**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF BUSINESS**

# DIVIDEND PAYOUT AND STOCK PRICE VOLATILITY AMONG FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE

**BY**

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**A Thesis submitted to the School of Business, Kwame Nkrumah University of Science and Technology in partial fulfillment of the requirements for the award of a Master of Business Administration Degree in Finance**

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## DECLARATION

I hereby declare that this submission is my own work except for references which I have duly acknowledged towards the MBA degree and that to the best of my knowledge it contains neither materials previously published by another person nor materials which has been accepted for the award of any other degree.

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## CERTIFICATION

I hereby certify that this thesis was supervised in accordance with laid down procedures by the University.

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MR. P. K. OPPONG BOAKYE Date

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## DEDICATION

I dedicate this research paper to my awesome father, Mr. Asafo-Adjei Daniel, who always inspires me to seek greater heights in all aspects of my life. And to my lovely mother, Mrs. Asafo-Adjei Theresa, who remains my ever dependable counselor, friend and prayer warrior.

I also dedicate this work to my lovely fiancée, Gifty Oforiwaah and my bosom friend, Sampson Afrifa Jnr. You are the pillars of my life and I love you all. God Bless you.

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## ABSTRACT

The objective of this study was to find out the effect of dividend payout on share price volatility among financial institutions listed on the Ghana Stock Exchange. Financial statements and the historic stock prices of ten financial institutions listed on the Ghana Stock Exchange for a period of six years (2008-2013) was utilized for calculating price volatility, earning per share, stock dividend, debt and profit after tax which were key variables of much relevance to the study. By using standard multiple regression analysis, the study was able to find out the predictive relationship between the dependent variable (price volatility) and independent variables (stock dividend, earning per share, profit after tax and debt).

The findings of the study showed that, out of the four independent variables, only earnings per share significantly determined the stock price volatility of financial institutions listed on the Ghana Stock Exchange. The other independent variables which include stock dividend, profit after tax and debt did not significantly determine the volatility in stock prices of financial institutions listed on the Ghana Stock Exchange.

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# CHAPTER ONE

# INTRODUCTION

## 1.1 BACKGROUND TO THE STUDY

In present-day corporate finance, dividend policy is among the most discussed subjects. In simple language, it is the trade-off between retaining income or profit of a firm on one hand; and redistributing cash or floating new stocks to owners of the company on the other hand. Consequently, a company's dividend strategy hovers around the decision to either to disburse dividend or otherwise. In the words of Amidu (2007), payments of dividend also hangs on the decision of the board of directors as to whether to distribute a sizeable, small or zero proportion of the company's income as dividend or to keep them for future investments.

Dividend disbursement singularly relies on an organization's income level; as to whether it has enough income to pay. Other relevant factors such as, the liquidity, profitability, leverage, growth in asset, return on equity, size of firm, to mention a few have been discovered by several research works as the determining factors of companies' dividend strategy (Jecheche, (2012), Ahmed & Javid (2009), Abor & Amidu (2006), Liu & Hu (2005)

Taking into account the significance of strategy on dividend payment from the stance of a shareholder, dividend does not only represent a source of revenue. It is also a way of assessing the performance of the firm in order to decide whether to keep or acquire stocks in the firm. Basically, the main motive of investors in trading in the stock market is to make the most of the expected return at a low risk rate. The returns may take the form of either capital gains or dividend payout.

In effect, a firm's dividend strategy has a direct effect on shareholders' fortune growth. This is because, through these, shareholders would satisfy their purchasing and consumption patterns (Khan, 2012).

From the perspective of the firm, the choice of an appropriate policy regarding dividend is highly crucial for a number of reasons. Firstly, the flexibility to invest in future projects depends on the amount of the company's income it retains as opposed to paying them out as dividends to their shareholders. In view of this, certain imperative factors such as managerial and behavioral environment, firms' profitability ratios, as well as the willingness of the firm, to mention but a few are considered by firms when crafting their dividend policies (Khan, 2012).

In a company's common stock, the value of shares is represented by the market price, which in effect, is the function of the firm's financing, investment and dividend decisions. Adopting a particular policy on dividend payment is seen as essential because of increasingly significant role of the finances in the firm's overall growth strategy. In the words of Bishop, (2000), managers of firms do not have to only keep their focus on issues regarding how much of the firm's income are needed for investment, but also take into account the possible effect of their decisions on share prices. As put out by Kapoor (2009), a firm's share price has the propensity to be reduced each time there is a reduction in dividend payments.

As a result, a declaration of arise of dividend creates abnormal positive security returns and a proclamation of a fall in dividend generates abnormal negative security returns. A fall in stock prices occurs due to the signaling effect of dividends. In other words, the announcement of dividend payment or non-payment sends an unspoken message to the market. The efficient market as have been shown by research over the years always responds appropriately. The response of the market forces to information of this nature

varies from one stock market to the other depending on certain unique characteristics of the market. Against this background, this study seeks to find out the effect of cash and stock dividends on stock prices among financial institutions listed on the Ghana Stock exchange.

## 1.2 PROBLEM STATEMENT

Investors have a basic objective increase the value of their investment through the returns associated to the risk take. And this they hope to achieve in the highest possible level. These returns basically take the form of dividends or capital gain. Their decision concerning the gains on investment is subject to the company's policy regarding dividends.

In the words of Arnold (2008), the central goal of dividend policy is to maximize shareholders' wealth by increasing their purchasing power. In this regard, the maximization of the wealth of investors is dependent on the dividend policy of the company and that investor would be able to gratify their consumption and purchasing desires**.**

Researchers have conducted studies on payment of dividends by companies and its impact on prices of their stocks from different industries on various stock exchanges. Notable among such studies is the one conducted by Khan (2012) who researched into the impact of dividend payout on stock prices in the chemical and pharmaceutical industry of Pakistan. The main goal of the study was to determine the stock prices the companies involved vary over time with respect to cash and stock dividend payment or retention. In Khan's study, he used a multiple regression model in which Price Volatility served as the dependent variable whiles Retention ratio, Return on equity, Stock dividend and Profit after tax also served as the independent variables.

The findings of his research revealed that, there was a significant association between stock market prices of companies in the pharmaceutical and chemical industry of Pakistan and their stock dividend, profit after tax, return on equity and earnings per share. Retention ratio however, showed no significant association with price of their stocks.

Due to the paucity of study on the above subject (dividend payout) and its effect on the price of stocks of listed companies in Ghana, especially financial institutions, the researcher deems it appropriate to replicate the study by Khan (2012). By doing so, the researcher will be able to compare the findings from the Ghanaian perspective to that of Khan (2012) which was conducted in Pakistan. The study remains unique because, as the one conducted by Khan (2012) used companies in the chemical and pharmaceutical industry, this study seeks to use listed companies in Ghana engaged financial services.

## 1.3 OBJECTIVES

1. To determine the effect of dividend payout on stock prices of financial institutions listed on the Securities Exchange Market of Ghana.
2. To identify the association between the dividend payout and stock prices of listed financial institutions in Ghana
3. To analyze the factors affecting the stock prices of financial institutions listed on the Ghana's Securities Exchange Market

## 1.4 RESEARCH QUESTIONS

1. What is the effect of dividend payout on stock prices of listed financial institutions in Ghana?
2. What is the relationship between the dividend payout and on the prices of stock of listed financial institutions in Ghana?
3. What other factors affect the stock prices of the listed financial institutions in Ghana?

## 1.5 RESEARCH HYPOTHESIS

H1: There will be a significant association between stock dividend payout and prices of stocks of financial institutions trading on Ghana's Securities Exchange Market.

H2: There will be no significant association between stock dividend payout and prices of stocks of financial institutions listed on Ghana's Securities Exchange Market.

## 1.6 SIGNIFICANCE OF THE STUDY

The essence of this study revolves around its contribution to research, policy and practice.

With regards to research, the outcome of the study serves as a point of reference to students and other individuals in the field of academia by providing empirical evidence with regards to issues concerning dividend payout and its impact on stock prices among listed financial institutions in Ghana.

Secondly the findings of the study will contribute immensely in the area of policy formulation. This is because; the empirical evidence gathered on the issues of concern regarding the effect of dividend on share price will inform stakeholders on the necessary strategies that needs to be taken to address the issues accordingly.

With regards to practice, the findings of the study will provide much insight to companies and institutions on the effect of dividend and share price, and also provide meaningful recommendations which could be beneficial to management of such companies in their decision making processes.

## 1.7 SCOPE OF THE STUDY

The study covers issues on the effect of stock dividend payout on share price by using listed financial institutions in Ghana as a case study. The term financial institution in the context of the study covers listed companies directly involved in financial activities such as accepting deposits, receiving premiums, paying out cash to clients among others. This set of companies therefore includes listed banks and insurance companies. The study makes use of the most recent available data on these financial institutions in the analysis.

## 1.8 LIMITATIONS OF THE STUDY

The shortcomings of the study include the following; firstly, the findings of the study cannot be easily generalized to all industries in Ghana due to the specialized regulatory nature of the financial institutions used in the study. Companies in the financial services industry are highly regulated in their operations by bodies such as the Bank of Ghana and the National Insurance Commission. This makes their mode and scope of operation highly homogeneous. This homogeneity allows for limited divergent factors which in other industries affect the turn of events as far as policies on sensitive issues such as dividend are concerned

Also, the Ghana Stock Exchange (GSE) compared to the likes of the London Stock Exchange (LSE) and New York Stock Exchanges (NYSE) is immature in nature. By immature we mean that, the Ghana Stock Exchange is still an emerging market limited functions. For this reason, the market does not accurately respond to all market information as it happens in other matured markets. This is also partly due to the fact that nearly half of the investors on the Ghana Stock Exchange have limited knowledge on portfolio management. Again, there is but just a limited accurate medium of information dissemination to its investors on the day to day activities and events happening on the market unlike LSE and NYSE which are nearly perfect markets.

For these and other reasons, findings from the study can only be applied to other such evolving stock markets in other parts of the world predominantly Africa and not well developed stock markets in America, Europe and Asia.

## 1.9 ORGANIZATION OF THE STUDY

In order to keep the presentation of the study in a well-organized manner, the following categorization was made. They were sequentially placed under five sections otherwise name as chapters. The first chapter is composed of the background to the study, problem statement, and objectives of the study. It also contains the research questions, research hypothesis, significance of the study as well as scope and limitation of the study.

The background of the study introduces the brain behind the effort to undertake the research. The problem statement further poses the essential problems the results of the study is expected to solve for the betterment of society while the objectives of the study clearly state the aims the researcher intends to achieve by undertaking the study. The research question which is directly in line with the objectives also clarifies the intent of the study. The hypothesis of the research also poses tentative prejudiced outcome of the study. It therefore outlines the variables to the tested in the proposed regression to be run. The significance of the study also sets out the essence of the study to both academia and the working world. The scope of the study encompasses the framework within which the study is being undertaken. The final part of the section talks about the limitations of the study which elaborates the shortcomings of the study as far as generalizations of results is concerned.

The second chapter is also made up of review of related studies. It provides related theories on earlier studies done on the subject of research. It sets the premise for a standard to which the results of the study can be compared. It also guides the researcher as what the possible outcomes are including relevant variables to be chosen. Furthermore, the section provides empirical conclusions associated with the study were also reviewed.

