

**UNIVERSITY FOR DEVELOPMENT STUDIES (UDS)**

**EFFECT OF DIVIDEND ON SHARE PRICE OF LISTED COMPANIES ON THE  
GHANA STOCK EXCHANGE**

**BY**

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**(UDS/MPC/0039/14)**

**THESIS PRESENTED TO THE DEPARTMENT OF ACCOUNTING, SCHOOL  
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## DECLARATION

I, Felix Ayine Anabila, declare that this study is my own work, submitted in partial fulfillment for the award of a Master of Science Degree in Accounting. I further declare that this work has not been submitted by any other person or group of persons for academic credits.

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SIGNED..... DATE.....

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(SUPERVISOR)



## DEDICATION

This research work is dedicated to the Almighty God and to my family and friends.

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## ABSTRACT

The study assesses the effect of dividend payout on the share price of companies listed on the Ghana Stock Exchange from 2000 to 2015. The sample size consists of five companies listed on the GSE from the Finance/Insurance industry. They include; Ghana Commercial Bank (GCB), Standard Chartered Bank, Societe Generale Bank (Ghana) Limited, Enterprise Insurance, and H. F. C. Bank. The study used mainly secondary data. The study described the trend of share prices and dividend payment of companies listed on the GSE, the effect of dividend on share price, as well as the trend of the annual average 91day Treasury bill rate (interest rate) for the market from 2000 to 2015. The effect of dividend on share price was examined using a double log multiple regression model. The study revealed that the share prices of all the companies (GCB, HFC, EIG, SCB, and SGSSB) fluctuate year by year throughout the sixteen year period from 2000 to 2015. The share price of SCB was higher than all the other companies throughout the entire period but fluctuate each year. The average share price of the companies listed on the GSE generally fluctuates over the years between 2.93 and 9.85. The study further revealed that dividend payment among all the companies was generally not stable but fluctuates every year. However, there seems to be a rise in dividend payment along the years though not stable. Also, the study revealed that several explanatory variables were significant in explaining the variations in the share prices of companies listed on the GSE. Dividend payment significantly influences the share prices of companies listed on the GSE. Dividend payment was statistically significant at 1% significance level. It has a positive relationship with share prices. The other variables which significantly influence share prices were annual average 91day Treasury bill rate (interest rate) and retain earnings. The study also revealed that interest rate for the market has not been stable over the years. It keeps fluctuating each year. However, there has been a sharp decline in interest rate in recent times compared to the early years of 2000. It is recommended that companies listed on the Ghana Stock Exchange (GSE) should make a policy to pay dividend regularly and promptly to its shareholders in order to attract more investors to their companies so that their share prices may appreciate for them to stay competitive in the market since dividend payment leads to an increase in share prices of companies listed on the GSE. Also, companies listed on the GES that intend increasing their share prices should not retain much earnings of shareholders since retain earnings leads to a decrease in the share prices. Since the future is uncertain, investors often prefer receiving their earnings now as against the future which corroborates the bird in hand theory.



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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

Companies listed on the stock exchange market and in Ghana, the Ghana Stock Exchange often issue out shares to shareholders therefore such companies are liable to pay shareholders dividend in return for their investment. However, payment of dividends varies from company to company depending on the dividend payment policies of the company. Some companies maintain the principle of withholding and ploughing back profit to expand their business operations while dividends are paid later in the future while others prefer prompt payment of dividend to shareholders as the company makes profit. Whichever policy adopted by a company has a direct effect or influence on investor's decision to purchase shares from the company which also has an impact on the share value of such company over time.

Dividend policies and its payments have been widely researched over the years across the globe. Many studies have been limited to understanding the theories behind the various policies on dividend used by companies. Some studies have attempted studying the effects of dividend policies on share price among others. However, the effect of actual dividend payment (amount paid to shareholders annually) on share price has not been carefully examined. Dividend policies of companies are certainly different from actual dividend payment in the sense that a policy to pay dividend annually does not consider the amount of dividend actually paid.



Shareholders decision to invest in a company will be greatly influenced by the amount of money paid to shareholders annually than only a policy to pay or not to pay. Dividend payment is important for investors, managers, lenders and for other stakeholders to make informed investment decision. Dividend payment is a way of investors assess whether the company could generate cash or not. It is important for investors and shareholders because investors consider dividends not only the source of income but also a way to assess the firms' performance and liquidity issues from investment points of view. Dividend payouts is the amount of income received by shareholders at the end of the years after paying tax and other statutory obligations.

The stock exchange market provide a wider and efficient platforms for the companies and investors to transact businesses in a more transparent and open manner. It reduces the risk that exist between the company and the investor. The Ghana Stock Exchange for example provides all stakeholders a transparent and unique platform to invest in shares of companies listed on the exchange to make available funds which goes a long way to provide benefits such as; enhancing the status of the companies in the community, improving the financial position of the company, gaining easier access to long-term capital and providing incentives for employees. Dividend payment or Capital Gain is often the reward that investors (shareholders) get in return for their investment in shares is the company.

Dividend is a cash payment made on a quarterly or semi-annual basis by a company to its shareholders after the deduction of tax at the standard personal income tax rate (Watson & Head, 2002). Capital Gain on the other hand, is the amount by which the sale price of a



share exceeds the purchase price which has a long term effect on the investor (Bodie et al, 1996).

According to Lintner (1956) and Gordon (1959), dividend payout to the investor is a very critical factor and so serves as an indicator to assess a company's performance since;

- Due to the asymmetry of information that exists between investors and company management, investors consider dividend to convey new information about the company and its prospects.
- Dividend payout is also devoid of accounting manipulations.
- Dividend payout also ensures high level of certainty compared to capital gain also known as 'bird in hand'.

Dividend payout is mostly an important factor investors consider when making investment decisions. It therefore means that, dividend has a vital role to play in share prices of companies listed on the Ghana Stock Exchange (Azhagaiah and Priya, 2008).

According researchers such as Frankfurter and McGoun, (2000), Amidu (2007) and Howatt et al (2009) dividend related studies, both as a matter of policy and as a share value-enhancing feature has been most challenging studies in modern financial economics. Few studies have been conducted to find out the relationship between dividend policy and share price as established already.

This study therefore comes to fill the gap in literature between dividend policies which has been researched upon and actual dividend payouts which the study focuses on. by establishing the effect of actual dividend payment on market share prices of companies



with respect to some selected quoted firms in Ghana especially from the banking and insurance industry.

Literature has it that investors can be categorized into two, based on their interest for investing in shares (Clientele Effect). The clientele effect indicates that investors will tend to hold stocks whose dividend policy fits their needs. According to Miller et al. (1961), dividends are irrelevant to the firm's value under a perfect market condition; the change in stockholder wealth is directly related to the firm's earnings not to its dividend policy.

In contrast, Lintner (1956) and Gordon (1959) argue for the relevancy of dividend policy to share valuation. They argued that dividends are preferred to capital gains due to their certainty. This is often referred to as the 'bird in hand' argument and means that the investor would prefer to receive a certain dividend payment now rather than leaving the equivalent amount in an investment whose future value is uncertain.

## **1.2 Problem Statement**

The share price of companies listed on the Ghana Stock Exchange (GSE) market is influenced by several factors. Investors often take into consideration the performance of a company in terms of the value of its shares before making investment. The performance of the GSE is largely dependent on the performance of the individual companies list on the market.



Individual companies listed on the stock exchange market are often saddled with how to effectively management their operations in order to give value to their shareholders by improving upon their share prices. Share prices could be influenced by dividend payment policies of companies. Some studies so far on the subject has been focused on the effect of dividend payment policies on share price without examining effect of the actual amount paid by companies to shareholders as dividend.

A decision to pay or not to pay dividend may be based on speculations and hence the amount of money paid to shareholders as dividend may not be taken into consideration. Meanwhile the most important element to consider which is useful to companies is the effect of the amount of money paid as dividend on share price which has been ignored by researchers for which this study seeks to address. Making a decision to pay dividend may be different from actual payments. Also, researches into the influence of dividend payment on share price have been focused on individual firms listed on the stock exchange.

However, few studies in Ghana have examined the impact of dividend payment on share price of companies listed on the GSE across different industries (Attah-Botchwey, 2014).

This study therefore assesses the effect of dividend payment on share price using actual figures of dividend payments by companies listed on the GES. The focus of the study is on the Banks/ Insurance companies listed on the Ghana Stock Exchange for the period 2000 – 2015 with particular focus on the Banking industry. The Banks/ Insurance industry represents a significant (largest) percentage of companies listed on the GES.



The trend of share prices of companies listed on the GES has not been considered in most recent studies on the subject. It is unclear whether the trend of share price move in a certain pattern or it fluctuates in response to dividend payments.

On the issue of the effect of dividend policies on share prices, some suggest that dividend policy is irrelevant because they argue a firm's value should be determined by the basic earning power and business risk of the firm, in which case value depends only on the income (cash) produced, not on how the income is split between dividends and retained earnings and opponents of this statement called dividend irrelevance, that investors care only about the total returns they receive, not whether they receive those returns in the form of dividends, capital gains or both.

The results of researches conducted in various stock markets are different. There are many internal and external factors, which simultaneously affect share prices and it is almost impossible to segregate the effect of each so the variations remain.

In "The State of the Ghanaian Economy in 2005" the Institute of Statistical, Social and Economic Research (ISSER, 2006) reported that in contrast to most stock markets at the global level, the performance of the Ghana Stock Exchange (GSE) was not impressive in 2005. From being at one time the best performer in the developing world, the GSE had moved down to sixteenth position by end of September, 2005.

The market traded 21.99 percent less in volume in 2005 than in 2004 with the GSE all-share index down by 29.85 percent at the end of December 2005. This has necessitated several studies into the subject including how dividend payment decision of a company can influence share prices.



Management of corporate organizations in emerging markets is faced with situation of determining the type of dividend policy to adopt in order to maximize shareholders wealth. Dividend policy is one of the most challenging topics of modern financial economics. In the case of a company listed on the stock exchange, shareholders who are not satisfied with the performance of their investment are able to sell their shares and invest elsewhere. Ownership rights are readily tradable and this provides a strong incentive for managers to focus on enhancing the value of the company (shareholders' value).

It is in the light of this that dividend decision ought to be evaluated with the aim of maximizing the value of the firm to its shareholders through market price of the shares and the current dividend. (Vasuthep, 2007).

The share volume of a company remains unchanged relative to changes in dividend and other performance variables; however, the share price of a company periodically changes as investors interest change. The issue of dividend payout to the investor is very critical and so serves as a parameter to assess a company's performance since dividend payout is devoid of accounting manipulations. In recent years some managers of companies deliberately and improperly manipulate accounting figures to portray the financial strength of their companies which is likely to mislead investors; an example is in the WorldCom and Enron cases.





### **1.3 Objectives of the Study**

The main objective of the study is to examine the effect of dividend payout on the share price of Banks/ Insurance companies listed on the GSE.

The specific objectives are;

1. To describe the trend of share prices and dividend payment of Banks/ Insurance companies listed on the GSE from 2000 – 2015.
2. To estimate the effect of dividend payment on share prices of Banks/ Insurance companies listed on the GSE from 2000 – 2015.
3. To describe the trend of the annual average 91day Treasury bill rate (interest rate) for the market from 2000 to 2015.

### **1.4 Research Questions**

1. What is the trend of share prices and dividend payment of Banks/ Insurance companies listed on the GSE from 2000 - 2015?
2. What is the effect of dividend on share prices of Banks/ Insurance companies listed on the GSE from 2000 - 2015?
3. What is the trend of the annual average 91day Treasury bill rate (interest rate) for the market from 2000 to 2015?



## 1.5 Hypothesis

H<sub>0</sub>: Dividend has no effect on share prices of Banks/ Insurance companies listed on the GSE.

H<sub>01</sub>: Dividend has a positive effect on prices of Banks/ Insurance companies listed on the GSE.

## 1.6 Significance of the Study

The Ghana Stock Exchange (GSE) as an organized stock market object to protect investors by requiring that key and relevant information be disclosed to investors and to hold all those responsible individuals liable for any commission or omission of material facts in relation to its activities. Trading on the GSE as in any other stock market provides ready market, liquidity and free negotiability of securities that investors hold; it is important to appreciate the fact that investors whose purpose for investing in shares on the stock exchange is to maximize their wealth by receiving dividend can readily sell off their shares in times of dividend crisis.

It is significant to note that the general investing community recognizes wealth maximization as a key motivating factor that induce them to invest in shares on the GSE.

It is therefore pertinent at this time to have some research done in respect of dividend and its impact on share prices to the investor which will serve as an investment guide to prospective and existing investors, institutional investors inclusive and also as source of information for investors who depend on dividend payment to make decisions on investing in shares on the Ghana Stock Exchange (GSE).



Studies on dividend payment as a subject to researchers is often on its effect on share price of individual firms and in some cases where multiple firms are studied, samples are drawn from cross sections of industries without focusing on one particularly industry. This study therefore seeks to address such gap inherent in finance literature and will complement the existing body of knowledge on dividend payment to shareholders and will also answer the question, what kind of effect exists between dividend and investors share price.

The study will therefore help contribute to knowledge and provide information to stakeholders on how dividend payment affect the share price of companies listed on the GSE specifically with regards to the banking industry as a case. This will help companies in the banking industry in planning their dividend policies so as to be able to stay competitive in the market. It will also help investors in making prudent investment decisions regarding when and where to invest their resources depending on dividend policies and share prices and how they relate.



The scope of this study covers Banks/ Insurance companies listed on the GSE from 2000 – 2015. It mainly covers five listed companies from the banking and insurance industry on the GSE within the reporting period.

### **1.7 Limitations of the Study**

The study is limited to only companies listed on the Ghana Stock Exchange from the year 2000 to 2015. Results from the study cannot be used to generalize for all companies listed on the GSE since the study only focused on the banking and insurance industry.

### **1.8 Organization of the Study**

The organization of this study is in five different chapters;

Chapter one deals with the background of the study, problem statement, objectives of the study, research proposition or hypothesis, significance of the study, scope and organization of the study. Chapter two thoroughly reviews scholarly work both theoretical and empirical literature done in the same area of the subject. This will cover theories and concepts relating to the study and operationalized related terminologies.

Chapter three focuses on the methodology employed to achieve set objectives. It discusses the research design, population and sampling technique, data collection method, instruments for data collection and analytical tool (statistical analysis) and the procedure and time frame of the study.

Chapter four present the discussion of the findings of the study.



Chapter five summaries the major findings, provide conclusions on the issues, make recommendations, research limitations and suggestions for further studies.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter examines the work done by people on dividend and its relevance to the study. It used both theoretical literature and empirical literature for this purpose. The review covers; the nature of stocks, definition of dividend policy and dividend payouts, dividend theories, the agency theory, behavioral models, the Ghana Stock Exchange, brief profile of companies under study, empirical review, operational definitions, among others.

#### 2.1 Nature of Stocks.

Stocks are bought by people for several reasons. Some investors are interested in the long-term growth of their investment while others think of the short term dividend. Those thinking of long term growth of their shares often buy low priced stock of a new company hoping that their share will grow substantially over the next few years. Smith, (1988) is of the view that stockholders expect the stock growth will be stable over the long run in a well-established firm (Smith, 1988). According to Gittman (2004), is also of the view that shareholders always expect to get dividend at the end of the year but dividend is not always promised as there is a risk of companies not making profit or making losses.

Stocks vary in type in the Stock Exchange market depending on the policies of the company. Common stock for instance is a type of stocks held by true owners of the



business. Sometimes they are known as ‘residual owners’ as they receive whatever left after winding up of the company (Gittman, 2004; Higgins 1995). Another type of stock is known as publicly owned stock. Common stock owned by a broad group of unrelated investors or institutional investors is called publicly owned stock. However, all common stock of a firm owned by a small group of investors is denoted as closely owned stock (Gittman, 2004; Higgins, 1995). Privately owned stock is when all the stock is owned by a single person.

Stocks are classified in to four types. Authorized shares represent the maximum number of shares a firm allows to issue. Treasury stock is repurchased by firm itself and it is no longer considered as outstanding share. Outstanding shares are held by public. Issued shares are the shares that have been put into circulation. (Port, 1976).

## **2.2 Definition of dividend policy and Dividend Payouts**

The concept of dividend has been defined by many authors and researchers. According to Bierman (2001), dividend is an appropriation of profits to shareholders after deducting tax and fixed interest obligations on debt capital. It constitutes return to shareholders on their investment, and the aim is to increase their confidence in the future of the company in which they have invested. Watson & Head (2010) define dividend as a cash payment made on a quarterly or semi-annual basis by a company to its shareholders. It is a distribution of after-tax profit. Jo & Pan (2009) assert that dividend payment could provide a signal to the investors that the company is complying with good corporate governance practices. One of the primary elements of corporate finance is dividend policy decision (Uwuigbe et al., 2012).



According to the Oxford Advanced Learners Dictionary, (7<sup>th</sup> edition 2006), Dividend is defined as an amount of the profits that a company pays to people who own shares (stock) in the company. Ross et al. (2008), define dividend as “the payment made out of a firm earnings to its owners in the form of either cash or stock”. The distribution of dividend is done by management with reference to the company’s dividend payout policy.

According to Allen & Michaely (2003), the word “policy indicates that dividends do not develop in a random and arbitrary manner and that some consistency over time is present”. A firm’s dividend policy refers to the choices the firm makes about whether to pay shareholders a cash dividend, about how large the cash dividend should be, and about how frequently it should be distributed (Megginson & Smart, 2009). In the view of Nissim & Ziv (2001), dividend policy is the regulations and guidelines that a company uses to decide to make dividend payments to shareholders.

According to Ross, Westerfield and Jordan (2008), Dividends and Dividend policy is an important subject in corporate finance because dividends are a major cash outlay for many corporations and hence closely related to the financial and investment decisions that corporations make. Dividend policy is a term which describes the way a firm chooses between alternatives in honoring its owners (shareholders) with dividends and the time of payment (Berk & DeMarzo, 2007).

Jones (2005) is of the view that dividend received from companies by shareholders are the only cash payment a stockholder receives directly from firm.





Dividend therefore represents the return that investors get directly by committing their financial resources into stocks of companies. Franklin and Roni, (2002), asserted that, the challenge of most financial economists over the years have been to develop a payout policy framework where firms maximize shareholders' wealth and investors as well maximize their utility.

The central theme of dividends and dividend policy lays the question: Should the firm pay out money for its shareholders, or should the firm invest it for shareholders? How best will these two decisions affect investors' decisional attitude?

### **2.2.1 Factors that Influences Dividend Policy**

Dividend payment constitutes cash outflows which gives investors a return on their investments. On the other hand, it limits the amount of internally generated funds available to sustain the growth objectives of a company. Because of the effect dividends have on the firm's internal sources of financing, financial managers need to be prudent in the distribution of earnings, especially under unstable business environment as it's prevailing in Ghana today.

