

- 1. There is positive and significant correlation between share price and dividend per share of firms listed on Ghana Stock Exchange.
- 2. There is positive and significant correlation between share prices and earnings per share of firms listed on Ghana Stock Exchange.

However, the third null hypothesis, H₀₃ is accepted which states that

3. There is no significant correlation between share price and price earnings ratio of firms listed on Ghana Stock Exchange.

Alternatively, the alternative hypothesis, H0₃ is rejected. Thus:

3. There is significant correlation between share price and price earnings ratio of listed firms on Ghana Stock Exchange.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings of the study based on the panel data used for this study, concluding remarks and recommendations made for effect of accounting results on share prices on Ghana stock exchange.

5.2 Summary of Findings

The purpose of this study was to find out whether the accounting results contained in the financial statements listed companies are used by investors for investment decisions. Relevant literatures on how accounting results influence share prices were reviewed and this review documented that accounting results do influence share prices. A multiple linear regression model was estimated to ascertain how share prices change following changes in selected accounting variables. Unbalanced panel and times series data were gathered from Ghana Stock Exchange was the main source of data used for this study. The study regressed the share prices of publicly listed firms against the selected variables (EPS, DPS and P/E ratio) from the period 2003 to 2013 to determine the relationship between them. The study confirmed that the literature by finding that the accounting variables used have jointly significance in explaining share prices.

The first hypothesis examines the impact of dividend per share on the share price. The results are supported by other research carried on this variable and concluded that there is a positive and significant correlation between these two variables.

The second hypothesis also looks at the effect of earning per share on share prices. Similarly, in this study, there was also a statistically significant difference between earning per share and share price.

The third hypothesis however, was different in terms of the results compared to the two hypotheses mentioned above. The results indicate that there is a positive correlation between price earnings ratio and share price but, there is no statistically significant between the two based on the regression model that was developed in this study.

5.3 Conclusions

Using selected key financial ratios from the annual financial statements of listed companies on the Ghana Stock Exchange over a period of eleven years from 2003 – 2013, this study sought to determine whether share prices are influenced by the accounting results (as captured by annual published financial statements and in the Stock Exchange report) of companies listed on the Ghana Stock Exchange.

The results of the study show that share prices are influenced by accounting results.

Based on the above stated findings, the following conclusions can be reached:

On the basis of theoretical and empirical literature it was expected that EPS, DPS and P/E ratio would positively and significantly impact on price. From the estimated model, EPS, and DPS conformed to both the theory and empirical results; However, P/E ratio positively impact on share price but was not significant.

The test results indicate that Dividend per share is statistically significant at one percent (1%) i.e. p>0.01 in explaining variations in share prices. The results also show that there is a positive correlation between dividend per share and prices of shares. An increase in dividend per share by a unit will lead to share price increase by 6.95 Ghana cedis. This position is supported by previous literature.

In conclusion, analysis of the results indicates that the share price of the publicly listed firms in Ghana Stock Exchange is a function of earning per share and dividend per share, as these two variables play a key role in share price. However, price earnings ratio does not influence share price even though its impact was positive but not significant.

5.4 Recommendations

Following from the findings in this study, the following recommendations are made:

The disclosure requirements of listed companies should be strengthened to ensure that full disclosure is made of corporate performance so as to provide investors with detail relevant information for investment decisions since investors use the financial statements.

Compliance with International Financial Reporting Standards by all listed companies should be emphasized by the Ghana Stock Exchange, the Institute of Chartered Accountants Ghana as well as the Securities and Exchange Commission to ensure that published financial statements represent faithfully what they purport to represent. This is necessary to help investors make accurate decisions by placing reliance on the financial statements.

The Ghana Stock Exchange should strive to improve the present way of disclosing the financial reports of the listed companies. A more continuous and prompt disclosure of financial results should help investors and dealers to revise their positions more frequently and in a more informed manner. Additionally, the Stock Exchange should strive to keep the quarterly published financial statements and make them available to investors and researchers for use.

Accounting research should be focused on improving the information content of financial statements and ensuring accurate measurement of corporate performance so as to make the financial statements more reliable and useful.

5.5 Suggestions for Further Studies

- 1. The period of this study covered from 2003 to 2013, nonetheless, the researcher suggests that further study be conduct to cover more years.
- 2. Again, this study covered only three of the accounting variables, it is suggested that other studies be conducted to cover more variables.
- 3. The study population for this study was the Ghana Stock Exchange. It is important other stock exchanges outside Ghana be used to be able to compare results. Therefore, it is suggested that research be done both locally and international at the same time in order to ensure reliability of results.
- 4. The study was conducted without making comparisons or differentiation between listed firms. It is suggested that further study be done to differentiate between listed firms.
- 5. Lastly this study was conducted by ignoring firms that had zero dividend paid and their price earnings ratios are not meaningful under the years of study. It is recommended that a balanced panel data be used in further studies.

