EXAMINING THE EFFECTS OF CAPITAL STRUCTURE ON SELECTED COMPANIES LISTED ON THE GHANA STOCK EXCHANGE

BY
NOBLE EDUAMAH

A thesis submitted to the KNUST School of Business, Kwame Nkrumah University of Science and Technology, Kumasi, in partial fulfillment of the requirement for the degree of

MASTER OF BUSINESS ADMINISTRATION

Faculty of Arts and Social Sciences

June, 2009

KWAME NKRUMAH UNIVERSITY OF A MELAN SCIENCE AND TECHNOLOGY SYING SAMBBAR SHIWA KUMASI-GHANA TEE 1984331 988 3343420

DECLARATION

I hereby declare that this submission is my own work towards the M.B.A., and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

Signature

Noble Eduamah

(PG 9772606) STUDENT

28-08-09

Date

Certified by:

MR. J. M. FRIMPONG

Supervisor

19-10-09

Signature Date

Certified by:

MR. J. M. FRIMPONG

Head of Department

> JMF

Signature

SANE

19-10-09

Date

L.BRARY

AWAME NKRUMAH UNIVERSITY OF

SCIENCE AND TECHNOLOGY

KUMASI-GHANA

DEDICATION

All glory and praises go to almighty God for granting me the strength and the courage to bring this work to a successful completion.

KNUST

I dedicate this work to my beloved father, Mr. Temple Kwesi Willie Eduamah



KWAME HKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY KUMASI-GHANA

ACKNOWLEDGEMENTS

My heartfelt gratitude goes to my supervisor, Mr. J.M. Frimpong of KNUST School of Business (KSB) for his direction and patience throughout this study.

I also, appreciate the contributions of my friends especially Naana Kofua Aggrey and all others who contributed one way or the other in the course of this research.



L BRARY

KWAME NKRUMAH UNIVERSITY OF

SCIENCE AND TECHNOLOGY

KUMASI-GHANA

ABSTRACT

Ordinary share capital or equity finance is the foundation of the financial structure of a

company and should be the source of most of its long term finance. The ability of

Financial Managers to formulate the financial and capital structure of their companies has

proven to be one of the most competitive issues on the Ghana Stock Exchange. The study

looked at the general capital structure of some selected Ghanaian companies and tried to

find out whether there exist any interrelationships between each company's capital

structure and its return on asset. In addition, the study analyzed the dividend policies of

selected companies and sought to find out how dividends declared were related to

earnings, as well as the factors affecting the dividend policies of these selected companies.

Data used was mainly financial statements and notes to these statements obtained from the

Ghana Stock Exchange, the individual companies and also data from statistical

publications. Further information on each selected company's Capital Structure, Return on

Equity, Dividend Policy and other relevant information was obtained through

questionnaires and interviews. Questionnaires were structured in such a way that relevant

information for the study were obtained.

The study ascertained that within the stated limitations, capital structure is significantly

positively correlated to return on assets.

The study also revealed that on the average, Ghanaian companies are lowly geared. This is

mainly attributed to the high cost of debt in the Ghanaian economy.

Keywords: Debt, Equity, Capital Structure, Dividend, Ghana Stock Exchange, Economy

iv

Table of Contents

Co	ontents	3	Page
DE	ECLARA	ATION	i
DE	EDICAT	ION	ii
ΑC	CKNOW	LEDGEMENTS	iii
ΑB	STRAC	CT	iv
СН	IAPTER	ONE	1
1.0	INT	RODUCTION	1
	1.1	Background of the Study	1
	1.2	Statement of the Problem	2
	1.3	Study Objectives	3
	1.4	Research Question	4
	1.5	Justification of Study	4
	1.6	Scope of the Study	5
	1.7	Limitations of the Study	
	1.8	Organization of the Study	6
СН	APTER	TWO	8
2.0		ERATURE REVIEW	
	2.1	Introduction	8
	2.2	Financial Leverage Distinguished From Operating Leverage	8
	2.2.1	Leverage Factor	9
	2.2.2	Leverage ratios	10
	2.3	Business Risk and Financial Risk	11
	2.4	The Theory of Capital Structure	12

	2.4.1	The Net Income Approach	12
	2.4.2	The Net Operating Income Approach	12
	2.4.3	The Traditional Approach	13
	2.5	The Modigliani and Miller Approach (M & M)	13
	2.5.1	M & M Propositon 1 (No Taxes)	13
	2.5.2	M&M Proposition II (No Taxes)	14
	2.5.3	Corporate Taxes and Capital Structure	15
	2.5.4	M&M Proposition I (Corporate Tax)	
	2.5.5	The Effects of Bankruptcy Costs	16
	2.6	The Optimal Capital Structure	
	2.7	Capital Structure And Dividend Policy: Why Does It Matter?	17
	2.8	Factors Influencing Dividend Policy	17
	2.9	Establishing a Dividend Policy	
	2.9.1	Residual Dividend Approach	18
	2.9.2	Dividend Stability	18
	2.9.3	A Compromise Dividend Policy	19
	2.10	Assessment of financial performance	19
	2.11	Ratio analysis	20
	2.12	CAMEL and Bank Performance Evaluation	22
CHA	APTER	THREE	23
3.0	MET	THODOLOGY AND ORGANIZATIONAL PROFILES	23
	3.1	Introduction	23
	3.2	Scope of study	23
	3.3	Tools for Data Collection	24
	3.4	Data Collection	24

	3.5	Primary and Secondary Data	25
	3.6	Data Analysis	25
	3.7	Models	26
	3.8	Profile of Selected Companies	27
	3.8.1	Profile of Ecobank Ghana Limited	27
	3.8.2	Profile of Standard Chartered Bank (GH) Limited	27
	3.8.3	Profile of SG- SSB Bank	28
	3.8.4	Profile of HFC Bank	29
	3.8.5	Profile of Enterprise Insurance Company Limited (EIC)	29
	3.8.6	Profile of Aluworks Limited	30
	3.8.7	Profile of Ghana Commercial Bank	31
	3.8.8	Profile of Fanmilk Limited	32
	3.8.9	Profile of Guinness Ghana Breweries Limited	
	3.8.10	Profile of CAL Bank	34
СНА	APTER	FOUR	35
4.0	ANA	ALYSIS OF FINDINGS AND DISCUSSION	35
	4.1	Introduction	35
	4.2	Data Analysis	35
	4.2.1	Analysis of Capital Structure (Leverage)	36
	4.2.2	Analysis of the General Capital Structure of the Selected Companies	36
	4.3	Analysis of Capital Structure Vis a Vis Return On Assets	40
	4.4	Analysis of Earnings per Share Vis a Vis Dividends per Share	45
	4.4.1	Discussion and Analysis of the Earnings Policies of the Selected	
	Compa	nies	48



CHAPTER FIVE		54	
5.0	Sun	nmary of Findings, Conclusion, and Recommendation	54
	5.1	Introduction	54
	5.2	Conclusion	55
	5.3	Recommendations	57
	5.3.1	Government Economic Interventions	57
	5.3.2	Determining Optimal Capital Structure	57
	5.3.3	Maximizing the leverage effect	
	5.3.4	Benefits of Optimal Capital Structure	58
Refe	rence		59
Appo	endices	5	62



AWAME HKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY KEMAS.-GHELL

DEFINITION OF TERMS

Asset beta: The sensitivity to systematic factors of the cash flows accruing to a particular set of productive assets.

Beta: A measure of the sensitivity of a security's returns to systematic risk.

Business risk: The variability of a company's operating profits given its business operations.

Capital markets: Financial markets where long-term securities are bought and sold.

Capital structure: The long term financing mix of a company.

Convertible bonds: Bonds that can, at some specified date (s), be converted at the option of the holder into a predetermined number of ordinary shares.

Cost of capital: The rate of return required by investors supplying funds to a company and so the minimum rate of return required on prospective projects.

Debentures: Fixed interest redeemable bonds that are normally secured on the assets of the issuing company.

Dividend cover: The number of times the annual dividend payment can be covered or paid out from current distributable earnings.

Financial risk: the risk interest rate changes causing reductions in a company's after –tax earnings and hence its ability to pay dividends.

Risk premium: The return in excess of the risk-free rate that is required by an investor before accepting a high-risk investment.



LIST OF ABBREVIATIONS

AGI: Association of Ghana Industries

DPS: Dividend per share

EBIT: Earnings before interest and tax

EPS: Earnings per share

GSE: Ghana Stock Exchange

KNUST

KNUST: Kwame Nkrumah University of Science and Technology

KSB: Kwame Nkrumah University of Science and Technology School of Business

NPV: Net present value

ROA: Return on asset

ROE: Return on equity

LIBRARY

KWAME RKRUMAH UNIVERSITY OF

SCIENCE AND TECHNOLOGY

KUMASI-GHAYA

LIST OF TABLES

Table 1 Debit to Equity ratio of Some Companies in Ghana	37
Table 2 Average Debit to Equity ratio of some Companies in Ghana	38
Table 3 Debit to Equity ratio of some Companies in Ghana	38
Table 4 Debit to Equity ratio of some Companies in Ghana	40
Table 5 Regression values for Return on Assets	43
Table 6: Regression values for Dividend Pay-out Ratio	45
Table 7 Regression values for Earnings per Share	
Table 8 Earnings per Share of Companies in Ghana	49
Table 9 Return on Assets of Companies in Ghana.	50
Table 10 Net profit Margins of Companies in Ghana	51
Table 11 Dividend per Share of Companies in Ghana	52

LIST OF FIGURES

Figure 1: ROA and DE/Graph of Companies in Ghana	42
Figure 2: ROA and D/E of Companies in Ghana	44
Figure 3: EPS and DPS of Companies in Ghana	47





CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

The capital structure of a company refers to its long term financing mix, Watson and Head (2007). This may be distinguished from other short-term funds in use, for example accounts receivable, hire purchase etc. The term financial structure is something erroneously used as a synonym for the term capital structure. Capital structure decision focuses on the mix of long term financing sources used by the firm. However, capital structure cannot be considered in isolation because this long term mix is affected by short term funding. As a result, capital structure decisions must consider the overall financing plan of the company including the use of trade credit.

In contrast, financial structure is a term used to describe the overall liabilities and net worth of the firm. That is to say, the financial structure decision is a financing mix decision and the capital structure decision is part of it. That is the long term financing aspect of the overall financing decision. A very fundamental, yet very important issue that confronts most financial mangers is: How should a firm choose its debt to equity ratio? More generally put, what is the best capital structure for the firm? Basically, the capital structure decision will be concerned with whether to use debt financing (i.e. leverage) and if so how much? Unfortunately there are no clear-cut guidelines that the financial manager can consult in making this all-important decision.

Despite all these odds, the financial manager can make a good decision by taking into account certain important fundamental determinants of capital structure-namely taxes and



more importantly, agency and control issues as well as other related corporate governance concerns.

As a developing country, Ghana still has vast untapped human and natural resources. The main problem however is that capital for investment is lacking. There has been reliance on foreign sources of capital for investment. It has however been observed that if Ghana is to make any meaningful progress in economic growth, she will have to rely more on her domestic savings.

For most Ghanaian investors, the expected returns of long-term investments are the dividends they receive as well as capital gains. Failure to meet this expectation would result in the sale of shares, which will result in the decline of the company's share price. For most companies, such a reaction will be highly undesirable since a company's share price provides a measure of its performance. Thus to be able to boost investor confidence and sustain its ability to remain in business, a company must be able to decide on a capital structure that best protects shareholder wealth.

The choice of investment financing, and its link with optimal risk exposure, is central to the economic performance of every company. Financial economies have a rich literature analyzing the capital structure decision in quantitative terms. The basic financial objective of every company is to maximize the wealth of the existing owners of the company. For publicly held corporations, this objective translates into maximizing the per share price of the company's common stock.

1.2 Statement of the Problem

Basically there are two schools of thought in financial literature with regard to capital structure theory and the relevance or otherwise of Dividend Policy. Two distinct views

exist. One is that dividends have a neutral effect on share prices and therefore does not affect the value of the firm. The other is that dividends do influence the value of the firm. Based on the theoretical propositions of each school of thought, one begins to wonder to which school of thought Ghanaian companies belong and why.