Whilst financial managers need to be prudent in the distribution of earnings, most shareholders believe that the level of dividends paid out to them should increase once the company's net profit after tax increases. Thus in the determination of the amount of dividends to be paid out financial managers are faced with a complex decision. They need to take into account all the various factors in the business environment as well as the desires of shareholders.



This section identifies some of the major variables which in the view of the directors influence the dividend decision process.

### **Legal Requirements on the Declaration of Dividend:**

The survival of any business depends eventually on the profitability of the company. Apart from this, it is only when profits are made that investors would receive a return on their investments. To ensure the perpetual succession and profitability of the business, the companies Code 1963, Act 179 provides guidelines on the distribution of earnings as dividends. Legally, under Section 71, a company shall not pay dividends to its shareholders unless the amount of such payment does not exceed its income surplus immediately prior to the making of such payments, return or distribution. Dividends can only be paid if it does not cause the income surplus account that is retained earnings to be a negative balance. This means that, the business must be profitable for a period of time in order to pay dividends.

In the case of financial institutions like Standard Chartered Bank, Ghana Commercial Bank, Societal General- Social security Bank and Enterprise Insurance Company, the Banking Law 2004 Act (672), requires that they maintain a minimum capital adequacy ratio of 8% as well as a Reserve Fund into which transfers from annual profits shall be made each year before the declaration of dividends. Section 9 also clearly states that where the amount of the bank's Reserve Fund is less than 50% of its paid up capital, the transfer should not be less than 50% of the net profit for the year.

All these regulations tend to protect the company's capital and prevent insolvency as well as provide directors with an insight as to whether they can or cannot pay dividends.



### **Corporate Earnings:**

Lintner's (1956) identification of earnings as the most important single factor in determining the amount of any change in dividend policy is confirmed by the dividend policy behavior of the companies used in the study.

Most companies attach a lot of importance to the level of earnings for two main reasons. One being the legal restrictions on payment of dividends and the other being that earnings serving as the main financial source for the payment of dividends. Generally, the companies used in the study experienced growth in the level of earnings over the ten year period except Producer Buying Company Limited recorded unstable earnings over the same time period. The level of earnings of the various companies has been greatly influenced by the economic environment pertaining over the past years. The high inflation rates have caused companies to adjust prices in line with the general price levels resulting in high levels of earnings. Apart from inflation contributing partially to increase in earnings, sales of the companies also increased. Some companies experienced extremely high growth in earnings during the period. Fan Milk Limited in 2001 and 2005 had earnings increase by 342% and 425% respectively.

### **Investment Opportunities and Working Capital needs:**

The main objective of financial managers is to maximize shareholders wealth in the long run. The achievement of this objective places a lot of emphasis on profitability. Being profitable includes among other things, taking Advantage of investment opportunities. Investment opportunities of most companies are closely linked to the growth prospects of



the industry in general. Most of the companies used in the study were in the expansionary stage with some registering very high rates of expansion.

Considering the rate of expansion, provisions made for replacement from depreciation of asset would certainly not be enough. This means that the company should turn to external or internal means of financing its activities. With the high cost of borrowing most companies prefer the latter. A companies like Fan Milk, PZ Cussion, CFAO Ghana Limited have been financing their expansion solely from internally generated funds. Thus the rate of asset expansion and the Attractiveness of new investment opportunities influence the level of earnings ploughed back and consequently the amount of the dividend paid out. The ploughing back of funds has an added advantage i.e the company avoids recapitalization from the market which is associated with a lot of uncertainties.

#### **Corporate Sources of Financing:**

Even though with development in the financial market companies have more access to external means of financing, it was observed that companies rely more on internally generated funds since is relatively cheaper. Apart from the internally generated funds, other means of corporate financing were found to be off-balance sheet financial arrangement such as lease, loan guarantees, banks overdrafts and prepaid contracts, of which the most frequently used one is the banks overdraft. Most companies as much as possible avoid the use of loans since it involves a relatively higher cost. Though most companies find these financial arrangements convenient to use, limitations associated with these are that the amount of credit extended is usually low and it involves



renegotiations from time to time. These limitations cause them to rely more on internally generated funds which do not have any of these restrictions.

Equity financing on the other hand is a more preferred means of financing and has the added advantage of not bearing any interest charges. But a complain about this mode of financing is that there is uncertainty as to the amount that can be realized from the floatation. Since the other means of financing are associated with some limitations, most companies prefer to use internally generated funds and some of the companies have policies as to the use of outside debt and new equity issues. The absence of relatively cheaper sources of financing result in most companies retaining higher levels of earnings.

#### **Nature of Shareholders:**

A major factor which has influenced dividends decisions of the companies is the nature of shareholders of the various companies. Observing the ownership structure of the companies reveals that original investors hold about 60% of the shares with the general public holding remaining 40%. Out of this, institutional investors' mainly insurance companies, employee associations and trusts have an average holding of 20% of the shares. A general view held in well-developed capital markets is that most institutional investors prefer capital gains. However directors of most companies admitted that in Ghana, the prime motive for investing whether by an institution or individual is to obtain income to supplement income generated elsewhere.

Shareholders can influence dividend decisions by way of sending memoranda and letters or by voting against a decision at a annual general meeting. Fortunately for the companies used in this study, none of the companies had experienced any such reaction



from shareholders. Directors having it in mind that shareholders are likely to sell off shares if dividends are not paid adopt policies which would ensure continuous payment of dividends to shareholders. Such open market reactions from shareholders is highly undesired since it would lead to decline of the share prices of the companies and this would result in poor rating of the companies by future investors. Thus the expectations of shareholders influence directors of companies to payout dividends.

### **Company's ability to sustain a Stable Policy:**

Due to problems of asymmetric information, shareholder tends to associate changes in the company's dividend payments with the performance of the company. An increase in dividend payout is interpreted as the company having better profitable investment opportunities and good future prospects whereas a decline in dividend payment is linked with declining future earnings. The latter leads to uncertainties about the future of the company. Because of the signal dividends send to investors most companies make a conscious effort to sustain a stable line of payment. Ghana Commercial and Total Ghana limited and Fan Milk have a policy of increasing dividend payment as earning increased. In 2004, when a decline in earnings was experienced, these companies avoided a reduction in its level of payment in order to send the desired signal to investors.

### **Dividend Policy Behaviour of Companies:**

By considering these factors, companies have adopted policies which enable them to meet their growth requirements as well as provide investors with a return on their investments. The companies did not have any fixed procedure for determining the payout ratio but generally not more than a third of earning was paid out as dividends. Most



companies started with very low pay outs ratios in 2000 and increased it gradually. Such a policy allows for the building of financial resources which would be used for the normal functioning of the companies as well as ensure that dividends can be paid when earnings for any particular year drops.

### **2.2.2 Forms and Types of Dividend Payouts**

Dividends payouts of firms take many forms; regular dividend also known as final dividend normally, is one which is paid in cash as a percentage of paid up capital or paid per share in the regular course of the firm's operations. It is referred to as final dividend because it is usually paid after final accounts and as such proposed by the board with approval from shareholders in a general meeting.

Normally, this form of dividend is declared when the company makes abnormal profit during the year and management so wish to award shareholders with the profit. Again, stock dividend is one type of dividend payout where a company, not having good cash position may decide to award its shareholders in the form of shares by relying on the profits of both current and previous years. These shares in the form of dividends given to shareholders are called Bonus Shares which does not alter the equity of shareholders.

Moreover, Scrip Dividend is one that shareholders receive in the form of shares and debentures of other companies. This option is normally upheld when the company earnings justify dividend payment, but the cash position of the company is temporarily weak and cannot support cash dividend payment. Additionally, liquidity dividend



becomes obvious when the company is liquidated. The payment is made out of some or all of the business that has been liquidated (Berk & DeMarzo, 2007).

The decision to pay a dividend rests in the hands of the board of directors of the corporation or company. When dividend has been declared, it becomes a liability of the firm and cannot be rescinded easily. Dividends are distributed to all shareholders as of some specific date and amount of the cash dividend is expressed in terms of dollars or any currency applicable per share known as Dividend per share and sometimes it is expressed as a percentage of the market price known as the dividend yield or as a percentage of net income or earnings per share known as the dividend payout.

### **2.2.3 Dividend Payout Time Line**

Dividends of publicly traded companies are often set by the directors and paid to the company owners a few weeks later, (Damoradan, 2007). The date on which the board authorizes the dividend is termed the declaration date, and hence the firm is legally liable to make the payment. Following the dividend announcement, the firm (board of directors) sets a record day on which it will pay shareholders of record. It takes three business days for shares to be registered and only shareholders who purchase the stock at least three days prior to the record date receives dividends. For that reason, the date two business days prior to the record date is referred to as ex-dividend date and as such anyone who purchased the stock on or after the ex-dividend date is not entitled to the dividend. The last day in the dividend time-line is the distribution or payable date on which the firm mails the dividend cheques to the registered shareholders (Damoradan, 2007).





#### 2.2.4 Measure of Dividends

Brav et al. (2005) noted that there are broadly speaking two ways of measuring dividends paid by a firm. They gave the two broad ways of measuring dividend as; dividend yield and dividend payout ratio. The former relates to the dividend paid to the price of the stock, this is expressed as;

**Dividend yield = Annual dividend per share**

**Price Per share**

Dividend yield is fundamentally important since it is the basis for measuring the component of total return of dividends with the remaining balance coming from price appreciation. It is also used as a measure of risk or an investment screen, Brav et al. (2003) noted that stock with high dividend yields earn excess returns after adjusting for market performance and risk.

The latter known as the dividend payout ratio is the dividend paid per earnings of the firm, expressed as; **Dividend payout ratio = Dividend**

**Earnings**

Payout ratio is usually used in a number of scenarios; in evaluation, it is used for estimating future periods as many analyst relies on growth in earnings rather than dividends in their estimates, also it is used in estimating the proportion of earnings that is retained in the firm or the retention ratio (De Angelo et al., 2006).

In general terms, firms with a high retention ratio or in otherwise low payout ratio have a higher growth rate in its earnings, whereas firms with low retention ratio or high payout ratio have a lower growth rate in its earnings.





### **2.3 Dividend Policies / Theories**

The theoretical principles underlying the dividend policy and its impact on firms can be described either in terms of dividend irrelevance or dividend relevance theory.

Miller & Modigliani, (1958) categorically stated that dividend policy is irrelevant; they claimed that, the value of a firm ultimately is derived from the underlying free cash flow and has nothing to do with dividend payout.

They further argue that, a firm's free cash flow determines the level of payouts that it can make to its investors. Therefore in a capital market, whether these payouts are made through dividend or shares does not matter. Obviously (Miller & Modigliani, 1958) is flawed as noted by DeMarzo et al (2007).

According to DeMarzo et al., (2007), Miller & Modigliani certainly did not take the decision element from investor's point of view into consideration. To buttress their assertion, they used the case of Royal & Son Alliance, UK based insurance company who on the 28<sup>th</sup> November, 2001, decided to cut down its dividend from \$ 12.6billion. This critical decision affected its share price as opposed to (Miller & Modigliani, 1958).

They also cited the case of Pfizer which on December 18, 2006, announced a broad plan to reward stockholders for the recent success of the firm's business. Under the plan, Pfizer proposed to: (1) Increase its quarterly dividend by 21 percent from 24 cents to 29 cents per share (2) Continue its share buyback program, with a goal of repurchasing \$

10billion of its stock during 2007. Investors liked the news, bidding up the stock price by 1.4 percent on the day of the announcement. This certainly is in sharp contrast with the assertion made by (Miller & Modigliani, 1958) that dividend policy is irrelevant since the value of a firm ultimately depends on the free cash flow and not the dividend policy. Contrary to Miller and Modigliani, the announcement of the dividend policy by Pfizer did trigger stock price increases proving that dividend policy do have a correlation with investor's behavior.

To explain the condition whereby positive abnormal returns increase following announcement of an increase in dividends, signaling theories were developed, starting from Ross, (1977), and Bhattacharya, (1979) amongst others. John & William, (1985) presented one of such theories where dividends are a costly signal in that they are taxed heavily than repurchases. Usually shareholders sell shares to meet their liquidity needs, if therefore a firm is undervalued shareholdings will be diluted, thus to prevent this dilution taxed dividends as a costly signal is employed. Allen, et al., (2000) however do not believe that John & William, (1985) costly signal dividend theory provides a satisfactory solution to the dividend puzzle.

In an article in a finance journal by Miller and Rock (1985) they stated that finance analysts have long recognized the inability of the full information model of the firm's dividend- investment decision to accommodate the evidence of dividend announcement effects, thus the information asymmetries between the investing public and the company's decision makers (board of directors). In the absence of any superior alternative, Miller and Rock, continued to use the main implications of the full information model, especially the company's investment optimality criterion, hoping any



'manipulations' of the dividend announcement effect will prove instantaneously and will be reversed once the truth becomes known. They further stated that such hopes may not be warranted since the analysis recognizes the possibility of trading shares rather than just merely owning them as contained in the standard valuation models.

When share trading is imported to the model along with information asymmetry, the consistency of the full information, optimal investment and dividend policies cannot any longer be taken for granted. Miller and Rock (1985) again stated inconsistent policies will presumably be eliminated; the elimination may possibly keep the assumptions of asymmetry of information, and the possible trading of shares and then seek consistent decision rules.

They preserved many properties of the standard model and provided a straight forward rationalization of the observed dividend announcement effects, subject to some exceptions like lower levels of investments and higher levels of dividends than standard.

A rational argument in favor of dividends consists of transaction cost. An investor who wants to receive a regular income from her security holdings has a choice between buying dividend- paying stocks and cashing in the dividends, and buying non-dividend paying stocks and regularly selling part of her portfolio. For a small individual investor the transaction costs of cashing in the dividends may be significantly smaller than the transaction costs associated with selling a part of the stocks (Allen and Michaely, 2002).

There are quite a number of theories on dividend and dividend policies; one school of thought believes that a higher dividend increases the firm's value, whilst, another believes that an increase in payout leads to a decrease in the firm's value. A third group



of financial analysts argue that dividend payout policy does not bring about any difference in the firm's value.

Lintner and Gordon (1963) proposed the bird in hand hypothesis stating that firms enjoy higher stock prices by paying higher current dividends because shareholders prefer current dividends to future ones with the same present value. Many investors do not usually have adequate and perfect information regarding the future prospects of the firm and rather rely on the dividend payment patterns as a key indicator in estimating the future performance of the firm.

This assertion means that, dividend policy is relevant because an increase in dividend creates an impression that the company is doing well and would greatly boost investor confidence in the company leading to increase in their estimates of future earnings resulting in a rise in the share price (Kapla, 2009). On the other hand, a sudden cut in dividend could have serious repercussions on the firm's equity value; it is therefore advisable for companies to adopt a stable and rising dividend policy to attract and maintain investors' confidence.

Adefila et al., (2011), concluded in his "bird in hand principle" that firm with a higher dividend payment would be valued more highly than one with a lower dividend payout all things being equal. Al-Malkawi (2007), is of the view that in a world of information asymmetry and uncertainty, dividends are valued differently from retained earnings (capital gains) which mean that dividend payouts has a significant influence on the value of a company or shareholders wealth. Investors and that matter shareholder are motivated by dividends because they like readily available wealth that spares them from consuming



out of their capital (Black, 1990). Some studies point out the fact that dividends are less risky than capital gains since investors are often not certain about the future Amidu (2007).

According to Modigliani and Miller (1961) in a perfect capital market, with no taxation and transaction cost, shareholders can readily make an equivalent homemade dividend at any time by selling the shares and as such the dividend choice of the firm should not matter at all.

The residual theory of dividend payout as postulated by Stewart Myers (1984) asserts that dividends are only paid after all liabilities and investment projects are fully met. The thought argue that dividends are important provided the present value remains the same, but, the timing of the payment is irrelevant. It therefore follows that, a firm will pay dividends only after it has invested in all positive net present value projects with dividend as a residual.

Managers consider a large firm to be more prestigious and they expect to earn more compensation than they would in a small firm. This is obviously not in the interest of the existing shareholders.

Black (1976) argues that paying dividends can mitigate a potential overinvestment problem, because they reduce the amount of free cash flow. This theory is difficult to test in the context of our research. The reason is that it is difficult to convey the notion of a negative Net Present Value project to individual investors who are not aware of finance theory. One possible way to test this theory is by linking free cash flow to down markets



or economic downturns. The assumption is that there are less growth opportunities under such circumstances.

This theory shows some resemblance with Gordon's (1961) theory. However, the theory of Gordon is based on uncertainty towards future dividends, while the theory of Shefrin and Statman (1984) is based on investors who prefer to consume from dividends instead of capital gains. Free cash flow is the cash flow that remains after all positive net present value (NPV) projects are undertaken. According to the overinvestment theory of Jensen (1986), managers aim to expand the size of the firm, and thus may take on negative NPV projects instead of paying dividends.

Shefrin and Statman (1984) develop a theory of dividends based on the fact that, even if the amount of cash received is the same, it can still make a difference for the investor whether the cash comes in the form of dividends or capital gains. Their model is based on a behavioral theory. In this theory investors want dividends because of self-control. This argument comes down to investors wanting to restrict themselves from consuming too much in the present. They don't want to dip into capital and, therefore, they only allow themselves to consume current income such as dividends.

The effect described by Shefrin and Statman (1984) is especially strong for elderly (retired) investors, as they have little or no labor income and rely more heavily on income from their securities holding. Shefrin and Statman (1984) refer to this as the behavioral life cycle.

Even if a firm does not have free cash flow, dividend payments can still be useful for the shareholders in order to control the overinvestment problem. Easterbrook (1984) argues



that dividends reduce the overinvestment problem because the payment of dividends increases the frequency with which firms have to go to equity markets in order to raise additional capital. In the process of attracting new equity, firms subject themselves to the monitoring and disciplining of these markets. This lowers agency cost. A share repurchase creates the same monitoring effect.

The agency theory was also advanced by Jensen and Meckling (1976) to explain dividend relevance.

They showed that agency cost arises when management serves its own interests instead of those of shareholders. According to the information content of dividends or signaling theory, firms, despite the distortion of investment decisions to capital gains, may pay dividends to signal their future prospects. The intuition underlying this argument is based on the information asymmetry between managers (insiders) and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders. Here, managers are thought to have the incentive to communicate this information to the market.

Bhattacharya (1979), John and William (1985), and Miller and Rock (1985) argued that information asymmetries between firms and outside shareholders may induce a signaling role for dividends. They show that dividend payments communicate private information in a fully revealing manner. The most important element in their theory is that firms have to pay out funds regularly. An announcement of dividends increase is taken as good news and accordingly the share price reacts favourably, and vice-versa. Only good-quality firms can send signals to the market through dividends and poor quality firms cannot





mimic these because of the dissipative signaling cost (for e.g. transaction cost of external financing, or tax penalty on dividends, distortion of investment decisions). Therefore, a similar reasoning applies to recurrent share buy-backs.