REFERENCES

- Abken, P. A., & Nandi, S. (1996, December). Options & Volatility. *Economic Review*, 21-35.
- Al-Malkawi, H. (2007). Determinants of corporate dividend policy in Jordan: An application of the Tobit model. *Journal of Economic and Administrative Sciences*, 23(2), 44-70.
- Amihud, Y., & Mendelson, H. (1986). Asset pricing and bid-ask spreak. *Journal of Financial Economics*, 17, 223-250.
- Ang, W., & Chen, Z. (2006). Determinants of dividend policy: The evidence from New Zealand. *International research Journal of Finance and Economics*.
- Appiah-Kubi, J., & Menyah, K. (2003). Return Predictability in African Stock Markets.

 Review of Financial Economics, 12, 247-270.
- Baisland, W. (2009). The relevance of Accounting information and the value of a comapny. *Journal of Accounting and Economics*.
- Ball, R. (2001). Infrastucture requirements for an economically efficient system of public financial reporting and disclosure. *Bookings-Wharton papers on financial services*.
- Ball, R., & Brown, P. (1968). An Empirical Evaluation of Accounting Income Numbers. *Journal of Accounting Research*, 6, 159-178.
- Barth, M., Beaver, W., & Landsman, W. (1997). Valuation characteristics of equity book value and net income: tests of the abandonment option hypothesis. . Working paper. Stanford University.
- Barth, W., Kang, S., & Kumar, K. (2001). The relevance of the value relevance literature for financial accounting standard setting: another vie. *Journal of Accounting and economics*, 31(1-3), 77-104.

- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, 24(1), 3-37.
- Bauman, S. (1996). Usual returns: effects of accounting information.
- Belsky, G., & Thomas, G. (1999). Why Smart People Make Big Money Mistakes And How To Correct Them: Lessons from The New Science of Behaviuoral Economics.
- Bernard, V. (1992). Stock Price Reactions to Earnings Announcements: A Summary of

 Recent Anomalous Evidence and Possible Explanations. *Advances in Behavioral Finance*.
- Bernard, V., & Thomas, J. (1990). Evidence that stock prices do not fully reflect the implication of current earnings for future earnings. *Journal of Accounting and Economics*, 13, 205-240.
- Bernard, V., Thomas, J., & Wahlen, J. (1996). Accounting-Based Stock Stock Price

 Anomalies: Separating Market inefficiences fro Risk. Comtemporary

 Accounting Research. Retrieved from som.yale.edu
- Bharttacharya, S. (1979). Imperfect Information, Dividend Policy and the "Bird in the Hand" Fallacy. *Bell Journal of Economics*, 10, 259-270.
- Black, B. (2000). Legal and Institutional Preconditions for strong stock market.

 Working paper, John M Olin Program in Law and Economics.
- Bowman, R., & Iverson, D. (1998). Short-run Overreaction in the New Zealand Stock

 Market. *Pacific basin Finance Journal*, 6, 475-491.
- Bradshaw, M., Richardson, S., & Sloan, R. (2006). The relation between corporate financing activities, Analysts' forecasts and stock returns. *Journal of Accounting and Economics*.

- Burgstahler, D., & Dichev, I. (1997). Earnings, adaptation and equity value. *Accounting* review, 72(2), 187.
- Bushee, B., & Noe, C. (2000). Corporate disclosure practices, institutional investors and stock return volatility. *Journal of accounting research (studies on accounting information and the economics of the firm)*, 171-202.
- Butler, K., & Malaikah, S. (1992). Efficiency and Inefficiency inThinly Traded Stock Markets: Kuwait and Saudi Arabia. *Journal of Banking and Finance*, *16*, 197-210.
- Cohen, D., & Lys, T. (2006). Weighing the evidence on the Relation between External Corporate financing Activities, Accurals and Stock Returns. *Journal of Accounting and Economics*, 42, 87-105.
- Collins, D., Pincus, M., & Xie, H. (1999). Equity valuation and negative earnings: the role of book value of equity. *Working paper*,.
- Collins, M., Maydew, K., & Weiss, R. (1997). Relevance of earning and book value.
- Conrad, J., & Kaul, G. (1998). An Anatomy of Trading Strategies. A Review Financial Studies, 11, 489-519.
- Dawson, S. (1981, July). A Test of Stock Recommendations and Market Efficiency for Kuala Lumpur Stock Exchange. *Singapore Management Review*, 69-71.
- Dawson, S. (1982, Spring). Is the Hong Kong Market Efficient? *Journal of Portfolio Management*, 17-20.
- DeBondt, W., & Thaler, R. (1985). Does the Stock Market Overreact? *Journal of Finance*, 40, 793-805.
- Diamond, D., & Verrecchia, R. (1987). Constraints on short selling and asset price adjustment to private information. *Journal of financial economics*, 18, 272-311.