The third chapter of the study constituted the methods and models used in undertaking the analysis of the data. The section introduces the kind of research design to be used in order to accurately achieve the desired results, sampling technique to be used in selecting participants for the study, the means through which data needed for the study would be collected as well as the procedure involved in achieving that. It further elaborates on how the data obtained would be analyzed and finally spells out the ethical considerations the researcher would take into account in order to undertake a sound study whose results would be valid and acceptable.

The fourth section our of the study constituted the analysis of data gathered from the study by using the Statistical Product and Service Solutions Software (SPSS) and Microsoft Excel. Panel data was analyzed and interpreted in congruence with the aims and objectives of the study.

Chapter five constituted the summary of the findings, conclusion and recommendations for the study as well as recommendations for further studies.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Dividend Policy

As indicated by Kumhar (2013), "dividend policy alludes to the unequivocal or understood choice of the Board of Directors with respect to the measure of lingering income (past or present) that ought to be circulated to the shareholders of the enterprise". Kumhar (2013) attested that this choice is viewed as a financing choice in light of the fact that dividends of the enterprise are a critical wellspring of financing accessible to the firm.

An organization's position on whether to pay out income as dividends or keep as held earnings structures a piece of its financing choice. On the off chance that the organization decides to issue dividends, the strategy will plot regardless of whether the dividends will be issued on a continuous premise or it will be occasional. The term 'dividend policy' alludes to "the practice that management follows in settling on dividend pay-out choices or, as such, the size and pattern of money allocation over a period of time to shareholders" (Lease et al., 2000, p.29 referred to in Al-Malkawi, Rafferty and Pillai 2010). As per Kumhar (2013), as far as the dividend strategy is concerned, firms have two fundamental decisions or choice to make; this include either to pay the returns of the organizations as dividend to its shareholders or to reinvest these trusts.

As indicated by Kumhar (2013), a declaration of dividend distribution to shareholders implies those trusts leave the firm forever and irreversibly. Along these lines appropriation of trusts to shareholders as dividends may starve the organization stores needed for development and extension, and this may bring about the firm to look for outer capital for venture. Accordingly the choice with reference to whether to pay

dividend or reinvest the stores has sprung bunches of contention which has thusly brought on researchers in the field to propound hypotheses and contentions defending their position in the matter of whether dividends are to be paid or not and in which way.

Prominent among these hypothesis and level headed discussions are insignificance of dividend strategy by Miller and Modigliani (1961), the significance of dividend strategy by Gordon (1962), the effect of dividend strategy on firms' risk and the effect of dividend strategy on stock value instability

## 2.1 DIVIDEND STRATEGY IRRELEVANCE

The dividend irrelevance hypothesis was proposed by Miller and Modigliani (1961) which recommend that the fortune or wealth of the shareholders is not dependent on dividend strategy. The hypothesis further contends that, the value or worth of a firm is rare to its gaining, which originates from an investment strategy. In addition, the insignificance hypothesis suggests that dividend has no impact on shareholders' worth if taxes and market insufficiencies are not accounted for in the equation. The creators of the irrelevance hypothesis; Miller and Modigliani (1961) keep on arguing that dividend and capital increase are the two primary courses through which benefits are stretched out by the firm to its shareholders and that when a firm decides to designate its benefits as dividends to its shareholders, then suddenly stock prices will be diminished by the measure of dividend per share on the ex-dividend date. In this way, they expressed that in a flawless market, dividend strategy does not influence the shareholder's yield.

Different researchers do bolster the insignificance dividend theory which will be evaluated as takes after:

To begin with, Brennan, (1971) upheld the unimportance hypothesis of Miller and Modigliani (1961) and determined that any dismissal of this hypothesis must be in light of the negating of the code of symmetric market rationality and the supposition of autonomy of immaterial information. He prescribed that for dismissal of recent supposition, one of these taking after conditions must exist: firstly, Investors don't act rationally. Also, Stock value must be subordinate of past occurrences and expected future prospect.

In addition, Black and Scholes (1974) built up a quarter century of regular stock in New York Stock Exchange for contemplating the effect of dividend strategy on stock price from 1936 to 1966. Their study was grounded on capital asset pricing model for testing the firm existing between dividend yield and projected return. Results from their study displayed no noteworthy relationship between dividend yield and expected return. Henceforth they inferred that there is no proof that, diverse dividend strategies will prompt distinctive stock costs. These discoveries of Black and Scholes (1974) were in consistency with the dividend unimportance hypothesis.

Besides, Hakansson (1982) upheld the dividend immateriality hypothesis of Miller and Modigliani and opined that dividends, whether informative or not, is unimportant to the worth of a firm so long as investors have homogeneous conviction and time added substance utility and the market is completely efficient. Regardless of his contention, several other studies on the subject matter produced results that were consistent with the insignificance dividend hypothesis.

These reports notwithstanding, different studies on the subject matter also produced counter reports that challenged the authenticity of the dividend insignificance theory; as few are talk about in the subsequent discourse.

Ball, Brown, Finn, and Officer (1979) did a study to determine the relationship existing between dividend and stock cost in Australian securities exchange from 1960 to 1969. They discovered huge relationship between return on stock and dividend yield in the following year after dividend distribution to shareholders. Their discoveries along these lines did not bolster the dividend insignificance hypothesis.

Another study was done by Baker, Farrelly and Edelman (1985) where six hundred and three (603) Chief Financial Officers (CFOs) of 562 organizations which were recorded on the New York Stock Exchange (NYSE) were overviewed. Their discoveries demonstrated that respondents firmly concurred that stock costs will be influenced by dividend strategy.

Once more, Baker and Powell (1999) recreated the study and led an overview among 603 Chief Financial Officers of US organizations which were recorded on the NYSE. They reported that larger part of respondents (90 percent) concurred that dividend strategy has impact on the value of the firm and influence its cost of capital as well.

Before the publication of Miller and Modigliani's (1961) fundamental paper on dividend strategy, a typical conviction was that higher dividends distribution builds a firm's worth. This conviction was for the most part taking into account the purported "bird in-the-hand" contention, talked about in more detail right away. Graham and Dodd (1934), for example, contended that "the sole reason for the presence of the enterprise is to pay dividends as dividend to its owners", and firms that pay higher dividends must offer their shares at higher costs (referred to in Frankfurter et al., 2002, p.202). Then again, as a major aspect of the new wave of finance in the 1960's, Miller and Modigliani (1961) showed that under specific suppositions about flawless capital markets, dividend strategy would be immaterial.

Given that in a flawless market, dividend distribution strategy has no impact on either the cost of a company's stock or its cost of capital, shareholders riches is not influenced by the dividend choice and consequently they would be unconcerned about a choice between dividends sharing and capital additions. The explanation behind their lack of concern is that shareholder wealth is influenced by the income created by the investment choices a firm makes, not by how it disseminates that income.

Subsequently, in Miller and Modigliani's view, dividends are insignificant. Miller and Modigliani (1961) contended that paying little heed to how the firm circulates its earnings, its quality is dictated by its fundamental earning ability and its investment choices. They expressed that "… given a firm's investment strategy, the dividend pay-out strategy it decides to adopt will influence neither the present cost of its shares nor the aggregate return to shareholders" (p.414). At the end of the day, investors estimate value of a firm taking into account the capitalized value of their future dividend, and this is not influenced by whether firms pay dividends or not and how firms set their dividend strategy.

Miller and Modigliani (1961) go further and propose that, to an investor, all dividend strategies are successfully the same since investors can make "homemade" dividends by modifying their portfolios in a manner that matches their inclinations. They based their contention upon optimistic suppositions of an impeccable capital market made up of judicious or rational investors.

The suppositions of an immaculate capital market essential for the dividend immateriality theory can be condensed as takes after:

Firstly, no contrasts between levies on dividends and capital gains; Secondly, there are no exchange and flotation costs incurred when securities are traded; Thirdly, all participants of the market have free and equivalent access to the same information

(symmetrical and costless information); Again, no irreconcilable circumstances between directors and security holders (i.e. no agency problem); lastly, all members in the market are price takers.

Given the significance of Miller and Modigliani's contention in the dividend strategy wrangle about, the accompanying segment gives an opposition view to the debate providing augments that attempt to denounce the authenticity of M & M's propositions.

## 2.2 RELEVANCE OF DIVIDEND POLICY

The significance of dividend strategy looks at the effect of dividends on institutional and individual investors. Such hypotheses along these lines hold that there is an immediate relationship between a company's dividend strategy and its market value. For this reason, investors react to getting genuine money returns than capital returns.

### 2.2.1. THE UNCERTAINTY OF FUTURE DIVIDENDS FACTOR

As per Gordon (1959), a valuation model is much suitable to build up the relationship between securities exchange qualities to an organizations' dividend strategy. In the wake of surveying dividend strategy and market cost of the shares, he suggested that the dividend strategy of firms influences the market value of stocks even in the ideal capital market. As indicated by him, investors may favor current dividend rather than future capital gains in light of the fact that the future circumstance is unverifiable regardless of the flawlessness of capital market. He further explained that numerous investors may incline toward dividend paid by keeping in mind the end goal to maintain a strategic distance from risk identified with future capital gain.

He likewise recommended that there is an immediate relationship between dividend strategy and market value of a firm's shares regardless of the fact that the inner rate of

return and the obliged rate of return will be the same. In Gordon, (1962's) steady growth model, the stock cost of a firm is subordinate of reduced stream of future dividends.

Lintner (1956) coined the theory as the "Bird in hand hypothesis", which has become a domicile name for dividend significance. As per the Hewitt Investment Group, "Gordon, 1959) and Lintner (1956)"… affirm that dividends received today are desirable over future dividends, which are liable to vulnerability. Higher instability will cause investors to place a higher risk premium to those installments, and this in effect increases the firm's cost of capital. This goes to demonstrate the legitimacy of the maxim that "a bird in hand is worth ten in the bush".

Bhattacharya (1979) referred to in Enyan (2009) also disagrees that the basic rational for the bird in-the-hand justification for dividend significance is mistaken. In his view, the uncertainty of an investment's cash streams defines a firm's risk. An increment in dividend pay-out today will bring about a relating reduction in the stocks' ex-dividend cost. In this way, expanding the dividend today won't build a company's quality by decreasing the riskiness of future cash streams. He however prescribed that the company's risk influences the level of dividend not the other route around. That is, the shakiness of a firm's income influences its dividend installments, however increments in dividends won't decrease the risk of the firm. The thought that organizations experiencing much instability of future income have a tendency to receive lower pay-out proportions is by all accounts hypothetically conceivable

### 2.2.2. THE AGENCY COST FACTOR

A study was completed by Jensen, Solberg, and Zorn (1992) to figure out the determinants of cross-sectional variation in insider ownership, debt and dividend strategy by utilizing three-stage minimum squares. The researchers considered five hundred and

sixty five (565) organizations as test for the year 1982 and utilized 632 organizations as test for the year 1987. Their discoveries established that high insider ownership organizations embrace lower dividend installment and suggested that insider proprietorship and dividend installment have negative affiliation. Their discoveries were in congruence with the agency cost hypothesis.

Holder, Langrehr, & Hexter, 1998) expressed that insider ownership and dividend payout have negative association after examining 477 US firms for their study. They likewise determined that the quantity of shareholders and dividend payout are absolutely related. Their discoveries were in agreement with the agency cost hypothesis.