Common stock repurchase is a well-known alternative to cash dividends. Both ways of paying out cash are useful to mitigate the agency problems that are raised by Easterbrook (1984) and Jensen (1986). A large number of academic papers find that share buy-backs are especially useful to signal that the stock price of the company that buys back its shares is undervalued.

A number of studies, including Comment and Jarrell (1991) and Ikenberry, Lakonishok, and Vermaelen (1995, 2000) find that share buy-back announcements are associated with significantly positive abnormal returns. Ikenberry, Lakonishok, and Vermaelen (1995, 2000) have also analyzed the long-run performance of US and Canadian companies after share buy-backs. In those studies a significantly long-run positive abnormal return is found.

Lindbolom et al (2002) in their thesis stated that, the speculative bubble experienced stock price during the fall of 1998 and March 2000 is an exemplified situation that included both unpredictability and irrational reactions. To think of such irrational behaviour brought about controversies in standard finance even though behavioural finance and other contemporary theories are beginning to discover evidence which may help us understand such market anomalies.

They therefore noted in their work that an approach based on perfect market predictions are increasingly unrealistic in today's financial markets. Their thesis to a large extent



supports the fact that even though a majority of the investors during the 1998 and March 2000, seems to have realized the seriousness of the speculative bubble they never continued their investment activities knowing that the risk for the collapse was eminent. The study again stated that the inevitable loss realized among both private and institutional investors as a consequence of the burst of the speculative bubble confidence towards the market at the end of 2001 appeared fairly high.

The work then reached a conclusion that, from a long term historical perspective, investing in the equity market has been profitable and the understanding of the behavioural factors affecting this market can help us better understand its periodic unpredictability.

## **2.4 Theoretical Framework**

There are several theories underpinning the study of dividends and its effect on share prices of companies listed on the stock exchange market. Among them are the dividend irrelevant theory, clientele effect, dividend smoothing theory, signaling hypothesis theory, bird in hand theory, firm life cycle theory, among others.

### **2.4.1 Dividend Irrelevance Theory**

Miller & Modigliani, (1958) categorically stated that dividend policy is irrelevant; they claimed that, the value of a firm ultimately is derived from the underlying free cash flow and has nothing to do with dividend payout.

They further argue that, a firm's free cash flow determines the level of payouts that it can make to its investors. Therefore in a capital market, whether these payouts are made



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heavily than repurchases. Usually shareholders sell shares to meet their liquidity needs, if therefore a firm is undervalued shareholdings will be diluted, thus to prevent this dilution taxed dividends as a costly signal is employed.

Allen, et al., (2000) however do not believe that John & William, (1985) costly signal dividend theory provides a satisfactory solution to the dividend puzzle. In an article in a finance journal by Miller and Rock (1985) they stated that finance analysts have long recognized the inability of the full information model of the firm's dividend- investment decision to accommodate the evidence of dividend announcement effects, thus the information asymmetries between the investing public and the company's decision makers (board of directors).

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They further stated that such hopes may not be warranted since the analysis recognizes the possibility of trading shares rather than just merely owning them as contained in the standard valuation models.

#### **2.4.2 Bird in Hand Theory**

The bird in hand theory has been well researched over time. However, there are a number of theories on dividend and dividend policies; one school of thought believes that a higher dividend increases the firm's value, whilst, another believes that an increase in



payout leads to a decrease in the firm's value. A third group of financial analysts argue that dividend payout policy does not bring about any difference in the firm's value.

The bird in hand theory was proposed by Lintner and Gordon (1963). Lintner and Gordon (1963) proposed the bird in hand hypothesis stating that firms enjoy higher stock prices by paying higher current dividends because shareholders prefer current dividends to future ones with the same present value. Many investors do not usually have adequate and perfect information regarding the future prospects of the firm and rather rely on the dividend payment patterns as a key indicator in estimating the future performance of the firm.

This means that, dividend policy is relevant because an increase in dividend creates an impression that the company is doing well and would greatly boost investor confidence in the company leading to increase in their estimates of future earnings resulting in a rise in the share price (Kapla, 2009). On the other hand, a sudden cut in dividend could have serious repercussions on the firm's equity value; it is therefore advisable for companies to adopt a stable and rising dividend policy to attract and maintain investors' confidence.

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The residual theory of dividend payout as postulated by Stewart Myers (1984) asserts that dividends are only paid after all liabilities and investment projects are fully met. The thought argue that dividends are important provided the present value remains the same, but, the timing of the payment is irrelevant. It therefore follows that, a firm will pay dividends only after it has invested in all positive net present value projects with dividend as a residual.

#### **2.4.3 Signaling Hypothesis Theory.**

Lintner (1956) and Gordon (1959) were the pioneers to put forward the information content of dividends (dividend relevance theory). This school of thought argues that there is direct relationship between the value of a company and its dividend policy as the company's future earnings play a major role in determining a company's dividend policy.

In situations where the management of a company is different from shareholders, managers tend to have more information about the company than shareholders. Dividend



announcements are therefore interpreted by shareholders as a signal of the future profitability of the firm. Though an increase in dividend payout may in reality be due to the fact that the company is mature and has fewer growth opportunities, the market may interpret it as the firm having good future prospects. Similarly, dividend cuts may be seen to be a signal that the firm has no or few future prospects which are profitable though in reality, the company is retaining more earnings to invest in economically viable projects.

Dividend cuts thus lead to a decrease in share prices with dividend increase leading to share price increase. The information gap which exists between managers and the market may therefore cause the market to place a value on the firm which might be different from its true intrinsic value. Lipson et al (1998) observed that, “managers do not initiate dividends until they believe those can be sustained by future earnings”. Pettit (1972), Fama et al (1969) and Venkatesh (1989) document that announcements of dividend increase are followed by significant price increase with dividend decrease being followed by significant fall in price.

Miller (1986) argued that it was the difference between the actual dividend paid and the dividend the market expected to be paid that matters not the direction in which the dividend changed. If the market for instance was expecting a fall in dividend payments and the actual fall was greater than what was expected, then share prices will fall. The dividend relevance theory proposed by Lintner (1956) was countered by Miller and Modigliani (1961). They argued that the shareholder’s value is rather affected by the earnings of a company which reflects a company’s investment policy, and not the amount of dividend paid out to shareholders. According to them, the value of a company’s stock



is independent of the level of dividend a company pays to its shareholders as long as a company followed its optimal investment policy.

Their argument was based on the assumptions that, capital markets are perfectly efficient; managers seek to maximize shareholders value, there is no asymmetry of information, no transaction cost in converting shares into cash, no corporate or personal tax and no transaction cost in floating shares. Another argument they put forward to support the dividend irrelevance theory was that, shareholders could create “homemade dividend” by selling their shares at the market price in the capital market if the firm did not pay dividend.

Black & Scholes (1974) found no relationship between dividend policy and stock prices. Their results supported the dividend irrelevance theory, further explaining that dividend policy does not affect the stock prices and it is the decision of investors to either keep high or low yielding securities; in both cases the returns earned by them remains the same.

#### **2.4.4 Dividend Smoothing**

John & Nachman (1986) have addressed the problem of dividend smoothing in their theoretical model. The firm’s dividend policy may not change over a period of time, even though earnings may change substantially and used a dynamic version of John and Williams (1985) Model. J & N model provided rationale for firms paying a smooth series of cash dividends even though such dividends have some tax disadvantage over alternative methods of distributing cash. A corporation’s prospects can only be partially





revealed using dividend policy because managers routinely smooth the payment stream; changes in dividend policy are only a rough signal of future expected earnings.

Constantinides & Grundy (1989) focused on interaction between investment decisions and repurchase and financing decisions in signaling equilibrium. With fixed investment, a straight bond issue cannot act as a signal, but a convertible bond issue can. When investment is chosen optimally rather than being fixed, this is no longer true; a straight bond issue can act as a signal.

Bernheim (1991) also provided a theory of dividends in which signalling occurs because dividends are taxed more heavily than repurchases. In his model, the firm controls the amount of taxes paid by varying the proportion of the total payout that is in the form of dividends, rather than repurchases. A good firm can choose the optimal amount of taxes to provide a good explanation of dividend smoothing.

Allen, Bernado & Welch (2000) took a different approach to dividend signaling. As in the previous models, dividends are a signal of good news (i.e., under valuation). However, in their model firms pay dividends because they are interested in attracting a better- informed clientele. Untaxed institutions such as pension funds and mutual funds are the primary holders of dividend- paying stocks because they are a tax-disadvantaged payout method for other potential stockholders. Another reason for institutions to hold dividend- paying stocks is the restriction in institutional charters, such as the “prudent man” rules that make it more difficult for many institutions to purchase stocks that pay either no dividends or low dividends.



According to Allen, Bernardo & Welch (2000), the reason good firms like institutions to hold their stock is that these stockholders are better informed and have relative advantage in detecting high firm quality. Low- quality firms do not have the incentive to mimic, since they do not wish their true worth to be revealed. Thus, taxable dividends are desirable because they allow firms' management to signal the good quality of their firms. Paying dividends increases the chance that institutions will detect the firm's quality. Another interesting feature of the Allen, Bernardo, and

Welsh model is that it does accommodate dividend smoothing. Firms that pay dividends are unlikely to reduce the amount of the dividends, because their clientele (institutions) are precisely the kind of investors that will punish them for it. Thus, they keep dividends relatively smooth.

As in the John & Williams model, Allen, Bernardo, and Welch model involves a different role for dividends and repurchases. They are not substitutes. In fact, firms with more asymmetric information and firms with more severe agency problems will use dividends rather than repurchases.

Kumar (1988) modeled a rational expectations signaling equilibrium in that dividends convey only broad information of changes in a firm's prospects. The model implies that although dividend increases (decreases) signal important positive (negative) information about the firm's prospects, dividends are a poor predictor of corporate earnings because of the smoothing process applied by managers.

In a two- period model developed by Kale & Noe (1990), dividend increases signal increased future cash flows stability and decreased riskiness of the cash flows. In this



model, dividends are positively correlated with share price returns and are inversely related to expected cash flows variance and underwriting costs.

#### **2.4.5 Clientele effect**

Every investor has his or her own expectations and needs. As a result, investors tend to prefer stocks of companies that satisfy a particular need. This is because investors face different tax treatment for dividends and capital gains and also face some transaction cost when they trade securities. Modigliani & Miller (1961) argue that for these cost to be minimized, investors tend towards firms that would give them those desired benefits. Likewise firms would attract different clientele based on their dividend policies. Though they argued that even though clientele effect may change a firms dividend policy, one clientele is as good as another, therefore dividend policy remains irrelevant.

Al-Malkawi (2007) affirms that firms in their growth stage, which tend to pay lower dividend would attract clientele that desire capital appreciation, while those firms in their maturity stage which pay higher dividends attract clientele that require immediate income in the form of dividend. Al-Malkawi (2007), grouped the clientele effect in two, those that are driven by tax effects and those driven by transaction cost. He argued that investors that are in a high tax bracket would prefer firms that pay little or no dividends to get reward in the form of share price appreciation and vice versa. Transaction cost induced clientele on the other hand, arises when small investors depend on dividend payments for their needs prefer companies who satisfy this need because they cannot afford the high transaction cost in selling securities.



This line of thinking suggests that investors may have different reasons for favouring dividends as a result of institutional features such as regulatory requirements or tax differentials, or from behavioural preference. In particular, Shefrin & Thaler (1988) argue that investors' personal life-cycle considerations determine the predilection for dividends: older investors favour dividend-paying stocks because they substitute for a regular employment income. Several studies find supporting evidence for dividend clientele among institutional investors.

Allen *et al.* (2000) present a model in which dividends attract institutional investors because they are taxed less than retail investors, which in turn imposes a better governance structure. Brav & Heaton (1997) identify a preference to dividend payouts using the prudent man rules that require certain types of institutional investors to hold mature and thus dividend-paying firms. Dhaliwal, Erickson & Trezevant (1999) and Seida (2001) find empirical evidence that supports the existence of tax-based clientele for dividends. Perez-Gonzalez (2003) presents evidence that investors' tax status affects firm dividend policy. Hotchkiss & Lawrence (2002) find complementary evidence that firm returns are higher following dividends announcements for firms with institutional investors who favour dividends.

Furthermore, based on a managerial survey, Brav, Graham, Harvey & Michaely (2005) report that managers consider their investor preferences toward dividends when making dividend-related decisions.

Other studies fail to find support for the clientele hypothesis among institutional investors. Grinstein & Michaely (2005) do not find supporting evidence for the clientele



theory. They investigate whether institutional investors do indeed favour dividend-paying firms and find that institutions avoid investing in non-paying firms, but nevertheless favour firms that pay low dividends over high ones.

In a recent paper, Barclay, Holderness & Sheehan (2009) investigate whether corporations that have the lowest dividend tax bracket favour dividends. In a contradiction of previous findings, they find that corporate shareholders do not induce firms to pay dividends, but rather are concerned with improving the firms' operating business.

Brav et al. (2005) conduct a comprehensive survey of 384 managers and interview another 23 firms. Their goal is to reconcile managerial views with common academic theories of dividends.

According to their survey, managers are sceptical about the relation between dividends and investor clientele and believe that institutional investors are indifferent to dividend decisions.

Researchers also find evidence for dividend clientele's existence among retail investors. Using data about retail investors' portfolio holdings, Graham & Kumar (2006) find that older and low-income retail investors tend to hold a larger fraction of dividend-paying stocks than other investors do.

The authors argue that older investors' preference for dividends results from their desire for income, and that low-income investors have an advantageous tax status that makes dividends preferable. The authors also find that these classes of investors purchase dividend-paying stocks after dividend announcements, in keeping with the behavioural



attention hypothesis that news attracts investors' attention (Lee, 1992; Barber & Odean, 2008).

In addition, Rantapuska (2008) uses Finnish investor-level trading data to find that tax status is a major determinant in the holding and trading of dividend-paying stocks: investors with a preferable tax status with respect to dividends tend to buy dividend-paying stocks before the ex-day and to sell after the ex-day. Conversely, Michaely (1991), using aggregate data, finds no evidence for the effects of trading by long-term retail investors around ex-dates following the 1986 Tax Reform Act.

According to Becker, Ivkovic, & Weisbenner (2007), firms are more likely to distribute dividends if they are located in geographical areas where investors tend to hold shares of local firms and if the investor base is older. This evidence lends further support to the dividend clientele hypothesis and the relationship between investor preference and firm payout policy.

#### **2.4.6 Clientele Effects of Dividends Theory.**

According to Hussainey et al (2011), dividend policy is a firm's policy with regards to paying out earnings as dividends versus retaining them for reinvestment in the firm. It is the division of profit between payments to shareholders and reinvestment in the firm. The dividend policy can be construed as the magnitude (size) and direction (timing and pattern) of dividend payments or, in other words, the size and pattern of cash distributions over time to shareholders.

The essence of dividend policy is to determine what portion of a firm's earnings that will be paid out as dividend or held back as retained earnings (Emekewue, 2008). Dividend



policy is related not only to a decision to pay or not to pay dividends but also to the size and pattern or magnitude and frequency of the payments Vasuthep, (2007). Dividend policy is thus an important part of the firm's long-run financing strategies.

Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholders. Although, both growth and dividend are desirable, these two goals are in conflict – a higher dividend rate means less retained earnings and, consequently, a slower rate of growth in earnings and stock prices (Weston and Brigham; 1977).

Investors tend to prefer stocks of companies that satisfy a particular need. This is because investors face different tax treatment for dividends and capital gains. They also face some transaction cost when they trade securities. Modigliani and Miller (1961) argued that for these costs to be minimized, investors lean towards firms that would give them those desired benefits. Likewise, firms would attract different clientele effect which may change the firms' dividends policy, one clientele is as good as another, and therefore dividend policy remains irrelevant.

Al-Malkawi (2007) affirms that firms in their growth stage, which tend to pay lower dividend would attract clientele that desire capital appreciation, while those firms in their maturity stage which pay higher dividends attract clientele that require immediate income in the form of dividend. Al-Malkawi (2007), grouped the clientele effect in two, those that are driven by tax effects and those driven by transaction cost. He argued that investors that are on high tax bracket would prefer firms that pay little or no dividend to get reward in the form of share price appreciation and vice versa. Transaction cost induce



clientele on the other hand, arises when small investors depend on dividend payments for their needs; prefer companies who satisfy this need because they cannot afford the high transaction cost in selling securities.

In early corporate finance, dividend policy referred to as a corporation's choice of whether to pay its shareholders a cash dividend or to retain its earnings. It addressed the frequency of such payments (whether annually, semi-annually or quarterly) and how much the company should, if it decides to do so, pay.

The most important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are the most significant internal source of financing the growth of the firm. On the other hand, dividend may be considered desirable from shareholders point of view as they tend to increase their current return. Dividend however, constitutes the use of the firm's fund (Pandey, 2005).

#### **2.4.7 Firm Life Cycle theory**

Several papers highlight the link between dividends and idiosyncratic risk. Venkatesh (1989) reports that idiosyncratic risk and the informational content of earnings decline following dividend initiation.

Fink, Fink, Grullon & Weston (2006) document that dividend-paying firms have lower idiosyncratic volatility. Bradley, Capozza, & Seguin (1998) and Chay & Suh (2008) explain the link between dividends and volatility in selection: only firms with low cash-flow uncertainty feel comfortable in committing to paying dividends, an attitude consistent with the conservative managerial views in Lintner (1956) and Brav et al.





(2005). Hoberg & Prabhala (2008) determine that the disappearance of dividends (Fama & French, 2001) is associated with an increase in idiosyncratic risk.

Another vein of the literature ties dividend payout to firms' life cycle. In particular, numerous papers observe that firms that pay dividends tend to be more mature and less volatile.

According to Grullon et al. (2002), firms that increase (decrease) dividends experience a future decline (increase) in their profitability. According to these authors, firms that exhaust their investment opportunities increase their dividends, and thus dividends indicate firm maturity rather than signalling future profitability.

Supporting the view that the decline in idiosyncratic risk is related to firm maturity, studies find that idiosyncratic risk is negatively correlated with the firm governance index (Ferreira & Laux, 2007) and firm age (Fink et al., 2006). DeAngelo, DeAngelo & Stulz (2006) and Denis & Osobov (2008) also find supporting evidence for the life-cycle theory: Firms are more likely to payout dividends when their equity is earned through operations, rather than contributed by investors. Von Eije & Megginson (2007) perform similar tests for firms in the European Union but without finding evidence that firms are more likely to pay dividends out of earned rather than contributed capital.



#### **2.4.8 Efficient Market Hypothesis**

The efficient market hypothesis proposed by Fama (1965) assumes that stock price at any point in time is a good estimate of its intrinsic value. He went ahead to state that for an efficient market, stock prices will quickly adjust to reflect all available information. According to Khoury (1983), the efficiency of a market can be tested by measuring the ability of the market to anticipate new information and how quickly it adjusts to such information.