Another mind boggling issue is how best management can consciously manipulate dividend policy as well as chose the right financing mix (i. e. on optimum capital structure) that would effectively and efficiently create wealth in an emerging capital market like Ghana's. These are important issues because a low pay out ratio may enable the business to conserve funds whilst a high pay out ratio may raise the demand for the company's securities and facilitate inflow of new funds. Unfortunately, in Ghana, most companies have not critically examined the benefits to be derived in seriously examining their industry of operation and pursuing an optimal capital structure as well as the right dividend policy for their industry of operation.

On the contrary, most Ghanaian companies are inclined towards a zero pay out policy without considering the possibility of the existence of an optimal dividend ratio. Such companies miss out tremendously on the benefits to be derived from on optimum capital structure as well as on optimum dividend policy (i.e. an increase in shareholder's wealth as an enhanced image of the company from the investor's perspective). These have great repercussions that must not be taken for granted.

1.3 Study Objectives

Several reasons account for the differences in the capital structure of most Ghanaian companies. Generally, this research seeks to investigate the general capital structure of

Ghanaian companies listed on the stock exchange and to establish the effects of the capital structure on the financial performance of these companies.

The specific objectives of the study are outlined as:

- i. Establish trends of capital structure in some selected Ghanaian companies i.e. whether generally Ghanaian companies are highly leveraged or not and if so why?
- ii. Find out if there is any relationship between capital structure and Return on Asset.
- iii. Investigate the dividend policies of the selected companies.
- iv. Find out if there exists any relationship between the dividend policies of these companies and their capital structure vis a vis their return on asset.

1.4 Research Question

The study is designed to answer the following pertinent questions within the domain of the research problem.

- i. What is the average leverage ratio for Ghanaian Companies?
- ii. What is the relation between capital structure and return on assets?
- iii. What is the relation between earnings per share and dividend policy of the companies?
- iv. Are there dividend payout policies for Ghanaian companies?

1.5 Justification of Study

In an economy like Ghana's characterized by low-income levels, high inflation rate and the rapid depreciation of the cedi against major convertible currencies until recently the country underwent a re-denomination exercise, there has been a practice of low savings and a high tendency to consume rather than to invest. This poses a major challenge to managers as to how to mobilize funds in an emerging capital market as Ghana's. What

this means is that, to be able to attract and sustain investors, managers must be able to demonstrate a high level of confidence in their company's security. This confidence is largely reinforced or influenced by the company's capital structure, cost of capital and return on equity.

This study will bring to bear what really are the motives of financial managers in determining the capital structure of their companies and to meet shareholders expectations. This study will also add to existing body of knowledge by unveiling hidden issues on effects of capital structure from both global and Ghanaian perspective. This will help future researchers to choose their literature review from diverse background on the subject of capital structure and its consequences. And subsequently improve the performance of companies in the Ghanaian economy.

1.6 Scope of the Study

The scope of this study will include:

- Analysis of Capital structure of Ghanaian companies
- Analysis of Capital structure vis a vis Return on Asset
- Analysis of Earnings per share vis a vis Dividend per share and
- Company specific analysis of earnings retentions

1.7 Limitations of the Study

Out of the thirty-seven (37) companies listed on the Ghana Stock Exchange the study was limited to only eleven companies in determining the general capital structure (financial leverage) of Ghanaian companies. However, in investigating the dividend policy of selected Ghanaian companies only five companies were chosen due to the difficulty in



getting officials to talk openly about their company's Dividend Policy. This might not give a fair representation of the issues being analyzed. However this limitation was partially overcome by ensuring that each major industry mainly, Manufacturing, Banking, Dairy products, Mining, Brewery were represented in the sample.

Interviews by their nature are subjective. As a result there is a tendency for respondents to influence their responses due to their individual perceptions on issues and their past experiences.

To control such subjective influences, evidence was sought from financial statements to justify each response.

1.8 Organization of the Study

The study has been divided into five chapters.

Chapter one is an introductory chapter. It includes: The statement of the problem, the importance of the study, scope and limitation of the study, conceptual framework of analysis and the methodology adopted for the study.

Chapter two is mainly a literature review. It is an attempt to explore and analyze relevant literature relating to the study and an attempt to explore certain aspects that have not been considered at all in the existing literature.

Chapter three concentrates on the methodology used in collecting data for the study, including the scope of the study, sources of data, research instruments and techniques, sample size and organization of work. Chapter four is a discussion on findings from questionnaires and interviews as well as analysis of dividend payout ratio of each of the selected companies.

Chapter five is a summary of the whole study. It also includes conclusions drawn from the results of the data analysis as well as recommendations.



CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Capital structure, Return of Equity and Dividend Policy are three distinct yet very much related issues in Managerial Finance. Indeed one can hardly talk about one subject without mentioning the other.

Existing literature portrays a very wide variety of ideas on each of these subjects. Different researchers have looked at capital structure, return on equity and dividend policy from different perspectives and have come out with some interesting findings. Others have looked at each subject from the same perspective and yet have come out with some rather significantly controversial propositions and theories. This is especially so with the issue of the relevance or otherwise of dividend policy. This literature review starts with a conceptual framework after which existing literature will be analyzed under the following headings:

- Capital structure and the cost of capital
- Capital structure and dividend policy

2.2 Financial Leverage Distinguished From Operating Leverage

The term operating leverage refers to the extent to which fixed operating costs are part of a firm's total operating costs Watson and Head (2007).

Financial leverage, similar in concept, refers to the use of debt in financing the firm. If all funds were supplied by owners in the form of stock, the firm would have no fixed periodic contractual cash payments for financing, Damodaran (2005).

The addition of more fixed costs increases the volatility of net returns to the common stock holders and greater volatility means greater dispersion in their returns or increased risk, Mazzeo (1992).

Quantifying the degree of risk depends upon how risk is measured. Most documented researches use either coefficient of variation or beta as a measure of risk. Unfortunately, the latter which makes an easier reference to the measure of systematic risk of firms, has not been established for most companies in the Ghanaian market.

The term financial structure refers to the way a firm's assets are financed. It is represented by the entire right-hand-side of the balance sheet. It includes short-term debt and long-term debt as well as shareholders' equity.

The term capital structure or the capitalization of the firm is the permanent financing of the firm. It is represented by long-term debt, preferred stock, and shareholders' equity. Thus a firm's capital structure is only part of its financial structure.

2.2.1 Leverage Factor

The term leverage factor is the ratio of the book value of total debt (D) to total assets (TA) or to the total value (V) of the firm, Mazzeo (1992)

Total value (V) refers to the total market value of all the components of the firm's financial structure.

When the leverage factor of a firm is calculated, based on the ratio of debt to total assets $\left(\frac{D}{TA}\right)$, this necessarily implies that the ratio of debt to shareholders' equity will be as shown below:

Let $\left(\frac{D}{E}\right)$ represent the ratio of debt of equity.

It is obvious that,
$$\frac{D}{E} = \frac{E}{TA} - \left(1 - \frac{D}{TA}\right)$$

2.2.2 Leverage ratios

"When a company borrows money, it agrees to make a series of fixed payments in the future. Because their shareholders get only what is left after the debt holders have been paid, the debt is said to create financial leverage. In extreme cases, in times of crisis, a company may be unable to pay its debts" Brealey *et al* (2003). Financial leverage enables a company to have an asset base larger than its equity.

There are some ratios to evaluate the degree of risk coming from a financial leverage Palepu et al (2006). There are two types of financial leverage ratios:

- Component percentages
- Coverage ratios.

Component percentages compare a company's debt with either its total capital (debt plus equity) or its equity capital. Coverage ratios reflect an ability to satisfy fixed financial obligations, such as interest, principal repayment, or lease payments Fabozzi *et al* (2003)

Total Debt to Assets Ratio: This component ratio is also-called "Debt Ratio" and measures the proportion of total assets financed by a company's creditors.

The higher the Total Debt to Assets Ratio, the greater the degree of indebtedness and the more financial leverage a company has.

Debt to Equity Ratio: This is another component ratio that is able to reveal how a company finances its operations with debt relative to the book value of its shareholders equity.

Assets to Equity (Equity Multiplier): It is also the component measure of financial leverage. It shows how a company uses debt to finance its assets.

Gearing Ratio: It is a measure of financial leverage representing the degree to which a company's activities are funded by owner's funds in opposition to creditor's funds.

Times Interest-Covered Ratio: The first coverage ratio, which provides the information about how well a company can cover or meet the interest payments associated with its debt. The ratio compares the funds available to pay interest (EBIT) with the interest expense.

The greater the interest coverage ratio, the better the ability to pay interest expense is.

Long-term Debt to Total Assets: The ratio measures a share of company's total assets, which is financed by long-term sources. The higher this value the better it is for the company.

Long-term Debt to Fixed Assets: This ratio shows which part of the fixed asset is created by long-term financing.

Financial Leverage: This measure is opposite to the Equity Multiplier Ratio and shows dependency of a company from external sources of financing.

The lower this ratio, the higher risk of insolvency a company has.

2.3 Business Risk and Financial Risk

Finally, it is important to distinguish between business risk and financial risk. Business risk is the variability of expected pre-tax returns (EBIT) on the firm's total assets.

Financial risk is the additional risk induced by the use of financial leverage. It is reflected in the variability of the Net Income Stream, referred to as NI, Johnson (1997).

2.4 The Theory of Capital Structure

There are different theories that seek to explain the effect of capital structure on the value of the firm. David Durand in the 1950's made the first written attempt to describe the effects of financial leverage on the cost of capital and valuation. He proposed three different theories of cost of capital namely:

- The Net Income Approach
- The Net Operating Income Approach
- The Traditional Approach

2.4.1 The Net Income Approach

Here, it is assumed that, the firm can raise all the required funds at a constant cost of equity. Since debt tends to have a lower cost than equity, the more debt utilized, the lower the overall cost of capital and the higher the evaluation of the firm. Thus, under the Net Income Approach, firms would minimize cost of capital and thus increase the net value of the firm by making use of only debt to finance its operations.

2.4.2 The Net Operating Income Approach

Here, the low cost of debt is assumed to remain constant with greater debt utilization. However, the cost of equity increases to such an extent that the cost of capital remains unchanged.

In a nutshell, under this proposition, all that matters is the operating income. How it is financed, makes no difference in terms of capital or valuation.

2.4.3 The Traditional Approach

The Traditional Approach: This falls somewhere in between the Net Income Approach and the Net Operating Income Approach, in which there are benefits for increased debt utilization but only up to a point. After that point, the cost of capital begins to turn up and the valuation of the firm begins to turn down.

2.5 The Modigliani and Miller Approach (M & M)

An extensive literature has developed related to the influence of leverage on the costs of debt and equity. The classic 1958 Modigliani-Miller article (popularly referred to as the M & M Approach on the cost of capital is by far the most popular article in this area of finance. This all-important article was published in "The American Economic Review" in June 1958 and was entitled "The Cost of Capital, Corporation Finance and the Theory of Investment".

Under the initial M & M Approach, it is assumed that, the value of the firm and its cost of capital are independent of the means of financing.

Thus, according to M & M, there is a risk premium associated with the cost of equity financing when leverage is involved.

In determining whether a firm can determine its Optimal Capital Structure, M & M came up with their first proposition:- M & M Proposition 1 (no tax).

2.5.1 M & M Proposition 1 (No Taxes)

This states that, the value of the unlevered firm (V_u) is the same as the value of the levered firm (V_L) . This is expressed as

$$V_L = V_{II}$$

Before the classic articles of M&M (1958) were published, the effect of leverage on the value of the firm was considered complex and complicated. However, from the M&M theory, it has been shown that levered firms can be likened to individual shareholders, who can adjust the amount of financial leverage by borrowing and lending on their own. This situation is often referred to as "home-made leverage". As long as individuals borrow and lend on the same terms as the firm, they can duplicate the effects of corporate leverage on their own.