- Dickinson, J., & Muragu, K. (1994). Market Efficiency in Developing Countries: A case study of the Nairobi Stock Exchange. *Journal of Business and Finance*, 21, 133-150.
- Dimson, E., & Mussavian, M. (1994). A Brief History of Market Efficiency. *European Financial Management*, 4(1), 91-193.
- Easton, P. D., & Sommers, G. A. (2002). Scale and the Scale effect in Market-based Accounting Research. *Journal of Business Finance and Accounting*, 30(1/2), 25-55.
- Ely, Z., & Waymire, G. (1996). The Relevance of Stock Value, earning per share and book value per share. *Journal of Accounting and Finance*.
- Exchange, G. S. (2013, December). *Background of GSE*. Retrieved from www.gse.com
- Fama, E. (1965). The Behavior of Stock Market Prices. *Journal of Business*, 38, 34-105.
- Fama, E. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *Journal of Finance*, 25, 383-417.
- Fama, E. (1991). Efficient Capital Markets II. Journal of Finance, 46, 575-617.
- Fama, E., Fisher, L., Jensen, M., & Roll, R. (1969). The Adjustment of Stock prices to New information. *International Economics Review*, 10, 1-12.
- Francis, J., LaFond, R., Olsson, P., & Schipper, K. (1999). Costs of equity and earnings attributes. *Accounting Review*, 79(4), 967-1010.
- Frimpong, J., & Oteng-Abayie, E. (2007). Market Returns and Weak-Form Efficiency:

 The case of Ghana Stock Exchange.
- Gandhi, D. K., Saunders, A., & Woodward, R. (1980). Thin Capital Markets: A case study of Kuwait Stock Market. *Applied Economics*, 12, 431-439.

- Garcia-Ayuso, C., & Sanchez, P. (1998). The Relevance and managerial Implications of intangibles: A literature review.
- Gjerde, M., Kniosfla, E., & Saetem, D. (2007). Share prices: Refelcting the Group belief of Investors. *Journal of Accounting review*.
- Graham, C., Cannice, M., & Sayre, T. (2002). The value-relevance of financial and non-financial information for internet companies. *Thunderbird International Business Review*.
- Groenewold, N., Tang, S. K., & Wu, Y. (2003). The Efficiency of the Chinese Stock Market and the Role of the Banks. *Journal of Asian Economics*, 14, 539-609.
- Habib, A. (2008). The Role Accurals and Cash Flows in Explaining Security Returns: Evidence from New Zealand. *Journal International Accounting, Auditing and Taxation, 17*, 51-56.
- Haugen, R., Ortiz, E., & Arjona, E. (1985). Market Efficiency: Mexico versus the U.S.

 The Journal of Portofolio Management, 12, 28-32.
- Hayn, C. (1995). The information content of losses. *Journal of Accounting and Economics*, 20, 125-153.
- Holthausen, R., & Larcker, D. (1992). The Prediction of Stock Returns using Financial Statement Information. *Journal of Accounting and Economics*, 373-412.
- Institute of International Finance. (2003, July). IIF Response to the Third Consultative Paper of the Basel Committee on Banking Supervision.
- Jensen, M. (1968). The Performance of Mutual Funds in the period 1945-1964. *Journal of Finance*, 23, 389-416.
- Kim, J., & Shamsuddin, A. (2007). Are Asian Stock Markets Efficient? Evidence from New Multiple Variance Ratio Tests. *Journal of Empirical Finance*. Retrieved from www.elsevier.com/locate/jempfin

- Kothari, S. (2001). Market Efficiency and Accounting Research: A Discussion of Capital Market Research in Accounting. *Journal of Accounting and Economics*, 31, 233-253.
- Krische, W., & Lee, Z. (2000). Dividend policy and common stocks volatility. *Journal of Portfolio Management*, 19-25.
- Lang, M., & Lundholm. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal for accounting research*, 246-271.
- Lasfer, M., Melnik, A., & Dylan, C. (2003). Stock Price Reaction in Stressful Circumstances: An International Comparison. *Journal of Banking anf Finance*, 27, 1959-1977.
- Latridis, G., & Valahi, S. (2008). Voluntary IAS 1 accounting disclosures prior to official IAS adoption: An empirical investigation of UK firms. *Research in Internal Business and Finance*. Retrieved from www.elsevier.com/locate/ribaf
- Lee, T. A. (1974). Enterprise Income: Survival or decline and fall? Accounting and Business Research, 40, 178-192.
- Lev, B. (1989). The Usefulness of earnings research: Lessons and direction from two decades of empirical research. *Journal of Accounting Research*, 27, 153-192.
- Metghachi, M., Yung-Ho, C., & Marcucci, J. (2007). Is the Swedish Stock Market Efficient? Evidence from Some Simple Trading Rules. *International Review of Financial Analysis*. Retrieved from www.sciencedirect.com
- Miller, M., & Modigliani, F. (1961). Dividend Policy, growth and the Valuation of Shares. *Journal of Business*, *34*, 411-433.
- Miller, M., & Rock, K. (1985). Journal of Finance. *Dividend Policy under Asymmetric Information*, 40, 1031-1051.

