UNIVERSITY OF EDUCATION, WINNEBA

USING FINANCIAL RATIOS TO ANALYSE THE FINANCIAL PERFORMANCE OF MANUFACTURING COMPANIES IN GHANA: A CASE OF GUINNESS GHANA BREWERIES

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JULY, 2019

DECLARATION

STUDENT'S DECLARATION

I, **CAROLINE ZIEME**, declare that this project report, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:…….

DATE:…….

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of project report as laid down by the University of Education, Winneba.

SUPERVISOR'S NAME: DR. JOSEPH MBAWUNI

SIGNATURE :……

DATE:…….

DEDICATION

This work is dedicated to my wonderful mother Mrs Zieme Gloria for her care and guidance throughout the time of study and to all my family members. Finally to my spiritual counselor Rev. Victor Kusi Boateng for all his prayers and support, God richly bless them all.

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TABLE OF CONTENTS

EDUCATION FOR SERVICE

LIST OF TABLES

TABLE **PAGE**

EDUCATION FOR SERVICE

LIST OF FIGURES

EDUCATION FOR SERVICE

ABSTRACT

In today‘s financial world, financial performance is a requirement amongst the perspective of various stakeholders, be it in the management, lenders, owners and investors‘ perspective. Financial performance is crucial for taking financial decisions related to planning and control. Hence, it forms the basis as one of the importance for taking financial decisions effectively. Manufacturing Sector plays an important role in economic development of a country. The manufacturing system of Ghana is featured by a large network, producing different kinds of assorted product to be consumed by the people Ghana. Guinness Ghana Breweries Limited is among the leading manufacturing companies in Ghana and is deeply engaged in human and economic development at the national level. This paper attempts to analyse the financial performance of manufacturing company and to the extent at which financial performance of Guinness Ghana breweries limited were examine on liquidity, profitability and capital structure ratios. Ratios and descriptive design was adopted using the published financial statements of company listed on Ghana stock exchange for ten years periods. Microsoft Excel was also used to obtain the mean and Standard deviation. This paper therefore recommends that there is the need to bring organizations system under control and make them to fit.

EDUCATION FOR SERVICE

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Performance of a company is usually related to how well a company can use it assets, shareholder equity and liability, revenue and expenses. Financial ratio analysis is one of the best tools use to analysis performance of any company. Regular review of company‘s financial health status is a valuable practice. Hsieh & Wang, (2001). Financial ratios are numerical values and they are retrieved from company‘s financial statements Mahipal (2011). Analysis based on financial ratios is the most important method to evaluate company‘s performance from different aspects of business. Financial ratios are defined as relationships determined from a company‘s financial information and used for comparison purposes Saleem & Rehman, (2011). They are considered as the optimal tools for analysis to reflect the liquidity and performance of the company during certain period. Moreover, they also help to identify strengths and weaknesses. Additionally, these ratios help to form a solid foundation for financial analysis by properly establishing relationships between items in the statement of financial position and income statement within the firm. Innocent *et al.* (2013). Okwuosa (2005) sees ratio analysis as one number expressed in terms of another to show the relationship between them. He adds that in financial accounting and reporting, it is generally agreed that there are certain relationships between items shown in the income statement and those in the statement of financial position. Therefore, ratios are used as a means of expressing these relationships. Nweze (2011) defines ratio analysis as financial statement analysis uses as a primary tool ratios, which relate two figures applicable to different categories. Chandra (2008) adds

that financial ratio analysis is a study of ratios between various items or groups of items in financial statement. Pandey (2010) sees financial analysis as a process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the firm‘s items in statement of financial position and the income statement. He adds that ratio analysis is a powerful tool of financial analysis. A ratio is used as a benchmark for analyzing performance of a company. So, the relationship between two accounting figures, expressed mathematically, is known as a financial ratio (or simply as a ratio). We used ratios such current ratio and quick ratio to measure the liquidity position and return on capital employed, price per earnings ratio and earnings per share to analysis profitability of companies. It analysis the uses of its assets and control of its expenses. It determines the greater the coverage of liquid assets to short-term liabilities and it also It measures manufacturing company overall efficiency and performance. It determines share market condition of manufacturing companies. It also used to analysis the manufacturing companies past financial performance and to establish the future trend of financial position.

1.2 Statement of the Problem

Literatures have shown that most of the studies conducted on financial ratio analysis and corporate profitability dwell largely on financial sectors. However, most stake holders find it difficult to analysis and interpret performance of companies using financial ratios. A look at the annual reports of manufacturing companies in Ghana shows large fluctuations in their performance. It is therefore essential to analysis performance using profitability ratios, liquidity ratios and capital structure ratios. The main objective of any

company is the creation of wealth for its stakeholders, although this mostly applies market facts. This means progress needs to be measured to show the return in total by analyzing the level of efficiency, liquidity and profitability. More importantly, financial ratios are well recognized and followed the rules of General Accepted Accounting Principles (GAAP). The financial ratios are still popular among most of the companies because non-financial measures such as customer satisfactions, quality, market share and human resources, tend to be subordinated to financial figures. In addition, the past, present and future performance of the company is necessary since the company operate on going concern. In assessing the overall financial condition of a company, the income statement and the statement of financial positions are important reports, as the income statement captures the company's operating performance and the statement of financial position shows its net worth. Financial performance could be assessed using the following key measures which are important to assess the current financial position and performance. These are descriptive and analytical measures of financial position and performance. Descriptive measures include total assets, total liabilities, stockholder‘s equity, total revenues, total expenses and net income. And analytical measures of financial position and performance could include profit-ability, efficiency, liquidity and solvency measures. This study therefore will use financial ratios to analysis ten years (2008-2017) performance of a manufacturing company in Ghana (Guinness Ghana Breweries limited).

1.3 Objective of the Study

The main objective of the study is to use financial ratios to analysis the performance of a manufacturing company. The specific objectives include

- To examine the performance of Guinness Ghana breweries Limited in 2017 using liquidity ratios.
- To analyze the performance of Guinness Ghana Breweries Limited in 2017 using profitability ratios.
- To analyze the capital structure of Guinness Ghana Breweries Limited as at close of 2017 and its contribution to the company performance.

1.4 Research Questions

- How is the performance of Guinness Ghana Breweries Limited in 2017 using liquidity ratios?
- How is the performance of Guinness Ghana Breweries limited in 2017 using profitability ratios?
- What is the performance of capital structure of Guinness Ghana Breweries Limited in 2017?

1.5 Significance of the Study

This research concentrates on financial ratios analysis which is used to describe a significant relationship between figures shown on the statement of financial position and income statement. Financial analysis is mainly done to compare the liquidity, profitability and financial soundness of company by diagnosing the information contained in the

financial statements. Financial ratio analysis is done to identify the financial strengths and weaknesses of the company by properly establishing relationship between the items of statement of financial position and income statement for period of ten years. It helps in better understanding of company financial position, growth and performance by analyzing the financial statements with various tools and evaluating the relationship between various elements of financial statements. From a management perspective, managers can base on financial ratios to have the right choice in the decision-making process and efficiently adopt new policies and new management system. Moreover, investors can predict the future situation, earning capacity of their invested companies and how safe their investments are. Ratio analysis also let other creditors know the ability of a Company to pay off its debt and that company‘s potential in the future to keep lending it. The significance of financial ratios to the government can be found in Industry‘s ratio. Many financial ratios analyze from different companies in the same Industry help the government have an exact evaluation and decide what financial Support they should do to help those companies. It will help shareholders to know their returns on shares and equity. Analyzing financial performance based on financial ratios will helps managers get a deep understanding what situation their companies are, as compared to their competitor, to strengthen it in the upcoming year and give investors right investment decision.

1.6 Limitation of Study

Due to constraints of time and resources, the study is likely to suffer from certain limitations. Some of these are mentioned below so that the findings of the study may be understood in a proper perspective.

The limitations of the study are:

The study is based on the secondary data and the limitation of using secondary data may affect the results.

The secondary data was taken from the ten years annual reports of Guinness Ghana. It may be possible that the data shown in the annual reports may be limited period which does not effectively show the performance of the company.

1.7 Scope of the Study

According to Akpakpan (2005), scope of the study is the limits or boundary lines of the study. It is the areas covered by the research or the extent the researcher would go in view of the impossibility of covering every financial statement, this study is therefore restricted to the analysis of the income statement and the statement of financial by means of financial ratios. The scope of the study is to assess the financial performances of manufacturing company for the periods 2008-2017.The periods were chosen because the researcher wants to assess the more recent profitability of the company under study. The concept of ratio analysis and techniques were chosen from financial statement, this study is therefore restricted to the analysis of the income statement and the statement of financial position by means of financial ratio.

1.8 Organization of the Study

This study was structured into five (5) chapters; the first chapter dwelled on the Background of the study, Statement of the problem, Objectives of the study, Research questions, Significance of the study, Limitation of the study, Scope of the study and Organization of the study. Chapter two of the study will deal with review of related literature. Chapter three which is the methodology of the study talks about the research design, population, sampling and sample technique, relevant period, data collection technique, data Collection and data analysis. Chapter four is the Results of whereas the concluding chapter highlights on the summary of findings, conclusion and recommendations to the study.

EDUCATION FOR SERVICE

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews pervious literatures which are relevant to the objectives. As stated in the objectives the researcher examines pertinent researches relating to financial ratios and performance in prior periods. The chapter covers literature relating to the uses of financial ratios. Several uses of ratios are discussed with particular reference to performance. Specifically, financial ratios are discussed and how they are used to examine performance. Other ratios including profitability, liquidity and capital market ratios are also reviewed. Furthermore, the chapter also looks at literature relation to performance, especially the performance of manufacturing companies in Ghana. With a clear understanding that ratios are not perfect tools in measuring performance, the researcher also reviews previous researchers in the area of limitations to the use of financial ratios.

2.1 Definitions of Terms

2.1.1 Financial Ratios

Dansby et al. (2000) define ratio as ―fractional relationship of one number to another". Accounting ratios describe the significant relationship which exists between figures shown on a statement of financial position and income statement in a budgetary control system or in any other part of accounting organization". On the other hand, Needles *et al*. (1996) defined ratio analysis as ―a technique of financial analysis in which meaningful relationship is shown between the components of financial statements". Ratio analysis is

the calculating and interpreting of financial ratios to determine and analyze company‘s performance. The basic inputs to ratio analysis are the firm‘s income statement and statement of financial position Gitman (2009). There are different ratio categories among the financial ratios which reflect various aspects of a company‘ performance. They are categories as follows; profitability ratios, liquidity ratios and Capital structure ratios. Accounting ratios are numerical values, and they are retrieved from company‘s financial statements. Analysis based on financial ratios is the most important method to evaluate company performance from different aspects of business. According to Saleem & Rehman, (2011) financial ratios are define as the relationships determined from a company‘s financial information and used for comparison purposes. They are considered as the optimal tools to reflect the financial conditions and performance of a company under certain period.

