

# Impact of capital structure on the profitability of listed banks in ghana

[Finance](#), [Banks](#)



## RESEARCH PROPOSAL

# INTRODUCTION

### 1. 1 Research Background

It is noticed in the business field, especially among scholars in finance, that every firm employs the use of capital in its business. The capital employed may be consisting of debt and/or equity (ownership contribution). Debt is any external funding which is repayable and has an associated cost and may be direct (such as interest payment) or indirect (such as agency cost). The Debt could also be a short term or long term and employed in different forms such as taking a credit facility directly from a financial institution, issuing (warrants) bonds, using lease financing or taking a trade credit to finance their business.

Capital structure consists of debt and equity used to finance the firm. The choice between debt and equity for a business firm has implications on the value of a firm as well as strategic importance for corporate managers (Brealey et al, 2008 and Ross et al 2008, and Bodie et al 2009).

Aiming at maximizing a firm's value has been every firm's top priority. Antwi et al (2012) therefore postulated that a firm could aim at maximizing its value by assessing how its capital structure or financial leverage is made up and how that debt equity composition impact on the value of the firm.

Therefore, there have been many studies inspecting the link between capital structure and the performance of firms and noted that, the capital structure decision plays an important role in the performance of firms, although findings of these studies are inconclusive to some extent.

Capital structure is about putting in place the structure, processes and mechanism that may ensure the firm is being directed and managed in a way that enhances long-term equity value through accountability of managers and enhancing organizational performance, (Kajananthan & Nimalthasan 2013). The ability of the organization to carry out their stakeholders need is closely related to the capital structure. Capital structure in finance term means the way a firm finances his assets across the blend of debt, equity or hybrid securities (Saad, 2010).

For many years it was thought to be an advantage for a firm to borrow to finance its operations so long as the firm's ability to pay the debt and any associated cost remains unquestionable and the debt finance raised, was invested sensibly.

The amount of debt financing that a firm can take without it affecting that firm negatively has gone through a series of research in the past periods. The interest of financial economists in the amount of debt a firm can take was stimulated by Modigliani and Miller, popularly referred to as MM in their article published in 1958 and has come to be known as modern theory on capital structure.

They undertook their research under a very restrictive set of assumptions that - no possibility exists for firms to go bankrupt, the absence of taxes; market participants can borrow or lend at risk free rate; there are no brokerage or transaction charges among others. MM in their article, points

out that in real world, factors such as taxes and interest rate payment affect the debt equity composition of a firm's capital and the value of a firm.

The research of MM attracted other researchers such as Fama and Miller (1972), Hirshleifer (1966), Stiglitz (1969, 1972), Scott, J. (1979) and so on, who conducted further research on the topic to establish the correlation between capital structure and firm's value/ profitability under different and more general assumptions. Since then, the study of capital structure and its debate has received a lot of attention from academicians, researchers on finance, financial analysts and practitioners; however most of these studies have occurred in the developed countries or in the developed economies.

## **1. 2 Statement of Research Problem**

There is a general lack of valid agreement on the nature of the link between capital structure and profitability in the less developed and developing countries. Since Modigliani and Miller (1958) came out with their theory on capital structure, many researchers in finance carried out several studies on the relationship between capital structure and profitability. However, most of these studies have been done in developed countries where economic conditions are relatively stable such as the United States and Britain.

In Ghana where business economic factors are relatively unstable, scholars and researchers in finance have also carried out some studies on capital structure and its relations to firms' profitability to find out whether their findings would be consistent with those in the developed economies.

However, previous studies in Ghana on capital structure however have not

adequately explored the relationship between capital structure and firm's profitability or value.

The empirical study of Awunyo-Vitor and Badu (2012) for instance focused on the effect of capital structure on performance of listed firms in Ghana. Similarly, the work of Abor (2005) also examined the link between corporate governance and capital structure and that of Amidu (2007) only examined the determinants of capital structure of banks in Ghana.