Another study by Saxena, (1999) considered the determinants of dividend in US firms over the time of 1981 to 1990. He utilized 333 organizations recorded on the NYSE as test. In concurrence with Holder et al's discoveries, they discovered huge negative relationship between insider ownership and dividend payout. Their discoveries suggested that agency cost is one of the vital determinants of dividend strategy.

In a study led by Chen & Dhiensiri, (2009), 75 Zelanian organizations were utilized as test as the researchers considered the variables affecting dividend strategy from 1991 to 1999. The study result demonstrated that insider proprietorship has negative effect on dividend payout. The finding of this study was additionally in concurrence with the organization cost theory.

### 2.2.3. CLIENTELE EFFECT

In the USA, Pettit (1977) directed a study that tried to research on the degree to which exchange costs and taxes can influence the investor's portfolios in USA. His discoveries gave experimental proof supporting the clientele effect hypothesis. In his study he watched 914 investors' portfolios and recorded that investors’ ages and their portfolios'

dividend yield are absolutely related. He additionally reported that investors' income and dividend yield are contrarily related. Pettit (1977) accordingly elucidated that matured investors with low-pay are more dependent to their portfolios for financing their present consumption.

Consequently, they lean toward putting resources into stock with high-payout for avoiding the exchange costs of offering stock. He likewise exhibited that investors who have portfolios with low un-diversifiable risk lean toward high-dividend stocks. His discoveries buttressed the tax-induced clientele effect.

Lewellen, Stanley, Lease and Schlarbaum, (1978) led a study like that of Petit (1977) as they utilized a specimen got from indistinguishable informationbase connected by (Pettit, 1977) to assess the clientele effect hypothesis. However their discoveries was not in accordance with that of Petit (1977) as it gave an exceptionally frail point of view to supporting the dividend clientele effect hypothesis.

In another study directed by (Scholz, 1992) self-reported information from 400 people in the survey of customer finance (SCF) was utilized to build up an empirical model for testing the dividend clientele effect through dissecting the information of investors' portfolios. His discoveries demonstrated that change between tax rate for capital gains and tax rate for dividends has impact on dealers' inclination for having high-payout stock in their portfolio or low-payout stock.

Dhaliwal, Erickson and Trezevant (1999) additionally considered 133 dividend starts from the time of 1982 to 1995 in the USA. These researchers analyzed varieties in institutional shareholders because of dividend starts. The result of their study demonstrated that after dividend starts, there are huge increments in institutional shareholders for 80 percent of their specimen. Their discoveries gave solid backing to the

hypothesis of duty impelled demographics since they reported that clienteles' impact can influence the investors' choices.

### 2.2.4 THE SIGNALING EXPLANATION

One other presumption regarding why the M & M dividend insignificance hypothesis is lacking as a legitimization for money related market sector practice is the vicinity of uneven information between insiders (managers and chiefs) and pariahs (shareholders). As per Enyan (2009), M & M (1961) assumed chiefs and outside investors have free, equivalent and quick access to the same information with respect to an association's estimates and real execution. Be that as it may, managers who deal with the firm regularly have information about its present and future prospects which untouchables (shareholders) may not be aware of.

This unlucky deficiency of instructive stream between managers/executives and shareholders may bring about the precise inalienable estimation of the firm to be missing to the market. Assuming this is the case, then the cost of shares may not in all cases be a genuine measure of the company's worth. So as to close this information hole between managers/executives and shareholders, managers/chiefs need to impart their insight to the shareholders with the goal that they can understand the real worth of the firm. Generally, inferable from an absence of complete and precise information accessible to shareholders, the trade stream in for spendable dough the type of dividend gave by an offer to a shareholder typically served as the ground for its market appraisal.

Along these lines dividends may give a helpful apparatus to chiefs in which to pass on their private information to the market in light of the fact that shareholders utilized money streams to shares as a method for esteeming a firm. Numerous scholastics and budgetary experts likewise propose that dividends may have verifiable information

around a company's prospects. Considerably Miller and Modigliani (1961) opined that when markets are defective, share prices may react to changes in dividend. As it were, dividends declarations may be seen to pass on suggested information around a company's future income potential. This recommendation has subsequent to wind up known as the "information substance of dividends" or signaling theory.

In any case, M & M (1961) rejected the likelihood that this happened by belligerence that the observational proof loans no backing to the thought that investors lean toward dividends to held income.

As indicated by the signaling hypothesis, investor can conclude information around an firm's future income through the sign originating from dividend declarations, both as far as the soundness of, and changes in, dividends. Nonetheless, for this hypothesis to hold, directors ought to firstly have private information around firm's prospects, and have motivations to pass on this information to the market.

Besides, a signal ought to be genuine; that is, a firm with poor future prospects ought not have the capacity to copy and send false signals to the market sector by expanding dividend installments. Consequently the market must have the capacity to depend on the sign to differentiate one firm from another. In the event that these conditions are satisfied, the market ought to respond positively to the declaration of dividend increment and unfavorably respond to the opposite.

As managers are often exposed to more information about the company's future prospects than outside investors, they may have the capacity to utilize changes in dividends as a vehicle to convey information to the financial market with regards to a firm's future income and development. Outside investors may see dividend declarations as an impression of the managers‟ evaluation of a company's performance and prospects. An increment in dividend pay-out may be translated as the firm having great future

achievement, and in this manner its share price will respond emphatically. So also, dividend cuts may be considered as a signal that the firm has poor future prospects, and the share value might then respond unfavorably.

As needs be, it would not be astonishing to find that managers are hesitant to declare reductions in dividends. It has been contended that organizations have a tendency to expand dividends when managers trust that income would increase over a long period all time. This proposes that dividend increase infer long-run manageable income. This forecast is additionally steady with what is known as the "dividend smoothing theory". That is, managers will try to smoothen dividends after some time and not make significant increments in dividends unless they can keep up the expanded dividends within a reasonable time-frame.

Lipson et al (1998) observed that, "managers don't start dividends until they trust those can be supported by future income". It is important, that in spite of the fact that management can utilize changes in dividends as a sign to pass on information to the market, now and again dividend changes may be a questionable signal.

Despite the fact that the information substance of dividends (signaling) has been noted prior, it was not demonstrated until the late 1970s and early 1980s. The most referred to dividend signaling models can be found in Bhattacharya (1979), John and Williams (1985), and Miller and Rock (1985). All in all, these models are in view of a few suppositions. There is uneven information between corporate insiders (directors) and outside investors (shareholders).

Dividends contain information about the company's present and future money streams, and directors have impetuses to pass on their private information to the market sector through dividend installments keeping in mind the end goal to close the information hole. The declaration of a dividend increment will be taken as uplifting news and the

market will offer up share prices as needs be. Likewise, a declaration that a dividend will be cut recommends unfavorable prospects and will have a tendency to see the company's offer value fall. Dividends are viewed as a valid signaling gadget due to the dissipative expenses included. Just great quality firms can utilize dividends to signal their prospects, and low quality firms can't mirror by sending a false signal to the market sector on account of the expenses included in that action

## 2.3 IMPACT OF DIVIDEND POLICY ON FIRM'S RISK

Ben-Zion and Shalit (1975) completed a study on the impact of size, influence and firm's dividend records on the risk of normal stock. In their study, the analysts tested 1000 biggest US modern enterprises in 1970 and inspected the relationship between option risk measures with size, influence and dividend records. The results of their exploration showed that the company's size and influence and dividend have noteworthy firm with firm's risk measures and are critical determinants of firm's risk. They reported that company's risk has critical negative firm with both dividend yield and size, however influence has noteworthy negative effect on company's risk.

Further, Rozeff, (1982) examined the determinants of dividend payout proportions. He proposed that beta, agency cost and development direct the ideal dividend payout. He contended that higher beta coefficients are identified with lower dividends pay out demonstrating that there is a negative relationship between company's risk and dividend payout. He elucidated that since firms with high beta may have higher outer financing cost, they are more likely to choose lower dividend payout strategy.

Another study directed by Eades (1982) dug into the relationship between dividend yield and firm's risk in US securities exchange. He utilized a specimen of firms that were basic to the 20 year yearly COMPUSTAT records (1960-1979) and the month to month stock

return documents from the Center at Research in Security Costs (CRPS). The discoveries of his study uncovered a discernibly noteworthy negative relationship between dividend yield and firm's beta demonstrating that more hazardous firms may have lower dividend paid.

## 2.4 IMPACT OF DIVIDEND POLICY ON STOCK PRICE VOLATILITY

Baskin (1989) picked an alternate way to deal with inspect the relationship between dividend strategy and stock value instability rather than returns. In this study in any case, control variables, for example, Earning unpredictability, company's size, obligation and development were presented as the researcher inspected the relationship between offer value instability and dividend yield. Then again, these control variables don't just have clear impact on stock value instability however they additionally influence dividend yield. For example, the acquiring unpredictability has impact on offer value instability and it influences the ideal dividend arrangement for organizations.

In addition, with suspicion that the working risk is consistent, the level of obligation may have beneficial outcome on dividend yield. Size of firm would be normal that influence offer value unpredictability also. That is, the share price of extensive firms is steadier than those of little firms as the vast firm have a tendency to be more enhanced. Moreover, little firms have restricted open information and this issue can prompt nonsensically respond of their investors.

Baskin (1989's) work was focused on taking after crucial models that attach dividends to risk of stock. The models are the term impact, the rate of return impact, the arbitrage evaluating impact and the information impact. Baskin(1989) foreseen that variability in the rebate rate has less effect on high dividend yield stocks in light of the fact that high dividend yield can be a sign of additional close term income so the firm with high

dividend yield would be relied upon to have less unpredictability in share price. This is then being termed as length of time effect. Baskin (1989) used the Gordon development model for exhibiting this impact. In addition, he cleared up that in view of the rate of return impact, it is likely that organizations with low dividend yield and low pay out to be assessed more important than their benefits set up because of their development prospects.

Since figures of acquiring from development opportunity have more mistake than expectation of procuring from resources set up, organizations with low pay out and low dividend yield are anticipated to have more instability in their share price. He additionally proposed that higher dividend yield will prompt higher arbitrage benefit subsequent to the overabundance return is subordinate of dividend yield and value rebate rate. Baskin further opined that managers can control the stock value unpredictability and stock risk through their dividend policy; that is, dispersion of dividend at the season of acquiring declaration may be deciphered by investors as a sign of the company's steadiness. Such signal supports investor certainty which has a beneficial outcome on its stock cost.

Another study led by Baskin (1989) concentrated on the 2344 U.S. firms over a time of 1967 to 1986 and he described a noteworthy negative connection between dividend yield and stock value instability which was bigger than relationship between offer value unpredictability and any of different variables. He suggested that dividend arrangement can be utilized for controlling the offer value instability. He further reported that if dividend yield increments by 1%, it causes the yearly standard deviation of stock value development to diminish by 2.5 %.

Nazir et al., (2010) in his study utilized 73 organizations recorded as a part of Karachi Stock Exchange (KSE) as test and concentrated on the relationship between offer value unpredictability and dividend arrangement for the time of 2003 to 2008. They connected settled impact and arbitrary impact models on board information. As indicated by the result of the study, offer value instability had a critical negative relationship with dividend yield and dividend payout. They additionally reported that size and influence have non-critical negative impact on offer value instability.