2.1.1.1 Profitability ratios

According to Phuong, (2016) Profitability is a modulation of two words profit and ability. Profitability is defined as the potential of a company to exceed its overall revenue from its total expenses which results in profit generation. Dave (2012) defines profitability as an ability to make profit from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can make profit by using all the resources available in the market. Profitability is also the ability of a given investment to earn a return from its investment. However, the term ―profitability" is an index of efficiency and management guide to greater efficiency. Although profitability is an important yard stick for accessing the efficiency and performance of a company, a

proper degree of efficiency can be accompanied by an absence of profit. The net profit figure simply reveals a satisfactory balance between the values received and the values given. The change in operational efficiency is to match one of the factors on which profitable of an organization largely depends on. Furthermore, there are many other factors besides efficiency which affect the profitability. Carole (2012) says profitability means that the revenue exceeds the expenses of the business. This is different from comparing assets and liabilities on a statement of financial position to determine financial position. A profitable business may be in a weak financial position and a business with a strong financial position may not be profitable. He adds that it must be evaluated on both a long term and a short-term basis because business goals and decision may differ depending on the time frame used. Profitability ratios are the ratios receiving most concern in a company. It measures the ability to generate profits or how well company gains profits. Moreover, profitability ratios are one of the most important factors to evaluate business from investor‘s perspective since they show overall efficiency and performance of company. If a company wants to attract investors, ratios are the first things those stakeholders tend to look at obviously. According to Bernstein (1983), there are several criteria to measure financial performance of a company profit and sales are two of the most widely used measures used. James Clausen (2009), state that the profitability ratio analysis uses income statement and statement of financial position to measure company profit performance. The income statement and statement of financial position are two important reports that show the profit and net worth of the company. It analyses how well the company is doing in terms of profits compared to sales. He also shows how well the assets are performing in terms of generating revenue. The statement

lists the value of the assets, as well as liabilities. In simple terms, the main function of the statement of financial is to show the company‘s net worth by subtracting liabilities from assets. He said that the statement of financial position does not report profits, there‘s an important relationship between assets and profit. The business owner normally has a lot of investment in the company‘s assets. Reilly and Brown (2005) stated that financial statement analysis seeks to evaluate managerial performance in several important areas including profitability, efficiency and risk. The goal of that analysis is to provide insights that will help us project future managerial performance. They also suggest that financial ratios should be examined relating to the economy, the firm‘s industry, firm‘s main competitors and the firm‘s past relative ratios. The relationship between liquidity and profitability has been discussed intensively since this it is crucially important for companies. Myers (2003) mention that excess liquidity is an expense for the company. Money tied up in current assets can be alternatively deposited or invested and generate interest income. Thus, the price of working capital over financing is the interest rate. In the case of liquidity deficit, the company must either attract short term loan or sell some liquid assets, which is also an expense. Only the optimal level of liquidity benefits profitability. Profit determinants found that liquidity of Ukrainian firms, measured by current ratio, has a significant positive influence on profitability. One can name the size of the company, intangible assets and liquidity among other important determinants of profitability for companies operating in the emerging markets. Therefore, liquidity has a considerable impact on firm‘s profitability and that is why it requires proper management. Profitability ratios includes Gross profit margin, Net profit margin, return on assets, return on equity and return on capital employed.

2.1.1.2 Gross profit margin

Gopinathan (2009), discuss that Profitability Ratios measure margins and returns such as gross, Operating, Pretax and Net Profits, ROA ratio, ROE ratio, and ROCE ratio**.** He determines the Gross profit as the surplus generated by sales over cost of goods sold. He discussed about the Gross Profit Margin = Gross Profit/Net Sales or Revenue. Moreover, Operating profits are arrived at by deducting marketing, administration and depreciation costs from the gross margin. Nonetheless, He explains Operating Profit Margin = Operating Profit/Net Sales or Revenue. Nevertheless, pretax profits are computed by deducting non-operational expenses from operating profits and by adding non-operational revenues to it. Pretax Profit Margin = Pretax Profit/Net Sales or Revenue.

2.1.1.3 Net profit margin

Net profit margin is calculated as the ratio between net profit and net sales. In other word, this ratio shows how much each sale earned by a company can be converted into profit which excludes all expenses. It access how profitable a company is after deducting all expenses, taxes, interest and preferred stock dividends (Reddy, 2013). According the research, the role of profit margin is important not only by the amount of profit that the owners can extract from the business, but also the line of defense for an advisory firm facing a decline in revenue when a bad market occurs. Kitces, et al. (2015). Gopinathan Thachappilly (2009), analysis about the net profit margin.Net Profit Margin = Net Profit/Net Sales or Revenue. He also explains that the returns on resources are divided into three categories such as ROA, ROE, and ROCE: At first the Return on Assets = Net Profit/ (Total Assets at beginning of the period + Total Assets at the close of the

period)/2) - The denominator is the average total assets employed during the year**.** Return on Equity = Net Profit/ (Shareholders' Equity at the beginning of the year + Shareholders' Equity at the close of the year)/2). Return on Capital Employed = Net Profit/ (Average Shareholders' Equity + Average Debt Liabilities) - Debt Liabilities.

2.1.1.4 Return on assets

According to Gitman (2009), Return on Asset (ROA) is a measure of the overall effectiveness of management in generating profits with available assets. Return on Assets (ROA) is an indicator of the success of a company for the management of wealth (assets) owned by the company, so that by increasing the ratio of Return on Assets (ROA) reflect the company's performance in managing assets held, so that it can generate profits or earnings. This ratio is used to measure the soundness of a company to generate earnings of all assets owned by the company. Emekekwue (2002) states that return on assets is a ratio that seeks to measure the amount of profit generated from the entire assets of the firm. ROA is one of five factors to predict business failure using a version defined as Earnings before Interest and Taxes / Total Assets. According to Hossari & Rahman (2005), the ROA is the single most common ratio in all the failure prediction studies based on their study including 53 previous studies. ROA is also a useful tool to investigate financial position, performance and company future predictions. Besides, assets are well utilized to generate income which is indicated through high percentage of ROA. The important of ROA in assessing company‘s financial position, performance and prospects was shown through survey by Gibson (1987). Chartered Financial Analysts was surveyed about the importance of many financial ratios and four different versions of

ROA were selected by at least 90% of the CFA respondents as a primary measure of profitability. Based on an investigation conducted by Jewell & Mankin, (2011), ROA should not be thought as a single ratio but a –category of ratios". Maria Zain (2008), in his articles he discusses about the return on assets as an important percentage that shows the company's ability to use its assets to generate income. He said that a high percentage indicates that the company's is doing a good utilizing of company's assets to generate income. He notices that the following formula is one method of calculating the return on assets percentage. Return on Assets = Net Profit/Total Assets. The net profit figure that should be used is the amount of income after all expenses, including taxes. He explained that the low percentage could mean that the company may have difficulties meeting its debt obligations. He also short explains the profit margin ratio on Operating Performance. He pronounces that the profit margin ratio is expressed as a percentage that shows the relationship between sales and profits. It is sometimes called the operating performance ratio because it's a good indication of operating efficiencies. There are four indicators in profitability ratios which are net profit margin, return on assets (ROA), return on equity (ROE) and return on capital employed (ROCE). In a different business cycle of a company, there is a strong statistical relationship between operating profit margin, net profit margin, ROE ratios This category of ratios consists of almost ratios which make a comparison between earnings related number from the income statement to total assets or average total assets. The ROA can be determined by velocity which is sales divided by assets. According to Rothschild (2006), he found out that ROA can be calculated as the product between margin and velocity. Moreover, ROA can be yielded by low-margin and

high-margin products of low-margin products are easier to make and flow through the assets at higher velocities.

2.1.1.5 Return on capital employed

ROCE has the advantage of being free from the bias that can result from differences in capital structure between firms .Balabanis, *et al*, (1988). ROCE is calculated by dividing net operating profit or earnings before interest and tax by the capital employed. The higher the ratio means much profit is generated from each currency of capital employed. However, it is stated that ROCE can damage company‘s health in long term according to an article in Management Today (1996). ROCE is considered to take profits rather than cash flow as the basis for calculating return since equipment is written down, the depreciation charge falls, and profits rise even though the cash generated may remain unchanged. One of the most important areas in the day to day management of the firm is the management of efficiency use of capital employed. Working capital refers to the funds invested in the current assets i.e. investment in stock, sundry debtors, cash and others current are essential to use fixed assets profitability for e.g.: A machinery cannot be used without raw materials. The investments on the purchase of raw material are identified as working capital. It is obvious that a certain amount of the fund is always tied up in raw material inventories. Working capital may be regarded as lifeblood of a business (Srinivas, 2012). Working capital is nerve system of any business. Without proper working capital management company cannot achieve its objectives and not possible to maintain financial soundness. So, in this perspective present study is undertaken to study working capital management through ratio analysis at Karnataka

Power Corporation limited. From the present study it is found that company financial position was seeing to be sound because the company tries to increase its production and net profit (Srinivas, 2012). Eljelly, (2004) elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets. The relation between profitability and liquidity was examined, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. The study found that the ratio was of more importance as a measure of liquidity than the current ratio that affects profitability. The size variable was found to have significant effect on profitability at the industry level. The results were stable and had important implications for liquidity management in various Saudi companies. First, it was clear that there was a negative relationship between profitability and liquidity indicators such as current ratio and cash gap in the Saudi sample examined. Second, the study also revealed that there was great variation among industries with respect to the significant measure of liquidity. Deloof (2003) discussed that most firms had a large amount of cash invested in working capital. It can therefore be expected that the way in which working capital is managed will have a significant impact on profitability of those firms. Using correlation and regression tests he found a significant negative relationship between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms. On basis of these results he suggested that managers could create value for their shareholders by reducing the number of days‘ accounts receivable and inventories to a reasonable minimum. The negative relationship between accounts payable and

profitability is consistent with the view that less profitable firms wait longer to pay their bills. Ghosh and Maji, (2003) in this paper tried to examine the efficiency of working capital management of the Indian cement companies during 1992 – 1993 to 2001 – 2002. For measuring the efficiency of working capital management, performance, utilization, and overall efficiency indices were calculated instead of using some common working capital management ratios. Setting industry norms as target-efficiency levels of the individual firms, this paper also tested the speed of achieving that target level of efficiency by an individual firm during the period of study. Findings of the study indicated that the Indian Cement Industry did not perform remarkably well during this period.

2.1.1.6 Return on equity

ROE shows how well a company can generate returns from shareholder‘s investment. Apparently, shareholder‘s equity consists of retained earnings, common stock, paid-in capital common stock and it does not include preferred stock. This ratio is calculated as net profit divided by shareholder‘s equity or multiplies profit margin by asset turnover by equity multiplier (Andrew, 2003). The ratio itself reflects three major dimensions of business from stakeholders‘ perspectives: income statement, profit generated from one dollar invested, how well assets can generate sales and amount of solvency risks (Eisemann, 1997). A low ROE indicates that the firm does not generate much retained earnings which might lead to funding problems and excessive solvency risk. Moreover, a low return on shareholder equity means that the company is seriously in a bad situation and this can limit external equity. It is stated that, character of an industry is not the only

force affecting ROE of a business. This ratio depends on customer niche, product strategy, and financial choices as well. Therefore, in the same industry, each business will exhibit some variety of behavior. According to Eisemann, (1997) a low ROE indicates weakness in an organization and this can lead to funding problems and excessive solvency risk. A low ratio can discourage the capital invested or external equity. Fundamentally, the higher the ROE ratio, the faster total shareholder equity and stock price will grow as profits in each year are added to the stock price of shareholders wealth. However, a study conducted by Rothschild, (2006) shows that the ROE itself is too abstract and removed from day-to-day business operations to be of any practical use in measuring and managing profitability. This ratio needs to be separated into its components.