2.5.2 M&M Proposition II (No Taxes)

Here, M&M argue that expected return on equity is positively related to leverage, because the risk of equity increases with leverage.

This can be expressed mathematically as follows:-

$$r_s = r_0 + \frac{B}{S(r_0 - r_b)}$$

Where,

 r_s = The firm's weighted average cost of capital or the required return on equity

 r_b = The interest rate or cost of debt

B = the value of debt

S = the value of stock or equity

 r_0 = The cost of capital for an all equity firm

M&M Proposition II therefore states the expected return on equity, r_s in terms of leverage. The equation states that, the required return on equity is a linear function of the firm's debt to equity ratio.

2.5.3 Corporate Taxes and Capital Structure

In the real world situation, however, companies pay corporate tax and individuals (i.e. shareholders) also pay personal income tax. Thus, M&M propositions I and II (no taxes) came under various criticisms. One of their first critics was Professor David Durand and whose contribution to the development of the Capital Structure theory has already been analyzed in section 2.2 of this literature review. As a result of these criticisms, thirty years after M&M Propositions I and II were published; Modigliani and Miller revised their original propositions and incorporated tax to find its effect on the market value of a company. Their revised proposition showed that managers could revise the market value of a company by using debt financing, that is, if interest payments were treated differently, for tax purposes rather than for cash dividends and capital gains. They showed that, if interest expense is tax deductible, then, debt financing creates a tax shield, which leads to an increase in the market value of the company's equity. M&M therefore introduced tax in their propositions.

2.5.4 M&M Proposition I (Corporate Tax)

With the introduction of corporate tax into their propositions, M&M established the following mathematical relationships.

$$V_L = EBIT \times (1 - T_c) + T + \frac{T_c r_b B}{RB} = V_u + T_c B$$



Where,

 V_L = the value of levered firm

 V_u = the value of an unlevered firm

 T_cB = the value of tax shield

2.5.5 The Effects of Bankruptcy Costs

Bankruptcy costs, or more generally put, financial distress costs tend to offset the advantages to debt. Under conditions of financial distress, ownership of the firm's assets may legally be transferred from the stockholders to the bondholders. Obligations to bondholders are fundamentally different from that of stockholders. While stockholders expect dividends, they are not legally entitled to interest and principal payments. Consequently the possibility of bankruptcy has a negative effect on the value of the firm. However, it is not the risk of bankruptcy itself that lowers value; rather it is the cost associated with bankruptcy that lowers value Baskin (1989).

Rubinstein (1973) asserts that, generally, the cost of equity rises with financial leverage. He also confirmed assertions by earlier researchers that the cost of debt may also rise with leverage. Thus, even if the debt is risky, the M&M proposition still holds as long as there are no bankruptcy costs.

2.6 The Optimal Capital Structure

The theories of capital structure are among the most elegant and sophisticated in the field of Managerial Finance. For this reason, one begins to wonder whether there exists any formula for evaluating an Optimal Debt to Equity ratio that would yield the best return on any investment. Stewart Myers in his article "Is there any magic in leverage?" begins by

dispelling the fallacy that there is a "magic" in leverage. According to him, most investment bankers begin marketing debt or any preferred instruments by first of all demonstrating the positive effects of such instruments on Earning per Share (EPS) or Return of Equity (ROE). They try to convince prospective clients that, using greater leverage will always cause EPS to rise. This however is true only for as long as additional earnings generated from the new capital exceeds the firm's after tax borrowing rate. He explains that, increased leverage means not only higher expected returns, but also higher risks for equity investors. It is therefore doubtful that, such leveraging of EPS and ROE has any real positive effect on stock prices. Thus, in reasonably sophisticated markets, the capital structure decision reduces mainly to consideration of market distortions or imperfections. These include taxes, bankruptcy costs, imperfect information and conflicts of interest between lenders and management as representatives of the shareholder's interest.

From the above and other existing literature, it is clear that no exact formula is available for evaluating an Optimal Debt to Equity ratio.

2.7 Capital Structure And Dividend Policy: Why Does It Matter?

In a classic study, Lintner, surveyed a number of managers in the 1950's and asked how they set their dividend policy. Most of the respondents said there were a target proportion of earnings that determined their policy. One firm's policy might be to pay out for example, 40% of earnings as dividends, whereas another company might have a target of 50%. This would suggest that dividends change with earnings Campbell (1994).

Empirically, dividends are slow to adjust to changes in earnings. Lintner (1954) suggested an empirical model where the changes in dividends are linked to the level of the earnings,



the target payout and the adjustment rate. He asserts that more conservative companies would be slower to adjust to the target payout if earnings increased.

Lintner concluded that, the more conservative the company, the more slowly it would move towards its target and therefore, the lower would be its adjustment rate.

2.8 Factors Influencing Dividend Policy

In view of the fact that, the issues of Dividend Policy, appear to be by far, one of the most controversial in financial literature, one begins to wonder what factors influence dividend policy. Copeland and Weston have identified these factors to include; Legal Rules, Liquidity Position of the firm, Debt Obligations, Restrictions in Debt Contracts, Rate of Asset Expansion, Profit Rate, Stability of Earnings, Access to the Capital Markets, Control, Tax Position of Stock Holders, Weston and Copeland (1989).

2.9 Establishing a Dividend Policy

Most financial literature agrees that, there are good reasons for firms to pay high dividends and there are also good reasons to pay low dividends. In practice, firms generally do not like to cut dividends.

Commenting on this, Willet (1964) observes: "Indeed, this is remarkable but not unusual".

2.9.1 Residual Dividend Approach

Generally, firms with higher dividend payments will have to sell stock more often. Such sales can be very expensive and are therefore not common. Thus, according to Willet (1964) for a given capital structure most firms try to minimize the need to sell new equity. If a firm wishes to avoid new equity sales, then it will have to rely on internally generated

equity to finance new projects. What this means is that, dividends can only be paid out of what is left over.

2.9.2 Dividend Stability

The Residual Dividend Approach has been criticized by some authors. Notable among them is Ross (1976). He argues that, this approach might lead to a very unstable dividend policy. Thus, if investment opportunities were quite high in a given period, dividends paid would be low or zero. On the other hand, dividends paid in another period might be high if investment opportunities are considered less promising. Ross considers the peculiar case of some companies, especially, big department stores or other retailers whose annual earnings are forecasted to be equal from year to year, but whose quarterly earnings change throughout the year. Here, dividends will vary throughout the year. This is called Cyclical Dividend Policy.

The second Dividend Policy for such firms would be a fixed fraction of yearly earnings paid quarterly. This implies that all dividend payments would be equal. This is called a stable Dividend Policy.

2.9.3 A Compromise Dividend Policy

Most financial literature agrees that, in practice, many firms appear to follow what is referred to as a Compromise Dividend Policy. Most authors observe that such a policy is based on five main goals:

- Avoid cutting back on positive NPV projects to pay a dividend
- Avoid dividend cuts
- Avoid the need to sell equity
- Maintain a target debt to equity ratio



Maintain a target dividend payout ratio

Ross (1976) asserts that, in addition to a strong reluctance to cut dividends, financial managers tend to think of dividend payments in terms of a proportion of income.

According to Ross (1976), one can minimize the problems of dividend instability by creating two types of dividends; Regular dividends and extra dividends.

2.10 Assessment of financial performance

Financial statements, by themselves, do not provide a lot of information about how well a company performs year to year or in comparison to other businesses in its industry. One of the reasons why it is difficult to make comparisons is that companies rarely have exactly the same revenue. Another reason is that companies have varying financing structures. Ratios and other performance measures and techniques have been developed to make financial information comparable from company to company. These tools form three broad categories: estimation of operating performance, evaluation of financial performance and defining level of financial risk. Operating performance deals with efficiency of management. In other words, it is important to know if a company uses its assets in an efficient and profitable manner. Financial performance deals with issues related to a company's financial structure and ability to meet its financial obligations. Analysis of financial risk is important to banks, suppliers, and investors. The general objective of financial analysis is to evaluate the effectiveness in each of these areas.

2.11 Ratio analysis

The information contained in the main financial statements has major significance to various interested parties who regularly need to have relative measures of the company's business efficiency. Financial analysis conducted for the need of third parties is external

by its nature and often called "analysis of financial statements". The analysis of financial statements is based on the use of ratios also known as relative values. Ratio analysis involves methods of calculating and interpreting financial ratios to analyze and monitor the firm's performance. The only data sources to ratio analysis are the firm's financial statements Gitman (2004). There are as many different financial ratios as there are possible combinations of items appearing on the balance sheet, income statement and cash flow statement, and their application is defined from an analyst point of view. Financial management practitioners use various approaches depending on the goal of analysis or business issue. Despite the number of ratios, they all cohere through their classification.

Fabozzi and Peterson (2003) in their "Financial Management and Analysis" propose following classification of financial ratios according to the way they are constructed. They define four types of ratios:

- Coverage ratios. A coverage ratio is a measure of a firm's ability to "cover" certain financial obligations. The denominator is an obligation and the numerator is the amount of the funds available to satisfy that obligation;
- Return ratios. A return ratio indicates a net benefit gained from particular investment of resources or any other similar activity. The numerator is the net result of an operation and the denominator is the resources spent for that operation;
- Turnover ratios. A turnover ratio is a measure of how much a firm gets out of its
 assets. It compares the gross benefit from an activity with the resources employed
 in it;
- Component percentage. A component percentage is the ratio of one amount in a financial statement, such as sales, to the total of amounts in that financial statement.

Fabozzi et al (2003)



A financial ratio is meaningful only when it is compared with some standard, a norm, such as an industry trend, ratio trend, or a planned management objective. This is called benchmarking and it can be used as a measure. According to David Vance, "benchmarking involves analyzing the financial statements of the best companies in an industry and using their financial ratios as a basis for evaluation of a company's performance" Vance (2003). As a result, to make correct conclusions on ratio analysis, two types of ratio comparisons should be made: cross-sectional approach and trend-analyzing method. Cross-sectional analysis involves comparison of different firms' financial ratios over the same period in time. It usually concerns two or more companies in similar lines of business. Certainly, the most informative approach to ratio analysis combines both cross-sectional and trend analyses. A combined view makes it possible to assess the trend in the behaviour of the ratio in relation to the trend for the industry.

2.12 CAMEL and Bank Performance Evaluation

A company's performance or rather solvency or insolvency has been given much attention both at the local and international level. Financial ratios are often used to measure the overall financial soundness of a bank and the quality of its management. Banks' regulators, for example, use financial ratios to help evaluate a bank's performance as part of the CAMEL system YUE (1992). Empirical evidence on the use of ratios for banks' performance appraisal include; Beaver (1966), Altman (1968), Maishanu (2004), Mous (2005).

Maishanu (2004) identified eight financial ratios that could serve in informing financial analysts on the financial state of a bank. As such, he put forth a univariate model for predicting failure in commercial banks.

CHAPTER THREE

3.0 METHODOLOGY AND ORGANIZATIONAL PROFILES

3.1 Introduction

A good research involves a proper data collection and data analysis that best represents the scope and elements under study Yensu (2007). Such careful selection provides a platform for an appreciable analysis of the importance of the research and the recommendation being considered for the area under study.

Scope of study

According to SEC report (2006), there are about 37 companies listed on the Ghana Stock Exchange. As a result of difficulty in obtaining data on the prices of shares of companies not listed, the study was restricted to companies listed on the Ghana Stock Exchange between 2000 and 2006. The use of listed companies also ensured easy access to other relevant information.

3.2 Scope of Work

The selection of companies was made in such a way that different industries were represented. Based on the above criteria eleven companies were chosen to investigate the general capital structure of Ghanaian companies. This included:

- Standard Chartered Bank
- Cal Bank
- EnterpriseInsurance Company
- Ecobank Ghana Limited
- Unilever Ghana Limited
- Guinness Ghana Breweries Ltd

- Fan Milk Limited
- Aluworks Limited
- HFC Bank
- Ghana Commercial Bank
- SG-SSB Bank

However, in investigating the dividend policy of selected companies only five were chosen due to the difficulty in getting officials to talk openly about their company's dividend policy.