Another study by Suleman et al., (2011) inspected the relationship of dividend strategy with offer value instability in Pakistan. They separated information from Karachi Stock Exchange in regards to five vital divisions for the time of 2005 to 2009. They utilized numerous relapses model for their examination. In opposition to (Baskin, 1989's) outcomes, their discoveries demonstrated that share value instability has noteworthy positive firm with dividend yield. They additionally reported that share value instability has critical negative firm with development.

Hussainey et al. (2011) analyzed the relationship between offer value unpredictability and dividend strategy in UK. They chose 123 English organizations and the time of their study was from 1998 to 2007. Their work was taking into account (Baskin, 1989). Like Baskin (1989), they utilized different relapse investigations for investigating the relationship of share price with dividend yield and dividend payout proportion. They included size, level of debt, earning unpredictability and rate of growth as control variables to their model.

Predictable to (Allen & Rachim, 1996) Australia results, (Hussainey et al., 2011) discovered a noteworthy negative relationship between offer value instability and payout proportion. They additionally discovered a negative relationship between offer value unpredictability and dividend yield. Their discoveries found that the payout proportion is

the prevalent determinant of the offer value instability and size and obligation have the most grounded firm with value unpredictability amongst control variables. In spite of (Allen & Rachim, 1996), (Hussainey et al., 2011's) discoveries demonstrated that a company's size has noteworthy negative effect on unpredictability of stock value and company's size. They likewise reported an obligation has critical positive effect on offer value instability.

## 2.5 THE LEGAL FRAMEWORK ON DIVIDEND PAYMENT IN GHANA

The dividend strategy of the firm must be developed inside of the lawful structure and confinements. The executives are not lawfully forced to pronounce dividends; the lawful standards go about as limits inside which an organization can work as far as paying dividends. Working inside of these limits, an organization will need to consider numerous money related variables and limitations in choosing the measure of dividend to be circulated as dividends. In Ghana, the Companies code, 1963 Act 179, segment 71 states that:

"But in a twisting up, an organization should not pay a dividend to its shareholders or, aside from as per segment 75 to 79 of this code, make or return or disperse of any of its resources for its shareholders unless, the organization is capable, after such installment, return or dissemination, to pay its obligations as they fall due; the sum or estimation of such installment, return or circulation does not surpass its pay surplus instantly before the making of such installment, return or appropriation"

It is denied for an organization constrained by certification whenever to pay any dividend or make any appropriation or return of its resources for its individuals. Area 72(1) likewise gives that an organization restricted by insurance can't appropriate its salary or resources in light of the fact that its regulations should statutorily contain a procurement

as far as regulation 3 of Table B in the Second Schedule of the code, expressing completely that " the wage and property of the general public, whence so ever determined, might be connected singularly towards the advancement of the objects of the general public as put forward in the instantly going before regulation and no bit in this way might be paid or exchanged, specifically or in a roundabout way, by method for dividend, reward or benefit to any individual who is an individual from the general public or of its chamber".

## 2.6 TAX IMPLICATION ON DIVIDEND PAYMENTS AND CAPITAL GAINS IN GHANA.

The Internal Revenue Act, 2000, Act 592 Section 83(1) gives the assessment that is payable on dividends paid to Resident Shareholders. Segment 83(1) states that "subject to subsection (3), a resident organization which pays a dividend to a native shareholder might withhold tax on the gross measure of the installment at the rate recommended in Part IV of the First Schedule".

The duty rate alluded to in the endorsed calendar is 10%. Area 95(1) of the same Act additionally expresses that "subject to subsection (2) a capital increase duty is payable by a man at the rate of 5% of capital increases gathering to or got by that individual from the acknowledgment of a taxable resource possessed by that individual. Area 97(1) characterizes a taxable advantage for incorporate shares of an inhabitant organization. This suggestion in the Income tax law is against the Miller and Modigliani recommendation of no tax in the ideal capital market.

## 2.7 FACTORS AFFECTING DIVIDEND PAYMENT IN GHANA

Having established the relevance of dividend policy it is important to examine the factors that affect dividend payment of listed companies. These are as follows:

### 2.7.1 LEGAL CONSTRAINTS

Three guidelines must be taken after when paying dividends:

**The Net Profit Rule:** dividends must be paid from present and accumulated past income. The Ghana Companies Code obliges dividends to be paid out of Income Surplus. Segment 71 states that an organization ought not to pay dividends unless (a) the organization is capable, after such installment or return or dispersion, to pay its obligations as they fall due; (ii) the measure of dividends paid ought not to surpass the offset remaining to the credit of the wage surplus record instantly going before the installment of the dividend.

**Capital Debilitation Principle**: keeps installment from the estimation of basic shares on the asset report. The Ghana Companies Code additionally keeps the arrival of capital. Segment 71 obliges that unless in a twisting up, an organization can't pay or give back any of its resources for its proprietors.

**Bankruptcy Guideline**: dividends can't be paid when indebted or if the installment makes the firm ruined

### 2.7.2 LIQUIDITY

Installment of dividends means money outpouring. Despite the fact that, a firm may have satisfactory income to proclaim dividend, it might not have adequate money to pay dividends. In this manner, the money position of the firm is an essential thought in paying dividends; the more noteworthy the money position and the general liquidity of

the organization, the more prominent will be its capacity to pay dividends. An adult organization is for the most part fluid and has the capacity pay vast measure of dividends. It doesn't have much venture opportunities, nor every one of the trusts tied up in changeless working capital and, in this way it has a sound money position. Then again, a developing firm faces the issue of liquidity. Despite the fact that it makes great benefits, it needs finances for its extending exercises and changeless working capital. Due to the inadequate money or weights on liquidity, if there should be an occurrence of a development firm, management will most likely be unable to proclaim dividends.

### 2.7.3 RESTRICTIONS IN LOAN AGREEMENTS

Loan bosses likewise endeavor to point of confinement stockholders' capacity to exchange advantages for themselves through dividend limitations. Bond contracts that limit dividends are important to secure bondholders against the pay-out of benefits that serve as guarantee. In the compelling case, shareholders could vote to pay themselves a selling dividend leaving just an unfilled corporate shell. Most dividend limitations allude to money dividends, as well as to share repurchases. Pay-out limitations for the most part oblige that dividends can be paid just from income created resulting to the getting or dividend over a given sum.

There are likewise habitually confinements on a borrower's capacity to expand dividends from existing levels. Banks might for the most part put confinements on dividend installments to secure their advantage when the firm is encountering low liquidity or low gainfulness. Thusly the firm concurs as a component of an agreement with a loan researcher to confine dividend installments. For instance a loan agreement may disallow the installment of dividends the length of the firm's obligation value proportion is in abundance of, say, 1.5:1 or when the liquidity proportion is not as much as, say, 2:1 or

may oblige the firm to pay dividends just when some measure of current income has been exchanged to a sinking store built up to resign obligation. These confinements are to guarantee that the organization hold dividend and have a low pay-out.

To secure the surety of their advances, banks additionally oblige pledges in credit understandings. Credit pledges are like those found in bond issues, and are of two essential sorts. Confirmed pledges depict activities that a firm consents to take amid the term of the advance. These incorporate such exercises as giving monetary proclamations and money spending plans, conveying protection on resources and against insurable market risks, and keeping up least levels of net working capital. Negative pledges portray activities that a firm concurs not to take amid the term of the advance. These may incorporate agreement not to converge with different firms, not to promise resources as security to different moneylenders, or not to make or insurance credits to different firms. Another normal confinement, particularly with firmly held organizations, is a breaking point on officers' pay and the measure of dividends that can be paid.

### 2.7.4 GROWTH PROSPECTS

The monetary necessities of the firm are specifically identified with the expected level of advantages development. Extensive, experienced firms for the most part have satisfactory access to new capital, while quickly developing firms might not have adequate stores accessible to bolster their various worthy activities. A firm that is settled and has a record of productivity will have the capacity to raise obligation or value capital without prior warning. A firm that has this capacity can pay money dividends despite the fact that management feels that there will be managed trade needs in for cold hard currency the not so distant future. Prepared access to obligation and value financing

instruments permits management feel secure in its capacity to pay both the money dividends and the corporate commitments.

### 2.7.5 MARKET CONSIDERATIONS

Shareholders are accepted to esteem settled or expanding level of dividends, rather than a fluctuating example of dividends. They are accepted to esteem a strategy of persistent dividend installment. Steady and ceaseless dividend installments are a positive sign of budgetary great wellbeing

### 2.7.6 CONTROL OF THE COMPANY

The goal of keeping up control over the organization by the current management gathering or the assortment of shareholders can be a vital variable in affecting the organization's dividend strategy. At the point when an organization pays extensive dividends, its money position is influenced. Therefore, the organization will need to issue new shares to raise trusts to fund its venture programs. The control of the current shareholders will be weakened in the event that they don't need or can't purchase extra shares. Under these circumstances, the installment of dividends may be withheld and income may be held to back the company's venture opportunities.

### 2.7.7 STABILITY OF THE COMPANY EARNINGS

The record of dividend in the course of the last five or ten years and the recurrence of periods bringing about working shortages manage the executives in their present dividend choices. In that firm, the market viewpoint when the installment of a dividend is under thought is essential. Despite the fact that, dividend dispersion is typically taking the income of a past period, the chiefs must consider into record what is quickly ahead

for the organization. It must consider the general financial standpoint and how it is liable to influence the market.

### 2.7.8. INFLATION

High swelling will imply that quite a bit of an firm's benefit will be expected to supplant resources at higher costs and expand working capital. In this manner, an organization may choose to diminish dividends to give the essential capital inside. Notwithstanding, customarily, value is seen as a venture which gives security against swelling. In this manner, management is frequently underweight to expand dividends every year in accordance with general value levels.

## 2.8 REVIEW OF EMPIRICAL STUDIES

Studies led by Travlos, Trigeorgis, &Vafeas (2001), Baker, Powell &Veit (2002), Myers & Frank (2004), Dong, Robinson & Veld (2005) and Maditinos, Sevic, Theriou, &Tsinani (2007) bolster dividend pertinence hypothesis. Dark & Scholes (1974) discovered no relationship between dividend arrangement and stock costs. Their outcomes further clarify that dividend arrangement does not influence the stock costs and it relies on upon investors' choice to keep either high or low yielding securities; return earned by them in both cases continues as before.

Barclay and Smith (1995) in their article "The Maturity Structure of Corporate Debt" found that high development organizations have lower Dividend Pay-outs and Debt Ratios than the low development organizations, which have higher Dividend Pay-outs and Debt Ratios. So investors lean toward higher Dividend Pay-outs and think of it as less unsafe than capital addition. Allen & Rachim (1996) discovered no relationship between the dividend yield and securities exchange value even in the wake of

considering 173 Australian recorded stocks yet it demonstrates the positive connection between stock costs and size, income and influence and negative connection stock costs and pay-out proportion while Baskin (1989) inspects 2344 U.S basic stocks from the time of 1967 to 1986, and discovered a huge negative relationship between dividend yield and stock cost.