2.1.2 Liquidity ratios

Liquidity can be examined along two basic dimensions: static and dynamic (Uyar, 2009). Static analysis is focused on traditional ratios (current and quick ratios) based on the data from the statement of financial position. These ratios assess to what extent current liabilities are covered by current assets. Dynamic analysis is based on cash outflows and inflows and uses cash conversion cycle to measure effectiveness of a company‘s ability to generate cash. It comprises both the statement of financial position and income statement data to create a measure with a time dimension. To conduct a comprehensive liquidity analysis both types of ratios are used. The essential part in management of working capital lies in maintaining liquidity in day-to-day operations is to ensure smooth running of the business and that it meets its obligations (Deloof, 2003). Liquidity

management, which refers to management of current assets and liabilities, plays an important role in the successful management of a business and secures future growth. The liquidity position of a business is about the degree in which it can dispose money. Liquidity management is necessary for all businesses, small, medium or large. Nevertheless, this is not an effortless task because managers must ensure that the firm is running in an efficient and profitable manner and in most cases, there are high possibilities of mismatch of current assets and current liabilities during this process. If this happens and firm‘s manager failed to manage it properly then it will affect firm‘s growth and profitability which will further lead to financial distress and finally firms can go bankrupt. Qasim & Ramiz (2011) indicate the fact that liquidity refers to the available cash for the near future, after considering the financial obligations corresponding to that period. Liquidity risk consist in the probability that the organization cannot be able to make its payments to creditors, as a result of the changes in the proportion of long term credits and short-term credits and the correlation with the structure of organization's liabilities. Further, Qasim and Ramiz (2011) says that liquidity management is very important for every organization that means to pay current obligations on business that include operating and financial expenses that are short term. Liquidity is particularly important to shareholders, long-term lenders and creditors, as it provides information about a business‘s safety margins afforded to creditors and its ability to repay loans. The levels of inventory, credit, accounts payable and cash that form part of the overall cash flow of a business affect the liquidity of the firm. Maness, (1994). By maintaining an appropriate level of liquidity, a business should be able to survive down turns and moreover, it may be able to exploit profitable opportunities as they arise Gitman, (1997).

On the other hand, as asserted by Cooper, et al (1998), illiquidity, unless remedied, will give rise to insolvency and eventually bankruptcy as the business‘s liabilities exceed its assets. Excessive debt exposes the business to potentially large interest costs and the risk of potential bankruptcy. Shareholders, long term lenders and creditors evaluate the level of risk they bear, and require compensation for the risks, which arise from a business's capital structure. The proportion of assets financed by creditors are of importance to shareholders, since creditors have a prior claim on the Liquidity ratios measure a business' ability to meet the payment obligations by comparing the cash and near-cash with the payment obligations. If the coverage of the latter by the former is insufficient, it indicates that the business might face difficulties in meeting its immediate financial obligations. This can, in turn, affect the company's business operations and profitability. The Liquidity versus Profitability Principle: There is a trade-off between liquidity and profitability; gaining more of one ordinarily means giving up some of the other. Morris and Shin (2010) conceptually defines the liquidity ratio as ―realizable cash on the balance sheet to short term liabilities.” In turn, ―realizable cash” is defined as liquid assets plus other assets to which a haircut has been applied. Ration analysis is one of the conventional way that use financial statements to evaluate the company and create standards that have simply interpreted financial sense. Raheman and Nasr (2007) in their study in which average collection period, inventory turnover in days, average payment period, current ratio, size of the firm, and financial assets to total assets ratio were the selected independent variables and net operating profit was the dependent variable found a strong negative relationship between the current ratio and profitability of the firms. The study also established a negative relationship between liquidity and profitability.

Furthermore, they found out a significant negative relationship between debt used by the firm and its profitability. Benjamin and Kamalavali (2006) in their study in which the independent variables used were current ratio, quick ratio, inventory turnover ratio, working capital turnover ratio, debtor‘s turnover ratio, ratio of current asset to total asset, ratio of current asset to operating income, comprehensive liquidity index, net liquid balance size and leverage and growth while dependent variable (profitability) was measured in terms of return on investment ROI established a negative association between ROI and the current ratio, cash turnover ratio, current asset to operating income and leverage. On the other hand, they established a positive association between ROI and the quick ratio, debtor‘s turnover ratio, current asset to total asset and growth rate. Dong (2010) in his study that focused on the variables that include profitability, conversion cycle and its related elements and the relationship that exists between them reported that the firms‘ profitability and liquidity are affected by working capital management. The relationship among these variables was found to be strongly negative. This denote that decrease in the profitability occur due to increase in cash conversion cycle. It is also found that if the number of days of account receivable and inventories are diminished then the profitability will increase numbers of days of accounts receivable and inventories. The importance of the fixed and current assets in the successful running of any organization. It poses direct impacts on the profitability and liquidity. There has been a phenomenon observed in the business that most of the companies increase the margin for the profits and losses because this act shrinks the size of working capital relative to sales. But if the companies want to increase or improve its liquidity, then it has to increase its working capital. James Clausen (2009), in his article he barfly express about

the liquidity ratio. He Pronounce that it analysis the financial statements that is used to measure company performance. It also analyses the income statement and statement of financial position. Investors and lending institutions will often use ratio analyses of the financial statements to determine company‘s profitability and liquidity. If the ratios indicate poor performance, investors may be reluctant to invest.

2.1.2.1 Current ratio

Gopinathan, (2009),he also state that current ratio help determine good financial performance .He explained that a business with high profitability can face short-term financial problems even its funds are locked up in inventories and receivables not realizable for months. Any failure to meet these can damage its reputation, credit worthiness and can lead to bankruptcy in some extreme cases. (Dansby et al., 2000). In addition, current ratio are work with cash and near-cash assets of a business on one side, and the immediate payment obligations (current liabilities) on the other side. The near-cash assets mainly include receivables from customers and inventories of finished goods and raw materials. Coupled with, current ratio works with all the items that go into a business' working capital and give a quick look at its short-term financial position. Current assets include Cash, Cash equivalents, Marketable securities, Receivables and Inventories. Current liabilities include Payables, notes payable, accrued expenses and taxes, and Accrued installments of term debt.

2.1.2.2 Acid test ratio

This measure the ability of a firm to pay all of its current liabilities if they come due immediately. (Dansby et al., 2000). It is a better measure of liquidity because unlike current ratio, it omits stock or inventory (which may not be easily turned into cash) from the current assets to get quick assets. It is measured by Current Assets Inventory/ Current Liability. The ratio provides a measure of the capacity of the business to meet its short-term obligations without any flaw. Normally, it is advocated to be safe to have a ratio of 1:1 as unnecessarily low ratio will be very risky and a high ratio suggests unnecessarily deployment of resources in otherwise less profitable short-term investments.

2.1.3 Capital structure

Gopinathan, **(**2009), in this article he expresses about capital structure**.** He mentions that the Ratio of Debt to Equity has Implications for return on equity debt ratios check the financial structure of the business by comparing debt against total capital, against total assets and against owners' funds. The ratios help checks how "leveraged" a company is, and the financial maneuverability of the company in difficult times. The concepts of leverage and other issues are examined below. 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 Debt Ratios formula is that Debt Ratio = Total Liabilities / Total Assets (Total liabilities include even non-interest-bearing operational liabilities) and Debt to Equity Ratio (Debt Capital Ratio) = Total Liabilities / Shareholders' Equity**.** Capitalization

(Term Debt Ratio) = Long-term Debt / (Long-Term Debt + Shareholders' Equity). Interest Coverage Ratio = Profit before Interest and Taxes (PBIT) / Interest Expense. Simultaneously, debt ratios and the related interest coverage ratio checks the soundness of a company's financing policies. One the one hand, use of debt funds can enhance returns to owners. On the other hand, high debt can mean that the company will find it difficult to raise funds during lean periods of business.. The ratio of these numbers tells a lot about the business. It is calculated by taking the debt owed by the company and divided by the owner‘s equity, also known as capital. The debt number may include all liabilities, or just long-term debt. Nelgadde (2010), debt collection and debt recovery tools a company guide to using debt solution tools for effective debt collection: credit insurance, a solicitor or debt attorney or a debt collection agency. Moreover, collection of accounts receivable, debt collection or debt recovery is an important source of a company‘s cash flow and business finance. As such, learning about credit management and debt recovery can prove vital for entrepreneurs.

2.1.3.1 Earnings per share

Gopinathan (2009), he stated that the EPS is computed by dividing the company's earnings for the period by the average number of shares outstanding during the period. He discusses that Stock analysts regularly estimate future EPS for listed companies and this estimate is one major factor that determines the share's price. Price/Earnings (PE) Ratio = Stock Price per Share / Earnings per Share (EPS). Hence, many investors prefer the Price/Sales ratio because the sales value is less prone to manipulation. Price/Sales (PS) Ratio = Stock Price per Share / Net Sales per Share. The Dividend Yield, the

dividend yield ratio annualizes the latest quarterly dividend declared by the company Dividend Yield = Annualized Dividend per Share / Stock Price per Share. Earnings per share ratio (EPS) are calculated as net income divided by a weighted average of common shares outstanding for the year (Consler, *et al.* 2011). EPS ratio measures the amount of net income paid to holders of common stock. There are some contradictory opinions about the EPS and P/E ratios. Higher EPS means a lower P/E ratio and investors tend to observe the P/E ratio closely to determine if a company is undervalued. Higher EPS also means more money the shares of stock are worth since investors are willing to pay more for achieving higher profits. By lowing the P/E ratio of many companies, the basic EPS will make the market appear undervalued to investors, and it helps to attract more money and increase the stock price. However, according to Financial Accounting Standards Board‘s chairman, there is no pure correlation between changes in EPS and price per share on the market (Mello, 1996). On the other hand, a valuation model was developed by Balsam & Lipka (1998) stated that the relationship between stock prices and accounting earnings had been studied. According to the model, there was an assumption that earnings effectively signal future cash flows and those shares prices are determined under rational expectations (Litzenberger & Rao 1971). Therefore, earnings can explain the prices.

2.1.3.2 Price earnings ratio

Another ratio reflecting market value ratio is price earnings ratio (P/E). The P/E ratio is widely used as a measure of relative stock valuation. Moreover, this ratio is an indicator to determine whether stocks are under or over valuation (Dudney, *et al.* 2015). In another

word, the P/E shows what market is willing to pay for stock based on its current earnings. Ashish, (2010). It is calculated as the ratio between market value share and price per earnings per share. According to mispricing view, it is stated that low P/E Ratios generate a higher return than stocks with high P/E ratios. However, there are some arguments about how P/E is calculated, and it significantly determines company‘s value. There are various ways to choose which earnings should go to P/E

Formula such as earnings from the previous year or net estimated earnings or last quarter‘ earnings multiplied by four. Most companies are using the traditional method and according to Kari Bayer, a quantitative strategist at Merrill Lynch & Co. in New York ―We just found that trailing four-quarter earnings is more reliable" Pratt, (2001). It is believed that taking P/E ratio based on historical earnings will form safer position for company; however, predicted earnings for the future should be made in case there are no earnings in the following period. Therefore, for new companies, the price-earnings ratio is not well-calculated. There is a study examining the relationship between P/E ratio and profitability which was conducted by Alexandra Wu (2014). He used a U-shaped graph to show whether firms with very high or very low ROE ratio had higher forward P/E ratio compared to other firms. In the test, the ROE was sorted into ten deciles to test the differences in P/E Ratio across the deciles. Among deciles 1 and 6, the relation between forward P/E and ROE was negative; on the other hand, it became positive among deciles 7 to 10.