3.2 Tools for Data Collection

The tools used for the research were financial statements of the selected companies from 2000 to 2006. The researcher specifically used the balanced sheet and profit and loss accounts for the years in question. References were also made to the notes of the various accounts for in-depth-explanation.

3.3 Data Collection

Data used was mainly financial statements and notes to these statements obtained from the Ghana Stock Exchange, the individual companies and also data from statistical publications.

Further information on each selected company's Capital Structure, Return on Equity, Dividend Policy and other relevant information was obtained through questionnaires and interviews. Questionnaires were structured in such a way that relevant information for the study were obtained.

Since decisions on dividend payments are effected at top management level, three respondents from each company namely: The Financial Manager, The Company's Secretary and a Director of each company were interviewed. The reason for this was to

ensure a fair representation of each company's view on Dividend Policy and other issues

relevant to the study.

The questionnaires covered mainly issues on the company's dividend policy, factors that ..

influence dividend decisions, the influence shareholders have on the company's decisions

and management's view of frequency and consistency of dividends given.

Data on Debt to Equity ratio (Capital Structure), Return on Equity and Earnings per Share

of selected companies were obtained from the Ghana Stock Exchange, the individual

companies and from statistical publications.

3.4 Primary and Secondary Data

Primary data included information gathered from the Financial Manager, Company's

Secretary and a Director by the researcher through unstructured interviews. The primary

data provided reliable and authentic firsthand information relevant to this study about the

operations and performance of the selected companies.

Secondary data in the form of financial statements were analyzed to identify the various

issues understudy. Other sources of secondary data included the internet, Security and

Exchange Commission report, as well as literature on existing research in investment and

operational manual of institutions understudy. Reports and Peer reviewed articles

published were also considered.

3.5 Data Analysis

Data collected was analyzed qualitatively and quantitatively. The quantitative analysis

was done using relevant tools like regression analysis and Microsoft as the main computer

24

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KIIMASI CHARA

software program. Tests were conducted at five percent significance level. Accounting ratios like debt to equity, return on equity, earnings per share were analyzed. Qualitative analysis was done by carefully studying each questionnaire and the results of each interview to make objective and relevant deductions.

3.6 Models

Models from studies by Black and Schoels (1974) and Litzenger and Rawanswamy (1979) that determined the relationship between dividend and the value of the firm by making use of varied forms of the capital asset pricing models were referred to in the data analysis.

However since it was impossible to obtain a value for beta (a measure of systematic risk) on our market, this study adopted a model of an earlier researcher (Fischer, 1951). According to this model, the price of a security (p) is determined by dividend (d) and retained earnings (r). Expressed mathematically as

$$P = f(d, r, u)$$

Where

P = Price per share

D = Dividend per share

R = Retained earnings

U = Residual term summarizing the effect of all other

Relevant variables

A regression model based on the above is given by

$$P = a + bd + cr + u$$

Where 'a' is a constant and 'b' and 'c' represent capitalization factors applying to dividends and retained earnings respectively. A measure for the risk associated with a

company is its financial leverage given by debt to equity ratio. Introducing risk would modify the equation to

$$P = a + bd + cr + dl + u$$

Where L = financial risk of the company.

The error term u captures all other variables which have an influence on the price of a share but cannot be quantified e.g. investors perception of the company.

3.7 Profile of Selected Companies

3.7.1 Profile of Ecobank Ghana Limited

Ecobank Ghana Limited ("Ecobank") is well entrenched in the corporate market, with its client base including some of the largest domestic and multinational corporates in Ghana. The bank has an established branch network, covering all of major Ghanaian cities. The bank accounts for approximately 7.7% of domestic deposits, and it commands an estimated 7% share of industry advances. Ecobank is a 92.2% owned subsidiary of Ecobank Transnational Incorporated ("ETI"), which controls over US\$1.9bn in assets. ETI has 11 other subsidiaries located across West and Central Africa.

Ecobank is the sixth largest bank in terms of asset size and net advances and fourth in terms of deposits in the local banking sector in Ghana. The bank is considered to be adequately capitalized. The capital base is expected to be bolstered by the issue of long-term subordinated debt, which will see the bank raise US\$10m in second tier capital.

3.7.2 Profile of Standard Chartered Bank (GH) Limited

Standard Chartered Bank Ghana Limited has been in operation since 1896, when it was known as the Bank of British West Africa. The Bank is 80% owned by Standard Chartered PLC, and the remainder of the stock is owned locally and traded on the Ghana Stock

Exchange. SCB is the oldest bank in Ghana, and ranked consistently amongst the top three banks, locally. The bank provides a wide range of services in the consumer and corporate and institutional banking sectors, including comprehensive trade finance, cash management services and foreign exchange products through their treasury operations. SCB has 19 branches and two agencies located in the main cities in the country. These are fully computerized and networked; with automated teller machines located at most branches. Corporate and institutional banking services are provided in three main locations in Accra (covering Tema, Kumasi and Takoradi).

Standard Chartered's community work in Ghana has led the way within and outside the Group. The Bank's 100 wells for 100 communities project has been cited as best practice within the country as a standard for responsible corporate organization.

3.7.3 Profile of SG- SSB Bank

The mission of SG-SSB is to create the preferred banking institution, which employs professionalism, teamwork and innovation to provide quality products and services that best satisfy the needs of our customers.

SG-SSB Ltd is a privately owned publicly listed company on the Ghana Stock Exchange with 37 branches throughout the country. It is one of the most profitable banks in Ghana and the dominant bank in the Western Region of Ghana. The Bank operates in the Retail, Corporate and Small and Medium scale Enterprise banking markets.

In Africa, SG-SSB's relationship with Société Générale puts at the service of its customers, 12 subsidiaries out of which nine: Senegal, Côte d'Ivoire, Guinea, Equatorial Guinea, Burkina Faso, Benin, Chad and Cameroon, are in West and Central Africa.



The International Business Centre (IBC) has been instituted to offer a one-stop shop for all international banking services. As part of the Société Générale Group, SG-SSB offers its valued customers an added benefit of international reach to over 80 countries around the globe including 13 countries in North, West and Central Africa including Senegal, Burkina Faso, Chad, Benin, Cameroon, Ivory Coast, Guinea and Madagascar.

3.7.4 Profile of HFC Bank

HFC Bank's vision is "To become a leading Universal Banking institution in the West African sub- region providing world class financial services."

HFC offers mortgage loans to enable qualifying individuals to purchase and own houses. Special packages are available for recognized groups, associations and institutions to meet the home ownership goals of their employees and/or members.

Through its banking and investment management operations, a wide range of financial and investment services are offered to individuals and corporate entities. Funds management, Brokerage, Property management, Current and Deposit accounts and all forms of credit facilities are available.

The largest shareholders as at December 31st 2003 were: Social Security and National Insurance Trust (SSNIT), Union Bank of Nigeria Plc, Ghana Union Assurance Company Limited, State Insurance Company of Ghana, Financial Investment Trust, MIHL/Union Homes Savings & Loans Limited (Nigeria), MIHL/Union Homes Pension Fund (Nigeria), Ghana Reinsurance Company and HFC Unit Trust.

3.7.5 Profile of Enterprise Insurance Company Limited (EIC)

Enterprise Insurance Company Limited is the pioneer in the insurance industry in Ghana having been in operation since 1924.

EIC share in the view that the public prefer companies that are seen to be positively contributing to the environment and society. A good reputation is one of the most valuable intangible assets a company can have, and maintaining it is a key motivation for Enterprise Insurance to engage in responsible business.

The Company's commitment to its responsibilities to society is founded on their deep seated belief in returning to society a share of their success; a success that hinges on good community relations and cordial co-existence with both the immediate and the wider environs of their business operations.

3.7.6 Profile of Aluworks Limited

Aluworks Limited provides one of the vital links in the chain towards complete integration of the industry in Ghana. Aluworks, sited in the industrial heartland of Tema a major seaport and industrial town in Ghana, is a modern rolling mill employing the latest technology in the industry.

Aluworks was listed on the Ghana Stock Exchange on 29th November 1996.

Aluworks' main products of internationally accepted standards are aluminum coils, flat sheets, circles and corrugated roofing sheets. Aluworks is a reliable supplier of good quality Aluminium Coils, Discs, Flat Sheets and Sheet-in-Coil as raw materials for many small and medium-scale factories manufacturing aluminium Household Cooking Utensils, Corrugated Roofing Sheets, and general fabrication throughout the West African sub-

region.

Within West Africa, Aluworks can offer some technical advice and support for the establishment of a new factory for Household Utensil Manufacturing, assist during trial runs with sample materials, and then supply raw materials for full production. In Ghana and throughout West Africa, factories producing aluminium colour coated sheets and Corrugated Roofing Sheets source their raw materials in the form of Sheet-in-Coil or Flat Sheets from Aluworks Ltd.

Delivery is prompt and their customers do not need to maintain large costly inventory levels, thanks to their proximity.

3.7.7 Profile of Ghana Commercial Bank

The Bank's Vision is 'To be the established leader in banking, satisfying the expectations of customers and shareholders, providing a full range of cost efficient and high quality services through the optimization of information technology and efficient branch network.'

Ghana Commercial Bank Ltd. established in May 1953 for Ghanaian entrepreneurs, is now the largest indigenous Bank with 149 branches nation-wide. Their objective among others is to support the private sector and facilitate the nation's economic growth. GCB brings banking to the doorstep of existing and potential customers and extends credit facilities to the private sector.

In 1996, the Bank was listed on the Ghana Stock Exchange and it is one of the heavily capitalised companies. In line with its mission, GCB is committed to providing first class

customer service and developing long-lasting relationships with its publics. Currently, all their branches are networked for efficiency.

In consonance with GCB's motto - WE SERVE YOU BETTER - the Bank is represented in all the 10 regions and 170 districts of the nation in a bid to make banking accessible to all Ghanaians.

GCB is proud of its executive Management team, which provides the required leadership for a 2,158-strong workforce.

3.7.8 Profile of Fanmilk Limited

Fanmilk Limited was incorporated in 1960 as Ghana Milk Company by a group of Scandinavian investors basically to produce milk to compliment the protein requirements of the Ghanaian. The main product of the Company at incorporation was pasteurized milk. In 1962 the Company underwent two significant changes. Firstly its name was changed to Fan Milk Limited, and secondly the product portfolio was widened with the change of name to include ice cream, yoghurt and ice lollies.

Fan Milk Limited became the first Foreign Company to become Public Limited Liability in 1967 and again among the first Companies to be listed on the Ghana Stock Exchange in 1990. The company had over 3,250 shareholders as at the end of the year 2003, and the number is still growing.

Fanmilk currently provide direct employment to over 350 individuals and indirect employment to another 8,000 or more people.

EIBRARY

WAME AKRUMAH UNIVERSITY OF

SCIENCE AND TECHNOLOGY

AUMASI-GHANA

The Company is very much alive to its social responsibilities, which include its obligations to environmental issues. Social responsibilities include the provision of financial, material and product support to various institutions and to various causes and programmes at the national, regional and community levels.

3.7.9 Profile of Guinness Ghana Breweries Limited

Guinness Ghana Breweries Limited (GGBL) is a leading blue chip company of Ghanaian industry. Following the completion of the transaction to acquire Ghana Breweries Limited, (GBL) Guinness Ghana Limited (GGL) changed its name to Guinness Ghana Breweries Limited.

Since 2005, management has worked tirelessly at integrating the new business, and the positive outcomes are already clearly evident. Diageo owns 50.44% of GGBL, and the remainder is held by a combination of offshore funds and individual shareholders. It is a star performing stock and in 2006 was among the top five best performing stocks on the Ghana Stock Exchange.

GGBL continues to invest in the key areas of clean water provision, health, environment, education and agriculture. GGBL's commitment to alcohol education and responsible drinking is a key priority. Over 2,000 bartenders were trained in the last year, and GGBL has implemented the Diageo Alcohol Brand Information Policy (DABIP) on all its brands. The company continues to lead the industry in the area of Responsible drinking education in Ghana.