- Myring, M. (2006). The Relationship between Returns and Unexpected Earnings: A Global Analysis by Accounting Regimes. *Journal of International Accounting, Auditing and Taxation, 15*, 92-108.
- Ntim, C. G., Opong, K. K., & Danbolt, J. (2007). An Empirical Re-Examination of Weak Form Efficient Markets Hypothesis of the Ghana Stock Market using Variance-Ratios Tests. *African Finance Journal*, 9(2).
- Ohlson, J. A. (1989, March). Accounting earnings, book value, and dividends: The theory of clean surplus equation. *Working paper*,
- Ohlson, J. A. (1995). Earnings, book values, and dividends in security valuation.

 Contemporary Accounting Research. 11, 661-688.
- Osei, K. A. (1998). Analysis of factors affecting the Development of an Emerging

 Capital Market: The Case of the Ghana Stock Market. *African Economic*Research Consortium Research.
- Otavio, J., & Luis, B. (2009). Accounting disclosure and Stock market information.

 Research in international business and finance.
- Ou, J., & Penman, S. (1989a). Financial Statement Analysis and the Prediction of Stock Returns. *Journal of Accounting and Economics*, 11, 295-330.
- Ou, J., & Penman, S. (1989b). Accounting Measurement, Price-Earnings Ratios, and the Information Content of Security prices. *Journal of Accounting Research*, *Supplementary*, 27, 111-144.
- Parkinson, J. (1987). The EMH and CAPM on Nairobi Stock Exchange. *East Africa Economy Review*, 3(2), 105-110.
- Rosenberg, B., Reid, K., & Landstein, R. (1985, Spring). Persuasive Evidence of Market Inefficiency. *Journal of Portofolio Management*, 9-16.

- Ross, C. E. (1989). Multiple personality disorder diagnosis, clinical features and treatment. *Journal of health and social behaviour*, 20(1).
- Sewell, M. (2001). Behavioural finance. Retrieved from http://www.behaviouralfinance.net/
- Sharpe, W. (1966). Mutual Fund Performance. Journal of Business, 39, 119-138.
- Shleifer, A., & Vishny, R. W. (1997). The limits of arbitrage. *Journal of finance*, 52, 35-55.
- Simons, D., & Laryea, S. (2004). Testing the Efficiency of Selected African Stock Markets. a Working Paper.
- Solnik, B. H. (1973). A Note on Validity of the Random Walk for European Prices. *Journal of Finance*, 28, 63-75.
- Sushma, V., & Bhupesh, K. S. (2008). The Value relevance of accounting information. *Journal of Modern Accounting and Auditing*, 50-62.
- Treynor, J. (1965, Jan-Feb). How to Rate Management of Investment Funds. *Harvard Business Review*, 43, 63-75.
- Website, F. (2013). Retrieved from www.quamnet.com
- Wikipedia. (2013). Retrieved from www.wikipedia.org
- Worthington, A., & Higgs, H. (2006). Weak-Form Market Efficiency in Asian Emerging and Developed Equity Markets: A Comparative Tests of Random Walk Behaviour. Retrieved from http://ro.uow.edu.au/commpapers/114

APPENDICES

Appendix A: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
1	Accra Brewery Company Ltd	2003	552.00	15.0000	57.14	10.00
2	Aluworks Limited	2003	4000.00	600.0000	607.02	7.00
	British American Tobacco Gh.					
3	Ltd.	2003	4951.00	324.0000	599.38	9.00
4	Camelot Ghana Ltd.	2003	550.00	25.0000	78.06	7.00
5	Enterprise Insurance Co. Ltd	2003	10500.00	150.0000	1408.78	7.00
6	Ghana Breweries Ltd.	2003	1460.00	500.0000	72.66	20.00
7	Ghana Commercial Bank Ltd.	2003	8170.00	250.0000	645.87	13.00
8	Guinness Ghana Breweries Ltd.	2003	5650.00	48.0000	430.97	13.00
9	Metalloplastica Ghana Ltd.	2003	275.00	24.0000	44.23	6.00
10	Mechanical Llyod Co. Ltd.	2003	700.00	2550.0000	91.72	8.00
11	Pz Cussons Ghana Ltd.	2003	2700.00	65.0000	438.52	6.00
	Standard Chartered Bank Gh.					
12	Ltd. NOB	S ₂₀₀₃	61001.00	5000.0000	9616.33	6.00
13	SG-SSB Limited	2003	21000.00	480.0000	1401.84	15.00
14	Trust Bank Ltd (The Gambia)	2003	9750.00	540.0000	1505.97	6.00
15	Unilever Ghana Ltd.	2003	14041.00	700.0000	1628.44	9.00