Studies on capital structure have been done on firms in the service industry in Ghana (Tornyiva, 2013; Amponsah, 2011); on some listed firms in Ghana (Akoto and Awunyo -Vitor, 2013) and also on firms in the banking industry in Ghana (Gatsi and Akoto 2010).

The objective of the present study therefore is to fill the gap in scholarly literature by ascertaining the impact of capital structure on the value of the firm within the context of listed banking companies in Ghana.

### **1.3 Purpose of Research**

The purpose of the Research is to find out the relationships between the major variables of capital structure and the profitability of some listed banks in Ghana by performing various tests through hypothesis testing.

#### Research Hypotheses

The study seeks to test and validate the following theoretical hypotheses to investigate the impact of capital structure on profitability of listed banks;

*H<sub>01</sub> = Capital structure has no significant impact on bank's profitability.*

*H<sub>02</sub> = Capital structure has significant impact on bank's profitability.*

#### **1. 4 Research Objectives**

The general objective of this study is to examine the impact of capital structure on the profitability of listed banks in Ghana.

Specifically, the study objective seeks;

1. to examine the effect of short term debt/liabilities on the profitability of the selected banks
2. to examine the effect of long term debt/liability on the profitability of the selected banks
3. to examine the effect of equity on profitability on the selected banks.

#### **1. 5 Research Questions**

In order to achieve the above stated objectives, the study intends to provide answers to the following research questions:

1. To what extend does short term debt/liability affect the profitability of the selected banks?
2. To what extend does long term debt/liability affect the profitability of the selected banks?
3. To what extend does equity affect the profitability of the selected banks.

## **1. 6 Significance of the Research**

In Ghana, studies on capital structure relating to the banking industries are very scanty. The appropriate choice of capital structure for a company by its corporate and financial managers is very crucial, because capital structure affects the company's profitability and the long term survival of the company depends on its profitability. The findings and recommendations of this research would go a long way to help management of these selected Ghanaian banks to make such an important strategic decision on the debt equity mix for their companies.

To academia, it is envisaged that the study will contribute to academia such that it will serve as relevant source of reference for future researchers. Providing suggestions for further studies, the study will generate more interests among researchers to explore further on the impact of capital structure on the profitability of listed banks in Ghana.

It would contribute to literature on capital structure in the banking industry and the findings and recommendations would serve as bases for further research.

## **1. 7 LITERATURE REVIEW**

The theory of capital structure traces back to the original works of Modigliani & Miller (1958) whose position was that capital structure is irrelevant to firm's performance when we have perfect capital markets with no transaction cost and taxes. By their theory, leverage has no effect on profitability since the use of debt or equity financing simply identifies the sources of funds available to a firm and that does not in any way influence

the value of a firm. Over time, their irrelevance theory was criticized for ignoring taxation and that their assumption of perfect capital markets is not real.

New dimensions have been added to the question of relevance or irrelevance of capital structure over the past few years. M&M declared that in a world of frictionless capital markets, there would be no optimal financial structure. This theory later became known as the “ Theory of Irrelevance’ . In M & M’s over-simplified world, no capital structure mix is better than another.

According to Richard C. Osborn, “ The term ‘ Capital Structure’ is used to mean the financial plan according to which all assets of a corporation are furnished. This capital is supplied by long and short term borrowings, the sale of preferred and common stock and the reinvestments of earnings.”

The main target and goal of all financial management is to maximize the wealth of their owners or shareholders of the firm. Shareholder wealth in turn is defined as the current price of the firm’s outstanding ordinary shares. Because debt holders, suppliers of goods and services and employees all have a priority claim it stands to reason that if the wealth of the shareholders are maximized all other parties will stand to benefit (or at least not be disadvantaged) if this goal is fulfilled. It should however be noted that profit maximization and wealth maximization are not synonymous. A firm can undertake a variety of actions that might improve short term profit that are either not translated into cash flows (i. e. selling to firms or individuals that have no realistic probability of paying) or engaging in other practices that



are either not sustainable or ethical. The timing and magnitude of cash flows and their associated risk are therefore the key drivers of the firm's share price and the wealth maximization of the owners of the firm (Gitman, 2003; Firms *et al*, 2008).