In Ghana's Fiftieth Anniversary Year, GGBL commissioned a state of the art, world class Waste Water Treatment Plant (WWTP) at the Kaasi Brewery, and also commenced

admission to its Institute of Advanced ICT Studies at Ahensan. GGBL operates three Breweries: Kaasi and Ahensan in Kumasi and the Achimota Brewery in Accra.

The GGBL brand portfolio spans a wide range of both alcoholic as well as non-alcoholic beverages. All of its products are manufactured in line with the highest ISO quality standards to guarantee its loyal consumers the same rewarding taste every time they celebrate life with their products. GGBL brands include Beer, Guinness Extra Stout, Star, Gulder, Gordon's Spark, Smirnoff Ice, Malta Guinness and Amstel Malta.

3.7.10 Profile of CAL Bank

CAL Bank commenced operations in July 1990, and is considered to be one of the most innovative banks in Ghana.

KNUS

The Bank mobilizes resources in world financial markets, and channels them to the Ghanaian market. In this way, CAL Bank supports the development of the national economy, focusing particularly on the manufacturing and export sectors. With its highly skilled professional staff, CAL Bank plays an important role in the Ghanaian financial sector by providing wholesale banking services to corporate clients with sound financial bases and competent management. Emphasis is placed on the economic viability and technical feasibility of each project, as well as the marketability of the client's products and services.

Having acquired a Universal Banking License in 2004, CAL has included a retail banking arm to its operations with specialized products and services to cater for the retail market. To complement retail banking and in line with its expansion programme, CAL is in the process of opening several branches in major cities and business districts in Ghana.

The Bank's vision is to be a leading bank known for product innovation and high quality services.



CHAPTER FOUR

4.0 ANALYSIS OF FINDINGS AND DISCUSSION

4.1 Introduction

This part of the study contains ratios calculated and the result is presented in a table form.

All ratios were arranged in the table to make them easier to understand. The various ratios were graphed and coloured to depict them over the years in question. In addition, all ratios were coloured to make them easier for evaluation and analysis

4.2 Data Analysis

In undertaking this study, eleven companies operating in Ghana were contacted for their financial statements. Interviews with representatives were also done on each of these companies to find out about their structural Policy, if they have, as well as about their dividend history as it relates to Net Income, Income Surplus and Retained Earnings and the extent to which capital structuring has an impact on the market value of their companies.

For the purpose of this study, analyses of data were in two parts. The first part was to do an analysis of the Capital Structure of all the eleven companies with the aim of finding out if there is any trend in the general capital structure of Ghanaian companies as represented by the selected companies.

The second part was to analyze data collected responsibly with regard to information obtained from the interviews held with the financial managers of the respective

companies. This second part analyzes the data with the aim of finding out about their structural policies of the nine companies, and then investigates the relationship between capital structure and the market value of selected companies over the period under review.

4.2.1 Analysis of Capital Structure (Leverage)

Ratios were used to assess the impact of capital structure on return on assets and dividends per share.

The nature of the industry within which a particular company operates was identified as a major factor in determining what the market considers to be an appropriate level of gearing.

This research revealed that the AGI has no records or research findings on the appropriate levels of gearing for the various industries.

4.2.2 Analysis of the General Capital Structure of the Selected Companies

For all the companies under review, the overall average Debt to Equity ratio was found to be 0.37. This was when all selected eleven companies were averaged together irrespective of their market or industry. The group basically was made up more of listed companies in the banking industry with a little mix of beverage, manufacturing, and insurance. When only those in the banking industry were averaged, it resulted in a Debt to Equity ratio of 0.27. GGBL had the highest leverage. This outcome was as a result of the company's directive to invest heavily in an expansion programme to take care of growth and also to expand its production lines to accommodate new production lines. This company contributed 0.96 on the average obtaining the overall average of 0.37 when it was again in the pool as per table1 from 2000-2006. On the whole, a dwindling trend in average D/E ratio over the years (i.e. from 2000-2006) was observed. The average D/E ratio rose from 0.21 in 2000 to a high of 0.55 in 2004 and again declining to a low of 0.27 in 2006 as in

Table 1 below. This saw the average D/E of the selected in the banking industry to be also dwindling along the years from a low of 0.16 in 2000 to a low in 2006 reflecting a 0.15 as in table 2.

Table 1 Debit to Equity ratio of Some Companies in Ghana

DEBIT/EQU	DEBIT/EQUITY											
	2000	2001	2002	2003	2004	2005	2006	AVE				
SCB	0.15	0.10	0.10	0.12	0.11	0.14	0.12	0.12				
CAL	0.00	0.23	0.28	0.29	0.18	0.22	0.24	0.21				
EIC	0.51	0.49	0.55	0.46	0.29	0.54	0.38	0.46				
EBG	0.00	1.00	0.27	0.23	0.24	0.40	0.37	0.36				
Unilever	0.53	0.60	0.66	1.07	1.04	0.09	0.00	0.57				
Aluworks	0.03	0.25	0.26	0.12	0.13	0.06	0.00	0.12				
HFC	0.06	0.07	0.07	0.20	0.19	0.27	0.03	0.13				
GCB	0.09	1.11	0.10	0.93	0.83	0.00	0.09	0.45				
FML	0.25	0.20	0.14	0.09	0.10	0.08	0.01	0.12				
SG-SSB	0.63	0.51	0.56	0.54	0.56	0.63	0.62	0.58				
GGBL	0.00	0.00	0.91	1.16	2.41	1.08	1.15	0.96				
Average	0.21	0.41	0.35	0.47	0.55	0.32	0.27	0.37				



Table 2 Average Debit to Equity ratio of some Companies in Ghana

DEBIT/EQ	DEBIT/EQUITY											
	2000	2001	2002	2003	2004	2005	2006	AVE				
SCB	0.15	0.10	0.10	0.12	0.11	0.14	0.12	0.12				
CAL	0.00	0.23	0.28	0.29	0.18	0.22	0.24	0.21				
EBG	0.00	1.00	0.27	0.23	0.24	0.40	0.37	0.36				
HFC	0.06	0.07	0.07	0.20	0.19	0.27	0.03	0.13				
GCB	0.09	0.11	0.10	0.93	0.83	0.00	0.09	0.31				
SG-SSB	0.63	0.51	0.56	0.54	0.56	0.63	0.06	0.50				
Average	0.16	0.34	0.23	0.39	0.35	0.28	0.15	0.27				

Table 3 Debit to Equity ratio of some Companies in Ghana

			78	X X	1	37		
DEBIT/EQU	JITY		100	Cuts				
	2000	2001	2002	2003	2004	2005	2006	AVE
SCB	0.15	0.10	0.10	0.12	0.11	0.14	0.12	0.12
CAL	0.00	0.23	0.28	0.29	0.18	0.22	0.24	0.21
EIC	0.51	0.49	0.55	0.46	0.29	0.54	0.38	0.46
EBG	0.00	1.00	0.27	0.23	0.24	0.40	0.37	0.36
Unilever	0.53	0.60	0.66	1.07	1.04	0.09	0.00	0.57
Aluworks	0.03	0.25	0.26	0.12	0.13	0.06	0.00	0.12
HFC	0.06	0.07	0.07	0.20	0.19	0.27	0.03	0.13
GCB	0.09	1.11	0.10	0.93	0.83	0.00	0.09	0.45
FML	0.25	0.20	0.14	0.09	0.10	0.08	0.01	0.12
SG-SSB	0.63	0.51	0.56	0.54	0.56	0.63	0.62	0.58
Average	0.23	0.46	0.30	0.41	0.37	0.24	0.19	0.31

From table 1 it was observed that analyzing the D/E of all eleven companies gave an overall of 0.37 that is, rising from 0.21 in 2000 to 0.55 in 2004, declining only in a year after where the average was found to be 0.32 with an onward fall among selected companies. However a close look at the D/E ratio of each company revealed that this ostensibly high overall ratio of 0.37 was due to the extra ordinarily high D/E ratio of 0.96 recorded by Guinness Ghana Breweries Limited (GGBL).

Computing the overall average D/E ratio of the companies without GGBL, the overall average was found to be 0.31 (as in Figure 1) showing clearly that the 0.96 average D/E of GGBL greatly influenced the overall D/E ratio to 0.37 obtained previously for all eleven companies, forming about 29% of total average obtained.



4.3 Company Specific Analysis of Capital Structure

Table 4 Debit to Equity ratio of some Companies in Ghana

	2000	2001	2002	2003	2004	2005	2006	AVE
SCB	0.15	0.10	0.10	0.12	0.11	0.14	0.12	0.12
CAL	0.00	0.23	0.28	0.29	0.18	0.22	0.24	0.21
EIC	0.51	0.49	0.55	0.46	0.29	0.54	0.38	0.46
EBG	0.00	1.00	0.27	0.23	0.24	0.40	0.37	0.36
Unilever	0.53	0.60	0.66	1.07	1.04	0.09	0.00	0.57
Aluworks	0.03	0.25	0.26	0.12	0.13	0.06	0.00	0.12
HFC	0.06	0.07	0.07	0.20	0.19	0.27	0.03	0.13
GCB	0.09	1.11	0.10	0.93	0.83	0.00	0.09	0.45
FML	0.25	0.20	0.14	0.09	0.10	0.08	0.01	0.12
SG-SSB	0.63	0.51	0.56	0.54	0.56	0.63	0.62	0.58
GGBL	0.00	0.00	0.91	1.16	2.41	1.08	1.15	0.96
Average	0.21	0.41	0.35	0.47	0.55	0.32	0.27	0.37
Std Dev	0.24	0.37	0.28	0.40	0.69	0.33	0.35	0.27

Of the eleven companies analyzed, GGBL recorded the highest average D/E ratio of 0.96 over the period under review (Ref. Table 1). This was due to the peculiar situation surrounding the company and the direction of their business and focus during that period of observation in the sense that, GGBL as was earlier known before a management decision to introduce external financing other than equity, was heavily depending heavily on borrowed funds from the banks to sustain business operations and expansion projects in the country, thus their business was mainly supported by debt; making it the most highly

leveraged. As earlier stated, there was the need to meet demand on the market for which serious expansion had to be considered a priority. Though GGBL is characterized by the use of much debt, for its operations, its long-term commitments is supported by its high asset base in the case of liquidation.

Ghana Commercial Bank had an average D/E ratio of 0.45, which is very high, compared to the overall average of 0.37 (for all companies periods under review)

EBG also registered a D/E ratio of 0.36 placing it very close to the overall average of 0.37. The bank had just released its Initial Public Offer (IPO) to raise enough capital to support its reserve with the Bank of Ghana as the capital requirement had been increased. Ghana Commercial Bank followed with a 0.45 on the average.

Enterprise Insurance Company recorded a D/E ratio of 0.46, followed by Unilever Limited with an average record of 0.57.

Standard Chartered Bank, Fan milk Ghana Limited, and Aluworks Ghana Limited had a D/E ratio of 0.12, suggesting that, it's the lowest leveraged among the companies indicating that they did not use long-term debt financing over the period under review.

4.3 Analysis of Capital Structure Vis a Vis Return On Assets

The financial statements were analyzed to find out whether there exists any relationship between the capital structures of the companies and return on asset (ROA) and the extent to which profit distribution impacts on shareholders' value other than reinvesting to add value to an entity over the periods under review.

To do this, the following hypotheses were put forward:

Ho - Debt to equity ratio has no effect on return on Asset

H1 - Debt equity ratio has an effect on Return on Asset

Using the regression relationship

$$Y = BX + A$$

Where.

Y = Return on Asset

X = Debt to Equity Ratio

A = Intercept

B = Coefficient of the X variable

Under the preceding null hypothesis

$$t \, statistic = \frac{b}{S.e(b)}$$

Where S.e = Standard error of the b variable. For the b variable to be Significant, the t-statistic must be greater than 2.