Appendix B: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
						KATIO
	Accra Brewery Company					
16	Ltd	2004	1480.00	15.00	29.64	50.00
17	Aluworks Limited	2004	10000.00	400.00	460.00	22.00
	British American Tobacco					
18	Gh. Ltd.	2004	7700.00	354.00	610.00	13.00
19	Cal Bank Ltd.	2004	3400.00	25.53	224.47	15.00
20	Camelot Ghana Ltd.	2004	970.00	30.00	112.70	9.00
21	Enterprise Insurance Co. Ltd	2004	8000.00	320.00	258.24	31.00
22	Fan Milk Ltd.	2004	20000.00	200.00	1168.25	17.00
	Ghana Commercial Bank					
23	Ltd.	2004	10150.00	250.00	824.44	12.00
	Guinness Ghana Breweries					
24	Ltd.	2004	12700.00	242.00	175.91	72.00
25	Hfc Bank (Ghana) Ltd.	2004	10000.00	70.00	219.73	46.00
26	Mobil Oil Ghana Ltd.	2004	39000.00	3650.00	2058.55	19.00
	Pioneer Aluminium Factory					
27	Ltd.	2004	800.00	25.00	54.25	15.00
	Produce Buying Company					
28	Ltd.	2004	3600.00	15.00	93.09	39.00
_	Standard Chartered Bank		-			
29	Gh. Ltd.	2004	170000.00	8765.00	10431.44	16.00
	OII. Ditt.	2007	170000.00	0705.00	10 131.77	10.00

30	Ssb	2004	27000.00	700.00	1513.21	18.00
	Trust Bank Ltd (The					
31	Gambia)	2004	31000.00	709.00	1552.04	20.00
32	Unilever Ghana Ltd.	2004	22000.00	896.00	909.53	24.00

Appendix C: Selected Companies, their Share Prices and accounting variables

S/	SHARE YEA						
	LISTED FIRMS		PRICE	DPS	EPS	RATI	
N		R				O	
			300000.0	5056.8			
33	Anglogold Ashanti Ltd.	2005	0	0	-87.04	89.00	
34	Aluworks Limited	2005	5003.00	450.00	384.50	13.00	
	British American						
35	Tobacco Gh. Ltd.	2005	3050.00	410.00	367.39	8.00	
	Benso Oil Palm						
36	Plantation	2005	5500.00	73.00	7.93	693.00	
37	Cal Bank Ltd.	2005	1700.00	50.00	214.38	9.00	
	Clydestones (Ghana)						
38	Ltd.	2005	S _{1000.00}	20.00	35.43	28.00	
39	Camelot Ghana Ltd.	2005	1700.00	40.00	7.95	214.00	
	Enterprise Insurance						
40	Co. Ltd	2005	6855.00	70.00	888.43	8.00	
41	Fan Milk Ltd.	2005	15800.00	300.00	1313.99	12.00	
	Ghana Commercial						
42	Bank Ltd.	2005	6740.00	375.00	825.31	8.00	

	Guinness Ghana					
43	Breweries Ltd.	2005	7740.00	297.00	387.20	20.00
44	Hfc Bank (Ghana) Ltd.	2005	6000.00	85.00	132.07	45.00
	Mechanical Llyod Co.					
45	Ltd.	2005	2500.00	30.00	168.39	15.00
				2117.0		
46	Mobil Oil Ghana Ltd.	2005	38000.00	0	2730.16	14.00
47	Pz Cussons Ghana Ltd.	2005	6500.00	75.00	475.30	14.00
	Standard Chartered			9574.0	11492.0	
48	Bank Gh. Ltd.	2005	13000.00	0	5	11.00
49	SG-SSB	2005	27000.00	450.00	705.21	10.00
	Trust Bank Ltd (The					
50	Gambia)	2005	31000.00	709.00	917.23	29.00
51	Unilever Ghana Ltd.	2005	22000.00	896.00	1363.29	11.00

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Appendix D: Selected Companies, their Share Prices and accounting variables