2.2 Performance Measurement

McDevitt L.et al (1997). Business Performance improvements arising from increased manufacturing integration continues to be one of the primary competitive issues of the 90‘s. Recent research in to manufacturing systems integration Carrie & Macintosh, (1992) has identified the need for effective deployment of business objectives down through the organisation and the subsequent measurement of performance in critical areas as key elements of sustainable competitive advantage. The objective of the current research and development programme at the University of Strathclyde. Manufacturing Systems Group, is to provide industry with a comprehensive and rigorous set of tools, techniques and procedures to allow auditing of existing performance measurement systems against a reference model and consequently design more robust, flexible and integrated performance measurement systems. According to McDevitt, L. et al (1997). It is envisaged that a correctly structured and designed performance measurement system would provide the basis for a rigorous and effective performance management system which could be used as a management tool by strategic, tactical and operational levels of management. Carrie and Macintosh, (1992). Identified the value of using performance measurement to deploy business objectives and to pinpoint and monitor performance improvements. Other researchers have also noted the links between performance measures and strategic plans and/or critical success factors of the business. The research by Grady (1991) and Eccles and Pyburn (1992) supports the same conclusions drawn in the earlier research programme. The need for performance measures which support rather than contradict business objectives is now clearly established. Bititci, (1994). In addition, there is already considerable work being carried out by the accounting profession on

performance measurement. Indeed, most manufacturing organisations have extensive performance measurement systems based on cost and financial accounting practices. However, because these techniques are often based on old fashion overhead absorption methods they fail to support the current business objectives and do not enable continuous improvement (Bititci, 1993). More recent innovations such as Activity Based Costing improve allocation methods but still do not promote continues improvement and strategic orientation. Notable work has been carried out by Kaplan (1990) and Johnson and Kaplan (1987) in recognition of these weaknesses. Neely (1993) summarises the short comings of the current accounting practices with respect to performance measurement in manufacturing enterprises. Because, financial measures that are currently in place are not supporting the change process, there is a case for new styles of measurement systems that are appropriate to the needs of the modern manufacturing industry. McNair and Masconi (1987), Drucker (1990) and Russell (1992) show that there is a need for alignment of financial and non-financial measures that fit within a strategic framework. Furthermore, based on research carried out by Bititci and Swenson (1993), Blenkinsop and Burns (1991) and Gelders et al (1993) there is evidence that, even in companies where performance measures are employed, these are still being use in a manner which does not promote integration. There has been several cases cited where the company‘s strategy, improvement projects and performance measures were in conflict. A paper by Bititci (1995) asserted that performance measurement should be viewed as a key business process which is central to the future wellbeing and prosperity of any manufacturing companies. The performance measurement system is seen as the information system which enables the performance management process to function effectively and

efficiently. Since the Seattle Conference a survey of manufacturing enterprises has been conducted to establish the senior management‘s view of their performance measurement. The survey results shows that majority of companies have a number of systems for performance measurement.

2.3 Financial Ratios and Performance

Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). According to Cascio (2006), performance is the degree of achievement of the mission at work place. Different researchers have different thoughts about performance. Mostly researchers used the term performance to express the range of measurements of transactional efficiency and input & output efficiency (Stannack, 1996). In his contribution, Chenhall (2005) opined that performance of an organization can be measured by financial ratios. Nevertheless, Garg (2007) indicated that firm performance based on finance and accounting literature is measured by return on asset and ratio of sales to assets. Hossan and Habib (2010) indicated that profitability ratios designate a company's overall efficiency and performance. It analyzes the company how to use of its assets and control of its expenses to generate an acceptable rate of return. In his contribution to profitability ratios, Thachappilly (2009**)** stated in his article the Financial Ratio Analysis for Performance evaluation that profitability ratio helps to evaluate the performance of a company, so that investors can decide whether to invest in that company. Performance of a company is usually related to how well a company can use it assets, shareholder equity and liability, revenue and expenses. Financial ratio analysis is one of the best tools use to analysis

performance of any company. Regular review of company‘s financial health status is a valuable practice. Hsieh & Wang (2001) Financial ratios are numerical values and they are retrieved from company‘s financial statements Mahipal (2011). Analysis based on financial ratios is the most important method to evaluate company‘s performance from different aspects of business. Financial ratios are defined as relationships determined from a company‘s financial information and used for comparison purposes Saleem & Rehman (2011). They are considered as the optimal tools for analysis to reflect the financial conditions and performance of the company during certain period. Moreover, they also help to identify strengths and weaknesses. Additionally, these ratios help to form a solid foundation for financial analysis by properly establishing relationships between items in the statement of financial position and income statement within the firm (Innocent *et al.* 2013). Okwuosa (2005) sees ratio analysis as one number expressed in terms of another to show the relationship between them. He adds that in financial accounting and reporting, it is generally agreed that there are certain relationships between items shown in the income statement and those in the statement of financial position. Therefore, ratios are used as a means of expressing these relationships. Nweze (2011) defines ratio analysis as financial statement analysis uses as a primary tool ratios, which relate two figures applicable to different categories. Chandra (2008) adds that financial ratio analysis is a study of ratios between various items or groups of items in financial statement. Pandey (2010) sees financial analysis as a process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the firm‘s items in statement of financial position and the income statement. He adds that ratio analysis is a powerful tool of financial analysis. A ratio is used as a

benchmark for analyzing performance of a company. So, the relationship between two accounting figures, expressed mathematically, is known as a financial ratio (or simply as a ratio). We used ratios such current ratio, quick ratio, operating cash flow ratio and free cash flow to analysis the measurement of liquidity position and return on capital employed, price per earnings ratio and earnings per share to analysis profitability of companies. It analysis the uses of its assets and control of its expenses. It determines the greater the coverage of liquid assets to short-term liabilities and it also It measures manufacturing company overall efficiency and performance. It determines share market condition of manufacturing companies. It also used to analysis the manufacturing companies past financial performance and to establish the future trend of financial position.

2.3.1 Performance and profitability

Chatterjee (2010) studied performance and profitability of listed firms on the London Stock Exchange. Using a sample of 30 UK firms and employing the Pearson correlation data analysis technique, the study confirms a significantly negative association between profitability and working capital management variables. Specifically, the study observes a significantly negative relationship between profitability and liquidity and also significantly negative relationship between total debt and profitability. The study further finds a significantly positive association between profitability and firm size. The implication is that, profitability of firms increase when they improve upon their performance. Particularly, holding highly liquid assets is important as it significantly enhances firms‘ profitability. This is because assets can easily and quickly be sold off and

the revenue re-invested in other relatively higher short-term assets and coupled with the fact that it also prevents court actions and its associated cost emanating from the firm‘s inability to pay its short-term creditors. The findings further imply that a high level of debt use is unhealthy for the financial success of the firm whereas increases in sales encourage firm profitability. Similarly, Dong and Su (2010) examined effects of performance on companies profitability of listed Vietnamese firms from 2006-2008. The authors find that, a significantly negative relationship exists between profitability, measured as gross operating profit, inventory days, and receivable days. Furthermore, the study also observes a statistically significant positive association between profitability and accounts payable days. These findings imply that increasing firms‘ inventory and receivable days lead to a decreasing profit while significant financial success can be attained with increased payable days. Gill et al. (2010) also studied the relationship between performance and profitability of 88 US companies listed on the New York Stock Exchange. Using data from 2005-2007, the authors find no statistically significant relationship between average payable days and profitability and also between averages inventory days and firm profitability. Similarly, they also observe no significant relationship between firm size and profitability but notice a negative association between accounts receivable and profitability. This suggests that managers can enhance the profitability of their firms by reducing the number of days for their account receivables. In a related study, Karaduman et al. (2010) investigated the impact of performance on the profitability of 140 randomly selected companies listed on the Istanbul Stock Exchange. Using data from 2005-2008, their findings indicate a statistically significant negative association between firm profitability, measured as return on assets on one hand and

accounts receivable and inventory days on the other hand. The study further reveals a significantly positive relationship between accounts payable days and firm profitability. Thus, the study has reiterated the importance of effective and efficient performance in ensuring firms‘ profitability. Afza and Nazir (2009) investigated the traditional relationship between performance policies and a firm‘s profitability for a sample of 204 non-financial firms listed on the Karachi Stock Exchange (KSE). Using regression analysis technique and data from 1998-2005, the study relates a significantly negative relationship between the profitability of firms and degree of aggressiveness of performance and financing policies. The study further indicates a significant difference among adequate performance and financing policies across different industries. The authors suggest that managers can create value if they adopt a conservative approach towards performance and profitability policies. In addition to the above, Falope and Ajilore (2009) examined the effects of good performance on the profitability of 50 quoted non-financial Nigerian firms. Using panel data methodology and data from 1996-2005, the authors observe a significantly negative relationship between net operating profit and liquidity variables, namely: average collection period and inventory days. However, the study notices no significant variations in the effects of profitability between large and small firms. An important lesson therefore is that, prudent management is critical for the profitability of firms of all sizes. Mathuva (2009) examined the influence of performance components on corporate profitability of 30 Kenyan listed firms. Using panel data methodology and data covering the period from 1993-2008, the study finds a significantly negative relationship between accounts collection days and profitability, a significantly positive association between inventory conversion period and profitability

and a significantly positive relationship between average payment days and profitability. The findings of this study therefore confirm the traditional view of efficient management and its effects on profitability. Raheman and Nasr (2007) studied the effect of different variables of profitability including average collection and inventory days and current ratio on the net operating profitability of 94 listed Pakistani firms. Using regression analysis and data covering the period from 1999-2004, the authors find a significantly negative profitability of the firms. The authors further report a significantly negative relationship between corporate debt and profitability but a significantly positive association between size and profitability. The implications of these findings are that prudent performance management, reasonable levels of debt use and increase sales are all very crucial in enhancing the profitability of the modern firm m. Lazaridis and Tryfonidis (2006) examined the relationship between profitability and performance of 131 firms listed on the Athens Stock Exchange. Using regression estimation approach and data covering the period from 2001-2004, the authors find a statistically significant inverse relationship between profitability, measured as gross operating profit and the cash conversion cycle, accounts receivables days and inventory days. They also observe a significantly positive association between profitability and accounts payable days. This study re-emphasises that, firms can enhance profitability by prudently keeping their working capital management components (accounts receivables, accounts payables, and inventory) within optimal levels. In another study, Eljelly (2004) examined the relationship between profitability and performance on a sample of 929 Saudi firms spread across three industries. Using correlation data analysis and regression data estimation technique, the author finds a significantly negative relationship between the firms‘

profitability and performance. Omesa, *et al* (2013) examined the relationships between Working Capital Management and Corporate Performance of 20 manufacturing firms listed on the Nairobi securities exchange for 5 years from 2007-2011was selected. Finally, Nyabwanga, *et al* (2012) assessed the effect of performance on the financial performance of SSEs in Kisii South District.