In a seminal paper by Fama (1970), he went ahead to categorise efficient markets into three forms, namely; weak, semi-strong and strong form. A market is weak efficient when current prices fully reflect all past information. The weak form therefore suggests that an investment strategy that is based on a company's past information cannot yield abnormal returns for the investor. The semi- strong form of market efficiency proposes that current prices reflect all publicly available information hence by trading on publicly available information, investors should not be able to gain abnormal returns. The strong form of market efficiency states that all privately and publicly available information are reflected in the current stock price.

Fama et al (1969) carried out a study to investigate the efficient market hypothesis. Their results from examining the effect of stock split announcement on share prices on the New York Stock Exchange from 1927 to 1959 revealed that stock prices adjust rapidly to these announcements, indicating a semi strong efficient market. Reviewing over 163 articles on the efficient market hypothesis, Sewell (2011) found that 50% of the articles he reviewed were in support of EMH with the other 50% contradicting it. Researchers such as Blume and Durlauf (2007) have also challenged the efficient market hypothesis.



#### **2.4.9 Insider Trading**

Studies done by various researchers on insider trading include Sivakumar and Waymire (1994), Park et al (1995) and Cheng et al (2005). Some results have revealed insider trading in some markets while others have revealed otherwise.

Insider trading comes from the hypothesis that dividends have information content. An insider dealer who receives prior information on a company's dividend policy before that information is made available to the public is able to take certain actions to avoid losses or make riskless profit.

If for instance the dealer knows before it is publicly announced that the company will decrease its dividend payout to shareholders, he will sell his shares before the announcement is made thereby avoiding the loss in share value that comes with dividend decrease.

#### **2.4.10 The Agency Theory**

The payment of dividends and for that matter dividend policy took its root from the agency theory. It is a common reality that in modern times corporations are managed by professionals who themselves are non-owners of these corporations and hence technically can be referred to as agents of these corporations (Al-Malkawi, 2007). Theoretically, the paramount goal of the financial manager should be to maximize the wealth of the owners of the firm who have conferred the authority on the managers to make crucial decisions regarding the management of the firm.

Though most financial managers will agree with the above paramount goal of owner wealth maximization, in practice however, managers are human and are therefore saddled





with personal problems and financial needs hence concerned with their personal wealth, fringe benefits and above all job security all at the expense of the company. Such concerns may play a facilitative role in the unwillingness of managers to take risk which might be beneficial to the firm but might lead to the loss of jobs or personal wealth of managers. This is compounded if the firm or company is a publicly traded company where most of the shareholders have no active role in the management of the company and hence cannot effectively monitor the competence and effectiveness of the executives of the company (Ross et al, 2008).

Juxtaposing the interest of owners and managers reveals a deep seated conflict between the two known as the agency problem. The agency problem hazards that there is a likelihood of managers placing their personal goals ahead of corporate goals. In an attempt to disentangle this seemingly muddle, Lang et al. (1989) suggested the separation of firms that are overtly over investing from all other value-maximizing firms. They realized that when this is done, higher abnormal returns accrue to over investing firms for which the agency-related benefits of dividend payout increase are higher as compared to value-maximizing firms. In consonance with the free cash flow hypothesis, the market reaction resulted in dividend increase by value-maximizing firms, this increase, though relatively positive, nevertheless is not significantly lower than the market reaction for over investors.

Easterbrook, (1984), notes that dividends play a significant role in controlling equity agency problems by facilitating primary capital market monitoring of the firm's activities and performance. This is because higher dividend payouts increases the probability of the firm selling common stock in primary capital market, which in turn leads to effective

monitoring of management by investment banks, securities exchanges and financiers. Significantly, Baghat, (1986), Smith, (1986), (Hansen & Torregrosa, 1992) and (Jani & Kini, 1999) all recognized the foundational role of monitoring by investment bankers in new equity issues. Also, a cross-sectional analysis of dividend policy shows results which are clearly in tandem with dividend policy acting as a corporate monitoring platform and with substitution effects between dividend payments and two other control mechanisms namely managerial ownership and leverage (Crutchley & Hansen, 1989).

Other studies on agency theoretic models of dividend behaviour by Fluck, (1998) and Myers, (2000) show that managers use dividend payouts as a measure of avoiding disciplining action by shareholders.

Denis & Sarin, (1994) however disagreed with the cash flow hypothesis for firms with large amount of dividend changes. Moreover, (Yoon & Starks, 1995) stated that there is a positive relationship between dividend policy changes and capital expenditure changes with their evidence barking the information-signaling effect over the free cash flow explanation of dividend policy. In line with the free cash flow hypothesis, Angelo (2000) indicated that the market penalized Time Mirror for intending to poorly reinvest free cash flow and rather applauded dividend redistributions of the cash flow.

The research findings of La Porta et al. (2000), asserted that minority shareholders pressure companies to pay dividends, but further studies on the relevance of the free cash flow hypothesis for alternative payouts such as share repurchase and special dividends, for instance, Vafeas (1997) and (Nohel & Tarhan, 1998) findings showed mixed results,



however, most researchers attributes the conflicting results to imperfect empirical constructs rather than theoretical flaws.

The cost associated with the agency between managers and owners of corporations as well as managers and owners interest have existed in the corporate world for several centuries Douglas, (1991).

Carlous, (1992) though not discounting the existence of fraud, found these assertions strange since the persistent success and long life of corporations could be attributed to sound managerial practice which is in conformity to the desires of shareholders. The focus of modern agency theory is to explain the corporate capital structure in an attempt to reduce the cost associated with the separation of corporate ownership and control. Schultz, (2000) noted that agency costs are lower in firms with high managerial ownership stakes because of the better alignment of shareholder and manager. The agency problem results from unequal dissemination of information, potential wealth transfer from bond holders to stock holders by engaging in high risk projects and failure to accept positive net- present value projects by management and the prerequisite consumption in excess prudent consumption.

The impact of dividend payments is borne by a variety of the company's stakeholders, including debt holders, managers, and suppliers. Agency problem according to Jensen and Meckling (1976) comes about when there is a conflict of interest between managers and shareholders. In Miller and Modigliani's theory, one of their assumptions was that no conflicts of interests existed between managers and shareholders in a perfect capital market. In practice, however, where the owners of the firm are distinct from its



management, this assumption may not hold. The interest of the managers may be different from that of shareholders which is to maximise shareholder's value. For instance, where managers compensation is tied to the firm's profitability and size, managements becomes more interested in low dividend payout levels as that will provide enough retained earnings to invest in other profitable projects that will benefit them without the need to turn to capital markets for financing. Shareholders on the other hand, prefer that management pay out earnings as dividend and obtain financing from the capital markets, as this will reduce the free cash flow available to managers and thus increase managerial efficiency in investment decisions.

Jensen (1989) introduced the free cash flow hypothesis stating that managers prefer to have more free cash (retained earnings) available to them so as to avoid being under the threat of bankruptcy hence their reluctance in paying out dividend.

According to Jensen (1976), dividends help reduce agency cost by serving as a mechanism for monitoring managers, causing them to invest in only profitable projects and not pursue their selfish interests.

Dividend announcements therefore have information content with dividend increase indicating that the future performance of the company will be better as agency cost has been reduced and managers will be making more efficient investment decisions. Announcement of dividend decrease on the other hand carries negative information to shareholders.



Agency cost has also been talked about by Rozeff (1982) and Easterbrook (1984). They supported the free cash flow hypothesis by stating that agency cost can be reduced by increasing the dividend paid to shareholders.

According to them, the market helps in monitoring the company when external funding is used for financing. Other researchers such as DeAngelo and DeAngelo (2000) and La Porta et al (2000) have supported the free cash flow hypothesis with results from a study by Dennis and Sarin (1994) finding no supportive evidence.

## **2.5 Behavioral Models**

So far the theories offered above have not been able to adequately address observed corporate dividend behavior; this is because investor behavior is significantly influenced by societal norms and attitudes (Cannavan, 2004). However the investor behavioral influences have been ignored by financial theorists many a time due to the problem of introducing investor behavior into traditional pricing models.

Cannavan argues that, the non-inclusion of these influences is a disservice to the enrichment of the corporate financial literature. He further noted that the inclusion of these influences will enrich the development of a financial theory to explain the endurance of corporate dividend policy.

Ordinary investors according to (Nohel & Tarhan, 1998) are faced not with risk but with uncertainty, lack of concise judgment and sense of objective evidence. They noted that social pressure can result in judgment errors and trading activities by shareholders that cannot be logically explained.





These errors in judgment technically speaking are only mistakes and not lapses of rational investor activity. (Frankfurter & Lane, 1992) see dividend policy as inconsistent with wealth maximization of shareholders and therefore regard the payment of dividend as a way of attracting potential investors.

## **2.6 The Ghana Stock Exchange**

The GSE was incorporated in July 1989 as a private company limited by guarantee under the Ghana's Companies Code 1963 (Act 179) and gained recognition as an authorized stock exchange under the Stock Exchange Act 1971, with trading commencing on November 12, 1990. It later became a public company limited by guarantee in 1994. The Ghana Stock Exchange (GSE) is a private sector initiative and it is not funded by the government but receive support from the government.

Alexander, Sharpe & Bailey (2006) explained listing of a company to mean that, the stocks or bonds or any financial instrument are being traded or sold on the market given the authorization.

A listed company may be freely applied to either the securities issuing company or the securities issued by a company. The word "Quoted" is also sometimes used to mean the same as listed. According to the GSE brochure on "How to buy and sell shares at the GSE" (2009), a stock exchange is an organized market on which securities such as shares and bonds can be bought and sold.

Prices of securities are determined generally by the demand and supply forces of the market, the Securities and Exchange Commission (SEC) and the officials of the GSE



supervise the operation of the exchange. Securities are bought and sold through License Dealing Members (LDM) on the exchange and not by investors themselves.

The main reasons for a stock exchange in a country is to help business go to the general public to raise long term funds to expand, modernize the business etc, in order to assist in job creation and to help in achieving economic wealth for the country through taxes and better goods and services.

The stock exchange helps to provide an alternative for investing idle funds for greater returns like dividend, interest and capital gains. The exchange also create career opportunities for young people in an economy and also the government can also borrow money from the public through the stock market by issuing bonds and stocks to build roads, schools, hospital etc.

A company can obtain a stock market listing for its securities through a public offer or a placing with the benefits of getting access to a wider pool of funds or finance, improvement in financial position of the company, improve marketability of shares, enhance public image or goodwill, easier access to long term capital, easier to seek growth by mergers and acquisition, provision of incentives for employees like share option and share ownership schemes etc.

Furthermore, a company obtains listing to provide the investing public (individual and institutional investors) an alternative avenue for investment by virtue of liquidity of securities listed. Also, there is free transfer of shares in listed (public) companies than in private companies. Original owners of shares of listed companies can realize holdings in



the company (according to the number of share in the company) and can sell their holdings to obtain funds for other projects.

Investors of the stock market securities stand to benefit from dividend income (which is part of the company's profit that is distributed to shareholders), bonus shares (that is, additional shares given to shareholders), possible capital gain (appreciation in the price of shares bought), right to vote at shareholders meeting, statement of account from the GSE securities Depository (GSD) instead of a share certificate since the automation of trading, right issue and a fixed amount of periodic interest payment until maturity of principal or loan in the case of bonds traded on the exchange.

## **2.7 Brief Profile of companies**

### **Ghana Commercial Bank Limited**

Formerly Ghana Commercial Bank, now legally GCB Bank Ltd. The second largest bank in Ghana by net profit and total assets, licensed by Bank of Ghana, the national banking regulator. The bank was founded in 1953, with 27 employees, as the Bank of the Gold Coast. Initially, it focused on serving Ghanaian traders, farmers, and business people, who could not obtain financing from the expatriate banks. In 1957, when Ghana attained Independence, the bank re-branded to Ghana Commercial Bank, to concentrate on commercial banking, since Bank of Ghana had been created to function as the central bank and banking regulator. In the beginning, the bank was wholly owned by the Government of Ghana.

However in 1996, when government shareholding stands at 51.17%, the stock of the bank was listed on the Ghana Stock Exchange. In 2013, the bank renamed itself GCB Bank



Ltd, with a new brand identity which was launched at the end of 2014. Today, GCB Bank Ltd serves the banking needs of large corporations, parastatal companies, small and medium enterprises as well as individuals. As of December 2016, the bank employs 1,532 staff, in branches distributed in all 10 regions of the Republic of Ghana.

On 17<sup>th</sup> May 1996, the Bank was listed on the Ghana Stock Exchange and it is one of the heavily capitalized companies. The shares of stock of GCB Bank Ltd are listed on the Ghana Stock Exchange and are part of the exchange's GSE All-Share Index. The government of Ghana maintains 21.4% shareholding in the bank, while the remaining 78.6% is owned by institutional and private investors. As of December 2016, there are about 21 investors in the stock of the bank.

In line with the mission, GCB is committed to providing first class service and developing long-lasting relationships with its clients. The extensive and well position branch network coupled with the competitively priced products established the Bank as the market leader in assets, deposit, profits and business size for many decades. For the purpose of this study, the 2000 – 2009 financial years were studied. As of December 2016, the bank's total assets were valued at about GHC 6 billions +, with shareholders' equity of approximately GHC 1 million+. GCB Bank Ltd maintains its headquarters in Accra, the capital of Ghana and the largest city in the country. The bank has over 161 branches distributed across most major urban areas of Ghana, with plans to refurbish many of them following a re-brand in 2014.



### **Societe' Generale' Bank (Ghana) Limited**

SG began in 1975 as "Security Guarantee Trust Limited" and the next year changed its name to "Social Security Bank Limited", or "SSB". In 1994, SSB and the "National Savings and Credit Bank" merged under a World Bank program. The next year, the government of Ghana divested its 21% share of the bank and it was converted to a public limited liability company and subsequently listed on the Ghana Stock Exchange. In 2004, the bank rebranded as SG-SSB after Societe Generale acquired a 51% controlling interest in the institution and in 2013 rebranded as SG to conform to the group name Société Générale.

According to its website, the bank is the 5th largest commercial bank in Ghana by assets, as of December 2011. As of December 2010, the bank's total assets were valued at approximately US\$423.4 million (GHC 685.9 million), with shareholders' equity of approximately US\$71.9 million (GHC 116.2+ million). The bank markets the "Sika" program including the SIKa Card, a credit card and the Sikatext Initiative Program. The bank is actively investing in internet banking.

The bank is one of the Société Générale subsidiaries. Out of these, seventeen (17) are in Africa, in the countries of: Algeria, Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Egypt, Ghana, Guinea, Equatorial Guinea, Madagascar, Mauritania, Morocco, Senegal, South African Republic, and Tunisia. The bank's stock is listed on the Ghana Stock Exchange and is traded under the symbol: SG-SSB. Major shareholders in the bank include corporate entities and individuals.



## **Enterprise Insurance Company Limited**

Enterprise Group was incorporated on 24th November 2008 and is the holding company of the Group. The original entity was Enterprise Insurance Company, established in 1924 and is the oldest insurance company in Ghana. It was listed on the Ghana Stock Exchange (GSE) in 1991 as the first insurance company to be publicly listed in Ghana.

Following a restructuring of the Group in 2010, Enterprise Group was incorporated to become the holding company and was listed on GSE in place of Enterprise Insurance which was subsequently delisted.

The Enterprise Group has entered into a new strategic partnership with Black Star Holdings Limited (BSHL) to replace Sanlam Emerging Markets. Black Star Holdings Limited (BSHL) is a wholly owned subsidiary of Leapfrog Strategic African Investments (LSAI), which is a separate account managed by Leapfrog Investments, and in which Prudential Financial, Inc., USA (PFI) is the primary investor.

Under the transaction, BSHL has acquired Sanlam's stake in the three subsidiary companies of Enterprise Group: Enterprise Insurance, Enterprise Life, Enterprise Trustees as well as Enterprise Properties.

Enterprise Insurance is the largest private insurance company in Ghana and is currently the highest ranked general insurance company in the Club 100 listing. It was the first insurance company to be listed on the Ghana Stock Exchange.

The Company has won many awards over the years including CIMG's "Insurance Company of the Year" in 2014 and 2015, and the Gold award in the Business and



Financial Services Excellence awards. It is currently rated in Category 'A' by Global Credit Rating of South Africa, for Claims Paying Ability.

Its strength in claims payment was confirmed in the aftermath of the unfortunate Accra floods of 3rd June, 2015 for which the Company paid approximately GHC 70m in claims within weeks of the sad event. That notwithstanding, the Company was nevertheless able to deliver Underwriting Profit for 2015, a confirmation of its formidable reinsurance structure.

### **Standard Chartered Bank Ghana Limited.**

Standard Chartered is a market leading financial service brand in Ghana and a member of the Standard Chartered Group. Standard Chartered Bank Ghana Limited has been operating in Ghana since 1896, and is one of the oldest businesses in the country. It opened its first branch in Accra in June 1896, and the main business then was the distribution of silver coins, of which the Bank was the sole supplier.

It was formerly called the British Bank of West Africa with its network covering most parts of the business centre of the country. At Ghana's independence in 1957, the Bank of British West Africa was changed to Bank of West Africa and launched an expansion programme which saw the number of branches grown from 30 at the end of 1958 to 112 in 1965. The bank went through many evolutionary changes, and finally acquired its present name, Standard Chartered Bank Ghana Limited, on January 1, 1985. As one of the first financial institutions to be involved in financial export and import and trade in products like cocoa, gold, bauxite and timber, the bank played a unique role, not only in monetizing the economy and playing the role of the Central Bank, but also in laying the



foundation for a formal banking industry in Ghana. The Bank listed on the Ghana Stock Exchange on 23<sup>rd</sup> August, 1991 and has consistently remained the highest-priced stock on the local bourse. For the purpose of this study, the 2000 – 2009 financial years were studied.

### **Republic Bank Ghana Limited**

Republic Bank Ghana Limited, formerly HFC Bank, is a commercial bank in Ghana. It is one of the commercial banks licensed by the Bank of Ghana, the national banking regulator. Republic Bank provides mortgage financing, commercial banking, investment banking and wealth management services. Regulatory approval is still pending for the bank to split into four divisions:

- Private Equity Division
- Real Estate Division
- Banking Division
- Investment Management Division

As of December 2011, Republic Bank was a medium-sized financial services provider in Ghana, with total assets valued at about US\$234.3 million (GHC 435.3 million), and shareholders' equity valued at about US\$53.8 million (GHC100 million).

The bank was created in 1990 as a shell company within Universal Merchant Bank (Ghana). In 1994 HFC Bank became a publicly traded company. In 1995 it became listed on the Ghana Stock Exchange. The stock of the bank is a component of the exchange's





GSE All-Share Index. According to the bank's website, the bank issued the Ghana Stock Exchange's first-ever corporate bond, in 1996. Republic Bank has its headquarters in Accra, the capital city of Ghana.