When the D/E ratio of all the companies put together was regressed on their respective ROA at 95% level of significance. The results obtained are as below:

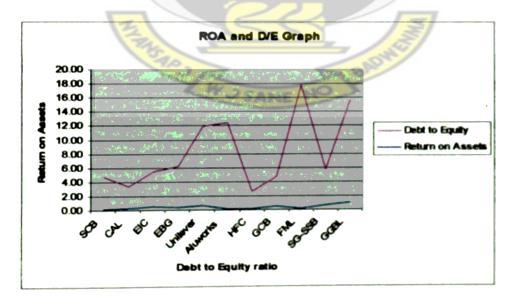


Figure 1: ROA and DE/Graph of Companies in Ghana

Table 5 Regression values for Return on Assets

58
66
55
51

Variable	b	SE(b)	t
х	4.1773	5.4571	0.7655
Constant	6.3031	2.3685	2.6612

From Fig. 1 and Table 5 above, the trend line equation is

$$Y = 4.1773x + 6.3031$$

$$R^2 = 0.0466$$

S.E =
$$(2.3685)(5.4571)$$

t-Statistics =
$$(2.6612)(0.7655)$$

The positive value of the coefficient of X implies that generally, Return on Asset increases with an increase in Debt to Equity ratio for the eleven companies under review. The relatively low value of the standard error (SE) compared to the coefficient of X, gave a t-statistic figure of 2.66612. Since the absolute value of the X coefficient (b) is more than 2, it is not significant. We therefore accept the null hypothesis and conclude that Debt to Equity ratio does affect Return on Asset of the eleven companies under review at a significance level of 95%.

The value of the R² of 0.0466 implied that D/E ratio explains just 4.66% of variations in return on Asset, meaning that many factors other than D/E explain variation in ROA.

Considering the extra ordinarily high value of the Debt to Equity ratio of GGBL, another test was performed without the non-financial institutions listed on the stock market. The outcome of that test as presented in Fig 8 below, led us to a different conclusion.

Regression values for data					
-0.1645					
0.0271					
0.2703					
4.1980					



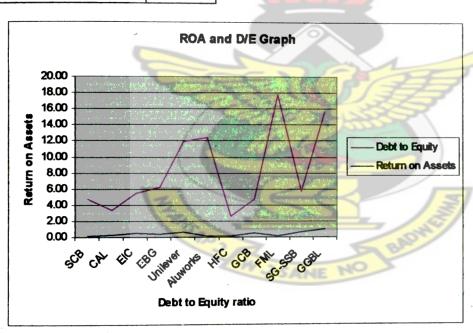


Figure 2: ROA and D/E of Companies in Ghana

Table 6: Regression values for Dividend Pay-out Ratio

Variable	b		SE(b)	t	
x	-	4.1923	7.2547	-	0.5779
Constant		8.4789	2.5245		3.3586

From Fig. 2 and Table 6 above, the trend line equation is

Y =
$$-4.1923x + 4.4789$$

 $R^2 = 0.0271$
S.E = $(7.2547)(2.5245)$
t-Statistic = $(-0.5779)(3.3586)$

The negative value of the coefficient of X (-4.1923) implies that generally, Return on Assets decreases with an increase in Debt to Equity ratio for the companies under review. This may be due to the high cost of debt.

The S.E figure of 7.2547 makes the absolute t-statistic value of the X coefficient (b) to be (-0.5779) greater than 2. This is significant. We therefore reject the null hypothesis, accepting the alternative hypothesis and conclude that Debt to Equity ratio actually affected Return on Assets of the companies under review at a significance level of 95%.

4.4 Analysis of Earnings per Share Vis a Vis Dividends per Share

The financial statements were analyzed to find out whether there exists any relationship between the Dividends declared and earnings of all the eleven selected companies over the period under review.

To do this, the following hypothesis was put forward:

- H_0 Earnings per share has no effect on dividend per Share
- H₁ Earnings per share has an effect on dividend per share

Using the regression relationship

$$Y = BX + A$$

Where,

Y = Dividend per share

X = Earnings per share

A = Intercept

B = Coefficient of the X variable

Under the preceding null hypothesis

$$t - statistic = \frac{b_2}{S.e\ (b_2)}$$

For the b variable to be significant at 95% significance level, the t-statistic must be greater than 2.

When the EPS ratio of all the companies put together was regressed on their respective DPS at 95% level of significance. The results obtained are as shown below:

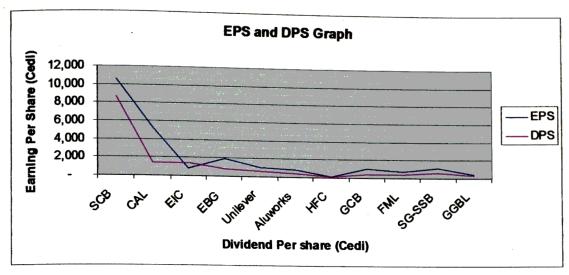


Figure 3: EPS and DPS of Companies in Ghana

Table 7 Regression values for Earnings per Share

Regression values for data					
Multiple R	0.93624				
R square	0.87655				
Adjusted R squared	0.89713				
Stand error	789.62568				

Variable	b	SE(b)	t
x	0.7395	0.0801	9.2308
Constant	-220.3637	272.7631	-0.8079

From Fig. 3 and Table 7 above, the trend line equation is

Y

=

0.7395x - 220.3637

 $R^2 = 0.87655$

S.E

=

(0.0801) (272.7631)

t-statistic

=

(9.0986) (-0.8079)

The positive value of the coefficient of X implies that generally, dividends declared (represented by DPS) increases with an increase in earnings (represented by EPS) for the eleven companies under review.

The relatively low value of the standard error (SE) compared to the coefficient of X, gives a t-statistic figure of 9.0986. Since the absolute value of the X coefficient (b) is greater than 2, it is significant. We therefore reject the null hypothesis and conclude that EPS level affects DPS of the eleven companies under review at a significance level of 95%.

The value of the R² of 0.87655 implies that EPS explains 87.65% of variations in DPS, meaning that EPS is one important facto r that determines DPS.

4.4.1 Discussion and Analysis of the Earnings Policies of the Selected Companies Company Specific Analysis of Earnings Retention

The previous chapter dealt with the introduction, literature review and methodology with respect to return on assets, being a measure of market value. In this chapter, data analyses of all eleven selected companies were considered. In so doing, analyses of policies concerning their earnings retention and assets utilization were also presented. This section presents the analysis of the selected companies with the component of the key ratios without digging deeper into the various components of ROA.

Table 8 Earnings per Share of Companies in Ghana

	2000	2001	2002	2003	2004	2005	2006	AVE
SCB	7,270	6,144	7,435	10,017	10,942	13,193	15,732	10,105
CAL	0	7,505	13,234	15,241	224	170	296	5,239
EIC	570	820	1,232	1,522	328	717	695	841
EBG		2,991	2,948	3,742	1,253	782	-	1,953
GCB	840	1,018	1,057	568	1,000	781	1,576	977
HFC	109.2	133	110	169	180	82	71	122
GGBL	88.9	156	229	430	540	515	850	401
FML	-98	318	591	974	1,390	1,781	-	708
Unilever	450	893	1392	1857	1004	1,470	-	1,009
Aluworks	2491	925	704	443	493	542	•	800
SG-SSB	1153	1,366	1067	1286	1490	653	698	1,102
Average	1,287	2,024	2,727	3,295	1,713	1,881	1,811	2,106
Sdev	2237.94	2,516.09	4048.64	4860.83	3096.80	3784.76	4644.34	2990.06

As shown in Table 8 it is clear that, most companies have shown impressive EPS over the periods with Standard Chartered Bank recording the heighest on the average with 10,105. This was followed by CAL Bank with an average EPS of 5,239. Home Finance Company recorded the lowest among the selected showing an average of 122 after Guinness Ghana Breweries Limited who has also recorded a 401.

L.BRARY

KWAME NKRUMAH UNIVERSITY OF

SCIENCE AND TECHNOLOGY

KIRASI-GHANA

Table 9 Return on Assets of Companies in Ghana

RETURN	ON ASSE	TS					ž	
0	2000	2001	2002	2003	2004	2005	2006	AVE
SCB	3.70	4.7	4.3	4.5	4.4	4.5	6	4.59
CAL	0	5.1	4	3	4	3	3	3.16
EIC	0	5.3	7.2	5.7	5.5	4.6	7	5.04
EBG		6	6	7	6	6	4	5.83
Unilever	7.01	12.32	17.6	14.5	12.7	15.7	0	11.40
Aluworks	27.4	20.3	13.6	6.6	10.2	8	0	12.30
HFC	3.3	2.4	2.5	3.3	3	1.2	1.53	2.46
GCB	6	4.5	5.8	2.8	2.9	2.7	5	4.24
FML	-5.4	15.8	22	26.5	23.1	22.3	19	17.61
SG-SSB	7.82	7.08	4.64	4.62	4.35	3.19	3.93	5.09
GGBL	6.5	14.6	21.6	18.3	14.7	10.8	16	14.64
Average	5.63	8.92	9.93	8.80	8.26	7.45	5.95	7.85

As shown in Table 9. Comparing performance on the average for their respective ROA's, FML recorded the highest with a 17.61% followed by GGBL and Aluworks with 14.64% and 12.30% respectively. This implies that, FML performed better than the mirror institutions on the average though it could rank itself with institutions such as Aluworks, Unilever ltd, and GGBL who performed higher than the total average mark of 7.85%.

L.BRARY

KWAME MKRUMAH UNIVERSITY OF

SCIENCE AND TECHNOLOGY

KUMASI-GHANA

Table 10 Net profit Margins of Companies in Ghana

	2005	2004	2003	2002	2001	2000	STD
GGBL	13.50	12.00	14.00	13.70	9.60	8.30	2.39
CAL	20.00	36.00	28.00	33.00	26.00	0.00	12.94
Unilever	9.30	9.10	13.80	12.20	8.70	6.40	2.65
Aluworks	4.30	4.20	4.50	8.10	13.40	15.10	4.89
EIC	10.50	7.90	8.20	10.70	10.70	13.80	2.13
SG-SSB	32.92	32.26	24.31	25.09	33.50	25.60	4.36
GCB	20.79	20.40	25.00	24.33	29.44	28.40	3.75
Fan milk	11.30	14.80	16.80	9.50	7.00	-2.80	6.96
HFC	8.00	18.00	20.00	17.00	15.00	19.00	4.36
SCB	39.00	40.20	37.40	34.10	24.30	29.80	6.11
EBG	48.00	50.00	49.00	64.00	57.00	0.00	22.71
Average	19.78	22.26	21.91	22.88	21.33	13.05	3.66

Analyzing the profit margin from the Table 10, the companies have been able to reduce expenses to give rise to their positions. This may be due to prior preparations by some companies like CAL and EBG towards listing on the stock market which ensured that they do some cost cutting.

The ROA of the companies improved tremendously from a low of 2.46% to 17.61% (2000-2006) on the average with four out of eleven selected companies making it past the average mark.

The profit margin of the selected companies also saw an improved position with three out of the eleven companies having its average rise above the average of the total. This was

also from a low of 2.39% to 22.71% on the average of their performances along the years of review.

This implies that the improvement in ROA was due to the asset utilization of the companies and also ability to generate more revenue from its assets. For FML, the improvement on its ROA on the average of the lot was as a result of improved profit margin at the same time because of improved asset utilization. Though all companies were expected to place above average pool, they are on the onward rise to make this happen in the near future



Table 11 Dividend per Share of Companies in Ghana

DIVIDEN	D PER SHA	ARE	,	MY	23			
	2000	2001	2002	2003	2004	2005	2006	AVE
SCB	3200	4200	5000	8765	9574	11500	13000	8,673
CAL		2407	3,558.00	2,515.00	50.00	55.00	75.00	1,443
EIC	300	2,407.00	3,558.00	2,515.00	50.00	55.00	250.00	1,473
EBG			1,049.00	1,327.00	351.00	495.00	673.00	779
GCB	250	400.00	500.00	250.00	375.00	550.00	400.00	413
HFC	37	45.00	48.00	70.00	85.00	45.00	55.00	58
GGBL	70	90.00	175.00	250.00	300.00	361.00	418.00	266
FML	0	100	150	200.00	300.00	400.00	1,028.00	363
Unilever	254	512	700	896	896.00	896.00	-	650
Aluworks	800	500	600	400	450.00	500.00	-	408
SG-SSB	400	600	480	700	900.00	450.00	450.00	597
Average	590.11	1,126.10	1,438.00	1,626.18	1,211.91	1,391.55	1,486.27	1,374.74
Std Dev	1,008.04	1,398.35	1,733.74	2,525.28	2,788.85	3,362.30	3,831.70	2,461.99

From Table 11, it is clear that dividend declared per share increase over the periods under review. For some of the companies, dividend per share increased even when there was a

decrease in earnings. This is true for companies like Aluworks and SG-SSB. This defect occurred in 2003 even though Aluworks to its grounds again with a comeback in net profit after taxes whiles SG-SSG saw fluctuating effect starting in the year 2004.