Another study directed by Ho (2002) important to the dividend arrangement in which he utilizes the board information strategy and altered impacts relapse model. The aftereffects of his study demonstrate the positive connection between dividend strategy and size of Australian firm and liquidity of Japanese firms. He discovered the negative connection between dividend arrangement and risk in the event of just Japanese firms. The general modern impact of Australia and Japan are observed to be noteworthy. Pastry researcher, Powell &Veit (2002) in their article "Reinvesting Managerial Perspectives on Dividend Policy" if new proof of chiefs' choice about dividend arrangement. They directed a study of directors of NASDAQ firms that are reliably paying money dividends. Their study result demonstrates that managers are generally mindful of verifiable examples of dividends and income. Along these lines, they outline their dividend arrangements subsequent to thinking of it as.

Pradhan (2003) additionally clarified the impact of dividend installment and held income on securities exchange cost of the Nepalese organizations. The aftereffects of his study demonstrate that dividend installment has solid connection with stock value while held income have exceptionally feeble connection with securities exchange cost. His outcomes further clarify that Nepalese stockholders give more significance to dividend pay than capital additions. Nishat & Irfan (2003) contemplated 160 organizations recorded at Karachi Stock Exchange for the time of 1981-2000. Their outcomes were in light of cross sectional relapse examination demonstrate that dividend yield and payout

proportion is decidedly identified with the offer value unpredictability. Adefila, Oladipo & Adeoti (2004) mulled over the variables influencing the dividend strategy of Nigerian firms. The consequences of their study demonstrate that Nigerian firms incline toward normal dividend payouts that can be as per the desires of their shareholders.

Their outcomes likewise infer that there is no connection between Dividend Payments, Net Earnings and Stock Prices. Nigerian firms pay dividends to their shareholders paying little heed to their level of benefits for fulfillment of their shareholders. Myers & Frank (2004) discovered positive connection between Price Earnings Ratio and Dividend Pay-out Ratio in their study by utilizing the information of 483 organizations from Multex Investor Information base. Their outcomes further demonstrate that there is a critical positive connection between Debt to Equity Ratio and Dividend Pay-out. Pastry researcher, Mukherjee, & Paskelian (2006) clarified the conduct of Norwegian chiefs who utilized the review procedure as a part of outlining the dividend strategy. The consequences of their overview demonstrate that present and future dividend, solidness of income, the present level of money related influence, and liquidity are the primary determinant that corporate chiefs consider in planning their dividend strategy. Their outcomes gave the blended assessment about the inquiry: "whether dividend strategy influences the organizations' worth or not"?

The aftereffects of the study directed by Amidu (2007) concentrated on the impact of dividend strategy on the execution of the organizations recorded on the Ghana Stock trade. The consequences of his study demonstrated that there is a positive connection between Return on Assets, Dividend Policy and Growth in Sales and there is a negative connection between Return on Assets, Dividend Pay-out Ratio and Leverage. His outcomes additionally bolster the consequences of past studies that give the most

grounded proof to the pertinence of dividend arrangement to the organizations' execution.

Pani (2008) referred to in Khan (2012) took the specimen of 500 organizations from the six parts of Bombay Stock Exchange keeping in mind the end goal to concentrate on the relationship between dividend arrangement and securities exchange costs. The aftereffects of his study demonstrate that the dividend maintenance proportion is absolutely identified with stock returns in the event of individual division however there is no factually huge connection between these variables. These outcomes further demonstrate that obligation value proportion has the negative connection with stock return while the measure of the firm has positive firm with stock return. Another study led by Raballe & Hedensted (2008) in Denmark amid 1988-2004 recognized the positive relationship between money dividends and net income of the organization, return on value, held income, size and a year ago benefit yet neglect to discover any connection between the obligation value proportion and dividend choice in Denmark.

Dough puncher, Veit, and Powell (2001) studied management of both monetary and non-budgetary NASDAQ firms to focus the persuasive variables on dividend arrangement. Of the twenty-two elements assessed, very pertinent variables in dividend arrangement choices of both money related and nonfinancial firms incorporated the past example of dividends, income steadiness, and present and anticipated future income levels, however noteworthy contrasts exist between the level of significance that non-budgetary and monetary firms management place on a few components, including legitimate requirements, capital structure support, and the level of money related influence.

Pastry researcher, Veit, and Powells (2001) outcomes likewise recommended that managers dividend choices are in pair with the model made by Lintner. Management’s philosophy on dividends appears to incorporate a conviction that in spite of scholastic

thinking as gave by the Modigliani-Miller (M&M) Dividend Irrelevancy Theorem (1961), the dividend choice can effect firm esteem by means of an adjustment in stock value, along these lines making or decreasing shareholder riches; thusly this subject warrants consideration.

The significance of the example of dividends can be seen through Dickens, Casey, and Newman's (2002) evaluation that, as demonstrated by bank dividend strategy, the authentic steadiness of dividend installments can convey generous information around a firm. Dickens, Casey, and Newman (2002) found that dividends pass on worth related information around a firm that income and other money related variables neglected to convey; one occasion in which this is genuine is for the situation where income examples are exceptionally sporadic while dividends are smooth, dividends can preferable depict gainfulness potential over dividend.

Aivazian, Booth, and Cleary (2003) have reasoned that both dividend for value and productivity absolutely correspond with the extent of the dividend pay-out proportion. Their study additionally presumed that organizations with high obligation proportions frequently had lower dividend installments, and firm size likewise decidedly connected with dividend pay-out. Mohd, Perry, and Rimbey (1995) likewise inferred that dividend pay-out related absolutely with firm size. Holder, Langrehr, and Hexter (1998) propose that organizations who put their market concentrate on a solitary market line had lower pay-out proportions than less engaged firms.

Pastry researcher and Powells (1999) study demonstrates that 90 percent of management spots significant worth in dividends as they are accepted to influence the firm's general quality, and they find that the Modigliani-Miller recommendation holds little weight in this present reality. Signaling demonstrated a key inspiration driving dividend arrangement, and their recommendation that dividends are an intends to control the

discussion coming about between the firm and its investors (as dividends help to screen management execution) was upheld as dividends demonstrated to lessen agency costs by compelling the firm to look for outer financing and along these lines be liable to basic open assessment.

As expressed by Mohd, Perry, and Rimbey (1995) in their study on the impacts of dividends on organization costs, "Circulation of assets in real money dividend structure urges managers to discover outside capital, accordingly promising them to lower agency costs as they are presented to the capital market sector. In this environment, the greatest level of dividend pay-out minimizes the organization cost structure when contrasted with the cost of producing obliged trusts."

Bread cook and Powell (1999) state that the utilization of dividend declarations as an strategy to assess stock cost has been resolved appropriate empiric partner, however 34 other confirmation recommends that dividends declarations could conceivably demonstrate development and in addition an absence of venture opportunities. The assessment inclination clarification, albeit not bolstered unquestionably by experimental confirmation, expresses that stocks offering low dividends bid more to investors in higher wage brackets. Research discoveries additionally demonstrated that market inclination inclines towards stable dividend development as opposed to a steady pay.

# CHAPTER THREE

# METHODOLOGY

## 3.0 INTRODUCTION

The procedural approaches adopted for the study are discussed in this section of the study. To establish sequential flow in the organization of the study, the section has been put in factions as follows: research design, population, sample and sampling process, data gathering instrument, data examination plan and ethical considerations.

## 3.1 RESEARCH DESIGN

Research design as defined by Dawson (2002) is the theoretical structure within which research is conducted. To throw more light on it, Creswell and Clark (2007) discourse that, the most relevant element that helps provide direction for the methods used and decisions made by researchers when undertaking a study is the research design.

A quantitative correlation design was used for the study. The reason for the adoption of this technique was because the researcher aims at discovering the connection between certain variables at the end of the study. To achieve this objective, the best way is to employ a research plan that would permit for the gathering of numerical facts that can be examined mathematically (Muijs, 2004).

In the words of Leedy and Ormrod (2005), a correlation design looks to examine the degree to which variation in one variable are related to variation in one or more variables. They further explain that, correlation design is suitable when a researcher is concerned with measuring multiple variables with the intent of evaluating the association that exist among them.

This notwithstanding, Bluman (2001) asserts that, the correlation design is equally suitable in assessing the direction and degree of the association existing among multiple quantifiable variables.

In other words, a correlation research design is suitable when researchers are concerned with measuring multiple variables and assessing the association between them without essentially determining cause and effect (Cozby & Bates, 2012; Bluman, 2001). Such a design can be used to determine the magnitude and direction of the relationship between two or more quantifiable variables.

## 3.2 POPULATION

Population of a research study in the words of Kumekpor (2002), comprise of all the units of a observable fact that is being investigated. The population of the study comprised of ten (10) financial institutions listed on the Ghana Stock Exchange. These institutions were chosen because their financial statements and monthly closing stock prices for years between 2008 and 2013 were available for analysis.

## 3.3 SAMPLE AND SAMPLING PROCEDURE

The purposive sampling technique was utilized in the selection of financial institutions for the study. The rationale behind the use of the purposive sampling technique is that, organizations listed on the Ghana Stock Exchange publish their financial statements annually which are available for public consumption. In addition, other relevant information such as the stock prices and yearly dividend payments can be accessed and analyzed for the purpose of the study. In this regard, only financial institutions that were listed on the Ghana Stock Exchange and have the relevant data such as financial statements and daily closing stock prices available were chosen. The availability of the

data for a specified period of time; thus from 2008 to 2013 was also a criteria for sample selection.

## 3.4 DATA GATHERING INSTRUMENT

The financial statements of the organizations comprising of balance sheets and cash flow statements were the main source relevant data for the study. These were obtained from DataStream on the website Ghana Stock Exchange. From these financial statements, the variables of interest to the researcher which include; stock dividend payout, profit after tax, earnings per share and debt level of the selected companies was deduced. Again, data on the daily closing stock prices of the selected financial institutions were obtained from the data center of the Ghana Stock exchange for price volatility calculation. The data collected and analyzed for the study covered a six (6) year period; thus from 2008 to 2013.

### 3.4.1 VARIABLE DEFINITION

**Price Volatility (PV)**

In the regression used for the study, price volatility served as the dependent variable. They were obtained for each sample financial institution and for each year finding the standard deviation of the annual range of stock prices.

**Stock Dividend Payout (SD)**

From the financial statements of each participating financial institution, the annual total amount of cash paid out to shareholders as dividend was recorded and compared. Provisions were made to control for extreme values in the regression running

**Earnings Per Share (EPS)**

The total values as recorded in the financial statements of the participating financial institutions were deduced for the regression analysis. Although some were stated in Ghana pesewas, all the values were converted to the same denomination (Ghana cedis) to cater for value ambiguity effect in the analysis.

**Debt (D)**

The ratio of the sum of all long-term liability to total asset was taken. The average for all the available years is then taken for the analysis.

**Profit after Tax (PAT)**

The annual net profit of the participating financial institutions were recorded from their financial statements. The averages of these values were calculated to control for extreme values in the regression analysis.