2.3.2 Liquidity and performance

According to Makori & Jagongo (2013). A well performance promotes a company‘s wellbeing on the market in terms of liquidity and it also acts in favor for the growth of shareholders value. Jeng-Ren, *et al* (2006).liquidity is vital, especially for manufacturing company‘s where a major part of assets is composed of current assets. Kargar & Bluementhal, (1994) the profitability liquidity tradeoff is important because if adequate performance is not given due considerations then the companies are likely to fail and face bankruptcy. The significance of performing efficiency is irrefutable Filbeck & Krueger, (2005). Liquidity is known as life giving force for any economic unit and its management is considered among the most important function of corporate management. Every organization whether, profit oriented or not, irrespective of size and nature of business, needs to perform well. Performance is the most crucial factor for maintaining liquidity, survival, solvency and profitability of business Mukhopadhyay, (2004). Performance is one of the most important areas while making the liquidity and profitability comparisons among firms (Eljelly, 2004), involving the decision of the amount and composition of current assets and the financing of these assets. The greater the relative proportion of liquid assets, the lesser the risk of running out of cash, all other things being equal. All

individual components of liquidity including cash, marketable securities, account receivables and inventory management play a vital role in the performance of any company. Liquidity plays an important role of overall corporate strategy in order to create shareholder value. Working capital is regarded as the result of the time lag between the expenditure for the purchase of raw material and the collection for the sale of the finished goods. The way of managing working capital can have a significant impact on both the liquidity and profitability of the company. Shin & Soenen, (1998). The main purpose of any firm is to maximize profit. But, maintaining liquidity of the firm also is an important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the company. Thus, strategy of company must maintain a balance between these two objectives of the company. Dilemma in effective performance is to achieve desired tradeoff between liquidity and profitability Raheman & Nasr (2007).Referring to theory of risk and return, investment with more risk will result to more return. Thus, company‘s which perform effectively and efficiently will be more liquidity. Conversely, a company which perform ineffectively and inefficiently will be low liquidity.

2.3.3 Capital structure and performance

Abor (2007) evaluated the relation of capital structure with performance of the firm in small and medium size firms (SMEs) of South Africa and Ghana. He found a significantly negative relation between financial leverage measured by ratio of short term debt, long term debt (significant but positive), total debt to total assets and firm performance measured by gross profit margin for both South Africa and Ghana. Further a

negative relation existed among the measures of capital structure and firms performance measured by return on assets in Ghanaian firms. Zeitun and Tian (2007) in his study on the Jordanian firms found a highly negative relation between the firm performance by employing both market and accounting based variables. Whereas the relation among capital structure variables and firm performance varies across companies. The relation is insignificant between capital structure variables and performance variables in the manufacturing companies. Accounting based variables of capital structure were debt (short term, long term and total debt) to total assets and total debt to total equity whereas accounting based measure for performance was ROA. The accounting based measure ROE (return on equity) has an insignificant relation with capital structure in all forms in Jordanian companies. Furthermore, the market based measures for performance was Tobin‘s Q and price earnings ratio. Shah and Khan (2007) on the Pakistani firms listed on three Stock Exchanges found a negative and significant relation among leverage levels and performance. They highlighted the existence of possible bias in their finding because many Pakistani companies are family controlled businesses. They inflate production costs and draw the profits from the company other than dividend. The income statement shows negative profits. This lead to a decline in equity levels and the ratio of debt increases in the overall ratio of financing. Seppa (2008) found that the Estonian firms follow Peking Order hypothesis in deciding about the optimal capital structure. Estonian firms first utilize internal funds to finance opportunities then move towards external source of financing. Further, large size companies also employ more external funds when internal funds are insufficient to finance opportunities. Large companies obtain funds easily and with less collateral compared to small companies. The choice of capital structure in

Estonian companies is also largely influenced by industry specific and country specific factors. Ebaid (2009) in his study on the emerging market economy of Egypt find that the selection of capital structure mix has a very weak relationship with the performance. He found that the relation among capital structure variables including short term, long term and total debt to total assets has insignificant relationship with performance measured by ROE (return on equity). Whereas, the relation of short term debt and total debt to total assets is negative and statistically significant with the performance. A negative insignificant relation exists for the long term debt with return on assets. Further, the relation of the capital structure with performance measured by the gross profit margin is also insignificant. Omran and Heavy industries have a positive relation with long term financing sources because of the large assets base employed by the firms. Bokpin et al. (2010) in his study on the firms of Ghana, a developing market found that debt levels on the Ghana Stock Exchange vary among industries. Firms use high debt levels in their capital structure and prefer the use of short term debts to equity to finance its operations. They find a negative relation between bankruptcy costs and capital structure. Increase in bankruptcy costs lead to a cut down in debt levels by the firms whereas firm‘s assets size has an insignificant relationship with the financial leverage. Onaolapo and Kajola (2010) in their study on the non-financial listed firms in Nigeria found that leverage have a significantly negative relation with performance in Nigerian firms. Due to agency conflicts between various stakeholders, firms have employed high leverage levels which have negatively affected the performance of the firm. San and Heng (2011) also studied the relation of capital structure with performance of the firm in the Malaysian construction industry in the aftermath of financial crises of 2007-08 that badly affected

most of the economies of the world including Malaysia. They found that the financial crises do not show any major impact on the performance of construction industry because of the large scale development work going on the country. Weak relation exists between leverage and performance measured by assets returns, equity returns and profitability in the Malaysian construction industry including small, medium and large size companies. The empirical studies support the view that optimal capital structure decisions are very critical to the success of the firm and these decisions vary across industries and countries. The importance of the capital structure decisions is much more crucial in the capital intensive industries compared to the other industries as huge amount of capital and resources are required to operate these firms. Therefore, a need in the literature was felt that it lacks the research work on the capital structure to the firm performance in markets like Ghana specifically the capital intensive sector like the manufacturing companies of Ghana.

2.4 The General Performance of Manufacturing Companies

According to Makori & Jagongo, (2013).Various studies have analyzed the relationship adequate performance and firm Profitability in various markets. The results are quite mixed, but a majority of studies conclude negative relationship between performance and firm profitability. The studies reviewed have used various variables to analyze the relationship, with different methodology such as linear regression and panel data regression. This section presents the chronology of major studies related to this study in order to assess and identify the research gap. Gul*, et al* (2013) investigated the influence of working capital management on performance of small medium enterprises (SMEs) in

Pakistan. The duration of the study was seven years from 2006 to 2012. The data used in this study was taken from SMEDA, Karachi Stock Exchange, tax offices, company itself and Bloom burgee business week. The dependent variable of the study was Return on Assets (ROA) which was used as a proxy for profitability. Independent variables were Number of Days Account Receivable, Number of Day‘s Inventory and Number of Days Account Payable. In addition to these variables some other variables were used which included Firm Size (SIZE), Debit Ratio and Growth (GROWTH). Regression analysis was used to determine the relationship between working capital management and performance of SMEs in Pakistan. Results suggested that accounts payable, growth and size have positive association with profitability whereas number of days accounts receivables, number of days inventory and debit ratio have inverse relation with profitability. Oladipupo and Okafor (2013) examined the implications of a firm‘s performance on its profitability and dividend payout ratio. Financial data were obtained from 12 manufacturing companies quoted on the Nigeria Stock Exchange over 5 years period (2002 to 2006). Using both the Pearson product moment correlation technique and ordinary least square (OLS) regression technique, they observed that shorter net trade cycle and debt ratio promote high corporate profitability. While the level of leverage has negative significant impact on corporate profitability, the impacts of working capital management on corporate profitability appeared to be statistically insignificant at 5% confidence level. On the other hand, they observed that dividend payout ratio was influenced positively by profitability and net trade cycle but negatively by growth rate in earnings. Almazari (2013) investigated the relationship between performance and the firms‘ profitability for the Saudi cement manufacturing companies. The sample included

8 Saudi cement manufacturing companies listed in the Saudi Stock Exchange for the period of 5 years from 2008 2012. Pearson Bivariate correlation and regression analysis were used. The study results showed that Saudi cement industry‘s current ratio was the most important liquidity measure which effected profitability, therefore, the cement firms must set a trade-off between these two objectives so that, neither the liquidity nor profitability suffers. It was also found, as the size of a firm increases, profitability increased. Besides, when the debt financing increased, profitability declined. Linear regression tests confirmed a high degree of association between performance and profitability. Omesa, *et al* (2013) examined the relationships between profitability and Corporate Performance of manufacturing firms listed on the Nairobi securities exchange. A sample of 20 companies whose data for 5 years from 2007-2011was selected. For analysis, Principal components analysis was used due to its simplicity and its capacity of extracting relevant information from confusing data sets. From the results using principal component analysis and multiple regression, working capital proxies Average Collection Period and control variables Current Liabilities, Net Working Capital ,Turnover Ratio and Fixed Financial Ratio were significant at 95% confidence (p values are < 0.05) to performance as measured by Return on Equity (ROE).Further, average collection period was fund to be negatively related to ROE. Maradi, *et al* (2012) compared performance of two groups of listed companies in Tehran Stock Exchange (TSE), which comprised of chemical industry and medicine industry. In chemical industry, 34 companies and medicine industry, 30 companies were selected and information related to these companies was gathered over 10 years (2001-2010) and analyzed using OLS multiple regression. The results show that, in medicine industry compared to chemical industry,

debt ratio makes more impact on reduction of net liquidity. But examination of impact of LEV over WCR indicate that, in chemical industry, debt ratio makes more impact on reduction of working capital requirements, compared to medicine industry. Nyabwanga, *et al* (2012) assessed the effect of working capital management practices on the financial performance of SSEs in Kisii South District. A sample of 113 SSEs comprising 72 trading and 41manufacturing enterprises was used. Pearson‘s correlation coefficients and multiple regression analysis techniques were used to analyze data consequently, the findings of the study were that, working capital management practices were low amongst SSEs as majority had not adopted formal working capital management routines and their financial performance the study also revealed that SSE financial performance was positively related to efficiency of cash management (ECM), efficiency of receivables management (ERM) and efficiency of inventory management (EIM). Gakure, *et al* (2012) analyzed the relationship between performance and profitability of 15 manufacturing firms listed at the Nairobi NSE from 2006 to 2010 and for a total 75 firms year observations. They used secondary data from a sample of 18 companies at the NSE. A regression model was used to establish the relationship between the dependent variable and the independent variables. Pearson‘s correlation and regression analysis were used for the analysis. The results indicated that there is a strong negative relationship between firm‘s performance and liquidity of the firm. The study found that there is a negative coefficient relationship between accounts collection period, average payment period, inventory holding period and profitability while the cash conversion cycle was found to be positively correlated with profitability. However, the effects of the independent variables except the average payment period were no statistically significant though the

overall model was statistically significant. Sharma and Kumar (2011) examined the effect of performance on profitability of Indian firms. They collected data about a sample of 263 non-financial BSE 500 firms listed at the Bombay Stock (BSE) from 2000 to 2008 and evaluated the data using OLS multiple regression. The results revealed that performance and profitability is positively correlated in Indian companies. The study further reveals that inventory of number of days and numbers of day‘s accounts payable are negatively correlated with a firm‘s profitability, whereas number of days accounts receivables and cash conversion period exhibit a positive relationship with corporate profitability. Raheman*, et al* (2010) analyzed the impact of working capital management on firm‘s performance in Pakistan for the period 1998 to 2007. For this purpose, balanced panel data of 204 manufacturing firms was used which are listed on Karachi Stock Exchange. The results indicate that d inventory turnover in days are significantly affecting the performance of the firms. They concluded that manufacturing firms were in general facing problems with their collection and payment policies. Moreover, financial leverage, sales growth and firm size also had significant effect on the firm‘s profitability. They study recommended that effective policies must be formulated for the individual components of working capital. Mathuva (2010) in his study on the influence of working capital management on corporate profitability found that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and profitability. He explained that the more profitable firms take the shortest time to collect cash from the customers. The study further revealed that there exist a highly significant positive relationship between the inventory conversion period and profitability. It was explained that firms, which maintain sufficiently high inventory

levels reduce costs of possible interruptions in the production process and loss of business due to scarcity and products. Finally, the study established that there exists a highly significant positive significant positive relationship between the average payment period and profitability. He held that the longer a firm takes to pay its creditors, the more profitable it is. Gill, *et al* (2010) analyzed the relationship between working capital management and profitability of 88 American firms listed on New York Stock Exchange for a period of 3 years from 2005 to 2007 was selected. The data was analyzed using Pearson Bivariate Correlation Analysis and Weighted Least Squares (WLS) Regression techniques. They found statistically significant relationship between performance and profitability, measured through gross operating profit. It followed that managers can create profits for their companies by adequate performance and by keeping accounts receivables at an optimal level. Although studies on adequate performance and profitability have been carried out by various scholars such as Gul, *et al* (2013); Oladipupo and Okafor (2013); Akoto, *et al* (2013); Omesa, *et al* (2013); Maradi, *et al* (2012); Gakure, *et al* (2012); Sharma and Kumar (2011);Mathuva (2010); and Gill, *et al* (2010), it is instructive to note that there is still ambiguity regarding the appropriate variables and ratios that should be used to measure performance and profitability.