	I ISTED EIDMS		SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
52	Aluworks Limited	2006	7251.00	500.00	519.86	14.00
53	Cal Bank Ltd.	2006	2205.00	55.00	293.66	8.00
54	Clydestones (Ghana) Ltd.	2006	800.00	30.00	25.68	31.00
55	Camelot Ghana Ltd.	2006	1700.00	40.00	81.11	21.00
56	Cocoa Processing Co. Ltd.	2006	538.00	3.00	6.93	78.00
57	Ecobank Ghana Ltd	2006	13519.00	495.00	1026.79	13.00
	Enterprise Insurance Co.					
58	Ltd	2006	8818.00	100.00	745.55	12.00
59	Ecobank Transaction Inc.	2006	22700.00	276.45	1037.11	22.00
60	Fan Milk Ltd.	2006	18002.00	400.00	1369.55	13.00
	Ghana Commercial Bank					
61	Ltd.	2006	6150.00	400.00	1106.91	6.00
	Guinness Ghana Breweries					
62	Ltd.	2006	9248.00	343.00	145.82	63.00
63	Hfc Bank (Ghana) Ltd.	2006	5400.00	45.00	139.01	39.00
64	Mechanical Llyod Co. Ltd.	2006	2100.00	40.00	156.92	13.00
65	Pz Cussons Ghana Ltd.	2006	6660.00	85.00	320.17	21.00
	Standard Chartered Bank					
66	Gh. Ltd.	2006	158000.00	11500.00	17131.50	9.00
67	Starwin Products Ltd.	2006	550.00	10.00	38.08	14.00
68	SG-SSB Limited	2006	6000.00	450.00	797.92	8.00

69	Sam Woode Ltd	2006	265.00	35.00	45.23	6.00
	Trust Bank Ltd (The					
70	Gambia)	2006	13250.00	640.54	672.90	20.00
71	Total Petroleum Ghana Ltd.	2006	54030.00	2604.38	2376.10	23.00
72	Unilever Ghana Ltd.	2006	15000.00	896.00	1353.62	11.00

Appendix E: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
	Arytons Drug					
73	Manufacturing	2007	0.10	0.0010	0.0071	14.00
74	Cal Bank Ltd.	2007	0.44	0.0075	0.0398	11.00
75	Clydestones (Ghana) Ltd.	2007	0.08	0.0030	0.0021	38.00
76	Camelot Ghana Ltd.	2007	0.17	0.0040	0.0099	17.00
77	Cocoa Processing Co. Ltd.	2007	0.05	0.0004	0.0006	82.00
78	Ecobank Ghana Ltd	2007	2.00	0.0674	0.1178	17.00
	Enterprise Insurance Co.					
79	Ltd	2007	1.30	0.0150	0.1752	7.00
80	Ecobank Transaction Inc.	2007	1.28	0.0276	0.0722	18.00
81	Fan Milk Ltd.	2007	2.39	0.0460	0.1964	12.00
	Ghana Commercial Bank					
82	Ltd.	2007	1.00	0.0550	0.0612	16.00
	Guinness Ghana Breweries					
83	Ltd.	2007	1.23	0.0343	0.8510	14.00

84	Ghana Oil Company Ltd.	2007	0.31	0.0088	0.0163	19.00
85	Hfc Bank (Ghana) Ltd.	2007	0.54	45.0000	0.0301	18.00
86	Mechanical Llyod Co. Ltd.	2007	0.21	40.0000	0.0275	8.00
87	Pz Cussons Ghana Ltd.	2007	0.83	85.0000	0.0875	9.00
	Standard Chartered Bank					
88	Gh. Ltd.	2007	26.00	11500.0000	1.5895	16.00
89	Starwin Products Ltd.	2007	0.06	10.0000	0.0006	88.00
90	SG-SSB Limited	2007	1.25	450.0000	0.0775	16.00
91	Sam Woode Ltd	2007	0.03	35.0000	0.0042	6.00
92	Total Petroleum Ghana Ltd.	2007	5.49	2604.3800	0.5951	9.00
93	Unilever Ghana Ltd.	2007	2.11	896.0000	0.2596	8.00



Appendix F: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
94	Arytons Drug Manufacturing	2008	0.16	0.0010	0.0100	16.00
95	Benso Oil Palm Plantation	2008	1.00	0.0150	0.1733	6.00
96	Cal Bank Ltd.	2008	0.60	0.0075	0.0632	9.00
97	Clydestones (Ghana) Ltd.	2008	0.08	0.0030	0.0005	159.00
98	Camelot Ghana Ltd.	2008	0.16	0.0045	0.0149	11.00
99	Cocoa Processing Co. Ltd.	2008	0.05	0.0004	0.0010	51.00
100	Ecobank Ghana Ltd	2008	4.50	0.0674	0.1917	23.00
101	Enterprise Insurance Co. Ltd	2008	3.14	0.0150	0.1062	30.00
102	Ecobank Transaction Inc.	2008	0.45	0.0276	0.0209	22.00
103	Fan Milk Ltd.	2008	4.50	0.0460	0.3149	14.00
	Ghana Commercial Bank					
104	Ltd.	2008	1.10	0.0550	0.1271	9.00
	Guinness Ghana Breweries					
105	Ltd.	2008	2.00	0.0343	0.0462	43.00
106	Ghana Oil Company Ltd.	2008	0.32	0.0088	0.0150	21.00
107	Hfc Bank (Ghana) Ltd.	2008	0.62	0.0100	0.0377	16.00
108	Mechanical Llyod Co. Ltd.	2008	0.21	0.0040	0.0341	6.00
	Standard Chartered Bank Gh.					
109	Ltd.	2008	38.00	1.4500	1.8206	21.00
110	Sic Insurance Company Ltd.	2008	0.50	0.0114	0.0305	16.00
111	Starwin Products Ltd.	2008	0.05	0.0010	0.0010	50.00
	Star will I Todacts Liu.	2000	0.05	0.0010	0.0010	50.00