## 3.5 DATA ANALYSIS PLAN

Data collected was analyzed using the Statistical Product and Service Solutions (SPSS) software and Microsoft Excel. The financial statements were well reviewed through the data assessment process so as to ensure that variables of significance to the researcher were obtained (stock dividend, profit after tax, and earnings per share and debt level). Price volatility for each of the financial institutions was calculated using Microsoft excel tool. The standard multiple regression analysis was utilized to establish the relationship between the dependent and independent variables. Justification for this was that the researcher was concerned about determining the predictive association between price volatility (outcome variable) and the selected predictor variables made up of; stock dividend payout, profit after tax, debt and earnings per share). Further correlation

analysis between the independent variables were also made. The researcher also tested for the normality and multicollinearity among the independent variables.

The analysis was done using the regression line;

$$P\text{-}Vol. = \alpha 0 - \alpha 1 SDi - \alpha 2 PATi + \alpha Debti + \alpha 4 EPSi + \alpha ei$$

PV- Price Volatility SD - Stock Dividend

PAT – Profit after Tax EPS – Equity per Share

Debt – Liability level

Volatility in share price is the un-diversifiable risk faced by investors who owe ordinary shares (Guo, 2002). In the contest of this study, Price Volatility referred to the degree of variability in the stock prices of the selected financial institutions over a six (6) year period. The rationale for the study was to determine the extent to which these variations in stock prices are caused by the payment of dividend as against retaining the earnings for future investment in the companies. We also introduced profit after tax, debt (liability level) and earnings per share of the selected financial institutions as other possible determinants of stock price volatility.

### 3.6 ETHICAL CONSIDERATIONS

With a research of such nature, the most appropriate ethical issue that the researcher will ensure is the non-manipulation of figures in the financial statements. Thus the researcher shall under no circumstance manipulate any of the figures in the financial statements in order to get certain desired results.

# CHAPTER FOUR

# DATA ANALYSIS AND PRESENTATION OF RESULTS

## 4.0 INTRODUCTION

The study at this stage dealt with the analysis of data gathered for the study. Panel data was gathered and analyzed using the standard multiple regression module. The module was used to ascertain the association between the variability of prices otherwise called price volatility which served as the dependent/outcome variable and four chosen independent variables (stock dividend payout, earnings per share, profit after tax and debt). Statistical assumptions underlying multiple regressions such as normality and multicollinearity were tested using appropriate statistical tools. The analysis of data was divided into four subsections namely: descriptive analysis of variables, checking for normality using skewness and kurtosis, checking for multicollinearity using correlation matrix and also a summary of multiple regression results.

## 4.1: DESCRIPTIVE ANALYSIS OF VARIABLES

The descriptive statistics of the analysis was dealt with at this section to appraise the variables that were used for the study. The lowest and highest values as well as mean and standard deviation of the variables were assessed. The table below shows these details in a simplified format

**Table 4.1: DESCRIPTIVE ANALYSIS**

| Variable | Lowest | Highest | Average | Std. Deviation |
|---|---|---|---|---|
| Price Volatility | 0.01 | 13.33 | 0.7671 | 2.18721 |
| Stock Dividend payout | 3839.00 | 257852100.00 | 25483011.27 | 41023121.65 |
| Earnings Per Share | 0.01 | 3.97 | 0.4738 | 0.87347 |
| Profit After Tax | 111140.00 | 946215600.00 | 58975679.73 | 129900530.09 |
| Debt | 817000.00 | 5865374790.00 | 396091847.33 | 850765561.01 |

Table 4.1 above consists of descriptive data on all the variables used in the study. These figures include the lowest and highest figures as well as the average and measure of central tendency (standard deviation) of price volatility (dependent variable), stock dividend payout, earnings per share, profit after tax and debt (independent variables).

From table 4.1, the lowest value for price volatility was 0.01 while its highest value was 13.33. The average value for price volatility was 0.7671 and its measure of central tendency was 2.18721.

Also, for stock dividend payout, the lowest value was 3839 and its highest value was 257852100. The average value for dividend payout was 25483011.27while its standard deviation was 41023121.65.

With regards to earnings per share, the lowest value was 0.01 and while the highest value was 3.97. The mean value for earnings per share was 0.4738 and its measure of central tendency was 0.87347.

Furthermore, 111140 was revealed by the study as the lowest value for profit after tax while the highest value was 946215600 The average value for profit after tax was 58975679.73and its standard deviation was 129900530.09.

The final predictive variable which is debt recorded817000as its lowest value whiles its highest value stood at5865374790. The mean value for debt was 396091847.33 and its standard deviation value was 850765561.01.

**Table 4.2: CORRELATION MATRIX TO CHECK THE ASSUMPTION OF MULTICOLLINEARITY**

| Variable | Price Volatility | Stock Dividend | PAT | Debt | EPS |
|---|---|---|---|---|---|
| Price Volatility | 1.000 | 0.114 | 0.071 | 0.136 | 0.525 |
| Stock Dividend | | 1.000 | 0.883 | 0.831 | 0.352 |
| Profit After Tax | | | 1.000 | 0.868 | 0.322 |
| Debt | | | | 1.000 | 0.229 |
| Earnings | | Per | | Share | 1.000 |

According to Tabachnick and Fidell (2001) multicollinearity is said to exist if two or more predictive variables have inter-dependency relationship. In other words, if the predictive variables correlate highly with each other such that their r-values are greater than or equal to 0.9, then multicollinearity exists. From table 4.3, it was found that, the assumption of multicollinearity was met because; none of the relationship among the variables was equal to or more than 0.9

**Table 4.3 COLINEARITY STATISTICS TO CHECK THE ASSUMPTION OF MULTICOLLINEARITY**

| Variables | Tolerance | Variance Inflation Factor (VIF) |
|---|---|---|
| Stock Dividend | 0.197 | 5.070 |
| Profit After Tax | 0.156 | 6.397 |
| Earnings Per Share | 0.863 | 1.159 |
| Debt | 0.205 | 4.867 |

To further confirm the absence of multicollinearity, Tabachnick and Fidell (2001), use the interpretation of the Tolerance Values from the regression output. They have established that, multicollinearity assumption does not exist so long as the tolerance values of the predictor variables are less than (0.10). From table 4.3 above, it is clear that all the Tolerance Values; stock dividend (0.197), Profit After Tax (0.156), Earnings Per Share (0.863) and Debt (0.205) are greater than (0.10).

They also opine that, in order for the data used for regression to be free from multicollinearity, the Variance Inflation Factor (VIF) Values should be less than 10. Therefore from the table above, it is very evident that, there are no multicollinearity issues so far as this data is concerned since all the VIF values are less than 10.

**Table 4.4: SUMMARY OF MULTIPLE REGRESSION RESULTS**

| Variables | R-squared value | Beta Value | P-values |
|---|---|---|---|
| Stock Dividend | | -0.093 | 0.730 |
| Profit After Tax | 33.5 | -0.480 | 0.117 |
| Earnings Per Share | | 0.587 | 0.000 |
| Debt | | 0.502 | 0.062 |

**Dependent Variable – Price Volatility**

**Table 4.5: ANOVA TABLE**

| Model | Sum of Squares | Df | Mean Square | F | Sig |
|---|---|---|---|---|---|
| Regression | 88.947 | 4 | 22.237 | 5.926 | 0.001[b] |
| Residual | 176.356 | 47 | 3.752 | | |
| Total | 265.303 | 51 | | | |

Table 4.5 shows a results confirming that the model used in the test study is significant as shown in (Sig/p-value = 0.001< 0.05). This result suggests that, at least one independent variable such as earnings per share or debt has a relationship with the dependent variable (Price volatility). The table also shows an R-squared value of 33.5% representing the significance level of the entire regression model used for the study. This suggests that 33.5% of the total deviation in the outcome variable (price volatility) can be attributed to the variation in the predictor variable (stock dividend payout) together with the complement independent variables; earnings per share, profit after tax and debt.

The p-value of the variables from the table shows the level of significance of the relationships existing between the independent variables and the dependent variable. With the exception of earnings per share with a p-value of (0.00) all the other independent variables have p-values greater than 0.05. In effect, only earning per share with its p-value of (0.00) on its own has a significant predictive power on the dependent variable. The other predictor variables show no significant predictive power on stock price volatility individually except in association with other variables. The p-values of (0.730), (0.117), and (0.062) for stock dividend payout, Profit after tax and Debt respectively indicates that these variables on their own do not predict volatility in stock prices significantly.

Furthermore, the beta coefficient of each predictor variable indicates the direction of the relationship existing between the dependent variable and each independent variable. In other words, some of the independent variables per the results of the regression model have a positive relationship with the dependent variable (price volatility) while others show a negative relationship.

From table 4.4, the findings showed an inverse relationship between stock dividend payout and price variability owing from the beta value of (-0.093). This means that as stock dividend payout ratio increases, price volatility decreases and vice versa. Although the predictive power of stock dividend payout on price volatility is insignificant as shown by the p-value of (0.730), when complemented with other variables, it helps to determine some variations in price volatility and this relationship is an inverse one.

Based on the insignificant inverse relationship established to exist between stock dividend payout and the dependent variable (price volatility), it means that, as dividend payout increases, the level of variation in stock prices which represent the riskiness of the stock also reduces. This is because, higher dividends can only be paid by companies that have earned high sustainable profits and can afford to pay such large portions of the earnings as dividend to shareholders. By increasing the purchasing power or wealth of shareholders, confidence in the company's shares is boosted. This attracts more investors to demand the shares of the company. Such kind of positive reaction towards the cash payouts is typical of emerging markets like Ghana where majority of the clientele are made up of investors who invest with the aim of earning short-term incomes as a source of livelihood. These clients are more interested in what they can earn as quickly as possible to meet their daily survival needs.

Such investors are not interested in long term gains that come in the form of capital gains but rather prefer that their share of the firm's gains are paid in cash either semi-annually

or annually. Again, since most of these investors are not privy to the day to day activities of the companies in which they have invested, they take little interest in the investment activities of the company for which reason their share of the profits made would be kept as retained earnings by the company as capital to finance future projects. The more cash is paid out to them as dividend, the greater their willingness to maintain their investment in the company to stabilize its stock price.

In the same view, new investors of the same characteristics may be attracted to acquire stocks of the company. These new clients may be institutional investors like the pension houses. These institutions also require periodic cash payments (dividend) to meet their day to day financial demands. The excess demand over supply in the short run may cause the price of the company's shares to rise but would eventually stabilize over the medium to long term. This thereby reduces the price volatility of such shares in the medium to long term. It is important to note that, as per the results of the study, this influence of dividend payout on price movement does not happen in isolation but operates through the combined effort of other variables such as profit after tax, debt or leverage level among others.

In the same vein, a low dividend payout has the tendency to cause volatility of stock prices to rise making it more risky to hold such stocks. This is due to the same reason of the nature of the clientele in developing countries like Ghana who believe more in the bird-in-hand theory. Such investors prefer companies who distribute the company's profits through dividend payout rather than capital gains for the future. These investors therefore see low dividend paying companies as low performers and therefore sell their shares in other to acquire shares of high dividend paying companies. As more of the shares are being sold by its holders, the market adjusts itself to the excess supply of the company's share over its demand and therefore causes the share price to fall. Until other

efforts are made to restore confidence in the company, the price of its shares will continue to fall over the medium to long term period, a sign of high share price volatility (risk of variation).

The above explanation notwithstanding, and as already established based on the p-value of stock dividend, the cause of variation in the stock prices cannot be fully attributed to the variation in the stock dividend payout ratio. It does not on its own have a significant predictive power in determining the variations in the stock prices of the financial institutions listed on the Ghana Stock Exchange.