2.4.1 Performance of manufacturing companies in Ghana

According to Akoto, *et al* (2013) the relationship between adequate performance and profitability of listed manufacturing firms in Ghana. The study used data collected from annual reports of all the 13 listed manufacturing firms in Ghana covering the period from 2005-2009. Using panel data methodology and regression analysis, the study found a significant negative relationship between Profitability and Accounts Receivable Days. However, the firm‘s Current Asset Ratio, Size, and Current Asset Turnover have significant positive influence on profitability. The study suggests that managers can create value for their shareholders by creating incentives to reduce their accounts receivable to 30 days. It is further recommended that, enactments of local laws that protect indigenous firms and restrict the activities of importers are eminent to promote increase demand for locally manufactured goods both in the short and long runs in Ghana. These studies do not provide clear-cut direction of the relationship firm‘s performance and its profitability. Further examination of these studies reveals that there is little of empirical evidence on the performance and its impact on the firm profitability in case of manufacturing companies. Therefore, the present study is an attempt to fill this gap and estimates the relationship between performance and profitability of manufacturing companies.

2.5 Uses of Financial Ratios

Financial ratios are used for all kinds of purposes. These include the assessment of the ability of a firm to pay its debts, the evaluation of business and managerial success and even the statutory regulation of a firm‘s performance. Not surprisingly they become norms and actually affect performance.‘ The traditional textbooks of financial analysis also emphasize the need for a firm to use industry-wide averages as targets (Foulke, 1968), and there is evidence that firms do adjust their financial ratios to such targets. Whittington (1980) identified two principal uses of financial ratios. The traditional, normative use of the measurement of a firm‘s ratio compared with a standard, and the positive use in estimating empirical relationships, usually for predictive purposes. The former dates back to the late nineteenth century and the increase in US bank credit given as a result of the Civil War when current and non-current items were segregated and the ratio of current assets to current liabilities was developed by Horrigan, (1968); and Dev, (1974). From then the use of ratios both for credit purposes and managerial analysis, focusing on profitability measures soon began. Around 1919 the du Pont Company began to use its famous ratio _triangle‘ system to evaluate its operating results, underpinning the modern interfirm comparison scheme introduced in the UK by the British Institute of Management and the British Productivity Council in 1959. The positive use of financial ratios has been of two types: by accountants and analysts to forecast future financial variables, e. g. estimated future profit by multiplying predicted sales by the profit margin (the profit/sales ratio), and, more recently, by researchers in statistical models for mainly predictive purposes such as corporate failure, credit rating, the assessment of risk, and the testing of economic hypotheses in which inputs are financial ratios. These will be

reviewed in the section on predictive studies. The reason ratios are used, as opposed to absolute values, is a mathematical one, and is basically in order to facilitate comparison by adjusting for size. However, this assumes that ratios possess the appropriate statistical properties for handling and summarizing the data. Ratios plays an important role in the management accounting function of an organization. Madura (2009) said the main objective of ratio analysis is to use the results for decision-making purposes. It determines the strength and weakness of the organization. According to James (2013). Ratio analysis is often expressed proportionately to show the relationship between figures in the financial statements. It is the systematic use of ratio to interpret the financial statements so that the strength and weaknesses of a firm as well as its historical performance and current financial condition can be determined. Financial ratio analysis is neither sophisticated nor complicated. It is nothing more than simple comparisons between specific pieces of information pulled from the company‘s statement of financial position and income statement Auerbach (1999). Gopinathan, (2009**)**, in his articles he discusses about Financial Ratio Analysis for Performance evaluation. This analysis is typically done to make sense of the massive amount of numbers presented in company financial statements. It determines the profitability and liquidity of a company, so that potential investors can decide whether to invest in that Company. Accounting ratios are most effectively used when compared to a standard or a norm that means a single ratio itself can not indicate favorable or unfavorable conditions. It must be compared with a benchmark or other standards before commenting on the ratio itself. Innocent *et al.* (2013).

2.6 Limitations of Ratios as Measurement of Performance

According to Lesakova, (2007). Many large firms operate a number of different activates in quite different industries, and in such cases it is difficult to develop a meaningful set of industry averages for comparative purposes. This tends to make ratio analysis more useful for small, narrowly-focused firms than for large, multidivisional firms. Inflation may have badly distorted a company's financial position. In this case, profits will also be affected. Thus a ratio analysis of one company over time or a comparative analysis of companies of different ages must be interpreted with judgment Price Level Changes - Changes in price levels make comparison for various years difficult. For example, the ratio of sales to total assets in 1996 would be much higher than in 1982 due to rising prices, fixed assets being shown at cost and not at market price. Seasonal factors can also distort ratio analysis. Understanding seasonal factors that affect a business can reduce the chance of misinterpretation. For example, a retailer's inventory may be high in the summer in preparation for the back-to-school season. As a result, the company's accounts payable will be high and its ROA low. According to Lesakova, (2007. Different accounting practices can distort comparisons even within the same company (leasing versus buying equipment, LIFO versus FIFO, etc.). It is difficult to generalize about whether a ratio is good or not. A high cash ratio in a historically classified growth company may be interpreted as a good sign, but could also be seen as a sign that the company is no longer a growth company and should command lower valuations. A company may have some good and some bad ratios, making it difficult to tell if it's a good or weak company. False Results if Based on Incorrect Accounting Data - Accounting ratios can be correct only if the data (on which they are based) are correct.

Sometimes, the information given in the financial statements is affected by window dressing, i.e., showing position better than what actually is. Abraham, (2006) says Manipulating numbers to calculate financial ratios means that one is focusing on individual trees, but must take a step back and see the whole panorama of the financial analysis forest. Doing this means recognizing the limitations which should be considered when interpreting the results of financial ratio analysis. The ratios and percentages that are calculated in financial analysis focus on certain areas in isolation to rest of the organisation. It is important to interpret these figures in the correct perspective, bringing into the examination qualitative factors such as general economic conditions, the unique characteristics of the nonprofit sector and the position of the organisation being investigated within the sector and also in relation to its own historical and cultural evolution There are also inherent limitations in the financial statement data which is used for the calculation of these ratios. Since many NPOs are not subject to accounting regulation, the way in which their reports have been presented is entirely at the discretion of those preparing them. This means that there may be difficulties with uniformity in reporting. Even the words may be taken to mean different things. Alternatively, a term used in a financial report, may not be given the same meaning by the reader as was intended by the preparer. Furthermore, the focus of operations of NPOs changes over time, making comparisons difficult. A further limitation is that of historical cost accounting. There are a number of levels of dollars in the balance sheet, with assets such as accounts receivable being stated in current dollars and non-current assets such as land being stated at historic cost. This makes comparative analysis across years difficult, particularly with the varying inflation rates of the past eighty years. In the 1920s,

inflation rates were not even considered; in the 1970s, inflation was in double digit figures; today, it is between one and three percent. Given these limitations, it is important that the interpretation of financial ratios _be tempered with consideration of the underlying data quality, the effects of flexibility in accounting, and the limitations of historical cost accounting‘ Herzlinger and Nitterhouse (1994). In order to operationalize this model, these ratios must be calculated and analyzed for the individual organization. Ideally, historical data, possibly for up to ten years, should be considered in developing trend 7 analysis for the NPO. This would enhance the measurement of organizational strengths and weaknesses, and identification of planning activities on which it is necessary that the organization focus in order to revive its financial profile in relation to its mission.

EDUCATION FOR SERVICE

CHAPTER THREE

METHODOLOGY

3.0 Introduction

According to Welman and Kruger (2001) research involves the application of various methods and techniques in order to create a scientifically developed knowledge by using objective methods and procedures. The techniques must be appropriate for the tasks. Also the validity and reliability of every research is dependent to a great extent on the research methodology adopted for the study. The methodology for the research must therefore be scientific. That is to say, the process must be rigorous, logical and unbiased. This chapter presents a detail and systematic process that the researcher adopted to achieve the objectives of the study. The purpose of the studies is to analyze the performance of manufacturing companies using financial ratios. Profitability, liquidity and capital structure ratios are used to calculate the performance of Guinness Ghana Breweries. It also deals with the methodology adopted for the studies it comprises research type, data collection, research design, population and sample, data analyze, data collection techniques and ratios analyze formulas have been discussed.

3.1 Research Design

The study focuses on how to analyze the performance of a Manufacturing Company (Guinness Ghana Breweries) listed on Ghana Stock Exchange (GSE) using financial ratio. A research design is a plan developed to attain the research purpose. It aims to ensure that the research can clearly answer the research problem, and involves systematizing the research activity, involving the collection of data and analyzing the

data Easterby-Smith, *et al* (1991). A good research design can provide valid conclusions and suggestions from the research. Ryan, *et al*, (1992). This section examines and justifies the appropriateness of the research design. There are three main types of research design, namely, exploratory, descriptive and explanatory research design.

3.1.1 Exploratory research

Exploratory research is conducted into a research problem or issue when there are very few or no earlier studies to which one can refer for information about the issue or problem. The aim of this type of study is to look for patterns, ideas or hypotheses, rather than testing or confirming a hypothesis. In exploratory research, the focus is on gaining insights and familiarity with the subject area for more rigorous investigation at a later stage. Thus, exploratory research becomes handy to the researcher when there is the need to acquire new insights into a phenomenon in order to formulate a more precise problem or hypothesis but in the case where the theory is too general or specific, hypothesis cannot be formulated. Therefore a need for an exploratory research is felt to gain experience that will be helpful in formulating relevant hypothesis for more definite investigation.

3.1.2 Descriptive research

Descriptive research is conducted to describe phenomena as they exist. It gives an accurate description of the characteristics of the subject, population, market, situation or problem the researcher is investigating. Robson, (2002). A descriptive study provides a comprehensive and clear picture by describing the characteristic of variables in the

phenomena of interest to the researcher from an individual, organization, industry or other perspective. Sekaran, (2003). It does not answer questions of –how, when and why" characteristics of a situation or population occurred. Rather it addresses the "what" questions. Shields and Rangarajan, (2013). The characteristics used to describe the situation or population are usually some kind of categorical scheme known as descriptive categories. Descriptive research often involves collecting information through data review, surveys, interviews, or observation, to ascertain and describe the characteristics of the pertinent issues of the problem under consideration. Conclusively, descriptive research aims to achieve the following goals: provide an accurate profile of a group or situation; give description to a process, mechanism or relationship; provide a verbal or numerical picture of the situation; source for information to stimulate new explanations; contextual presentation of basic background information; and categorization of the problems and documentation of information that contradicts prior beliefs about a subject.