Abor (2005) investigated the relationship between capital structure and profitability of listed firms on Ghana Stock Exchange for five years. He applied regression to estimate functions related to return on equity (ROE) with measure to capital structure. The results of the study reveal a significantly positive relation between the ratio of short-term debt to total assets and

ROE was found. Also the results, significant positive association between the ratios of total debt to total assets and return on equity. The study suggested that profitable firms depend more on debt as their main financing option.

Amidu (2007) *also* conducted a study to investigate the dynamics involved in the determination of the capital structure of the Ghana banks. The dependent variables used in this paper are the leverage (LEV) is total debts divided by total capital; short-term debt ratio (SHORT) is total short-term debt to capital while long-term debt ratio (LONG) is the total long-term debt divided by total capital. The explanatory variables include (PRE) profitability, (RSK) risk, and asset structure (AST), tax (TAX), size (SZE) and sales growth (GROW). The regression line model is used in this research and the result was a negative relationship between profitability and leverage. The results of prior studies show that higher profits increase the level of internal financing

(Titman and Wessels 1988; and Barton 1989). Profitable banks accumulate internal reserves and this enables them to depend less on external funds. The results of this study show that profitability, corporate tax, growth, asset structure and bank size influence bank's financing or capital structure decision. The significant finding of this study is that more than 87 percent of the banks, assets are financed by debts and out of this short-term debt appear to constitute more than three quarters of the capital of the banks. This highlights the importance of short-term debts over long-term debts in Ghanaian banks financing.

Ebaid (2009) examined the capital structure and performance of firms, basically the aim was to check the relationship between debt level and financial performance of companies (listed at Egyptian stock exchange during the period of 1997 to 2005). By using the three accounting based measure of performance (ROA) return on assets (ROE) return on equity and gross profit margin. He found that there is negative significant influence of short term debt (STD) and the Total debt (TD) on the financial performance measured by the return on asset (ROA) but no significant relationship found between long term debt (LTD) and this measure of financial performance. He also proposed that there is not significant influence of the debt (TD, STD and LTD) on financial performance measured by both of gross profit margin and Return on equity. The results also indicated that control variable firm size has no significant effect on the firm's performance. In this research paper least squares regression model was used to check the performance of the firms.

Pratheepkanth (2011) conducted a study regarding the capital structure (CS) and its impact on financial performance during 2005 to 2009 of business organizations in Sri Lanka. The result of research validated a negative relationship between capital structure (CS) and financial performances of the Sri Lankan companies. Pal and Soriya (2012) suggested that intellectual capital (IC) performance of Indian pharmaceutical and textile industry. The data was gathered from the 105 pharmaceutical companies and 102 textile companies. Dependent variables used in this study includes MB (market to book value), ROA (return on Asset), ATO (asset turnover ratio) and ROE (return on equity), independent variables are PC, DER, VAIC and sales. Correlation and regression analysis were conducted to find the results. The use of MB as the market valuation is also debatable because the market sentiments of the stakeholders may not always consider financial statements of the company.

Considering the views of the various capital structure theories (the trade-off theory, the pecking-order theory, the signaling theory and the market-timing theory), various firm level qualities have been identified by empirical literature as factors that decide the firm's capital structure or leverage. Some of these qualities considered are profitability, age, the firm's size and the structure of the firm's asset. Others are the growth of the firm, how risky its business is, and its tax and ownership structure.