This observation confirms Lintner's assertion that shareholders prefer a steady progression in dividend irrespective of earnings. As such, some companies adopted a policy of increasing dividends over the years irrespective of whether their profits are declining or not.

ROA for companies can vary substantially and will be highly dependent on the industry. The higher the ROA, the better, because the company is earning more money on less investments. When you really think about this, management's most important job is to make wise decisions in allocating its resources. Anybody can make profit but very few managers excel at making large profits with the little investments.

L.BRARY
KWAME NKRUMAH UNIVERSITY SP
SCIENCE AND TECHNOLOGY
KUMASI-GHANA

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATION

5.1 Introduction

The issue of Capital Structure and its impact on the shareholder value of organizations is one that has been neglected by Ghanaian Companies for a very long time. This is however not so in the developed countries. This reason for not attaching much importance to this important aspect of the financing decision in this part of the world is due to:

- The fact that management of most companies do not appreciate the effect of capital structure on the market value of their organizations and its invariable effect on shareholder value.
- Insufficient knowledge of the effects of dividend policy on the overall corporate image on the part of both management (of these companies) as well as investors.

As a result of the above, this study sought to investigate the changes in capital structure and its impact on shareholder value of some selected Ghanaian companies as well as their dividend policy.

The aim was to come out with findings that would sensitize management of these companies to appreciate the relevance of these important issues and also to add to the existing store of knowledge in this area of finance.

To achieve these objectives both primary and secondary data were collected and analyzed.

Questionnaires were administered to financial managers of the selected companies.

The secondary data helped in investigating the dividend policies of these companies and the primary data helped in establishing the effects of capital structure on return on asset.

Although, the overall study was carried out successfully, it was subject to a number of constraints or limitations. These include unwillingness of some financial managers of the selected companies to talk openly about their dividend policies, making data collection very frustrating.

It was also observed that the managers felt that these issues were quite confidential and not supposed to be made public. Others expressed an open disinterest in the study because they were not sure of how information divulged could benefit them. The researcher thus had to go to these managers several times before the interviews were granted.

Another problem was non-availability of relevant primary data for some Ghanaian companies. To overcome this problem the study was limited to only companies listed on the Ghana Stock Exchange. This in itself also presented a limitation which was offset by choosing at least one company from the following industries; Fruit drink & Dairy products, Fast moving consumer goods, Oil, banking, Brewery, and others. The reason was to give a fair representation of companies.

5.2 Conclusion

The study came out with some pertinent observations. The analysis of these led to very important conclusions. These conclusions also led to some important recommendations that will be useful to management of the selected companies, potential investors and the public at large.

Some of these are outlined below:

- approximately 0.37. This means that for a given Ghanaian Companies is approximately 0.37. This means that for a given Ghanaian company, 37% of the funds available for operating the business would be financed by debt and the remaining 63% financed by equity. An attempt to obtain figures from the Association of Ghanaian Industries (AGI) by the researcher revealed that AGI has no figures for gearing in Ghanaian Companies. Results from this study could be a very good basis for further research into this very important area of finance. According to the financial managers interviewed, the low gearing ratio of their companies was due to the high interest rate charged on debt. They therefore would prefer to finance their operations by more equity rather than debt. This drive has encouraged more companies to be listed on the money market.
- The study ascertained that within the stated limitations and assuming "Ceteris Paribus" conditions, capital structure is significantly positively correlated to return on asset. This implies that the higher a company's debt to equity ratio the higher its return on assets.
- For all the companies analyzed, dividend declared and earnings were positively correlated, confirming that as earnings increase, dividend also increases. This agrees with existing literature.

 None of the companies analyzed, had any definite dividend policy or any regular dividend payout ratio. However, all of them alluded to the motion that Dividend

Policy is relevant and has an effect on the firm's value.

5.3 Recommendations

Though much can be said to have been achieved by companies listed on the Ghana Stock

Exchange (GSE), they are still faced with the daunting task of striking the optimal capital

structure to give their shareholders maximum returns on their investment. The following

recommendations are therefore made to meet the challenges.

5.3.1 Government Economic Interventions

The current unfavourable economic conditions prevailing in the Ghanaian market puts

undue stress on the cost of raising debt as part of capital structure. It is imperative for the

government to pursue policies to bring down the rate of inflation and the deterioration of

the local currency against that of the developed countries. The government must also

endeavour to promote the reduction of the Central Bank's Lending Prime Rate.

5.3.2 Determining Optimal Capital Structure

The market value of a company clearly depends on its weighted average cost of capital

(WACC). The lower a company's WACC, the higher the present value of its future cash

flows and therefore the higher its market value.

This research revealed that capital structure affects a company's WACC and hence its

value. It would therefore be in the company's best interest to locate its optimal capital

structure and move towards it.

KWAME AKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

57

5.3.3 Maximizing the leverage effect

It has been shown in this research that gearing is an important consideration for companies. Some academic theories support the existence of an optimal capital structure. Others argue that one capital structure is as good as another. When considering the market imperfections that exist, one tends towards accepting the existence of an optimal capital structure. In practice though, it is more likely that there exists a range of capital structure with which a company can minimize its WACC, rather than one particular combination of debt and equity finance. It appears by integrating sensible levels of debt into its capital structure; a company can enjoy the tax advantage arising from debt finance and thereby reduce its WACC, as long as it does not increase its gearing to levels that give rise to concern among its investors about its possible bankruptcy.

5.3.4 Benefits of Optimal Capital Structure

The feedback on the benefits of having the optimal capital structure of an organization is indeed tremendous. It is important for financial managers to seek the correct capital structure that would give their shareholders the maximum returns on their investments.

REFERENCES

Aharony, J. and Swary, I. (1980) 'Quarterly dividend and earnings announcements and stock holders' returns: an empirical analysis', Journal of Finance, Vol. 35, March, pp. 1-12.

Altman, E. (1968) "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy". *Journal of Finance*, iss.09, pp. 589-609.

Altman, E. (1984) 'A further empirical investigation of the bankruptcy cost question', Journal of Finance, Vol. 39, pp. 1067-89.

Annual Report of Trans America Corporation, (1991) page 15.

Baskin, J.B. (1989). 'An empirical investigation of the pecking order hypothesis', Financial Management, Vol. 18, pp. 26-35.

Black, F. and Schoels, M., (1974) 'The Effects of Dividend Yields and Dividend Policy on Common Stock Prices and Returns', Journal of Financial Economics, Vol. 1, pp. 10-22.

Campbell, R. Harvey, J., (1994) 'Capital Structure and Payout Policies', *Journal of Financial Economics*, May 1974 pp 14-22

Ghana Companies Code 1963 Act 179 Sect. 71, 72 and 73

Hakasson, N. H., (1984) 'To Pay or not to Pay Dividends' Journal of Finance Vol. 37 No

2. May 1982, pp 413-426



Hunt, P.S. (1971) 'Basic Business Finance' 4th edition pp 384-412

Johnson, S. A., (1997) 'An empirical analysis of the determinants of corporate debt ownership structure', *Journal of Financial and Quantitative Analysis*, March 2000.

Lintner, J., (1954) 'Distribution of Income of Corporations among Dividends, Retain Earnings and Taxes', *American Economic Review*, May 1956

Mazzeo, M. A., (1992) 'Capital Structure Implications and M&M Propositions Working Paper', July 1992, *Journal of Business* Vol. 65 pp 353-369

Miller, M. and Modigliani, F., (1961) 'Dividend Policy, Growth and Valuation of Shares', *Journal of Business*, October 1961, pp. 408-430.

Miller, M. and Modigliani, F. (1963) 'Taxes and the cost of capital: a correction', American Economic Review, Vol. 53, pp. 433-43.

Parriton, G. H, (1986) 'Variables Influencing Dividend Policy" Journal of Business Finance and Accounting, pp. 162-168

Ross, S.A, (1995), 'Fundamentals of Corporate Finance', 3rd edition, pp. 521-528

Saugata, J.A, (1989) "Dynamics of Dividend Policy", "Working paper series in economics and finance" SSE/EFI 1989 Vol. 8 pp. 44-48

Vance, D. I. (2003), 'Financial Analysis and Decision Making: Tools and Techniques to Solve Financial Problems and Make Effective Business Decisions'.

Watson, S., and Wilson, N. (2002) 'Small and medium size enterprise financing: some of the empirical implications of a pecking order', Journal of Business Finance and Accounting, Vol. 29 (April), pp. 557-78

Weston, J. and Copland T., (1989), Managerial Finance, 8th edition pg. 646-649

Willet J.T. "A Discussion of Corporate Policy" *American Economist Review* Vol. LIV, Sept. 1964, pg. 634-635.

"Working paper series in economics and finance" SSE/EFI 1987 Vol. 12 pg. 18-22

"Working Paper Series in Economic and Finance" SSE/EFI 1989 Vol. 6 pg. 42-49

Zemitan, G. (2005), "Methods of prognosis of firm's financial performance", Cited: November 8, 2008.

http://www.masters.donntu.edu.ua/2004/fvti/chizhikova/library/prognozmetod.htm.

APPENDICES

STANDARD CHARTERED BANK

year	Debt/Equity	ROA	Dividend Per	Earnings	NET	NET PROFIT
			Share	Per Share	PROFIT	MARGIN
2000	0.15	3.70	3200	7270	115163	29.80
2001	0.10	4.70	4200	6144	108107	24.30
2002	0.10	4.30	5000	7435	130822	34.10
2003	0.12	4.50	8765	10017	176259	37.40
2004	0.11	4.40	9574	10942	192541	40.20
2005	0.14	4.50	11500	13193	232152	39.00
2006	0.12	6.00	13000	15732	-	-

Regression values for	or data
Multiple R	-0.28654
r square	0.08211
Adjusted R ²	0.54105
Stand error	0.47330

Variable	b		SE(b)	T
Х	-	10.45455	10.09072	-1.03606
Constant		5.84026	1.217475	4.797025

ALUWORKS LTD

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per Share	Per Share	PROFIT	MARGIN
2000	0.03	27.40	800	2491	34595	15.10
2001	0.25	20.30	500	925	38567	13.40
2002	0.26	13.60	600	704	29354	8.10
2003	0.12	6.60	400	443	18456	4.50
2004	0.13	10.20	450	493	20752	4.20
2005	0.06	8.00	500	542	22580	4.30
2006	-	-	- K	111	T	-

Regression values for data					
Multiple R	0.28140				
r square	0.07919				
Adjusted R ²	0.53959				
Stand error	6.19649				

Variable	b	S.e(b)	T
х	25.14129	24.74920	1.01584
Constant	9.24713	3.431354338	2.69489176

UNILEVER GHANA LIMITED

Year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per Share	Per Share	PROFIT	MARGIN
2000	0.53	7.01	2,491	254	28,090	6.40
2001	0.60	12.32	925	512	57,693	8.70
2002	0.66	17.60	704	700	89,840	12.20
2003	1.07	14.50	443	896	125,661	13.80
2004	1.04	12.70	493	896	80,816	9.10
2005	0.09	15.70	542	896	96,648	9.30
2006	0.00	0.00	-	_	-	0

nta .
0.48896
0.23908
0.61954
3.72061

Variable	b	SE(b)	t
Х	7.09510	3.65399	1.94174
Constant	7.36008	2.307969	3.188985

GHANA COMMERCIAL BANK

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per	Per	PROFIT	MARGIN
			Share	Share		
2000	0.09	6.00	840	250	61838	28.40
2001	1.11	4.50	1018	400.00	138624	29.44
2002	0.10	5.80	1057	500.00	167974	24.33
2003	0.93	2.80	568	250.00	172849	25.00
2004	0.83	2.90	1000	375.00	93682	20.40
2005	0.00	2.70	781	550.00	165040	20.79
2006	0.09	5.00	1576	400.00	0	0