3.1.3 Explanatory research

Explanatory research is a continuation of descriptive research. The researcher goes beyond merely describing the characteristics of the situation or problem, to analyzing and explaining the why or how the phenomenon being studied is happening. Thus, while descriptive research may be employed to identify and obtain information on the characteristics of a particular problem or issue, explanatory research aims to understand phenomena by discovering and measuring causal relations among them. In some circles, it is referred to as causal research design. Saunders *et al* (2007).

Explanatory research is conducted when there is already a hypothesis as to why something is happening. Questions and tests are designed to support that hypothesis, and proven to be correct or not. Explanatory research tries to: determine the accuracy of a principle or theory; find out which competing explanations is better; advance knowledge about an underlying process; link different issues or problems under a common general statement; build and elaborate a theory so it becomes complete and extend theory or principle to new areas by providing evidence to either refute or support an explanation. Neumann, (1994). Explanatory research frequently includes descriptive elements but goes beyond this to identify and explore the causes underlying the effects and the nature of the relationships between the dependent and independent variables. In summary, to provide valid conclusions and recommendations, descriptive and explanatory research designs were adopted for this study. The purpose of a descriptive research as earlier mentioned is to portray an accurate profile of persons, events or situation Robson, (2002). This study seeks to collect data from financial statement of Guinness Ghana Breweries to analyses it performance, hence the use of descriptive research design. Explanatory research studies aim at testing hypotheses to explain the nature of certain relationships, or establish the difference among groups, or the independence of two or more factors in the situation. Sekaran, (2003).

This study is deemed to be explanatory since it seeks to establish and explain the relationship between performance and profitability, liquidity and capital structure. In this study descriptive research was also used to analyses the performance of Guinness Ghana Breweries from 2008-2017.

3.2 Relevant Period

Ten years period was used for the research. Period used for the study is 2008-2017 annual financial statement of Guinness Ghana Breweries. This was used because the researcher wants to compare past years performance with current year‘s performance to analyses the profitability, liquidity and capital structure of the company.

3.3 Population

Population represent as the totality of persons or objects with which the study is concerned. According to Akinade and Owolabi (2009) population is the total set of observations from which a sample is drawn. The population of a study is the collection of all possible individuals, objects or measurement of interest. From Saunders *et al* (2007) population of study is the full set of cases from which a sample is taken. The study was conducted on 2007 to 2017 financial statement of Guinness Ghana Breweries a manufacturing company listed on the Ghana Stock Exchange.

3.4 Sample Size and Sample Technique

It is often impossible and generally accepted that the entire population for the study cannot be studied. This is normally due to the difficulty on the part of the researcher in getting access to the whole target population normally due to the size of the population, time constraints and the cost involved. To address the challenge of access to the complete population, representative samples are thus prescribed in any scientific study. Saunders *et al* (2007). Since it was impossible to cover the entire population given the population size, time and cost, a sample was used. The smaller the absolute size of the sample and,

to a far lesser extent, the smaller the relative proportion of the total population sampled, and the greater the margin of error. Within this, the impact of absolute sample size on the margin of error decreases for larger sample sizes. Saunders *et al*. (2007). De Vaus (2002) argues that it is for this reason that many market research companies limit their sampled sizes to approximately 5-10 years. Unfortunately, from many samples, a 100 per cent response rate is unlikely to be achieved, and so the sample will need to be larger to ensure sufficient responses for the margin of error required. The manufacturing institutions listed on the Stock Exchange are the target for the study. The reason is that manufacturing is seen as one of the important sector in the economy. There were 14 manufacturing institutions listed on the GSE. The researcher also considered Guinness Ghana Breweries Limited as it main target sample size for this study and it‘s where the researcher could easy have access to data. The best sample technique suited for this study is purposive sampling because the researcher was interested on comparing the company‘s past financial statement with current financial statement.

3.5 Data Type

The study is based on secondary data that has been collected from annual reports of the company‘s website, magazines, journals, documents and other published information. The study is quantitative in nature as the researcher knows exactly what variables to investigate and how they should be investigated. Aliaga & Gunderson (2002) defined quantitative research as explaining phenomena by collecting numerical data that are analyzed using mathematically based methods. Quantitative methods are used to examine

the relationship between variables with the primary goal being to analyze and represent that relationship mathematically through statistical analysis.

3.6 Data Collection technique

Secondary sources of data were utilized. Secondary sources of data were collected from the company‘s annual report on the Ghana Stock Exchange Fact Book. Other information used were fund in the library, on the internet, newspapers, magazines and company, website. Secondary data was used because of the accessibility to inaccessible subjects that will allow a research on subjects which the researcher do not have physical access and also for longitudinal analysis, that is, information used suitable to study over a long period of time The researcher used three main financial statements ratio analysis such as; statement of financial position, income statement and shareholder's equity of Guinness Ghana Breweries for the studies. Accounting Ratios are classified based on the different parties interested in making use of the ratios. A very large number of financial ratios are used for the study. Financial Ratios are used to measure financial performance against profitability and liquidity. The Most useful comparaison when performing Financial ratio analyses is trend analysis. Financial ratios are derived from the three financial statements. Financial ratios are used in Flash Reports to measure and improve the financial performance of a company.

3.7 Data Validity and Reliability

The researcher made sure that data was verified from different sources, to ensure credibility, validity and reliability. Information gathered for the study was accurate data

that will help to generate more empirical evidence from the study for policy decision in future and add knowledge to the subject area of this study. For this reason, the study tried as much as possible to ascertain the reliability and validity of the data collected for analysis from reliable source to support the study. For reliability of the work, the researcher made sure that the information obtained from Guinness Ghana Breweries Ltd through their website, brochures and other journals relevant for the study as well as the ratio analysis made were properly checked. Data obtained were cleaned by sorting and resorting during analysis of the information gathered. Inappropriate handling of data gathered can lead to generation of misleading results from the study and wrong conclusions drawn from this study. For the purpose of reliability and validity reports and other relevant information‘s were also extracted or collected from Ghana Stock Exchange website. The ratio analysis made through the date obtained from the website of the Guinness Ghana Breweries Ltd and brochures were reviewed to ascertain some of the information given by the Ghana stock exchange through their website.

3.8 Data Analysis

The researcher used all important tools of ratios, to analyze the performance of the company by comparing past years financial statement with current year. It indicates the different steps such as selection of financial statement, Identification of statement of financial position, income statement and shareholders‘ equity, ratio analysis, mathematical calculation, statistical analysis of Guinness Ghana Breweries financial statement year by year comparison. Firstly, the researcher, calculated liquidity ratios such as current ratios and quick ratio from the company‘s statement of financial position. Also,

the researcher calculated profitability ratios such as net profit margin and gross profit margin from the company‘s income statement. All other types of ratios for the research were calculated from the company‘ financial statement to access the liquidity and performance of Guinness Ghana Breweries and how well the company generate its assets, liquidity, revenue, expense, and shareholder equity.

3.8.1 Profitability ratios

Profitability ratios designate a company‘s overall efficiency and performance. It measures how to use assets and how to control its expenses to generate an acceptable rate of return. It also used to examine how well the company is operating or how well current performance compares to past performance.

3.8.1.1 Net profit margin

The net profit, also known as net margin indicates how much net income a company makes with total sales achieved. A higher net profit margin means that a company is more efficient at converting sales into actual profit. Net profit margin analysis is not the same as Gross profit margin. Under gross profit, fixed costs are excluded from calculation. With net profit margin ratio all costs are included to find the final benefit of the income of a business.

Net profit margin is the percentage of revenue left after all expenses have been deducted from sales. The measurement reveals the amount of profit that a business can extract from its total sales. The net sales of the equation is gross sales minus all sales deductions, such as sales allowances.The net profit margin is intended to be a measure of the overall

success of a company. A high net profit margin indicates that a business is pricing its products correctly and is exercising good cost control. It is useful for comparing the results of company‘s within the same industry, since they are all subject to the same business environment and customer base, and may have approximately the same cost structures. Similar terms used to describe net profit margins include net margin, net profit, net profit ratio, net profit margin percentage, and more. To calculate net profit margin and provide net profit margin ratio analysis requires skills ranging from those of a small business owner to an experienced once. As a result, this depends on the size and complexity of the company.

Net Profit margin = Net profit before tax/sales ×100

Where; Net Profit is equal to total income minus total expenses during a period and Revenue is income earned from the principal business activities

3.8.1.2 Gross profit margin

The Gross Margin Ratio, also known as the gross profit margin ratio, is a profitability ratio that compares the gross margin of a company to its revenue. It shows how much profit a company makes after paying off its Cost of Goods Sold. It is a company's total sales revenue minus its cost of goods sold, divided by total sales revenue, expressed as a percentage. The higher the percentage, the more the company retains on each dollar of sales, to service its other costs and debt obligations. Cost of sales (also known as cost of goods sold) includes variable costs and fixed costs directly linked to the sale, such as material costs, labor, supplier profit, shipping-in costs (cost of getting the product to the

point of sale, as opposed to shipping-out costs which are not included in COGS), etc. It does not include indirect fixed costs like office expenses, rent, and administrative costs.

Gross Profit margin =Gross profit/Sales×100.

3.8.1.3 Return on capital employed

Return on capital employed *(ROCE) ratio* is used to determine the returns that a company is generating from the capital employed within the business. This ratio is used to measure the efficiency with which long term capital is being used in generating profits for the business. The ratio also helps to assess the ability of a company to generate sufficient returns for covering costs of its capital. It‘s computed by dividing the net income before interest and tax by capital employed. It measures the success of a business in generating satisfactory profit on capital invested. In the denominator we have net assets or capital employed instead of total assets (which is the case of Return on Assets). Capital Employed has many definitions. In general, it is the capital investment necessary for a business to function. It is commonly represented as total assets less current liabilities (or fixed assets plus working capital requirement).ROCE uses the reported (period end) capital numbers; if one instead uses the average of the opening and closing capital for the period, one obtains return on average capital employed (ROACE). It basically can be used to show how much a business is gaining for its assets, or how much it is losing for its liabilities. The ratio is expressed in percentage.

Return on Capital Employed=Net profit before tax/Net Asset×100.

3.8.1.4 Return on equity

Return on equity *(ROE)* is one of the most widely used financial ratio. In corporate finance, the return on equity (ROE) is a measure of the profitability of a company in relation to the equity, also known as net assets or assets minus liabilities. ROE is a measure of how well a company uses investments to generate earnings growth. This ratio shows the rate of return, owners are earning on their investment made within the company. It measures efficiency of a business in generating profits from every dollar of owner‘s fund. It is a fiscal year net income (after preferred stock dividends, before Common stock dividends), divided by total equity (excluding preferred shares), expressed as a percentage. ROE is especially used for comparing the performance of companies in the same industry. As with return on capital, a ROE is a measure of management's ability to generate income from the equity available to it. ROEs of 15-20% are generally considered good. ROE is also a factor in stock valuation, in association with other financial ratios. While higher ROE ought intuitively to imply higher stock prices, in reality, predicting the stock value of a company based on its ROE is dependent on too many other factors to be of use by itself.

Return on equity =Net income/shares holders equity×100.

3.1.8.5 Return on assets

Profitability is assessed relative to costs and expenses, and it is analyzed in comparison to assets to see how effective a company is in deploying assets to generate sales and eventually profits. The term return in the ROA ratio customarily refers to net profit or net

income, the amount of earnings from sales after all costs, expenses and taxes. Divides net profits by the total amount of assets on the balance sheet.

$$\text{Return on Asset} = \frac{\text{Net Profit after Tax}}{\text{Total Asset}} \times 100$$

3.8.2 Liquidity ratios

Liquidity ratios refers to the ability of a company to interact its assets that is most readily converted into cash. Assets are converted into cash in a short period of time that are concerns to liquidity position. However, the ratio made the relationship between cash and current liability. Liquidity ratios measure whether there will be enough cash to pays vendors and creditors of the company. It include current ratio and quick ratio.