The insignificance of the predictor power of dividend payout based on (p=.730) goes to confirm the dividend irrelevance theory put out by M & M (1961) who argued that a firm's stock appraisal is a function of the level of corporate profit or gains which in effect mirrors its investment policy. In other words, stock valuation is not based on the proportion of a firm's profit distributed to its shareholders in the form of dividend. Without prejudice to the assumptions underlying the working of their model, M & M concluded that stock valuation is not dependent of the size of the amount paid to shareholders as dividend. This may explain why the predictive power of stock dividend on price volatility among financial institutions on the Ghana stock exchange is insignificants according to the results of the study.

Furthermore, it could be deduced from table 4.4 that, there is a negative relationship between profit after tax and price volatility (-.480). This means that as profit after tax increases, price volatility decreases and vice versa. This goes further to predict that, the more profitable a company becomes, the lesser the fluctuations in its stock price over time. Despite the negative relationship existing between the two variables, such a relationship is not significant because its related p-value of (0.117) is greater than (0.05). Therefore the researcher cannot draw the conclusion that, stock holders of highly

profitable financial institutions in Ghana face less risk as far as volatility of stock prices are concerned.

In addition, the study also discovered that debt had no significant effect on the outcome variable as proven by its p-value of (0.062). Besides the insignificance of the variable, there is positive shadow relationship between debt and price volatility (-0.502). Thus as debt increases, price volatility also increases and vice versa. This can be explained based on a number of reasons.

Firstly, companies that take on high leverage have a poor asset to liability ratio. Such a situation restricts the operations of the company with regards to further expansion and sharing of profit through dividend payout. In such situation, the future prospects of the company become dwindled. The pressure on the management to service these high debts prevents the managers of these companies from taking on new expansion projects. The signal that the growth of the company has been halted, most risk averse investor are likely to offload their share in the company. These factors affect the movements of the share price of the company making it more risky to hold.

Secondly, by law, bond (debt) holders are paid before share holder. Therefore, the higher the debt ratio, the more likely earnings of a company would not be enough to share with its stockholders as dividend. The inability of the company to payout reasonable dividends to its holders also after the volatility of the stock prices negatively. These explain why price volatility is likely to rise as the debt of the company rises beyond a certain threshold.

These factors explained above notwithstanding, the results of the study establish that, debt alone does not significantly predict such price variation. This can be explained by the related p-value of (0.062) which is greater than (0.05) and therefore renders debt an insignificant variable in determining price volatility.

Finally on the discussion of the variables, the study found that, there was a significant positive relationship between earnings per share and price volatility ($p=0.000$, $\beta=0.592$). This results indicates that, variation in earnings per share has a huge significant effect on price variation. The association between the two variables is such that, an increases in earnings per share leads to an increase in price volatility and vice versa. Considering price per earnings ratio, which is the direct association existing between the price of a share and its earnings, it can be explained that, as earnings increases, the level of variation in the company's stock price also increases indicating a possible high risk and return opportunities for holders of such stocks.

It has been established that, earnings influence the price of a company's stock depending on how well the company performs against set expectations. Consistency in earnings growth of a company is the catalyst for instilling investor confidence. In effect, when investors have high confidence in the future growth of the business based on the present performance in earnings, they are often willing to pay more for the stock and this can cause a steady increase in the price of the company's stocks. This price movement would be positive for holders of such stocks.

In the same vein, if the earnings of the company dwindles, the stock prices will also fall posing a threat of loss to shareholders who keep holding on to such stocks. This variability in the price of shares as a results of variations in the earnings per share of a firm creates an environment for high gains and losses for the holders of the firm's stocks.

The regression model for the study is therefore presented below

$$P\text{-}Vol = \alpha 0 + \alpha 1SDi + \alpha 2PATi + \alpha 3Debti + \alpha 4EPSi \quad \ldots\ldots (1)$$

$$P\text{-}Vol = .152 - SDi\ (-.093) - PATi\ (-.480) + Debti\ (.502) + EPSi\ (.587) \quad \ldots\ldots (2)$$

Per the regression line above, the independent variables Stock Dividend Payout (SDi), Profit After Tax (PATi), Debt (Debti) and Earnings Per Share (EPSi) do make individual

contributions towards the prediction of variability in stock prices. However out of the four predicting variables, only predictive power of Earnings Per Share is significant as far as the variability in stock prices of financial institutions on the securities exchange market of Ghana is concerned.

Khan (2012) conducted a similar study using the same independent variables in order to find out their predictive relationships with price volatility among chemical and pharmaceutical industry of Pakistan. According to his findings, securities exchange prices of companies in the chemical and pharmaceutical industry of Pakistan had a noteworthy connection with Stock Dividend, Profit after Tax and Earnings per Share.

The findings of the current study which was conducted in the Ghanaian context using financial institutions listed on the Ghana stock exchange however found out that; the only variable that has significant relationship with the securities exchange market prices was earnings per share. Thus the findings of the current study were not in direct congruence with the findings from Pakistan. From the researchers' point of view, what might have contributed to this inconsistency in the findings is due to the differences in the industries in which the study was conducted. In Pakistan, the study was conducted among chemical and pharmaceutical companies whiles this study conducted in Ghana used companies in the financial industry. These two industries are very distinct from each other in terms of their line of business and operational controls. This factor has a bearing on the nature of key variables on their financial statements.

# CHAPTER FIVE

# SUMMARY OF FINDINGS, CONCLUSION & RECOMMENDATIONS

## 5.0. INTRODUCTION

The study at this stage presented the synopsis of results, conclusion, recommendations as well as direction for upcoming studies. The summary of findings are presented systematically based on the research objectives and hypothesis. Each research objective is discussed in relation to the results of the regression analysis made in the study. Below is the presentation;

## 5.1 SUMMARY OF FINDINGS

The aim of the study was to find out the impact of stock dividend payout on share price volatility among Financial Institutions listed on the securities exchange market of Ghana. Price volatility was the dependent variable against which the four independent variables; namely; Stock Dividend payout, Profit after Tax, Earnings per Share and Debt regressed. The point of the study was to figure out the effect of stock profit payout on share value instability among Financial Institutions listed on the securities trade market of Ghana. Price unpredictability was the indigent variable against which the four autonomous variables; in particular; Stock Dividend payout, Profit after Tax, Earnings per Share and Debt were regressed

A standard multiple regression was utilized to test for the prescient connections between the outcome variable and the indicator variables. After running the regression analysis using the Statistical Package and Service Solutions (SPSS) tool, the results showed an overall p-value of (0.01) which is less than (0.05) and by interpretation indicating that the model used for the analysis was fit and suitable.

This therefore established that, among the four (4) independent variables regressed against the outcome variable, there exist a significant association between price volatility and at least one of the predictor variables. The beta values of the independent variables showed the direction of their relationship with the dependent variable. The direction of the association between the outcome and predictor variables is independent of the significance level of the associations.

Stock dividend payout as the main independent variable for the study, and therefore the first research objective and question were;

**Research Objective 1**: To determine the effect of dividend payout on stock prices of financial institutions listed on the securities exchange market of Ghana.

**Research Question 1**: What is the effect of dividend payout on stock prices of listed financial institutions in Ghana?

In the regression analysis, the researcher sought to establish if variations or unpredictability in stock prices of financial institutions listed on the Ghana securities exchange market could be attributed to dividend payout. The p-value of stock dividend from the results of the analysis was (0.730>0.05) indicating that the variable has no significant effect on stock prices. In other words, variation stock dividend payout on its own does not cause variation in the prices of stocks of financial institutions on the Ghana securities exchange market

**Research Objective 2**: To identify the association between the dividend payout and stock prices of listed financial institutions in Ghana

**Research Question 2**: What is the relationship between dividend payout and on the prices of stock of listed financial institutions in Ghana?

The second research objective sought to identify the direction of the relationship between stock dividend payout and price instability. From the results of the regression, above, the beta value of stock dividend payout (-0.093) indicates that, there is an inverse relationship between the two variables. As discussed earlier, the inverse relationship suggests that, all things being equal, an increase in stock dividend payout will lead to a reduction in the volatility of stock prices of financial institutions listed on Ghana's securities exchange market and the reverse is true.

**Research Objective 3**: To analyze the factors affecting the stock prices of financial institutions listed on the Ghana Stock Exchange

**Research Question 3**: What other factors affect the stock prices of the listed financial institutions in Ghana.

The third and final objective of the study was to find any other factors that have predictive powers over stock price variability. The additional variables introduced into the study were Profit after Tax, Earnings per Share and Debt. The results of the regression presented that;

**Profit after tax:** there a negative relationship between Profit after Tax and price volatility. This was indicated by the beta value of (-0.480). This association between the variables suggests that, all things being equal, an increase in the profit after tax of a company will lead to a decline in the instability of its stock prices. However, the relationship between the two variables in insignificant as shown by its p-value of (0.117>0.05).

**Debt**: there was a positive relationship between debt and price volatility as shown by the beta value (0.502). The direction of the relationship between debt and price instability of stocks suggests that, all things being equal, an increase in the liabilities of a company will lead to an increase in the instability of its stock prices as well. And the

reverse must be true. However, just as it was in the case of profit after tax, the level of the relationship between the two variables is insignificant as indicated by the p-value of (0.062>0.05)

**Earnings per Share:** From the regression results table above, there was a positive association between earnings per share and stock price instability. This is indicated by the beta value (0.587). The direction of the relationship suggests that, other things being equal, an increase in earnings per share would lead to an increase in the volatility of stock prices of financial institutions on the securities exchange of Ghana. This relationship was found to be significant as indicated by the p-value of (0.000<0.05). This suggests that, among the four predictor variables regressed against the outcome variable, only earnings per share on its own can cause a direct change in the variability of stock prices of financial institutions trading on the Ghana securities exchange market.

The results of the study also reveals that if a company fails to produce and maintain consistent earnings growth which in effect reduces it price per earnings ratio over a period, its shareholders are likely to dispose their stock thereby bringing its stock prices down. It is again worth noting that, the sentiments of investors is a paramount component in stock pricing. This is because, investors are generally willing to pay more to own shares of high earning companies. Therefore by improving on the earnings per share of accompany over a consistent period of time would be rewarded by investors who would willingly pay more for the stocks of the company thereby providing more financial resources for other investing activities of the company.

## 5.2 CONCLUSION OF THE STUDY

The study delved into the variables that determine stock price volatility among financial institutions listed on the Ghana securities exchange market. The null hypothesis of the study which stated that; "There will be no significant association between stock dividend payout and prices of stocks of financial institutions listed on Ghana's Securities Exchange Market" was accepted.

Based on the outcomes, the researcher concludes that listed financial organizations on Ghana's Securities Exchange Market need to pay much attention to Earning per Share since it has been found to be the most significant predictor of stock price volatility in the stock market.

That notwithstanding, other variables such as the stock dividend, debt and profit after tax should also be given the necessary attention. This is because, even though they did not make significant impact on stock price volatility, they are still relevant indicators for stock price volatility in the stock market.

## 5.3 RECOMMENDATIONS

In view of the aftereffects of the study, the accompanying proposals can be made to help managers and directors of organizations trading on the Securities Exchange Market of Ghana settle on educated choices.