Regression values for data					
Multiple R	-0.43023				
r square	0.18510				
Adjusted R squared	0.59255				
Standard error	0.91828				

Variable	В	SE(b)	t
Х	- 1.28791	0.78009	-1.65097
Constant	4.82135	0.427794	11.27027

FANMILK GHANA LIMITED

year	Debit/Equity	ROA	Earnings Per	Dividend	NET	PROFIT
			Share	Per Share	PROFIT	MARGIN
2000	0.25	-5.4	- 98	-	- 1,936	-2 80
2001	0.20	15.8	318	100	6,283	7.00
2002	0.14	22	591	150	11,697	9.50
2003	0.09	26.5	974	200	19,270	16.80
2004	0.10	23.1	1,390	300	27,495	14.80
2005	0.08	22.3	1,781	400	35,223	11.30
2006	0.01	19	- KI	1,028	\$-T	-

Regression values for data				
Multiple R	-0.71529			
r square	0.51164			
Adjusted R squared	0.75582			
Standard error	5.28030			

Variable	В	SE(b)	t
Х	- 95.58056	26.95666	-3.54571
Constant	29.43897	3.621224	8.129562

SG-SSB

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per	Per	PROFIT	MARGIN
			Share	Share		
2000	0.63	7.82	1,153	400	93	25.60
2001	0.51	7.08	1,366	600	106	33.50
2002	0.56	4.64	1,067	480	88	25.09
2003	0.54	4.62	1,286	700	71	24.31
2004	0.56	4.35	1,490	900	91	32.26
2005	0.63	3.19	653	450	77	32.92
2006	0.62	3.93	698	450	0	0

Regression values for data				
Multiple R	-0.20767			
r square	0.04313			
Adjusted R squared	0.52156			
Stand error	1.17586			

Variable	b	SE(b)	t
Х	- 7.10830	9.66537	-0.73544
Constant	9.21261	5.61444	1.640879

HOME FINANCE COMPANY LIMITED

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per Share	Per Share	PROFIT	MARGIN
2000	0.06	3.30	109	37	6,225	19.00
2001	0.07	2.40	133	45	7,584	15.00
2002	0.07	2.50	110	48	8,806	17.00
2003	0.20	3.30	169	70	16,929	20.00
2004	0.19	3.00	180	85	18,014	18.00
2005	0.27	1.20	82	45	8,227	8.00
2006	0.03	1.53	71	5 5	5-T	-

Variable	В	SE(b)	T
X	- 1.04159	2.60989	-0.39910
Constant	2.59505	0.369512	7.022916

Regression values for data				
Multiple R	-0.11445			
r square	0.01310			
Adjusted R squared	0.50655			
Stand error	0.58495			

GUINNESS GHANA BREWERY LIMITED

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per Share	Per	PROFIT	MARGIN
				Share		
2000	0	6.5	89	70	10,444	8.30
2001	0	14.6	156	90	18,359	9.60
2002	0.91	21.6	229	175	35,190	13.70
2003	1.16	18.3	430	250	50,631	14.00
2004	2.41	14.7	540	300	63,492	12.00
2005	1.08	10.8	515	361	108,085	13.50
2006	1.15	16	850	418	-	-

Variable	b	SE(b)	t
X	2.01091	1.62747	1.23560
Constant	12.715 <mark>26</mark>	1.788249	7.110451

Regression values for data				
Multiple R	0.33596			
r square	0.11287			
Adjusted R squared 0.55643				
Standard error	3.27065			

CAL BANK LIMITED

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per Share	Per Share	PROFIT	MARGIN
2000	-	-	-	-	-	-
2001	0.2	5.1	7,505	2,407	10,433	26.0
2002	0.3	4.0	13,234	3,558	18,415	33.0
2003	0.3	3.0	15,241	2,515	21,459	28.0
2004	0.2	4.0	224	50	34,819	36.0
2005	0.2	3.0	170	55	26,703	20.0
2006	0.2	3.0	296	75	-	-

Variable	В	SE(b)	t
X	12.52048	2.98937	4.18834
Constant	0.57613	0.645437	0.8926284

Regression values for data	
Multiple R	0.77059
r square	0.59380
Adjusted R squared	0.79690
Standard error	0.71818

ENTERPRISE INSURANCE COMPANY LIMITED

year	Debit/Equity	ROA	Earnings Per	Dividend	NET	PROFIT
			Share	Per Share	PROFIT	MARGIN
2000	0.51	0.00	570	300	2,848	13.80
2001	0.49	5.30	820	2,407	4,104	10.70
2002	0.55	7.20	1,232	3,558	6,160	10.70
2003	0.46	5.70	1,522	2,515	8,316	8.20
2004	0.29	5.50	328	50	9,560	7.90
2005	0.54	4.60	717	55	18,454	10.50
2006	0.38	7.00	695	250	5	-

Regression values for data		
Multiple R	-0.23512	
r square	0.05528	
Adjusted R squared	0.52764	
Standard error	1.65560	

Variable	В	SE(b)	t
Х	- 6.01504	7.17796	-0.83799
Constant	7.80977	3.331377	2.344308

ECOBANK GHANA LIMITED

year	Debit/Equity	ROA	Earnings	Dividend	NET	PROFIT
			Per Share	Per Share	PROFIT	MARGIN
2000	0.00	0.00	•	•	-	0.00
2001	1.00	6.00	2,991	-	54,435	57.00
2002	0.27	6.00	2,948	1,049	53,647	64.00
2003	0.23	7.00	3,742	1,327	68,113	49.00
2004	0.24	6.00	1,253	351	87,702	50.00
2005	0.40	6.00	782	495	119,645	48.00
2006	0.37	4.00	- KI	673	1	•

Variable	В	SE(b)	t
x	3.44658	1.97300	1.74687
Constant	3.76416	0.813544	4.626862

Regression values for data	
Multiple R	0.45027
r square	0.20274
Adjusted R squared	0.60137
Stand error	1.50296

SAMPLE QUESTIONNAIRE

DESIGNED FOR MANAGEMENT OF SELECTED COMPANIES

1.	TODAY'S DATE:,, 2008
2.	NAME OF COMPANY:
3.	WHEN WAS THE COMPANY LISTED ON THE GHANA STOCK
	EXCHANGE? YEAR: MONTH:
4.	IS THERE ANY POLICY THAT GUIDES THE CHOICE OF CAPITAL STRUCTURE OF THE COMPANY? i.e. IS THERE ANY GUIDING
	PRINCIPLE WITH REGARD TO HOW MUCH DEBT OR HOW MUCH
	EQUITY IS USED TO FINANCE THE COMPANY? PLEASE TICK
	YES[] NO[]
5.	IF THE ANSWER TO QUESTION 4 IS YES, THEN PLEASE OUTLINE
	BRIEFLY WHAT THESE POLICIES ARE:
6.	WHAT ARE THE INTERNAL AND EXTERNAL FACTORS MOST LIKELY
	TOINFLUENCE THE COMPANY'S POLICY ON CAPITAL STRUCTURE?
	INTERNAL FACTORS
	a)
	b)
	c)
	d)
	e)

	EXTERNAL FACTORS	
	a)	
	b)	
	c)	
	d)	
	e)	
	f)	
7.	COMPANY IN TERMS OF PERCENTA NAME GHANA GOVERNMENT INSTITUTIONS	HAREHOLDING STRUCTURE OF THE AGES? PERCENTAGE%
	INDIVIDUALS	 %
8.	WHICH OF THE FOLLOWING DIVID COMPANY? PLEASE TICK	END POLICIES IS PURSUED BY THE
	[] STABLE DIVIDEND POLICY	BADW
	[] CONSTANT PERCENTAGE OF I	EARNING
	[] LOW BUT REGULAR DIVIDENI	OS PLUS EXTRA DIVIDEND IN ANY
	YEAR OF HIGH EARNINGS	
	OTHERS (PLEASE SPCIFY)	
	9. IS THERE ANY REASON FOR THE C	COMPANY'S CHOICE OF
	DIVIDEND POLICY IN QUESTION 8?	
	[]YES []NO	

IF YES PLEASE EXPLAIN BRIEFLY
10. WHAT IS THE FREQUENCY OF DIVIDEND PAYMENT OF THE
COMPANY? PLEASE TICK
[] QUARTERLY
[] SEMI-ANNUALLY [] ANNUALLY
[] OTHERS (PLEASE SPECIFY)
and the same of th
11. ARE THE COMPANY'S CURRENT DIVIDEND PAYMENTS BASED ON THOS
OF PREVIOUS YEARS?
[] YES [] NO
12. WHAT EXTERNAL OR INTERNAL FACTORS DO YOU THINK
WOULD INFLUENCE THE DIVIDEND POLICY OF THE COMPANY? PLEAS
LIST IN DESCENDING ORDER OF IMPORTANCE.
WUSANE NO
TERNAL FACTORS
·

EXTERNAL FACTORS
a)
b)
c)
d)
13. SINCE IT'S LISTING IN THE STOCK EXCHANGE, HAS THE
COMPANY EVER CHANGED OR ADJUSTED ITS DIVIDEND POLICY? [] YES [] NO
14. BRIEFLY EXPLAIN THE REASON FOR YOUR CHOICE OF
ANSWER FOR QUESTION 13 ABOVE?
15. DO SHAREHOLDERS INFLUENCE THE COMPANY'S
DIVIDEND DECISION IN ANY WAY?
[] YES [] NO
16. IF THEY DO, THEN PLEASE EXPLAIN BRIEFLY HOW THEY DO SO

17. IN THE HISTORY OF THE COMPANY HAS ANY CONFLICT EVER ARISING
BETWEEN MANAGEMENT AND INVESTORS, WITH REGARD TO THE
DIVIDEND POLICY PURSUED?
[] YES [] NO
IF YES, BRIEFLY EXPLAIN WHAT HAPPENED AND HOW IT WAS RESOLVED
KNUST
18. WHICH OF THE FOLLOWING DO YOU CONSIDER MOST IMPORTANT TO
SHAREHOLDERS?
[] CAPITAL APPRECIATION
[] DIVIDEND PAYMENT
19. WHAT DO YO <mark>U TH</mark> INK THE REACTION O F SHAR EHOL DERS WOULD BE
19. WHAT DO TOO THINK THE REACTION OF SHAREHOLDERS WOULD BE
IN THE FOLLOWING SCENARIOS (PLEASE TICK)
SA SA

P	LEAS	SE RANK THE FOLLOWING IN NUMERICAL ORDER OF		
IMPORTANCE (I.E. 1=MOST IMPORTANT, FOLLOWED BY 2, 3, ETC.) IN				
THE WAY THEY INFLUENCE DIVIDEND DECISIONS IN YOUR COM				
[]	LIQUIDITY OF BUSINESS		
[]	TAX POLICY		
[]	LEGAL FACTORS		
[]	SHAREHOLDERS PREFERENCE		
[]	WORKING CAPITAL REQUIREMENTS		
[]	FIXED ASSETS EXPANSION		
[]	NEED TO PAY DEBTS		
[]	STABILITY OF EARNINGS		
[]	PROFITABILITY		
[]	ANY OTHERS (PLEASE SPECIFIY)		
Π	N YO	UR OPINION, DO YOU THINK DIVIDEND POLICY IS RELEVANT TO		
THE OPERATING PERFORMANCE OF A COMPANY?				
[] Y	ES []NO		
		THE BUILD		
V	VHA]	ADVISE WOULD YOU GIVE TO INVESTORS IN TERMS FO		
DIVIDENDS AND CAPITAL GAINS?				
	T [[[[T T T T T T T T T T T T T T T	THE W [] [] [] [] [] [] [] [