112	SG-SSB Limited	2008	1.35	0.0450	0.1104	12.00
	Trust Bank Ltd (The					
113	Gambia)	2008	1.33	0.0342	0.0506	26.00
114	Total Petroleum Ghana Ltd.	2008	7.60	0.2312	0.3956	19.00
115	Unilever Ghana Ltd.	2008	4.00	0.1240	0.5211	8.00



Appendix G: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
						KATIO
116	Arytons Drug Manufacturing	2009	0.13	0.0010	0.0113	12.00
117	Benso Oil Palm Plantation	2009	0.48	0.0150	0.0225	21.00
118	Cal Bank Ltd.	2009	0.20	0.0145	0.0468	4.00
119	Clydestones (Ghana) Ltd.	2009	0.08	0.0030	0.0049	16.00
120	Camelot Ghana Ltd.	2009	0.16	0.0045	0.0199	8.00
121	Ecobank Ghana Ltd	2009	2.80	0.1648	0.2670	12.00
122	Enterprise Insurance Co. Ltd	2009	2.20	0.0150	0.1737	13.00
123	Ecobank Transaction Inc.	2009	0.15	0.0276	0.0094	16.00
124	Fan Milk Ltd.	2009	5.55	0.0460	0.7641	7.00
	Ghana Commercial Bank					
125	Ltd.	2009	0.74	0.0550	0.1667	4.00
126	Ghana Oil Company Ltd.	2009	0.17	0.0088	0.0273	6.00
127	Hfc Bank (Ghana) Ltd.	2009	0.62	0.0100	0.0424	15.00
128	Mechanical Llyod Co. Ltd.	2009	0.20	0.0060	0.0270	7.00
	Produce Buying Company					
129	Ltd.	2009	0.19	0.0015	0.0108	18.00
	Standard Chartered Bank Gh.					
130	Ltd.	2009	30.00	1.5000	3.2733	10.00
131	Sic Insurance Company Ltd.	2009	0.27	0.0177	0.0306	9.00
132	Starwin Products Ltd.	2009	0.05	0.0010	0.0010	51.00
133	SG-SSB Limited	2009	0.45	0.0450	0.0704	6.00

	Trust Bank Ltd (The					
134	Gambia)	2009	1.33	0.0342	0.0150	24.00
135	Total Petroleum Ghana Ltd.	2009	6.80	0.2371	0.9503	7.00
136	Ut Financial Services Ltd.	2009	0.21	0.0101	0.0311	7.00

Appendix H: Selected Companies, their Share Prices and accounting variables

			SHAR			P/E
S/ N	LISTED FIRMS	YEA R	E	DPS	EPS	RATI
			PRICE			O
13	d	*				
7	Sic Insurance Company Ltd.	2010	0.43	0.0177	0.04	12.00
13	Arytons Drug					
8	Manufacturing	2010	0.16	0.0021	0.01	11.00
13						
9	Benso Oil Palm Plantation	2010	0.75	0.0332	0.06	14.00
14						
0	Cal Bank Ltd.	2010	0.31	0.0120	0.04	8.00
14						
1	Enterprise Insurance Co. Ltd	2010	0.50	0.0250	0.04	12.00
14						
2	Ecobank Transaction Inc.	2010	0.15	0.0042	0.02	10.00
14						
3	Fan Milk Ltd.	2010	2.45	0.1000	0.14	18.00