With their history of Home Finance Company in Ghana, they have been very instrumental in the development of the mortgage industry in Ghana and continue to be the number one home loan provider in the country. They have supported many Ghanaians both home and abroad to own their homes. HFC Bank is listed on the Ghana Stock Exchange Market.

## **2.8 Empirical Literature**

### **2.8.1 Dividend versus Share Repurchase/Buy back**

A number of empirical studies have been conducted to examine the relationship between dividend policy and share price (Hussainey, Mgbame, & Chijoke-Mgbame, 2011; Nishat & Irfan, 2004; Suleman, Asghar, Ali Shah & Hamid, 2011). However the findings by these researchers are not consistent. Baskin (1989) found a negative association between stock prices and dividend yield.

His findings, however, was at variance with (Hussainey *et al.*, 2011) who failed to established a negative association between the two variables. In the United Kingdom, Goddard *et al.* (2008) examined the long-run relationship between stock dividends and stock prices, using panel data. Using panel unit root and panel co-integration techniques, the authors found evidence of long-run association between stock prices and dividends. In other words, the study found that share prices and dividend move together in the long run.



According to Atrill (2009), a share buyback occurs when a business purchases its own shares and then either cancels them or holds them in treasury for re-issue at a later date. To implement a buyback, a business may acquire its shares in the open market in much the same way as any other investor. It may, however, make a proportional offer, where a set proportion from each investor is purchased, or a universal tender offer, where a fixed number of shares is acquired at a particular price.

The law normally requires public companies to buy back shares from funds generated either from distributable profits or from the proceeds of a fresh issue of shares. (see for example Section 61 of the Ghana Companies Act, 1963, Act 179). Buybacks can be undertaken either on an intensive basis or over a period of time. For example Microsoft Corporation announced, in September 2008, its intention to buy back \$40bn worth of its own shares over a five-year period. Share buybacks offer an alternative to dividend payments as a means of returning funds to investors. This raises the question as to which of the two methods investors prefer. If we assume perfect capital markets, they will be indifferent.

Also, a study by Bitok (2004) on the effect of dividend policy on the value of the firms quoted at the NSE found that paying dividends reduces risk to the companies and thus influence stock price. The study also found that dividend yield and payout ratio serves as proxies for the amount of projected growth opportunities. Sung & Urrutia (1995) also established that current stock prices are affected by dividend. According to the authors, as per the present value model, the current stock price is determined by future dividends, and that, as per the Lintner's model, future dividends are determined by current and past



dividends. From this, they derived model of causality from dividends to stock prices and therefore concluded that current and past dividends affect current stock prices.

In an empirical study conducted among US firms by Sung & Urrutia (1995), the researchers tested a causal relationship between stock prices and dividend. They found that there is bi-directional causality between dividends and stock prices. They concluded that the present value model and the Lintner's dividend model are important theoretical frameworks for explaining the relation between stock prices and dividends.

Ball *et al.* (1979) also examined the relationship between stock prices and dividend of Australian companies in the 1960s. Their study established significant relationship between dividend yield and share price return. The study however failed to find any support for the dividend irrelevance theory proposed by Miller and Modigliani.

Baker *et al.* (2001) conducted a survey among 603 American firms listed on the New York Stock Exchange (NYSE). Survey was done among the chief financial officers of the selected firms. Their results indicated that majority of the respondents strongly agreed that stock prices will be affected by dividend policy.

Gordon (1962) studied dividend policy and market price of the shares and proposed that the dividend policies of firms affect the market value of stocks even in the perfect capital market. He stated that investors may prefer present dividend instead of future capital gains because the future situation is uncertain even if in perfect capital market. Indeed, he explained that many investors may prefer dividend on hand in order to avoid risk related to future capital gain. He also proposed that there is a direct relationship between



dividend policy and market value of share even if the internal rate of return and the required rate of return will be the same.

### **2.8.2 Dividend Policy and Share Prices**

Dividend policy involves the organization's choice to either pay dividend or not. Aside this, dividend policy also examines the frequency of dividend payment (whether semi-annually, annually or quarterly). According to the signaling hypothesis, announcements concerning dividend change should correlate positively with share price movement and future changes in earnings. In recent years, a number of studies have attempted to examine the impact of dividend policy on the share price changes of companies. Al Masum (2014) conducted a study in Bangladesh to examine the impact of dividend policy on the share prices of listed banks on the Dhaka stock exchange. In the study, dividend yield and dividend per share were used as independent variables while controlling for earnings per share, return on equity and retention ratio. A panel data approach was employed to investigate the relationship between dividend and stock prices. The overall result of the study indicates that dividend policy has significant positive effect on stock prices.

In Malaysia, Zakaria *et al.* (2012) examined the impact of dividend policy on share price volatility of selected companies. The study employed least square regression method after controlling for investment growth and earnings volatility, firm size and debt. The study discovered that only 43.43 percent of the changes in the share prices are explained by dividend yield, dividend payout ratio, investment growth, size of the firm, leverage and earnings volatility. These companies recorded 94.41 percent share price volatility during



2005 until 2010. They find that dividend payout ratio significantly influences the changes in share price. The greater the size of the company, the more significant impacts the volatility of share price would be. They also find dividend yield, investment growth and earnings volatility insignificantly influence the changes in the company's share prices. Leverage negatively influences the movement of the share price.

Waithakaet *et al.* (2012) investigated the impact of dividend policy on share prices of selected companies on the Nairobi Stock Exchange. The study used linear regression model to examine the relationship between dividend policy and share prices. They find that share prices are positively related with dividend announcement, implying that dividend policy has some level of impact on the share prices of listed companies. Also, Nazir *et al.* (2010) used panel data analysis to investigate the role of corporate dividend policy in determining stock price changes in the Karachi Stock Exchange. The study established that movement in share prices is significantly affected by dividend policy as measured by dividend yield and dividend payout ratio. According to a study conducted by Rashid & Anisur Rahman (2008), the authors established that there is an insignificant positive relationship between dividend policy (Dividend yield) and share price volatility of 104 non-financial firms listed on the Dhaka Stock exchange from 1999 - 2006



### **2.8.3 Factors Affecting Stock Prices**

Apart from dividend policy (measured by dividend yield and payout ratio), other factors also affect the movement of stock prices. According to Allen & Rachim (1996), the relationship between dividend policy and share price volatility after the inclusion of growth as a control variable would be suggestive of either the arbitrage or information



effect. Debt, dividend and ownership structure significantly affects firm value (Alonso *et al.*, 2005). Debt plays active role to discipline managers in firms that do not have growth opportunities. In the absence of growth opportunities, dividend is significantly and positively related to firm's value. High retained earnings during period of no growth opportunities may result in an inefficient investment. Based on 361 non-financial Malaysian listed firms from 2002 to 2007, Abdul Rahim *et al.* (2010) detected a symptom of underinvestment when there was positive relationship between dividend policy and the firm's value. They find that increase in firm's value was contributed by the decreased investment, increased dividend and stagnant debt ratio. They suggested that underinvestment happens because the management cautiously chooses only secured investments and distributes the excess cash to shareholders as dividends.

The size of a firm, measured by its market capitalization has been identified as having an impact on its share price movement. Higher average return could be seen in smaller stocks. As the size of the firm increase, the company share price would likely to decline (Atiase, 1985). According to Allen & Rachim (1996), small firms are less involved in diversification activities, thus it will be less subjected to investor's scrutiny compared to large company. Return on Equity (ROE), has also been identified as one of the factors influencing the stock prices of firms. The ROE is calculated by dividing the company's profit after tax by its shareholders' equity. Liu & Hu (2005) as well as Ling *et al.* (2008) used the return on equity in their study and found a positive relationship between it and stock prices.

In Ghana, studies on dividend policy have been limited to the determinants of dividend payout ratios of listed firms (Amidu & Abor, 2006); how dividend policy affects

performance of the firm on Ghana Stock Exchange (Amidu, 2007); dividend policy and share price volatility (Asamoah, 2010) and the relationship between dividend policy and performance of banks in Ghana (Agyei & Marfo-Yiadom, 2011).

Amidu & Abor (2006) examined the determinants of dividend payout ratios of listed companies in Ghana. Their analyses were performed using data derived from the financial statements of firms listed on the Ghana Stock Exchange over a six year period. Ordinary Least Squares model was used to estimate the regression equation. Institutional holding was used as a proxy for agency cost. Growth in sales and market-to-book value were also used as proxies for investment opportunities. Their results show positive relationship between dividend payout ratios and profitability, cash flow, and tax. The results also show negative association between dividend payout and risk, institutional holding, growth and market-to-book value. However, the significant variables in the results were profitability, cash flow, sale growth and market-to-book.

Amidu (2007) examined whether dividend policy influences firm performance in Ghana. His analyses are performed using data derived from the financial statements of listed firms on the GSE for a period of eight years. Ordinary Least Squares model is used to estimate the regression equation. He finds a positive relationship between return on assets, dividend policy, and growth in sales. He also finds that bigger firms on the GSE perform less with respect to return on assets. His results also revealed negative association between return on assets and dividend payout ratio, and leverage. The results of the study generally support previous empirical studies.



Asamoah (2010) examined the relationship between dividend policy and stock price volatility. A sample of 10 Ghanaian listed companies is examined for a period from 1993 to 2005. In support of Baskin's (1989) US results, evidence is found that dividend yield influences stock price volatility. This suggests that dividend policy affects stock price volatility and it provides evidence supporting the arbitrage realization effect, duration effect and information effect in Ghana. On the other hand, contrary to expectations, he found significant positive relationship between size and stock price volatility, and insignificant negative relationship with debt. He also discovered that a negative relationship exist between growth and stock price volatility as expected. His results support Baskin's suggestion that dividend policy per-se can influence stock price volatility.

Agyei & Marfo-Yiadom (2011) studied the relationship between dividend policy and performance of banks in Ghana. Their study uses panel data constructed from the financial statements of 16 commercial banks in Ghana for a period of 5 years, from 1999-2003. The financial statements were obtained from the Banking Supervision department of Bank of Ghana. They find evidence that the average dividend paid by banks over the study period is 24.65%. They also find that banks that pay dividends increase their performance. Their results reinforce earlier findings that leverage, size of a bank and bank growth enhance the performance of banks though the age factor presents mixed results. On the whole, their results are consistent with earlier studies that dividend policy has an effect on firm value and therefore relevant.





#### 2.8.4 Other Review

The cash dividend payment model of (Masulis & Trueman, 1988) also focuses on deferred dividend costs. It however notes that investors with deferent tax liabilities will not be uniform in an ideal firm's investment and therefore minimizes the varying differences by segregating investors into clientele.

Borges (2002) assume that investors maximize income after-tax. This model asserts that no dividends should be paid but rather share repurchase should be used to distribute corporate earnings. The model was extended to a general equilibrium frame work by Frankfurter et al. (2000) which says that investors maximize the expected utility of their total wealth. This theory though robust has similar predictive effect.

The discrete- time, infinite-horizon model was propounded by Auerbach in 1979; it says that shareholders rather than firm market value maximize their wealth if capital gains or dividend tax differential exists. Based on this Auerbach (1984) states that dividends distribution occur because of the consistent, long-term undervaluation of corporate capital which is a complex and flexible process involving multiple periods of total reinvestment of all the firm's profits followed by firm's returns less than the returns expected by investors.

The tax-adjustment models have over the years been criticized as not meeting the requirement of rational behaviour. This necessitated Miller (1986) strategy of tax sheltering of income by high tax bracket individuals. In this strategy, individuals can refrain from repurchasing taxpaying shares to avoid the tax liabilities. Alternatively using another strategy first advanced by (Miller & Scholes, 1978) shareholders can purchase



dividend paying stocks and receive their distribution, then, simultaneously borrow funds to invest in tax free securities. Another strategy for avoiding tax liabilities is the use of dividend specific, personal tax shelters such as the dividend income exemption as advanced by De Angelo and Skinner, (1992). They criticize (Miller & Scholes, 1978) tax shelter strategy as not being sufficient to induce positive dividend payment at equilibrium.

Lintner (1956) conducted a survey on financial managers of United States Companies and came to the conclusion that dividend decision was important in an organisation. The study asserted that dividend decision should be made independent of company investment decision. Similar conclusions were reached by Fama and Babiak (1968) as they studied 201 United States Companies. Gordon (1959), again found that firms with high payout ratios had high price to earnings (P/E) ratios meaning that investors place high value on firms with high payouts compared to those with low payout ratios.

Joll (1998) carried out a study on 324 companies that announced a change in dividend payout policy, in 1993 and found out that there was a positive relationship between the repurchase decision and the magnitude of the executive stock option plan. An extension of these studies including the company's employees and management were done by Weisbenner (2000), wanted to know if the group holding or in possession of the stock options (that is company's employees and management) made any difference in payout choice and as a priority he expected it to make a difference. Weisbenner then stated that, if non-executive employees hold stock options then the dividend protection is less of a considering factor (assuming employees wealth is not maximized). But the dilution factor is still relevant since it affects everyone who holds stock, not only the employees.



Therefore, in the case of non-executive stock option plans, an increase in the repurchase activity is expected but, no reduction in dividends. If executives hold stock options, the expected result is both a reduction in dividends and an increase in repurchase activities.

An empirical evidence to support this hypothesis was found by Weisbenner (2000). First of all he found that, the overall size of the firm's stock option program had a great influence on the firm's repurchase policy (presumably in an attempt to prevent stock dilution). The firm's stock option programs are equally related to its propensity to reduce retained earnings. In the second instance it was found that, the larger the executive's holding of stock options, the more likely the firm was to reduce dividend and retained more of its earnings (presumably an outcome of managers' motivation not to pay dividends). These studies show the important relationship between compensation, and for that matter executive compensation and the form of dividend payouts. The extent to which the firm's stock option increases it tends to use more repurchases to reduce retained earnings. When more of the stock option programs are directed at management, dividends tend to reduce.

Weisbach et al., (2000) came out with another important link between firm's characteristics and dividend payout policy. As in Lintner's model, Weisbach et al., (2000), hypothesized that dividends were more of a permanent commitment than were share repurchases, and that dividends were more likely to be paid out of permanent earnings while repurchases were more likely to be used as a way to distribute temporary cash flows. The empirical implication of this hypothesis is that higher cash flow variability would usually tend to use share repurchase, and those with lower cash flow variability tend to use dividends. With a large sample of repurchase and dividend change



events, Weisbach et al (2000) realized that firm's that repurchased their shares had high variability of their operating income relative to those that only increased dividends or to firms that increased their dividend and repurchased their shares. Undoubtedly, they found that firms that did not pay cash dividends had the highest cash flow variability of all studied.

Using the Logit model, they again indicated that, higher cash flow variability and higher non-operating cash flow increased the likelihood of repurchases relative to dividends. As noted by earlier studies, they also found that, although dividends appeared to be made from permanent earnings, there was no evidence of earnings improvements following an increase in dividends. They also stated that dividend payment does not improve the overall wealth of the firm. Lie's (2001) concluded that, tender offers were more likely to occur when firms had excess cash on their balance sheet (a temporary build up capital), and dividends were more likely to increase with excess cash on the income statement (presumably a permanent rise in cash flow).

Nishat (2002) carried out a study in Pakistan with the objective of determining the impact of dividend policy on the stock prices in Pakistan. The study used data from a sample of 160 listed companies in the Karachi Stock Exchange over twenty years period (1981-2000). The empirical estimation was based on a cross-sectional regression analysis of the relationship between stock price volatility and dividend policy with controlling of firm size, earnings volatility, and leverage and asset growth. It was realized that the dividend policy measure (dividend yield and payout ratio) had an impact on the share price volatility. The study stated that, dividend policy affects stock price volatility and it provided evidence also supporting the arbitrage realization effect, duration effect and



information effect in Pakistan. Nashat (2002) again noted that, the responsiveness of the dividend yield to stock price volatility increased during reform periods (1991-2000), while, payout ratio measure had a significant impact only at lower levels.

The size of the firm and leverage had a positive and significant impact on the stock price volatility. The firm size had a negative effect on stock price during the pre-reform, but a positive effect during the reform period. The earnings volatility had a negative impact and significant during the reform period only. The general conclusion was that though the results were not robust as in case of developed capital markets, they were consistent with the behaviours in emerging markets.

Al-Masum (2014) conducted a study in Bangladesh to examine the impact of dividend policy on the share prices of listed banks on the Dhaka stock exchange. In the study, dividend yield and dividend per share were used as independent variables while controlling for earnings per share, return on equity and retention ratio. A panel data approach was employed to investigate the relationship between dividend and stock prices. The overall result of the study indicates that dividend policy has significant positive effect on stock prices.

In Malaysia, Zakaria et al. (2012) examined the impact of dividend policy on share price volatility of selected companies. The study employed least square regression method after controlling for investment growth and earnings volatility, firm size and debt. The study discovered that only 43.43 percent of the changes in the share prices are explained by



dividend yield, dividend payout ratio, investment growth, size of the firm, leverage and earnings volatility.

Waithakaet et al. (2012) investigated the impact of dividend policy on share prices of selected companies on the Nairobi Stock Exchange. The study used linear regression model to examine the relationship between dividend policy and share prices. They find that share prices are positively related with dividend announcement, implying that dividend policy has some level of impact on the share prices of listed companies.

Also, Nazir et al. (2010) used panel data analysis to investigate the role of corporate dividend policy in determining stock price changes in the Karachi Stock Exchange. The study established that movement in share prices is significantly affected by dividend policy as measured by dividend yield and dividend payout ratio.

Debt, dividend and ownership structure significantly affects firm value (Alonso et al., 2005). Based on 361 non-financial Malaysian listed firms from 2002 to 2007, Abdul Rahim et al. (2010) detected a symptom of underinvestment when there was positive relationship between dividend policy and the firm's value. They find that increase in firm's value was contributed by the decreased investment, increased dividend and stagnant debt ratio.

Hail, et al. (2014) examined variations in the dividend payments of firms while considering the manager cum investors asymmetric the Security and Exchange Commission (SEC). Adaramola (2012) investigated the information content of dividend payments in Nigerian employing panel model and Granger Causality test, the findings



indicated that stock price variation is not directly caused by dividend payments. Uwuigbe, et al. (2012) examined the nexus between financial performance and dividend policy of some Nigerian quoted companies, as well as the nexus among ownership, size and the dividend payments. The regression-analysis method was used, the study found that companies' performance and dividend disbursement are directly and significantly related.

Kenyoru, et al., (2013) assessed how the stock price in Kenya is affected by dividend decision of quoted companies over the period 1999 to 2008. They used multiple regression analysis and payout ratio was inversely connected to stock price variation, that is higher payments lead to lower volatility and that price of shares were more stable when dividend yield was higher.

Yasir, et al., (2012) investigated the connection between Pakistani stock price changes and dividend policy. The study found that dividend policy impacted on stock price because payment ratio is inversely connected to price changes while dividend yield is directly associated with price changes and they concluded that the signaling hypothesis is useful in Pakistani stock market.