Explanation on how capital structure is related to the profitability of a company could be given by using the pecking order theory. The theory states that companies would firstly use internally generated fund (IGF) rather

than funds obtained from outside the company when it comes to funding its business projects or activities. The order of choice is as follows: the company would use the source of funds that is least risky to the one that is most risky, this happens for the fact that managers of a firm are well informed on the (financial) issues of the firm than the other stakeholders outside, so there is information asymmetric, as Myers (1984) puts it, between the managers who are inside stakeholders and the less informed other stakeholders including market participants.

Retain earnings are therefore, the main source of finance and the most reliable which has the least cost. Therefore, Titman and Wessels (1988) and Barton et al (1989) concurred that companies which make very high profit, under normal circumstances, would keep moderately lower to debt ratios because they are able to obtain the needed funds for the business activities or operations from internal sources.

The profitability level of a company among other things is largely influenced by its capital structure policies. Several works have been done on the relationship between capital structure and profitability of a firm. From extant literature it has been found that there is a significantly positive correlation between the ratio of short-term debt to total assets and return on equity (Abor (2005), Kyereboah-Coleman (2007a), Berger and Bonaccorsi di Patti (2006), Chiang et al (2002)). There was however, a negative relationship between long-term debt to total assets ratio and ROE. That notwithstanding, the overall ratio of total debt to total assets and return on equity was

positive in the work of Abor, (2005) when he studied the profitability of firms listed on the Ghana stock exchange.

Findings of Kyereboah-Coleman (2007) also revealed similar results, in which highly leveraged microfinance institutions performed better compared to lowly leverage microfinance institutions. Highly leveraged companies were also able to reduce agency cost by the debt compelling managers to act more in the interest of shareholders thereby increasing the value of the firm, (Berger and Bonaccorsi di Patti, 2006).

These findings contradicted with MM's (1958) prove of capital structure irrelevancy under very restrictive assumptions, perfect capital markets, homogenous expectations, no taxes, and no transaction costs that do not hold in the real world. The issue now is what amount of debt/equity ratio should a firm have for profit maximization. This research work therefore seeks to find the impact of capital structure on the performance or profitability of listed banks in Ghana.

## **1. 8 METHODOLOGY**

To investigate the impact of capital structure on the profitability of listed banks in Ghana, this study proposes to use the methodologies adopted in earlier research work on this issue. As other studies have discussed these relationships, conceptual frame work of our study is based on deduction method and for analysis of data collected from secondary sources quantitative techniques shall be employed. Analysis of data is proposed to

be done through descriptive statistics, correlation matrix and regression models.

## **1. 9 RESEARCH LIMITATIONS**

Owing to time and other resource constraints, a sample of listed banks will be drawn from the entire list of banks in Ghana. This limits the study's ability to generalize findings because the sample may not reflect the same attributes of non-sampled companies. In other words, the external validity of the study is limited in scope.

The study will employ the use of secondary data, which may be taken from firms' audited annual reports and it has its own limitations, thus, the competitive nature of any organization may prevent of revaluation of any confidential details. Therefore, it is only rearrangement of data given in financial statements. Analysis and discussions are based on the available data and the knowledge of the selected firms and therefore; would not control the data collection or constraints in the original data analysis.

However, be that as it may, the limitations to be encountered thereon will not be a hindrance to the validity nor affect the reliability of the outcome of the study.

## **1. 10 ORGANISATION OF THE STUDY**

In examining the impact of capital structure on the profitability of listed banks in Ghana, the study will be organized into five main chapters with each chapter concentrating on specific aspect of the study.

The first chapter shall be the introduction and this will provide background to the study, the problem of the study, the objectives, and research questions, significance of the study, scope and limitations as well as organization of the study.

The chapter two of the study will deal with the relevant literature relating to the subject of the study. The chapter will cover theoretical, empirical and conceptual review on various related works to the study.

In chapter three, the study will explain the methodology adopted by the researcher, the data collection techniques and analysis. Chapter four of the study will deal with the analysis of the data for the study and will also discuss the findings that will be revealed thereon.

The findings, conclusions, recommendations and suggestions for further studies will be dealt with in chapter five of the study.

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