14	Ghana C	Commercial Bank					
4	Ltd.		2010	2.70	0.0356	0.18	15.00
14							
5	Ghana C	Pil Company Ltd.	2010	0.29	0.0104	0.03	9.00
14							
6	Hfc Ban	k (Ghana) Ltd.	2010	0.44	0.0150	0.04	11.00
14	Produce	Buying Company					
7	Ltd.		2010	0.13	0.0037	0.03	4.00
14	Standard	l Chartered Bank					
8	Gh. Ltd.		2010	45.16	2.4700	3.28	14.00
14							
9	SG-SSB	Limited	2010	0.64	0.0400	0.05	12.00
15	Trust Ba	ank Ltd (The					
0	Gambia)	S	2010	1.33	0.0231	0.06	21.00
15							
1	Total Pe	troleum Ghana Ltd.	2010	10.00	0.7129	1.01	10.00
15							
2	Unilever	Ghana Ltd.	2010	5.69	0.2128	0.26	22.00
15							
3	UT Bank	k Ltd.	2010	0.30	0.0107	0.02	14.00

Appendix I: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
154	Anglogold Ashanti Ltd.	2011	34.00	0.1738	10.40	3.00
155	Benso Oil Palm Plantation	2011	1.10	0.0537	0.22	5.00
156	Cal Bank Ltd.	2011	0.28	0.0130	0.05	6.00
157	Camelot Ghana Ltd.	2011	0.12	0.0050	0.04	3.00
158	Ecobank Ghana Ltd	2011	3.19	0.2000	0.34	9.00
159	Enterprise Insurance Co. Ltd	2011	0.38	0.0060	0.03	13.00
160	Fan Milk Ltd.	2011	2.37	0.0200	0.14	17.00
161	Ghana Commercial Bank Ltd.	2011	1.85	0.0700	0.19	10.00
162	Hfc Bank (Ghana) Ltd.	2011	0.45	0.0160	0.04	11.00
163	Mechanical Llyod Co. Ltd.	2011	0.11	0.0060	0.05	2.00
	Produce Buying Company					
164	Ltd.	2011	0.25	0.0088	0.20	1.00
165	Pz Cussons Ghana Ltd.	2011	0.24	0.0226	0.02	11.00
	Standard Chartered Bank Gh.					
166	Ltd.	2011	45.48	1.2700	4.08	11.00
167	Sic Insurance Company Ltd.	2011	0.40	0.0177	0.06	7.00
168	SG-SSB Limited	2011	0.47	0.0350	0.06	8.00
169	Total Petroleum Ghana Ltd.	2011	19.83	0.6759	1.58	13.00
170	Unilever Ghana Ltd.	2011	6.64	0.2871	0.48	14.00
171	Ut Bank Ltd.	2011	0.32	0.0100	0.04	8.00

Appendix J: Selected Companies, their Share Prices and accounting variables

			SHARE			P/E
S/N	LISTED FIRMS	YEAR	PRICE	DPS	EPS	RATIO
172	Anglogold Ashanti Ltd.	2012	37.00	0.4510	4.93	8.00
173	Arytons Drug Manufacturing	2012	0.18	0.0013	0.01	19.00
174	Benso Oil Palm Plantation	2012	1.40	0.0690	0.42	3.00
175	Cal Bank Ltd.	2012	0.38	0.0260	0.08	5.00
176	Ecobank Ghana Ltd	2012	3.00	0.2400	0.41	7.00
177	Enterprise Insurance Co. Ltd	2012	0.48	0.0160	0.09	5.00
178	Ecobank Transaction Inc.	2012	0.12	0.0027	2.19	0.05
179	Fan Milk Ltd.	2012	3.55	0.0400	0.23	15.00
180	Ghana Commercial Bank Ltd.	2012	2.10	0.0700	0.44	5.00
181	Ghana Oil Company Ltd.	2012	0.62	0.0140	0.05	12.00
182	Hfc Bank (Ghana) Ltd.	2012	0.45	0.0220	0.04	10.00
183	Mechanical Llyod Co. Ltd.	2012	0.15	0.0060	0.06	3.00
184	Produce Buying Company Ltd.	2012	0.18	0.0088	0.03	5.00
185	Pz Cussons Ghana Ltd.	2012	0.18	0.0226	0.03	6.00
	Standard Chartered Bank Gh.					
186	Ltd.	2012	11.50	3.0500	0.93	12.00
187	Starwin Products Ltd.	2012	0.05	0.0140	0.01	10.00
188	SG-SSB Limited	2012	0.48	0.0400	0.09	5.00
189	Trust Bank Ltd (The Gambia)	2012	0.40	0.0171	0.02	19.00
190	Total Petroleum Ghana Ltd.	2012	23.49	0.6600	2.27	10.00
191	Tullow Oil Plc	2012	38.05	0.1498	2.26	17.00
192	Unilever Ghana Ltd.	2012	8.52	0.4800	0.30	28.00

193 Ut Bank Ltd.	2012	0.38	0.0100	0.04	10.00

Appendix K: Selected Companies, their Share Prices and accounting variables

P/E RATIO 18.00 6.00
6.00
10.00
10.00
7.00
16.00
6.00
9.00
7.00
14.00
47.00
9.00

NOBIS