## **2.9 Similar Empirical Studies in Ghana**

Amidu & Abor (2006) examined the determinants of dividend payout ratios of listed companies in Ghana. Their analyses were performed using data derived from the financial statements of firms listed on the Ghana Stock Exchange over a six year period. Ordinary Least Squares model was used to estimate the regression equation. Institutional holding was used as a proxy for agency cost. Growth in sales and market-to-book value



were also used as proxies for investment opportunities. Their results show positive relationship between dividend payout ratios and profitability, cash flow, and tax.

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Agyei & Marfo-Yiadom (2011) studied the relationship between dividend policy and performance of banks in Ghana. Their study uses panel data constructed from the financial statements of 16 commercial banks in Ghana for a period of 5 years, from 1999-2003. The financial statements were obtained from the Banking Supervision department of Bank of Ghana.

## 2.10 Operational Definitions

**Investment /Investors:** According to Frederick Amling (1988), investment refers to “the purchase by an Individual or institution of a financial or real asset that produces a return proportionate to the risk assumed over a long period of time”.

An investor is any person actual or potential who postpones current consumption of financial resources for future benefits/ consumption on shares on the Ghana Stock Exchange (GSE).





**Shares:** According to the Companies Code 1963, Act 179, first schedule, “**shares** are the interests of the members who are entitled to the capital and profit of the company”.

For the purpose of this study, a share means part ownership of a company and an entitlement therein to a proportion of distributed profit.

**Dividend Payout:** Dividend is a cash payment made on a quarterly or semi-annual basis by a company to its shareholders after the deduction of tax at the standard personal income tax rate (Watson & Head (2002)). For the purpose of the study, dividend payout, dividend and dividend policy are used interchangeably.

**Dividend Yield (DY):** Dividend yield of a stock signifies how much a company pays dividend in relation to its stock price. It is calculated as a fraction of annual dividends paid by the company upon its stock price. Dividend yield is considered an important variable that is used by Allen & Rachim (1996), Nishat and Irfan (2003), Rashid & Rahman (2009), Nazir, Nawaz, Anwar, & Ahmed (2010), Asghar, Shah, Hamid, & Suleman (2011), Hussainey, Mgbame, & Chijoke-Mgbame (2011) and it is significantly explaining the effect of dividend policy on stock market prices. All these researchers found positive relation between dividend yield and stock price.

**Dividend per share:** This is the per unit dividend paid to a shareholder per share of his or her holdings in the company.

**Market Price (MP):** Market price is taken as dependent variable which is calculated by taking the average of high and low market prices of the shares while in the previous studied researchers like Rashid & Rahman (2009), Nazir, Nawaz, Anwar, & Ahmed (2010), Asghar, Shah, Hamid, & Suleman (2011), Hussainey, K., Mgbame, C.O., &



chijoke-Mgbame, A.M. (2011) use price volatility as a dependent variable to see the effect of dividend policy on stock market prices.

**Retention Ratio (RR):** Retention Ratio is opposite to dividend pay-out ratio and is calculated by subtracting Total Dividend from Total Earnings and then dividing the resulting amount by Earnings. Pani (2008) used dividend to Retention Ratio to see its effect on Stock Prices and found positive relation between them. This ratio is previously ignored by the researchers and they used either dividend payout ratio or dividend yield ratio in their studies for explaining the variation in stock price.

**Profit after Tax (PAT):** Profit after tax is used a control variable. Pani (2008), Adesola & Okwong (2009), Ahmed Javid (2009) and Al-Kuwari (2010) used profit after tax as independent variable in their studies and found positive relation between stock prices and profit after tax. They consider profit after tax as an important variable to explain the variation in stock prices.

**Earnings Per Share (EPS):** Earnings per share is the amount of earnings per each outstanding share of a company's stock.

**Return on Equity (ROE):** Return on Equity is calculated by dividing profit after tax with shareholders' equity. Liu & Hu (2005), Raballe & Hedensted (2008) and Ling, Mutalip, Shahrin, & Othman (2008) used Return on Equity in their studies and found positive relation between Return on Equity and Stock Prices.



## 2.11 Dividend Policy and stock price volatility

A different method was used by Baskin (1989) to examine the association between dividend policy and stock price volatility rather than stock prices or returns. He advanced four basic models which related dividends to stock price risk and called these as; the duration effect, rate of return effect, arbitrage pricing effect and informational effect. He added some control variables for examining the association between stock price volatility and dividend yield.

These control variables are earning volatility, firm's size, debt and growth. These control variables do not only have clear effect on stock price volatility but they also affect dividend yield. For instance, the earning volatility has effect on stock price volatility and it affects the optimal dividend policy for corporations. Baskin revealed that fluctuation in the discount rate has less impact on high dividend yield stocks because high dividend yield can be a signal of more near-term cash flow so the firm with high dividend yield would be expected to have less volatility in stock price. This is then being named as duration effect and used the Gordon growth model for demonstrating this effect. Moreover, he explained that based on the rate of return effect, it is possible that firms with low dividend yield and low pay out to be assessed more valuable than their assets in place due to their growth opportunities.

Baskin argued that managers can controls the stock price volatility and stock risk by dividend policy and distribution of dividend at the time of earning announcement may be interpreted as signal about stability of firm. He concluded that dividend policy can be used as a tool for controlling the stock price volatility and reported that if dividend yield increases by 1 %, the annual standard deviation of stock price decreases by 2.5 %.



Allen and Rachim (1996) revealed that the dividend policy and stock price volatility would be suggestive of either the arbitrage or information effect even after inclusion of growth in assets as a control variable. Contrary to Baskin's (1989) findings, they observed that there are no relationship between the dividend yield and stock price movements, but it showed a positive relation between stock prices and company size, earnings and leverage while dividend payout shows a negative impact on stock price volatility. Baker and Powell (1999) conducted a survey among 603 Chief Financial

Officers of US companies which were listed on the NYSE. They reported that majority of respondents (90%) agreed that dividend policy has impact on value of firm and affect firm's stock price volatility too.

He made four explanations about the relationship between dividend policy and the value of the firm namely, bird-in-hand, signaling, tax preference and agency explanations. Out of the four explanations on dividend relevance the respondents generally expressed the highest level of agreement towards the signaling theory. In their study, Nel and Kruger (2001) found that stock price with higher volatility results in greater risk that the share might not performed as expected.

They further revealed that if the volatility of a stock price increases, investors will perceive the share to be more risky and vice versa. Guo (2002) defined the stock price movements as the systemic risk faced by investors who possess ordinary shares investment. He argued that the investors are by nature risk averse, and the volatility of their investments is important to them because it is a measure of the level of risk they are exposed to. Al-Malkawi (2007) divided the clientele effect to: tax effects and transaction



cost, he suggested that investors on the upper tax bracket would prefer retained earnings or capital gain in the form of stock price improvements on dividend, while investors in the lower tax bracket might prefer dividend on retained earnings in the form of stock price improvements.

Nazir et al. (2010) used 73 firms listed in Karachi Stock Exchange (KSE) as the sample and studied the relationship between stock price volatility and dividend policy for five year period. In line with the Baskin's (1989) findings, they revealed that stock price volatility has significant negative association with dividend yield and dividend payout. Okafor et al. (2011) tested the impact of the dividend policy on stock price volatility with special reference to Nigerian Stock market using multiple regression analysis.

The results showed a statistically significant negative effect from dividend yield on price volatility, the result of the impact of the dividend payout ratio on the price volatility showed negative effect only in some years. It is contrary to the Baskin's (1989) findings. Suleman et al. (2011) examined the association of dividend policy with stock price volatility in Pakistan.

They extracted data from Karachi Stock Exchange regarding five important sectors for the period of four years. Contrary to Baskin's (1989) results, their findings showed that stock price volatility has significant positive relationship with dividend yield.

They also reported that stock price volatility has significant negative relationship with growth. Hussainey et al. (2011) examined the relationship between stock price volatility and dividend policy in the United Kingdom. Their findings discovered that the payout ratio is the predominant determinant of the stock price volatility and size and debt have



the strongest relationship with price volatility. Contrary to the findings of Allen & Rachim (1996), it shows that firm's size has significant negative impact on volatility of stock price and firm's size.

The authors also reported a debt has significant positive impact on stock price volatility. Jecheche (2012) investigated the impact of dividend policy on stock price volatility in Zimbabwe Stock Exchange.

Performing the cross-sectional regression analysis for the estimation model, and two variables of the dividend policy, and controlling for firm size, earning volatility, leverage and asset growth, the study has concluded that the two proxies of the dividend policy have significant effect on the price volatility, also the study offers empirical evidence supporting the signaling and arbitrage realization effects in Zimbabwe. Hashemijoo et al. (2012) examined the impact of dividend policy on stock price volatility in Malaysia. The results of the study revealed that the price volatility is associated negatively with both variables of the dividend policy, and that the dividend yield and firm size have the highest significant impact on the stock volatility.

The authors have carried out a critical evaluation of literature, before selecting the variables. The variable selection has been justified with multiple references and two independent variables and two control variables were used for the analysis. The firm size and assets growth have been added to the model as control variables in order to eliminate spurious results. Dividend yield and payout has been taken in order to measure the dividend policy and estimated the impact of the same on stock price volatility.



## 2.12 Conclusion

Literature reviewed so far covers various relevant studies conducted in Ghana and elsewhere. Studies conducted so far in Ghana have focused on investigating the effect of dividend policies on firms' performance as well as the determinants of dividends payouts. A few studies conducted on the effect of dividend payments on share prices used case studies of one or two companies listed on the GSE which may not be a representation of an entire industry.

In general, studies on dividend payment as a subject to researchers is often on its effect on share price of individual firms and in some cases where multiple firms are studied, samples are drawn from cross sections of industries without focusing on one particularly industry. This study therefore seeks to address such gap inherent in finance literature and will complement the existing body of knowledge on dividend payment to shareholders and will also answer the question, what kind of effect exists between dividend and investors share price.

This study therefore is conducted to investigate the effect of dividend payments on share prices of Banks/ Insurance companies listed on the GSE from 2000 – 2015. This is very unique and will bridge the knowledge gap of how the Banks/ Insurance companies perform on the GSE relative to the effect of dividend payments on share prices.



## CHAPTER THREE

### METHODOLOGY

#### 3.0 Introduction

This chapter describes the methods and procedures used to achieve the objectives of the studies. These include; research design, population and sampling technique, data collection method and analytical tool (statistical analysis). It outlined the various approaches in collecting relevant data and techniques of processing the data.

#### 3.1 Research Design

The research design for the study is a case study. The study is conducted on only the banking/insurance industry taking into consideration some few listed companies. Bell (1999) states “a case study approach is particularly appropriate for individual researchers because it gives an opportunity for one aspect of a problem to be studied in some depth within a limited time scale”. Some selected companies under the banking/insurance industry were selected and used as cases for analysis.

#### 3.2 Population and sampling technique

The target population for this study consists of all companies listed on the Ghana Stock Exchange on or before the year 2000 (base year). The study adopted purposive sampling technique in selecting the companies to be included in the study. This was done to deliberately include companies from the finance/insurance industry which were registered with the GSE on or before the year 2000. The study is only focusing on the insurance/finance industry in order to have an in-depth understanding about that





particular industry. The insurance/finance industry dominates the GSE which had most of its companies listed on the GSE on or before the year 2000 (base year).

The sample size consists of five companies listed on the GSE from the Finance/Insurance industry. They include; Ghana Commercial Bank (GCB), Standard Chartered Bank, Societe Generale Bank (Ghana) Limited, Enterprise Insurance, and HFC Bank

### **3.3 Data Collection Source**

The study used mainly secondary data. The annual financial reports of the companies under study were used to obtain data with the aid of data specimen form. These annual financial reports and the Ghana Stock Exchange Fact Book and the annual State of the Ghanaian Economy report from the Ghana Statistical Service. The data collected spanned for the period of sixteen years (2000 – 2015).

### **3.4 Study Instruments**

The researcher formulated data specimen form which was used as an instrument in gathering / collecting data on share prices, dividend per share, retained earnings, earnings per share and market interest rate from the GSE and Ghana Statistical Service.

### **3.5 Analytical Tool and Technique**

To examine the effect of dividend on share price, the researcher used a double log multiple regression equation. This involved expressing both dependent and independent variables in their natural logarithms. It will allow for estimation of elasticity directly from the regression. According to Alson et al. (2002), the estimated parameters of the double log functional form can be interpreted as elasticity. The gradient coefficients will



represent elasticity of share price in relation to each explanatory variable. The dependent variable is the share price and the independent variables to be analyzed are dividend per share, retained earnings, earnings per share, average annual share price and market interest rate. The data was processed using EVIEWS econometric software. The study adopted a double-log demand equation with respect to price and income of a good in the work of Alson et al (2002). The model is formulated as follow;

### Model Formulation

$$\ln Q_i = \alpha_i + \eta_{i1} \ln P_1 + \eta_{i2} \ln P_2 + \dots + \eta_{iN} \ln P_N + \eta_{iI} \ln I \dots \dots \dots (3.1)$$

Below is the double-log multiple regression equation for this study:

$$\ln Sp = \beta_0 + \beta_1 \ln d_t + \beta_2 \ln r_t + \beta_3 \ln P_t + \beta_4 \ln i_t + \beta_5 \ln e_t + \mu \dots \dots \dots (3.2)$$

Where sp = end of year average price per share of the company

d<sub>t</sub> = dividend per share at time t

r<sub>t</sub> = retained earnings at time t

P<sub>t</sub> = end of year average price per share of the company

i<sub>t</sub> = annual average 91day treasury bill rate for the market

e<sub>t</sub> = earnings per share @ time 't'

μ = residual term summarizing the effect of all other relevant variable.

### Test of Hypothesis



The study used probability values (0.01, 0.05, and 0.1 or 1%, 5% and 10%) significant levels, in judging whether a variable is significant or not. With this, a variable is judged to be statistically significant and accepted when its P- Value is lower than any of the standard probability values listed above and statistically insignificant and rejected if the opposite occurs.

### **3.5 Validity and Reliability**

The study used audited financial statements of the selected companies on the GSE as mandated by law. Other relevant data was obtained from the Ghana statistical service and the Institute of Social, Science and Economic Research (ISSER) Legon, Ghana.

### **3.6 Profile of the Ghana Stock Exchange**

The Ghana Stock Exchange (GSE) is the principal stock exchange of Ghana. The exchange was incorporated in July 1989 with trading commencing in 1990. It currently lists 42 equities (from 37 companies) and 2 corporate bonds. All types of securities can be listed. Criteria for listing include capital adequacy, profitability, spread of shares, years of existence and management efficiency. The GSE is located within the Cedi House in Accra.

Since its inception, the GSE's listings have been included in the main index, the GSE All-Share Index. In 1993, the GSE was the sixth best index performing emerging stock market, with a capital appreciation of 116%. In 1994 it was the best index performing stock market among all emerging markets, gaining 124.3% in its index level. 1995's index growth was a disappointing 6.3%, partly because of high inflation and interest



rates. Growth of the index for 1997 was 42%, and at the end of 1998 it was 868.35. As of October 2006 the market capitalization of the Ghana Stock Exchange was about 111,500 billion cedis (\$11.5 billion). As of December 31, 2007, the GSE's market capitalization was 131,633.22 billion cedis. In 2007, the index appreciated by 31.84% (see the "Publications" section on the GSE's website for more information).

The manufacturing and brewing sectors currently dominate the exchange. A distant third is the banking sector while other listed companies fall into the insurance, mining and petroleum sectors. Most of the listed companies on the GSE are Ghanaian but there are some multinationals.

Although non-resident investors can deal in securities listed on the exchange without obtaining prior exchange control permission, there are some restrictions on portfolio investors not resident in Ghana. The current limits on all types of non-resident investor holdings (be they institutional or individual) are as follows: a single investor (i.e. one who is not a Ghanaian and who lives outside the country) is allowed to hold up to 10% of every equity. Secondly, for every equity, foreign investors may hold up to a cumulative total of 74% (in special circumstances, this limit may be waived). The limits also exclude trade in Ashanti Goldfields shares. These restrictions were abolished by the Foreign Exchange Act, 2006 (Act 723).

There is an 8% withholding tax on dividend income for all investors. Capital gains on securities listed on the exchange will remain exempt from tax until 2015. The exemption of capital gains applies to all investors on the exchange. There are no exchange control



regulations on the remittance of original investment capital, capital gains, dividends, interest payments, returns and other related earnings.

Potential changes at the exchange include the introduction of automated trading and the listing of some state banks. The Bank of Ghana plans the development of mutual funds, unit trusts and municipal bonds at a subsequent date. These changes are aimed at making the exchange more relevant, efficient and effective. The exchange was also involved in preparing the draft law on collective investment vehicles.



## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### 4.0 Introduction

This chapter presents the results and discussions of the study. It covers the trend of share prices of companies listed on the GSE from 200 to 2015, the trend of dividend payment of companies listed on the GSE from 200 to 2015 and the effect of dividend payment on the share price of companies listed on the GSE. The companies studied include; GCB, HFC, EIG, SCB, and SGSSB.

#### 4.1 Descriptive Statistics

Table 4.1 presents the descriptive statistics of the data used for the analysis. The data was comprised of the share price, dividend, retained earnings, earnings per share and interest rate. The figures presented represent the average values of the various variables. It is seen from Table 4.1 that all the variables fluctuate year after year. It is not easy to predict each variable in terms of how it will behave in subsequent years. The data is taken from the year 2000 to 2015.