Firstly, organizations recorded on the Ghana stock trade must keep up a sensible measure of profit pay out to its shareholder

This is because it serves as a signaling variable to both existing and potential investors as to the performance of the company. However, since the predictive power of stock dividend payout alone on stock price volatility is insignificant, companies need not

increase their payout ratio beyond a certain threshold with the hope of reducing volatility of their share prices

Secondly, companies must focus on improving their earnings since earnings per share. This when achieved has a great potential of reducing the degree of variation in the company's stock prices as revealed in the results of the study.

Thirdly, profit after tax though insignificant on its own in predicting price moves as revealed by the study, the direction of the relationship indicates that, completed by other variables, companies must improve their profit after tax in the effort to reducing the degree of variability in the prices of stocks of financial organizations trading on the Ghana Securities Exchange Market.

Finally, companies must see to maintain a reasonable proportion of debt since an increase in debt beyond certain thresholds has the inherent power to cause other variables to cause price volatility to increase unfavorably.

## 5.4 DIRECTIONS FOR FUTURE STUDIES

This study looked to discover the effect of stock profit payout on stock value instability among financial organizations recorded on the Ghana Securities Exchange Market. Future analysts can duplicate this study by increasing the scope of the study. This can be done by including all the companies listed on the Ghana Stock Exchange. The researcher suggests that the sample size of the study be increased to about thirty or more in future studies to make the results more reliable for generalization due to the effect of the different profitability, debt and dividend payout ratios of companies belonging to different industries and therefore have different operational conditions. Such a study will empower future researchers to contrast discoveries with a comparable study directed by

Hussainey (2011) in UK which was done using all the companies listed on the London stock exchange.

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## APPENDIX

### Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .579[a] | .335 | .279 | 1.93707 |

a. Predictors: (Constant), debt, Earnings Per Share, stock dividend, Profit After Tax

### ANOVA[a]

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 88.947 | 4 | 22.237 | 5.926 | .001[b] |
| | Residual | 176.356 | 47 | 3.752 | | |
| | Total | 265.303 | 51 | | | |

a. Dependent Variable: price volatility

b. Predictors: (Constant), debt, EarningsPerShare, stock dividend, Profit After Tax

**Coefficients**

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | Correlations | | | Collinearity Statistics | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | | | Zero-order | Partial | Part | Tolerance | VIF | |
| (Constant) | .206 | .338 | | .609 | .546 | | | | | | |
| Stockdividend | -5.060E-009 | .000 | -.093 | -.348 | .730 | .106 | | -.051 | -.041 | .197 | 5.070 |
| EarningsPerShare | 1.458 | .318 | .587 | 4.583 | .000 | .521 | | .556 | .545 | .863 | 1.159 |
| ProfitAFterTax | -7.933E-009 | .000 | -.480 | -1.597 | .117 | .063 | | -.227 | -.190 | .156 | 6.397 |
| Debt | 1.267E-009 | .000 | .502 | 1.913 | .062 | .139 | | .269 | .228 | .205 | 4.867 |

a. Dependent Variable: price volatility

**SUMMARY OF 2008 FINANCIAL STATEMENTS OF FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE**

| FINANCIAL INSTITUTIONS | PRICE VOLATILITY | STOCK DIVIDEND | EARNINGS PER SHARE | PROFIT AFTER TAX | DEBT |
|---|---|---|---|---|---|
| CAL BANK | **0.07** | 1752000 | 0.0484 | 7976000 | 30024100 |
| ECOBANK | 1.0097 | 13384000 | 0.16 | 33579000 | 83495700 |
| ECOBANK TRANS. INC. | 0.66 | 26940000 | 1.39 | 111140 | 11114000 |
| ENTERPRISE GROUP | 0.68 | 1417000 | 0.11 | 2776000 | 2776000 |
| GCB BANK | 0.13 | 14575000 | 0.14 | 37004851 | 14419333 |
| HFC BANK GHANA | 0.04 | 956636 | 0.0471 | 2078006 | 34895666 |
| SIC INSURANCE COMP. | 0.1 | 2233543 | 0.0454 | 8881092 | 50013622 |
| SOCIETE GENERALE GH. | 0.06 | 4275000 | 0.1089 | 15521697 | 36709380 |
| STANDARD CHARTERED | 5.27 | 26769000 | 1.89 | 33187000 | 89548300 |
| UT BANK | 0.0087 | 2000000 | 0.03 | 5300000 | 11054000 |

**SUMMARY OF 2009 FINANCIAL STATEMENTS OF FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE**

| FINANCIAL INSTITUTIONS | PRICE VOLATILITY | STOCK DIVIDEND | EARNINGS PER SHARE | PROFIT AFTER TAX | DEBT |
|---|---|---|---|---|---|
| CAL BANK | 0.11 | 2455000 | 0.0471 | 8878000 | 39345600 |
| ECOBANK | 0.7614 | 26574000 | 0.26 | 53853000 | 11814610 |
| ECOBANK TRANS. INC. | 0.13 | 29863000 | 0.58 | 64600000 | 777095800 |
| ENTERPRISE GROUP | 0.28 | 1048000 | 0.05 | 1194000 | 16498000 |
| GCB BANK | 0.18 | 15900000 | 0.068 | 18117151 | 171825249 |
| HFC BANK GHANA | 0 | 1868045 | 0.0302 | 5527355 | 22622716 |
| SIC INSURANCE COMP. | 0.08 | 3462917 | 0.0301 | 5891490 | 52275110 |
| SOCIETE GENERALE GH. | 0.33 | 0 | 0.0692 | 19293069 | 46817243 |
| STANDARD CHARTERED | 3.75 | 29089000 | 2.99 | 57497000 | 124463500 |
| UT BANK | 0.48 | 2120000 | 0.04 | 7521000 | 18957500 |

**SUMMARY OF 2010 FINANCIAL STATEMENTS OF FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE**

| FINANCIAL INSTITUTIONS | PRICE VOLATILITY | STOCK DIVIDEND | EARNINGS PER SHARE | PROFIT AFTER TAX | DEBT |
|---|---|---|---|---|---|
| CAL BANK | 0.03 | 2866000 | 0.0365 | 8810000 | 423232000 |
| ECOBANK | 1.46 | 41423000 | 0.26 | 60117000 | 129358300 |
| ECOBANK TRANS. INC. | 0.006 | 43214000 | 1.14 | 13181900 | 917426100 |
| ENTERPRISE GROUP | 0.061 | 2896000 | 0.005 | 602000 | 817000 |
| GCB BANK | 0.089 | 9434000 | 0.209 | 55432230 | 186117618 |
| HFC BANK GHANA | 0.01 | 1913585 | 0.0415 | 7599282 | 291635679 |
| SIC INSURANCE COMP. | 0.009 | 0 | 0.0308 | 6028415 | 50063658 |
| SOCIETE GENERALE GH. | 0.011 | 13355755 | 0.059 | 19370322 | 56966832 |
| STANDARD CHARTERED | 0.64 | 49830000 | 3.64 | 72208000 | 147190100 |
| UT BANK | 0.012 | 2099000 | 0.03 | 9905000 | 45671400 |

**SUMMARY OF 2011 FINANCIAL STATEMENTS OF FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE**

| FINANCIAL INSTITUTIONS | PRICE VOLATILITY | STOCK DIVIDEND | EARNINGS PER SHARE | PROFIT AFTER TAX | DEBT |
|---|---|---|---|---|---|
| CAL BANK | 0.04 | 3199000 | 0.0739 | 18338000 | 693142000 |
| ECOBANK | 0.141 | 46026000 | 0.3 | 70105000 | 187714400 |
| ECOBANK TRANS. INC. | 0.015 | 54972000 | 1.76 | 206840000 | 1570257600 |
| ENTERPRISE GROUP | 0.042 | 787000 | 0.083 | 10914000 | 3553000 |
| GCB BANK | 0.388 | 18550000 | 0.06 | 16683000 | 228509100 |
| HFC BANK GHANA | 0.027 | 2931371 | 0.054 | 9890257 | 356915855 |
| SIC INSURANCE COMP. | 0.049 | 3478567 | 0.0311 | 6081044 | 60078608 |
| SOCIETE GENERALE GH. | 0.098 | 116986286 | 0.0675 | 22872030 | 572121031 |
| STANDARD CHARTERED | 8.49 | 25877000 | 3.97 | 77676000 | 173848600 |
| UT BANK | 0.036 | 0 | 0.2 | 13066000 | 64012000 |

**SUMMARY OF 2012 FINANCIAL STATEMENTS OF FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE**

| FINANCIAL INSTITUTIONS | PRICE VOLATILITY | STOCK DIVIDEND | EARNINGS PER SHARE | PROFIT AFTER TAX | DEBT |
|---|---|---|---|---|---|
| CAL BANK | 0.047 | 6455000 | 0.0902 | 49517000 | 955301000 |
| ECOBANK | 0.074 | 55230000 | 0.049 | 143169000 | 292229600 |
| ECOBANK TRANS. INC. | 0.012 | 257852100 | 1.7 | 946215600 | 5865374790 |
| ENTERPRISE GROUP | 0.057 | 2100000 | 0.106 | 13889000 | 1933000 |
| GCB BANK | 0.085 | 18550000 | 0.52 | 138645000 | 268952100 |
| HFC BANK GHANA | 0.002 | 9144899 | 0.0675 | 13025347 | 460431304 |
| SIC INSURANCE COMP. | 0.02 | 3478567 | 0.0462 | 9034390 | 71613131 |
| SOCIETE GENERALE GH. | 0 | 13355755 | 0.0906 | 3026314 | 919112242 |
| STANDARD CHARTERED | 13.33 | 59998000 | 1.16 | 136288000 | 2079335000 |
| UT BANK | 0.017 | 0 | 0.04 | 20931000 | 833223000 |

**SUMMARY OF 2013 FINANCIAL STATEMENTS OF FINANCIAL INSTITUTIONS LISTED ON THE GHANA STOCK EXCHANGE**

| FINANCIAL INSTITUTIONS | PRICE VOLATILITY | STOCK DIVIDEND | EARNINGS PER SHARE | PROFIT AFTER TAX | DEBT |
|---|---|---|---|---|---|
| CAL BANK | 0.239 | 19189000 | 0.1678 | 92010000 | 127677000 |
| ECOBANK | 0.729 | 85036000 | 0.063 | 185862000 | 406729900 |
| ECOBANK TRANS. INC. | 0.027 | 92713000 | 0.6 | 147773000 | 2039780500 |
| ENTERPRISE GROUP | 0.563 | 4724000 | 0.186 | 24376000 | 2179000 |
| GCB BANK | 1.022 | 47700000 | 0.86 | 229199000 | 293876100 |
| HFC BANK GHANA | 0.146 | 3839 | 0.1226 | 36338958 | 809371408 |
| SIC INSURANCE COMP. | 0.052 | 0 | 0.003 | 594652 | 75873467 |
| SOCIETE GENERALE GH. | 0.038 | 13355755 | 0.1089 | 36364192 | 102285188 |
| STANDARD CHARTERED | 1.441 | 56637000 | 1.77 | 208019000 | 250137400 |
| UT BANK | 0.042 | 9522000 | 0.02 | 9757000 | 105699400 |