**Table 1: Descriptive Statistics**

Year	Share		Retained	Earnings Per	Interest
	Price	Dividend	Earnings	Share	Rate
2000	4.462	10498.4	3790921	0.28612	42
2001	4.832	16812.28	6575800	0.39866	28.9
2002	5.236	16239.6	5484745	0.41272	26.6
2003	4.894	18515.4	7350063	0.394258	18.7
2004	5.916	18943.4	3554431	0.6352	17.1
2005	4.66	12902.4	3790921	0.28612	11.5
2006	3.748	14829.28	6575800	0.39866	10.2
2007	5.904	16037.6	5484745	0.41272	10.6
2008	8.18	18465.4	7350063	0.394258	24.7
2009	6.262	18943.4	3554431	0.6352	23.7
2010	9.726	18419.4	3485474	0.7929	12.3
2011	9.506	15492	3620250	0.83402	10.3
2012	2.84	24929.6	3836839	0.40044	23.1
2013	4.144	23889.8	7281428	0.61774	18.8
2014	5.508	42287.2	10194024	0.70958	25.8
2015	4.232	34498.2	10250573	0.61596	23.1

(Source: Author's Computation, 2018)



## 4.2 Trend of share prices of companies listed on the GSE from 2000 – 2015

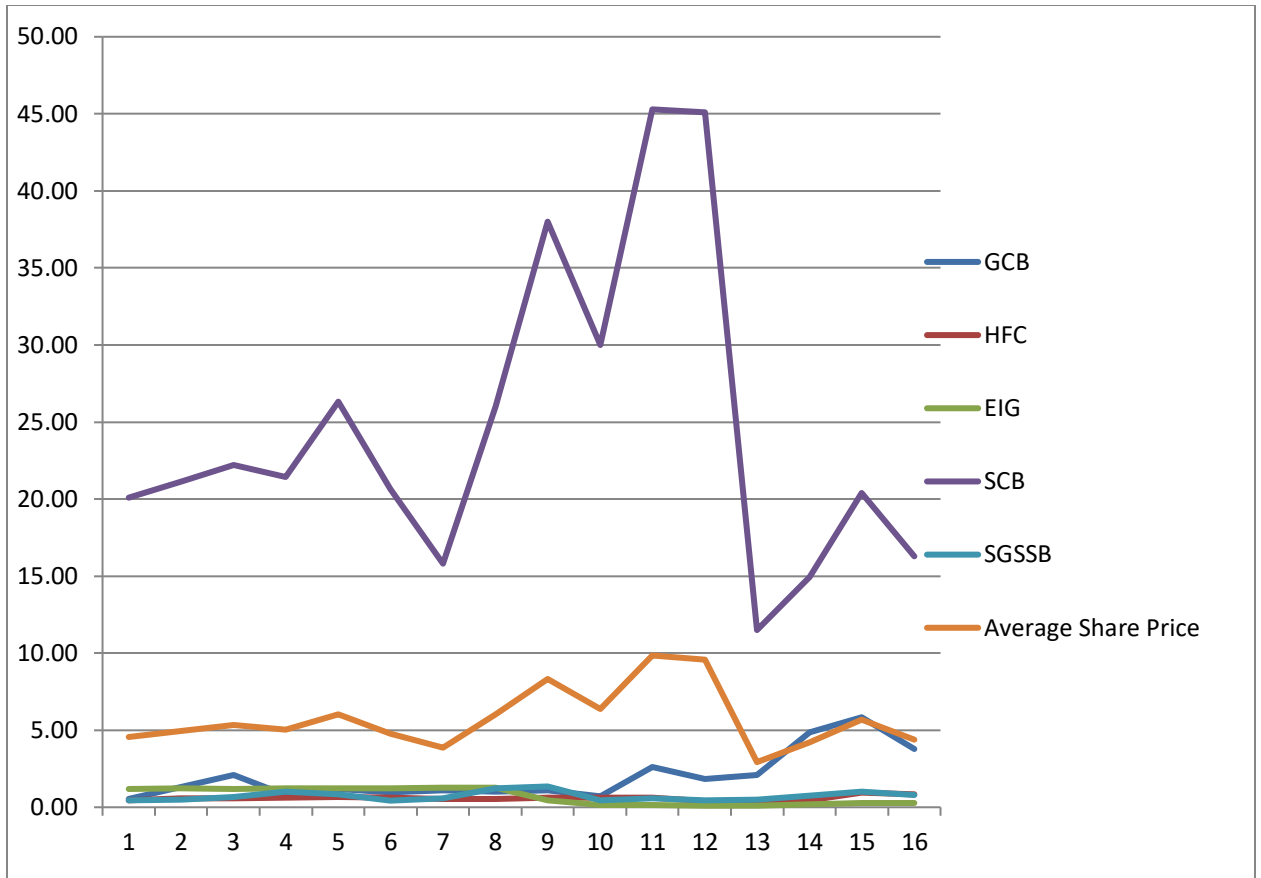
Figure 4.1 presents results for the trend of share prices of companies listed on the GSE from 2000 to 2015. The first objective of the study was to describe the trend of share prices of companies listed on the GSE from 2000 to 2015. It is observed from Figure 4.1 that the share prices of all the companies (GCB, HFC, EIG, SCB, and SGSSB) fluctuate year by year throughout the sixteen year period from 2000 to 2015.

For HFC, EIG and SGSSB, their share prices fluctuate year after year in almost the same manner ranging between 0.10 and 1.45 in no format except for EIG which started with higher share prices but gradually keep reducing year after year. The share price of EIG in 2000 was 1.20, maintain for a few years and then increase a little to 1.4 in 2004 and 1.7 in 2007 and then declined to 0.10 in 2011 and began rising. For GCB, the share price keeps fluctuation between 0.54 and 2.10 between 2000 and 2012. It then rose sharply to 4.85 in 2013 and fell to 3.78 in 2014. The share price of GCB was higher than all the other companies from 2013 to 2015 except for SCB. The share price of SCB was higher than all the other companies throughout the entire period but fluctuate each year. It started with 20.11 in 2000 and rose to a maximum price of 45.29 in 2010 and 2011 and fell drastically to 11.50 in 2012 and began rising again. The average share price of the companies listed on the GSE generally fluctuates over the years between 2.93 and 9.85.

The results show that depending on other factors in a particular year, the share price could either increase or decrease. Share prices of companies listed on the GSE could be affected by several variables including dividend payment among others as reported by (Hussainey *et al.*, 2011).







**Figure 4.1 Trend of Share Prices of Companies Listed on the GSE between 2000 and 2015**

**(Source: Author’s Computation, 2018)**

*Note: The y axis represent the share prices of the companies and the x axis represent the years under consideration beginning from year 2000 represented by 1 in that order to year 2015 represented by 16.*



### **4.3 Trend of dividend payment of companies listed on the GSE from 2000 – 2015**

Figure 4.2 presents the results for the trend of share prices of companies listed on the GSE between 2000 and 2015. It can be observed that the amount of dividend paid to shareholders keeps fluctuating every year among all the companies but is in the rise.

For SGSSB, it pays almost the highest amount of dividend to its shareholders annually among all the companies ranging between 42750 in 2008 and 200336 in 2014. The company which pays the least dividend to its shareholders was EIG which pays between 534.4 and 4724 fluctuating over the period.

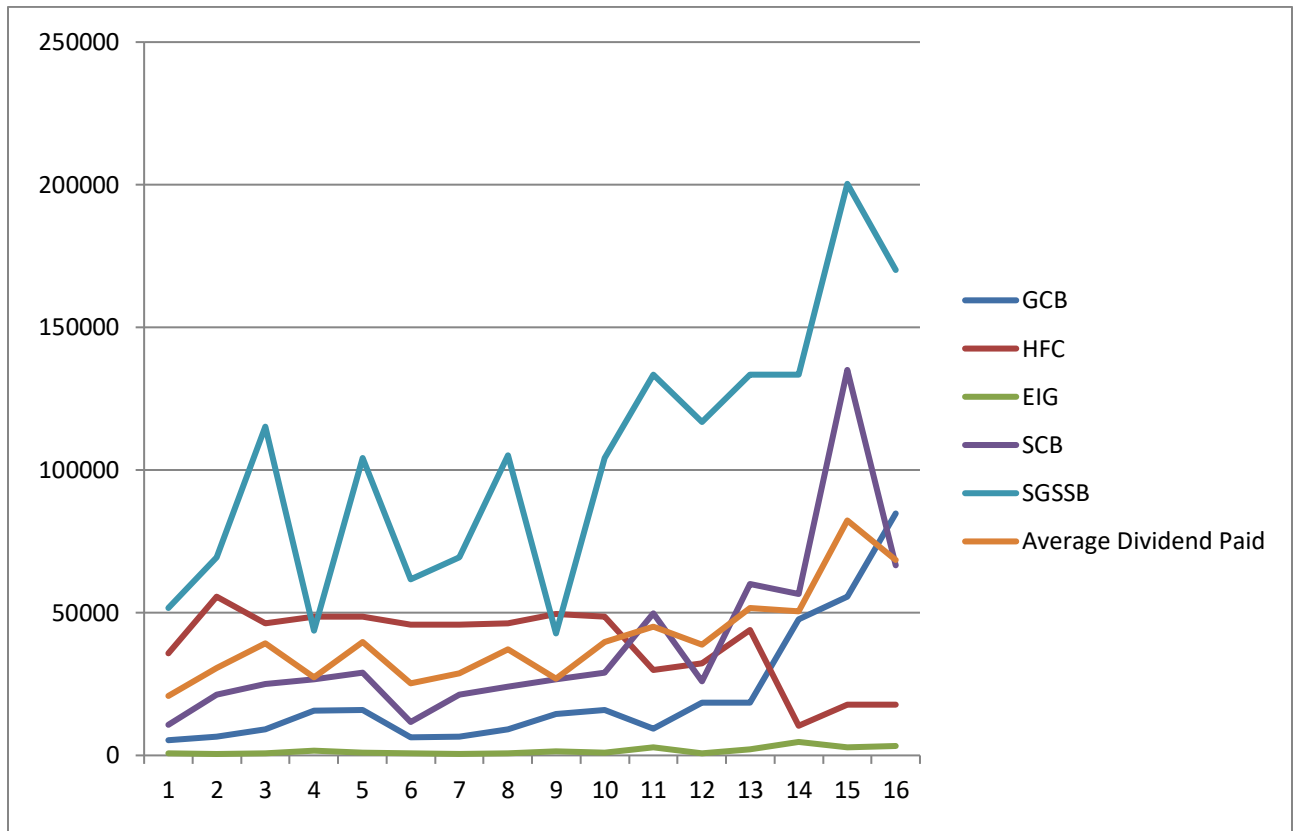
The performance of HFC (Republic Bank) in terms of dividend payment was good at the early years from 2000 but began falling from 2010. It dropped sharply from 48680 in 2009 to 29937 in 2010 and rose to 44000 in 2011 and fell again. For SCB, it fluctuates throughout the period but generally on a rise. It rose sharply from 56637 in 2013 to 135108 in 2014 and fell again to 66545 in 2015.

For GCB, the amount dividend payment each year also fluctuate but on a rise. There was a sharp and steady rise in dividend payment of GCB from 2012 to 2015 ranging between 18550 and 84800. This implies that GCB continues to improve upon its dividend payment annually and is seen to be performing well in its quest to pay its shareholders.

Dividend payment policies and total actual dividend payouts vary from company to company based on their internal financial management policies and actual profits made within the year. It is also dependent on level cashflow constraints of companies. Due to



this, it is clear that dividend payouts fluctuate from year to year without following a particular pattern as asserted by Zakaria *et al.* (2012).



**Figure 4.2 Trend of dividend payment of Companies Listed on the GSE between 2000 and 2015**

**(Source: Author's Computation, 2018)**

*Note: The y axis represent the amount of money paid as dividend in thousands of Ghana Cedis (000, GHC) of the companies and the x axis represent the years under consideration beginning from year 2000 represented by 1 in that order to year 2015 represented by 16.*

#### **4.4 The effect of dividend payment on share prices of companies listed on the GSE from 2000 – 2015**

This section presents the results for the effect of dividend payment on share prices of companies listed on the GSE from 2000 to 2015. The dependent variable was share prices while the independent variables were dividend payment, interest rate, retain earnings and earnings per share. It is observed from Table 4.2 that the model was best fit for the analysis. The estimated results of the double-logged regression had an R-squared of 0.927. This implies that about 93% of the total variation in the share prices of companies listed on the Ghana Stock Exchange is explained by the combined effects of all the explanatory variables. The Adjusted R-squared of 0.90 further implies that the explanatory variables used in the model were the right variables and that the R-squared of 0.927 could be relied upon. Also, the F-statistic of 34.83 which is significant at 1% significance level suggests that the model is best fit for the data and that the results from the regression analysis could be relied upon. There is also no autocorrelation given that the Durbin Watson Statistic value of 1.969751 is within the acceptable bound.

From the estimated regression results presented on Table 4.2, it is observed that several explanatory variables were significant in explaining the variations in the share prices of companies listed on the GSE. The only variable which was not significant in explaining



the variations in share prices is earnings per share which implies that the share prices of companies listed on the GSE is not influenced by the earnings per share of shareholders.

The main objective of the study was to examine the effect of dividend payout on the share price of companies listed on the GSE for which Table 4.2 presents. It is observed from Table 4.2 that dividend payment significantly influence the share prices of companies listed on the GSE. Dividend payment is statistically significant at 1% significance level. It has a positive relationship with share prices which implies that as dividend payment increases, share prices of companies listed on the GES also increases. The coefficient of dividend payment of 0.728489 implies that a 1% change in dividend payment will lead to a corresponding 0.73% change in the share prices of companies listed on the GSE. This finding corroborates with those of Waithakaet et al. (2012), Weisbach et al (2000), Nishat (2002) and Al-Masum (2014) who found that share prices were positively related with dividend policy and payment, implying that dividend payment policy has some level of impact on the share prices of listed companies. The general implication is that as companies pay dividend to its shareholder, more people are ready to invest in the company through shares. Therefore, as the demand for shares of a particular company increases, the share price of the company is likely to increase and vice versa.

As Lintner and Gordon (1963) proposed the bird in hand hypothesis stating that firms enjoy higher stock prices by paying higher current dividends because shareholders prefer current dividends to future ones with the same present value. Many investors do not usually have adequate and perfect information regarding the future prospects of the firm and rather rely on the dividend payment patterns as a key indicator in estimating the



future performance of the firm. This assertion means that, dividend policy is relevant because an increase in dividend creates an impression that the company is doing well and would greatly boost investor confidence in the company leading to increase in their estimates of future earnings resulting in a rise in the share price (Kapla, 2010).

Again from Table 4.2, it is observed that annual average 91day Treasury bill rate (interest rate) for the market has a significant positive relationship with the share prices of companies listed on the GSE. It is significant at 10% significance level. The result meets expectation and that a coefficient of 0.141194 implies that a percentage change in annual average 91day Treasury bill rate (interest rate) for the market leads to a corresponding increase in the share prices of companies listed on the GSE by 0.14%.

Finally from Table 4.2, it is observed that retain earnings significantly influence share prices of companies listed on the GSE at 1% significance level. Retain earnings has a negative relationship with the share price of companies listed on the GES. A coefficient of (-0.367704) implies that a percentage increase in retain earnings will lead to a 0.36% decrease in the share price of companies listed on the GSE. The expectation from this result is met in that investors do not consider future returns on their investments and will rather prefer being paid their dividend now as against retaining it in the company to be paid later. This results conforms to the earlier finding which indicated that dividend payment leads to increase in share prices as against retain earnings. The implication is that as companies retain the earnings of investors instead of paying them, share prices are likely to go down because investors will not be willing to invest more since the future is always uncertain and this will have a consequential effect on the share price.



**Table 4.2: Estimated Regression Results for the Effect of Dividend Payment on Share price**

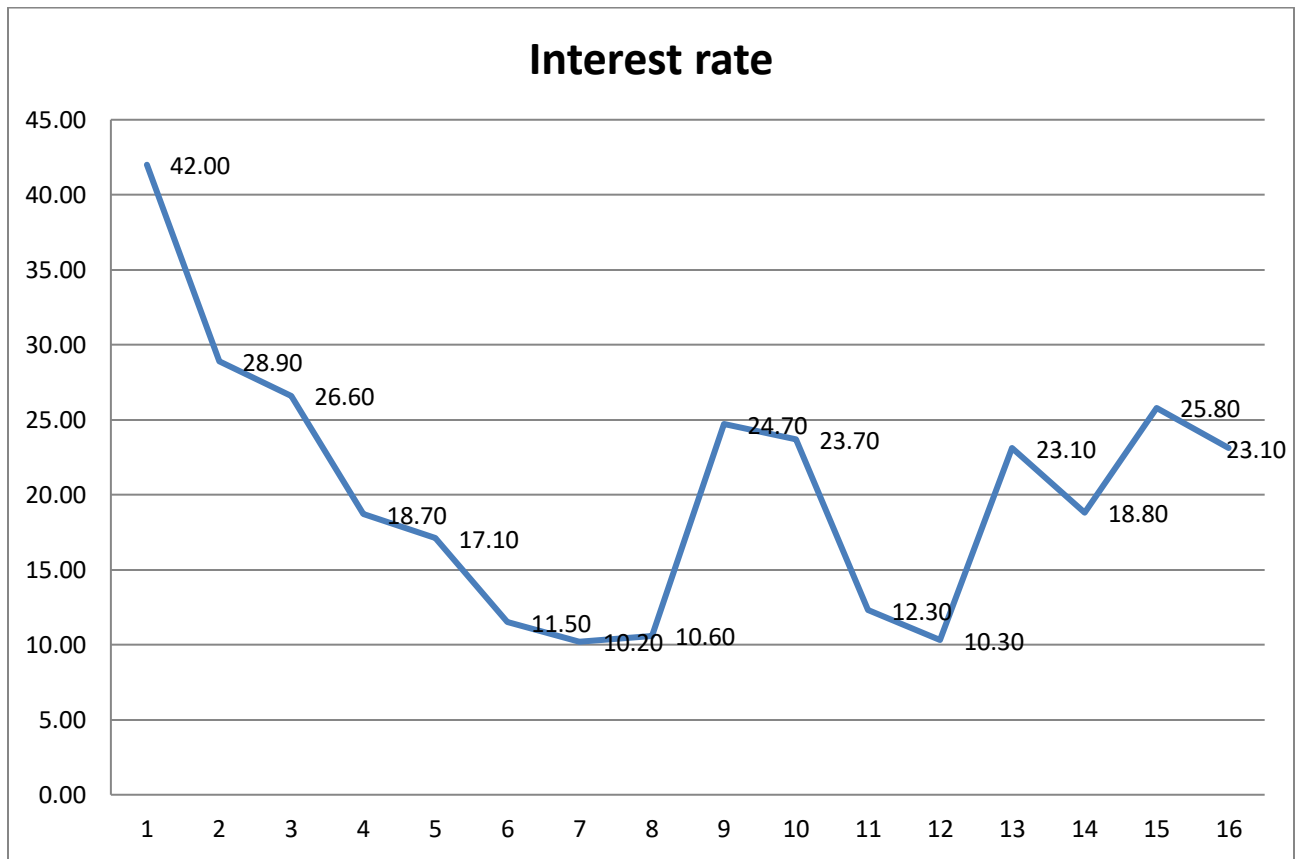
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.234829	1.084843	-2.060048	0.0639
LOG(Dividend Payment)	0.728489	0.095986	7.589501	0.0000
LOG(Interest Rate)	0.141194	0.069840	2.021671	0.0682
LOG(Retain Earnings)	-0.367704	0.047421	-7.754031	0.0000
LOG(Earnings Per Share)	-0.000970	0.137219	-0.007068	0.9945
R-squared	0.926825	Mean dependent var		1.698255
Adjusted R-squared	0.900216	S.D. dependent var		0.323929
S.E. of regression	0.102325	Akaike info criterion		-1.471025
Sum squared resid	0.115174	Schwarz criterion		-1.229591
Log likelihood	16.76820	Hannan-Quinn criter.		-1.458662
F-statistic	34.83109	Durbin-Watson stat		1.969751
Prob(F-statistic)	0.000003			

**(Source: Author's Computation, 2018)**



#### 4.5 Trend of Annual Average 91 day Treasury Bill Rate (Interest Rate) for the Market from 2000 to 2015

Figure 3.3 presents results for the trend of the annual average 91day Treasury bill rate (interest rate) for the market from 2000 to 2015.



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**Figure 4.3 Trend of Annual Average 91 day Treasury Bill Rate (Interest Rate) for the Market from 2000 to 2015**

(Source: Author's Computation, 2018)

*Note: The y axis represent the annual average interest rate for the market and the x axis represent the years under consideration beginning from year 2000 represented by 1 in that order to year 2015 represented by 16.*



It is observed from Figure 4.3 that interest rate for the market has not been stable over the years. It keeps fluctuating each year. It is observed that interest rate was higher in the early years of 2000 and was as high as 42.00. It then declined to 28.90 in 2001 and keeps falling to its lowest point of 10.20 in 2006. It rose sharply from 10.60 in 2008 to 24.70 in 2009 and fell again to 10.30 in 2011. It rose to 23.10 in 2012 and keeps fluctuating downward and upward to 23.10 again in 2015.

The performance of an efficient stock exchange depicts the performance of an economy. In Ghana, interest rates decisions are taken by the Monetary Policy Committee of the Bank of Ghana. The official interest rate is the Monetary Policy Rate (MPR). The fluctuating interest rate over the years may largely be attributed to changes in inflation as well as the changes in liquid cash for most banks for the period.



## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

## 5.0 Introduction

Chapter five is the last chapter of the study and presents the conclusion and recommendations of the study. The findings obtained from chapter four are first summarized in this chapter where conclusions are drawn from the findings and recommendations made based on the findings and the conclusions arrived at. The specific objectives of the study were;

1. To describe the trend of share prices and dividend payment of Banks/ Insurance companies listed on the GSE from 2000 – 2015.
2. To estimate the effect of dividend payment on share prices of Banks/ Insurance companies listed on the GSE from 2000 – 2015.
3. To describe the trend of the annual average 91day Treasury bill rate (interest rate) for the market from 2000 to 2015.

## 5.1 Summary of Findings

### **Trend of share prices of companies listed on the GSE**

It was revealed that the share prices of all the companies (GCB, HFC, EIG, SCB, and SGSSB) fluctuate year by year throughout the sixteen year period from 2000 to 2015. For HFC, EIG and SGSSB, their share prices fluctuate year after year in almost the same manner ranging between 0.10 and 1.45 except for EIG which started with higher share prices but gradually keep reducing year after year. The share price of GCB was higher than all the other companies from 2013 to 2015 except for SCB. The share price of SCB was higher than all the other companies throughout the entire period but fluctuate each



year. The average share price of the companies listed on the GSE generally fluctuates over the years between 2.93 and 9.85.

### **Trend of dividend payment of companies listed on the GSE**

The study revealed that SGSSB pays almost the highest amount of dividend to its shareholders annually among all the companies ranging between GHC 42750 in 2008 and GHC 200336 in 2014. The company which pays the least dividend to its shareholders was EIG which pays between GHC 534.4 and GHC 4724 fluctuating over the period. Dividend payment among all the companies was generally not stable but fluctuates every year. However, there seems to be a rise in dividend payment along the years though not stable.

### **The effect of dividend payment on share prices of companies listed on the GSE**

The study revealed that several explanatory variables were significant in explaining the variations in the share prices of companies listed on the GSE. Dividend payment significantly influences the share prices of companies listed on the GSE. Dividend payment was statistically significant at 1% significance level. It has a positive relationship with share prices. The finding corroborates with those of Waithakaet et al. (2012), Weisbach et al (2000), Nishat (2002) and Al-Masum (2014) who found that share prices were positively related with dividend policy and payment, implying that dividend payment policy has some level of impact on the share prices of listed companies.

The study further revealed that the annual average 91day Treasury bill rate (interest rate) for the market has a significant positive relationship with the share prices of companies listed on the GSE.



Also retain earnings significantly influence share prices of companies listed on the GSE at 1% significance level. Retain earnings has a negative relationship with the share price of companies listed on the GSE.

### **Trend of Annual Average 91 day Treasury Bill Rate (Interest Rate) for the Market**

The study revealed that interest rate for the market has not been stable over the years. It keeps fluctuating each year. It is observed that interest rate was higher in the early years of 2000 and was as high as 42.00. It then declined to 28.90 in 2001 and keeps falling to its lowest point of 10.20 in 2006. The fluctuating interest rate over the years may largely be attributed to changes in inflation as well as the changes in liquid cash for most banks for the period.

### **5.2 Conclusion**

It can be concluded that the share prices of all the companies fluctuate year by year throughout the sixteen year period from 2000 to 2015. However, SCB performed better than all the other companies in terms of its share prices over the period since the share price of SCB was higher than all the other companies throughout the entire period but fluctuate each year as well.

Dividend payment among all the companies was generally not stable but fluctuates every year. However, there seems to be a rise in dividend payment along the years though not stable. SGSSB was better than all the other companies in terms of dividend payment since it paid almost the highest amount of dividend to its shareholders annually among all the companies.



It can also be concluded that several explanatory variables significantly explain the variations in the share prices of companies listed on the GSE. Dividend payment significantly influences the share prices of companies listed on the GSE. It has a positive relationship with share prices. The other variables which significantly influence share prices were annual average 91day Treasury bill rate (interest rate) and retain earnings.

It is also concluded that interest rate for the market has not been stable over the years. It keeps fluctuating each year. However, there has been a sharp decline in interest rate in recent times compared to the early years of 2000.

### **5.3 Recommendation**

It is recommended that companies listed on the Ghana Stock Exchange (GSE) should make a policy to pay dividend regularly and promptly to its shareholders in order to attract more investors to their companies so that their share prices may appreciate for them to stay competitive in the market since dividend payment leads to an increase in share prices of companies listed on the GSE.

Also, companies listed on the GSE that intend increasing their share prices should not retain much earnings of shareholders since retain earnings leads to a decrease in the share prices. Since the future is uncertain, investors often prefer receiving their earnings now as against the future which corroborates the bird in hand theory.

Investors on the Ghana Stock Exchange (GSE) should monitor companies' performance to make investment decisions. It is crucial in maximizing investors wealth by investing in companies that pay regular cash dividend or any other form of dividend since it has a positive relationship with share volume thus firm's value.





## REFERENCES

- Abdul Rahim, R., Yaacob, M. H., Alias, N. & Mat N. F. (2010). “Investment, Board Governance and Firm Value: A Panel Data Analysis.” *International Review of Business Research Papers*, Vol. 6(5), pp. 293–302

Adaramola, A.O. (2012). Information Content of Dividend: Evidence from Nigeria, *Developing Country Studies*, 2 (2), pp. 74-83.

Adefila, J. J., Oladipo, J. and Adeoti, J. (2011), “The Effect of Dividend Policy on the market price of shares in Nigeria: A case study of fifteen Quoted companies”.

Agyei, S. K. & Marfo-Yiadom, E. (2011). “Dividend Policy and Bank Performance in Ghana”. *International Journal of Economics and Finance* Vol. 3, No. 4; September 2011

Allen, F. and Michaely, R. (2003) “Payout policy,” *Handbook of the Economics of Finance*, vol.1, p. 337- 429.

Allen.F.andMichealy. R, (2002), ‘‘Pay-out policy’’, Centre for financial Institution Working Papers, 01-21.

Al-Malkawi, H.N. (2007). “Determinants of corporate dividend policy in Jordan: an application of the Tobit model”. *Journal of Applied Accounting Research*. Vol. 23, pp. 44-70

Al-masum , A. (2014). “Dividend Policy and Its Impact on Stock Price - A Study on Commercial Banks Listed in Dhaka Stock Exchange”. *Global Disclosure of Economics and Business*. Volume 3, No 1

Alonso, P. D. A., Iturriaga, F. J. L. & Sanz, J. A. R. (2005). “Financial decisions and growth opportunities: a Spanish firm's panel data analysis”. *Applied Financial Economics*. Vol. 15 (6), pp. 391-407

Amidu, M. & Abor, J. (2006). “Determinants of dividend payment ratios in Ghana”. *The Journal of Risk Finance*. 7 (2): 136-145



Amidu, M. (2007). "How does dividend policy affect performance of the firm on Ghana Stock Exchange" *Investment Management and Financial Innovations*, 4(2):104-112. Ghana: University of Ghana Business School.

Asamoah, G. N. (2010). "Dividend Policy and Stock Price Volatility In Ghana". EABR & ETLC Conference Proceedings. Dublin, Ireland

Baker, H.K. (1999) "Dividend Policy Issues in Regulated and Unregulated Firms: A Managerial Perspective," *Managerial Finance*, vol. 8(6), p. 1-19.

Bhattacharya S.(1979), Imperfect Information, Dividend Policy, and "The Bird In Hand Fallacy", *Journal of Economics*, 10 (1), 259-270

Black F. (1979), "the Dividend Puzzle", *Journal of Portfolio Management*, (2) 5-8.

Black, F. (1990). Why Firms Pay Dividends. *Financial Analysts Journal* 46:3, 5.

Bodie, Z, Kane,A.and Marcus, A.J (1999) *Investments*, Irwin McGraw – Hill, 338-342.

Comment R. and Jerrell G.A (1991), "The relative signalling power of Dutch auction and fixed-price self-tender offers and open market share repurchases", *The Journal of Finance*, 1234-1271.

Easterbrook F. (1984), "Two agency –cost explanations of dividends", *American Economics Review*, 74, 650-659.

Gitman (2004), "Principles of Managerial Finance"

Gordon, M. (1961), "The Investment, Financing, and Valuation of the Corporation", *Review of Economics and Statistics*.





Gordon, M.J. (1959) "Dividends, Earnings and Stock Prices," *The Review of Economics and Statistics*, vol. 41(2), p. 99-105

Hail, L., Tahoun, A. and Wang, C. (2014). Dividend Payouts and Information Shocks, *Journal of Accounting Research*, 52 (2), pp. 403-456.

Higgins, (1995). Dividend changes and future profitability. *The Journal of Finance*, vol. 56, no. 6, pp. 2111-33.

Ikenberry, David, Josef Lakonishok and Theo Vermaelen, (1995), Market Under reaction to Open Market Share Repurchase. *Journal of Financial Economics* 39, 181—208

Ikenberry, David, Josef Lakonishok and Theo Vermaelen, (200), Share Repurchases in Canada: Performance and strategic trading, *Journal of Finance*, 55, 2373—2397.

Jensen, Michael C., (1986), Agency Costs of Free Cash Flow, Corporate Finance and Takeovers, *American Economic Review* 76 (2), 323—329.

Jensen, Michael C., and William H. Meckling, (1976), Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3(4), 305-360.

John, Kose and Joseph Williams, (1985), Dividends, Dilution, and Taxes: A Signaling Equilibrium, *Journal of Finance* 40(4), 1053-1070.

Jolls, Christine, (1998), The role of incentive compensation in explaining the stockrepurchase puzzle, 400-421.



Kenyoru, N.D., Kundu, S.A. and Kibiwott, L.P. (2013). Dividend Policy and Stock Price Volatility, *Research Journal of Finance and Accounting*, 6 (6), pp. 115-120.

Lintner, John, (1956), Distribution of Incomes of Corporations Among Dividends, Retained Earnings and Taxes, *American Economic Review*, 46(2), 97-113.

Meggison, W. L. & Smart, S. B. (2009). "Introduction to Corporate Finance". South-Western Cengage Learning, USA

Miller, M.H. and Modigliani, F. (1961), "Dividend policy, growth, and the valuation of shares", *Journal of Business*, 34, 411-433.

Miller, M.H. and Rock, K. (1985), "Dividend policy Under Asymmetric Information", *Journal of Finance*, 40, 1031-1051.

Modigliani, F. and Miller, M. (1961). Dividend Policy, Growth and the Valuation of Shares, *Journal of Business*, 34 (4), pp. 411-433.

Nazir, M. S., Musarat, M., Waseem, N. and Ahmed, A. F. (2010). "Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy". *International Research Journal of Finance and Economics*. Vol. 55, pp. 100-107

Nissim, D & Ziv, A. (2001). "Dividend changes and future profitability". *Journal of Finance*. 56, 2111-2133

Nohel, T., & Tarhan, V. (1998). Share Repurchases and Firm Performance: New Evidence on the Agency Costs of Free Cash Flow<sup>1</sup>. *Journal of Financial Economics*, 49(2), 187-222.



Pandey, I. M. (2005), *Financial Management* 9th ed., New Delhi: Vikas Publishing House PVT Ltd.

Ramcharran, H. (2001), “An Empirical Model of Dividend Policy in Emerging Equity Markets”, *Emerging Markets Quarterly*, 5, 39-49.

Ross, S. (1977) “The Determination of Financial Structures: The Incentive Signaling Approach,” *Bell Journal of Economics*, vol. 8, p. 23-40.

Ross, S. A., Westerfield, R. W., Jaffe, J. & Jordan, B. D. (2008). “Modern Financial Management”. 8th ed. McGraw-Hill. New York, NY.

Shefrin, H.M. and Statman, M. (1984), “Explaining Investor Preference for Cash Dividends”, *Journal of Financial Economics*, 13 (2), 253-282.

Smith., (1988). “Dividend policy, growth, and the valuation of shares”, *The Journal of Business*, vol. 34, no. 4, pp. 411-33.

Uwuigbe, U., Jafaru, J. and Ajayi, A. (2012). Dividend Policy and Firm Performance: A Study of Listed Firms in Nigeria, *Accounting and Management Information Systems*, 11 (3), pp. 442-454.

Watson, D. & Head, A. (2010) “Corporate Finance, Principles and Practice”. Financial Times, Prentice Hall

Weisbenner, Scott, (2000), Corporate share repurchase in the mid-1990s: What role do stock options play? WP, MIT.



Yasir, H., Zernigah, I.K. and Muhammad, A.K. (2012). Dividend Policy and Share Price Volatility: Evidence from Pakistan, *Global Journal of Management and Business Research*, 12 (5), pp. 78-84.

Zakaria, Z., Muhammad, J. & Zulkifli, A.H. (2012). “The Impact of Dividend Policy on the Share Price Volatility: Malaysian Construction and Material Companies”. *International Journal of Economics and Management Sciences*. 2(5), 1-8.



## **APPENDIX**

### **Appendix 1: SHARE PRICE**

#### **INSTITUTIONS**

<b><u>YEAR</u></b>	<b>GCB</b>	<b>HFC</b>	<b>EIG</b>	<b>SCB</b>	<b>SGSSB</b>
2000	0.54	0.46	1.20	20.11	0.46
2001	1.32	0.56	1.22	21.11	0.51
2002	2.11	0.58	1.20	22.20	0.67
2003	0.78	0.61	1.22	21.45	1.02
2004	1.20	0.66	1.24	26.32	0.82
2005	0.98	0.62	1.24	20.65	0.43
2006	1.08	0.54	1.26	15.80	0.60
2007	1.00	0.54	1.27	26.00	1.25
2008	1.10	0.62	0.45	38.00	1.35
2009	0.72	0.62	0.14	30.00	0.45
2010	2.61	0.62	0.14	45.29	0.59
2011	1.85	0.40	0.10	45.11	0.47
2012	2.10	0.45	0.12	11.50	0.48
2013	4.85	0.45	0.19	14.93	0.75
2014	5.84	0.95	0.29	20.41	1.00
2015	3.79	0.86	0.27	16.30	0.80



## **Appendix 2: DIVIDEND**

### **FINANCIAL INSTITUTIONS**

YEAR	GCB	HFC	EIG	SCB	SGSSB
2000	5334.7	35740	681.8	10735.5	51752
2001	6600	55640	534.4	21287	69408
2002	9075	46345	655	25123	115260
2003	15575	48556	1677	26769	43750
2004	15900	48680	1048	29089	104332
2005	6334.7	45740	691.8	11745.5	61752
2006	6600	45740	519.4	21287	69408
2007	9075	46345	655	24113	105260
2008	14575	49566	1417	26769	42750
2009	15900	48680	1048	29089	104332
2010	9434	29937	2896	49830	133558
2011	18550	32246	787	25877	116863
2012	18550	44000	2100	59998	133558
2013	47700	10388	4724	56637	133558
2014	55650	17843	2835	135108	200336
2015	84800	17843	3303	66545	170099



### Appendix 3: RETAINED EARNINGS

FINANCIAL INSTITUTIONS

YEAR	GCB	HFC	EIG	SCB	SGSSB
2000	51473	4545	108.1	27580.1	18870900
2001	57221.4	7234.82	151.8	38330	32776060
2002	71077.5	1945.7	301	41157	27309242
2003	87288.6	2705.52	1432	43162	36615727
2004	46489.73	2372.183	4794	57339	17661162
2005	51473	4545	108.1	27580.1	18870900
2006	57221.4	7234.82	151.8	38330	32776060
2007	71077.5	1945.7	301	41157	27309242
2008	87288.6	2705.52	1432	43162	36615727
2009	46489.73	2372.183	4794	57339	17661162
2010	80235.29	3537.074	6251	32049	17305300
2011	26732	9237.074	10204	66560	17988516
2012	101602	10672.48	21993	62481	18987445
2013	197280	11886	41645	177809	35978519
2014	379141	20180	74730	150319	50345751
2015	505779	13475	84704	143184	50505724



**Appendix 4: EARNINGS PER SHARE**

FINANCIAL INSTITUTIONS

YEAR	GCB	HFC	EIG	SCB	SGSSB
2000	0.0223	0.019	0.0045	1.3193	0.0655
2001	0.124	0.04	0.0098	1.75	0.0695
2002	0.0122	0.0471	0.043	1.88	0.0813
2003	0.014	0.0441	0.0123	1.89	0.01089
2004	0.068	0.0399	0.0089	2.99	0.0692
2005	0.0223	0.019	0.0045	1.3193	0.0655
2006	0.124	0.04	0.0098	1.75	0.0695
2007	0.0122	0.0471	0.043	1.88	0.0813
2008	0.014	0.0441	0.0123	1.89	0.01089
2009	0.068	0.0399	0.0089	2.99	0.0692
2010	0.209	0.0525	0.005	3.64	0.058
2011	0.06	0.0643	0.0083	3.97	0.0675
2012	0.523	0.1226	0.106	1.16	0.0906
2013	0.841	0.1828	0.186	1.77	0.1089
2014	1.02	0.1319	0.466	1.78	0.15
2015	0.92	0.1298	0.1	1.81	0.12







YEAR	Interest rate
2000	42.00
2001	28.90
2002	26.60
2003	18.70
2004	17.10
2005	11.50
2006	10.20
2007	10.60
2008	24.70
2009	23.70
2010	12.30
2011	10.30
2012	23.10
2013	18.80
2014	25.80
2015	23.10