3.8.2.1 Current ratio

It measures current assets against current liabilities. The current ratio measures the company‘s ability to pay back its short-term debt obligations with its current assets. The higher ratio indicates the company is better equipped to pay off short-term debt with current assets.

The current ratio is an indication of a company's liquidity. Acceptable current ratios vary from company to company. In many cases, a creditor would consider a high current ratio to be better than a low current ratio, because a high current ratio indicates that the company is more likely to pay the creditor back. Large current ratios are not always a good sign for investors. If the company's current ratio is too high it may indicate that the company is not efficiently using its current assets or its short-term financing facilities. If current liabilities exceed current assets the current ratio will be less than 1. A current ratio

of less than 1 indicates that the company may have problems meeting its short-term obligations. Some types of businesses can operate with a current ratio of less than one, however. If inventory turns into cash much more rapidly than the accounts payable become due, then the firm's current ratio can comfortably remain less than one. Inventory is valued at the cost of acquiring it and the firm intends to sell the inventory for more than this cost. The sale will therefore generate substantially more cash than the value of inventory on the statement of financial position. Low current ratios can also be justified for businesses that can collect cash from customers long before they need to pay their suppliers. Current Ratio = Current Assets / Current Liabilities. Where both items are taken from the statement of financial position.

3.8.2.2 Quick ratio or Acid test ratio

Acid test ratio is like the current ratio. The only difference is it‘s excludes the liquid items from current assets and gives a better view of the company‘s ability to meet its maturing liabilities. Quick ratio, also known as the acid-test ratio is a type of liquidity ratio which measures the ability of a company to use its near cash or quick assets to extinguish or retire its current liabilities immediately. Quick assets include those current assets that presumably can be quickly converted to cash at close to their book values. It is the ratio between quickly available or liquid assets and current liabilities. A normal liquid ratio is 1:1. A company with a quick ratio of less than 1 cannot currently fully pay back its current liabilities. This ratio is much better and reliable tool for assessing liquidity position of firms. The acid test ratio or quick ratio, measures quick assets against current liabilities. It exclude inventory from the sum of assets in the quick ratio, but included in

the current ratio. Ratios are tests of viability for business entities but do not give a complete picture of the company's health. If a business has large amounts in accounts receivable which are due for payment after a long period (say 120 days), and essential business expenses and accounts payable due for immediate payment, the quick ratio may look healthy when the business is actually about to run out of cash. In contrast, if the business has negotiated fast payment or cash from customers, and long terms from suppliers, it may have a very low quick ratio and yet be very healthy. More detailed analysis of all major payables and receivables in line with market sentiments and adjusting input data accordingly shall give more sensible outcomes which shall give actionable insights. Generally, the acid test ratio should be 1:1 or higher; however, this varies widely by company. In general, the higher the ratio, the greater the company's liquidity (i.e., the better able to meet current obligations using liquid assets. Quick assets are considered assets that can be quickly converted into cash. Generally, they are current assets less inventory. Quick Ratio = Current Assets minus (Inventories + Prepaid expenses + Deferred income taxes + other liquid items) / Current Liabilities.

Quick Ratio= (Current Assets-Inventory)/ current Liabilities.

3.8.3 Capital structure ratios

The final ratios are the market value ratio. It also call share ownership ratio. It referred to the stockholder in analyzing present and future investment in a company. In this ratio the stockholders are interested in the way to certain variables affect the value of their holdings. In order to the stockholder is able to analyze the likely future market value of the stock market. There are two ratios under this ratio. They are as follows:

3.8.3.1 Earnings per share

Earnings per share ratio are a small variation of ownership ratio. (EPS) is the portion of a company‘s profit that is allocated to each outstanding share of common stock, serving as an indicator of the company‘s financial health. In other words, earnings per share is the portion of a company's net income that would be earned per share if all the profits were paid out to its shareholders. It gauges by dividing net income into total number of share outstanding .it is most important for deterring of share price.

Earnings per share ratio: Net income /weighted average number of share outstanding.

3.8.3.2 Price earnings ratio

Price earnings ratio refer to the company market price per share to its market value per share. It indicates management success in creating value for its stockholders. P/E ratios are used by investors and analysts to determine the relative value of a company's shares in an apples-to-apples comparison. It can also be used to compare a company against its own historical record or to compare aggregate markets against one another or over time.

Price earnings ratio= market price per share/ earnings per share.

3.9 Brief History of Manufacturing Companies in Ghana.

Manufacturing in Ghana dates to the early days of the Ghana‘s independence. Just after independence, the then government under the leadership of the first president of the Republic of Ghana, Dr. Nkrumah, embarked on nationwide industrialization drive and built factories for food and agro processing, aluminum smelting, saw milling and timber processing, mineral processing, oil refinery, textiles and glass making among others. The

objectives of this mission, among others, were for the factories to utilize the readily available raw materials in the country; to add value to the raw materials before they are exported; to produce goods and products for local consumption (and probably with some surplus for export) in order to minimize their importation; to provide employment for Ghanaians especially the youth and to open up the country and ensure rapid infrastructure development in all parts of the country. Under this policy the following production plants were built by the government, Pwalugu Tomato Factory and the Meat Factory all in Bolegatanga in the Northern Parts of Ghana. The Kumasi Jute Factory, the Kumasi Shoe Factory and the Wenchi Tomato Factory in the mid Ghana were also built. In the western region, there were the BonsaTyre Manufacturing Company at Bonsaso, the Aboso Glass Factory, the Preatea Gold Processing Factory and the Takoradi Paper Mill. There were also the Kade Match Factory and the Nsawam Cannery in the Eastern Region, the Central Region had the Komenda Sugar Factory and the Saltpond Ceramics Limited. The twin cities of Accra and Tema were the hub of this industrialization policy. Most of the industries were located there due to their closeness to the then newly built Akosombo 29 Dam to Provide Hydroelectric power to power the industries; the presence of the Tema harbour which facilitated movement of machinery and other materials from abroad for the factories and also the export of goods and other materials abroad; and the availability of the necessary human capital, at that time, to work and manage the factories. Most of these state-owned companies were given protection by the government to survive. After the overthrown of the Nkrumah regime, successive governments could not provide enough supervision and protection for the companies. Corruption, poor management, political influences (especially during the military regimes) in the state sector and other

economic reasons led to stagnation for the growth of these companies from 1970 to 1977 and then to a decline from 1977 to 1982. Thereafter, the manufacturing and processing industry in the country could not regain their vibrancy, and performance remained weak into the 1990s. Most of these companies also suffered underutilization in terms of their industrial capacity in the 1960s, which increased alarmingly in the 1970s. Under the Economic Recovery Program (ERP) in the 1980s, government intended to revive some of these state-owned manufacturing companies so that the reasons for which they were set up could be realized. Many challenges faced by the companies made their revival difficult, government, under the auspices of Divestiture Implementation Committee (DIC), either fully or partially diverted most of the companies and cited various reasons for that. Though the development of the manufacturing sector was spearheaded by the State, other multi-national companies such as Guinness Ghana Breweries, UAC, P Z Cussons, Lever Brother, and some few individual Lebanese, Indian and Ghanaian industrialists also set up manufacturing companies. Currently according to the Commonwealth of Nations report on Ghana, there are around 25,000 registered firms, doing business in agro processing, mining and mineral processing, light manufacturing, aluminum smelting, food processing, cement making and small commercial boat building. Others are also into alcoholic and beverages production. There are also companies producing chemicals, drugs and other pharmaceutics textiles, timber and wood processing, furniture making, iron and steel as well as clothing and textiles. Ceramics and glass-making companies also exist in relatively small quantities. Over eighty per cent (80%) of these firms are small to medium size enterprises (with less than 50 employees) and around fifty-five per cent (55%) of them can be found in the industrial hub of

Accra/Tema metropolis. The Association of Ghana Industries (AGI), the mother association that seek the welfare for manufacturing companies, has about 1200 members (including service providers). Manufacturing contributed about six per cent (6%) of Ghana‘s gross domestic product (GDP) (2011) and offer jobs to over 250,000 people (2009). According to the Commonwealth of Nations report, on the global economies of 185 countries, Ghana is rated 67thby the World Bank for relative ease 0f operating a business in Ghana a ranking based on how easy the regulatory environment in the country with respect to the opening and operation of a local firm.

3.9.1 Brief history of Guinness Ghana Breweries

Guinness Ghana Breweries Limited (GGBL) is a Ghanaian brewery based at the Kaasi Industrial Area in Kumasi. The company was founded in 1960 and formed in 1991, is active in the beverage industry with its main activity being the manufacture and sale of beer, stout, malt drinks and their ancillary products. It also produces non-alcoholic liquors such as Malta Guinness and Amstel Malta. When production started at its inception, the company produced only the Guinness Foreign Extra Stout. GGBL is a subsidiary of the Amsterdam-based spirit manufacturer Diageo Highlands Holding BV. The Company is engaged in the business of manufacturing, selling and distributing of alcoholic and non-alcoholic beverages and their ancillary products. The Company's segments include Alcoholic beverages, Non-alcoholic beverages and Spirits. . The company is currently implementing a number of changes within its distribution systems and making innovations within its branding and marketing divisions, in a bid to increase its overall efficiency and stay ahead of ever-changing consumer needs. This socially and

environmentally responsible company, which is part of the world‘s leading premium drinks business, UK-based Diageo, also strives hard to play a leading role in improving the lives and livelihoods of the community in which it operates, through a number of breakthrough initiatives. It employs more than 700 permanent staff across its two sites located at Kaasi in the Ashanti Region and Achimota, in the Greater Accra region, and up to 500 contract staff. In Ghana, it distributes a wide range of internationally celebrated brands including Johnnie Walker, Smirnoff and Baileys and on the beer and stout front, produces Guinness, Malta Guinness, Star and Alvaro as well as Ruut Extra Premium Beer, which was the first cassava-based beer on the market. It currently produces some 2,000hl a day equivalent to 26,700 cases rattles out 36,000 bottles an hour on its just installed packaging line. Corporate Relations Director, Preba Green Street, said: ―We also distribute Heineken as they have a 20 percent stake in our business as well as other products in the Diageo range including the Johnnie Walker, Baileys and Smirnoff ranges.” The company was formed in 1960 and is the only Total Beverage Business to be listed on the Ghana Stock Exchange (August 23, 1991). Guinness Ghana Breweries has existed in its current form since 2005 when Guinness Ghana Ltd merged with the Heineken-owned Ghana Breweries Limited. Heineken retained a 20 percent stake in the company. With a clear goal in mind and aside from the recent capital investment, the company has been focusing on its distribution methods in its bid to broaden its customer reach. Green street explained: ―We carried out a detailed study of our routes to consumers and realized from that there were opportunities for us to expand particularly into off-trade areas. ―Last year, the company had a few major distributors as our prime customers but now we are evolving to a more efficient distribution model that is enabling

us to capture the market opportunities we identified and to better serve consumers in those segments." GGBL is also working hard at improving its ability to serve the off-trade more efficiently and effectively. The company is aligning its brands to fit more snugly the various consumer profiles within the market. Traditionally, parent company Diageo has been primarily concerned with the premium end of the market in terms of its brand portfolio. "In recent years, we have seen the opportunity of expanding in a number of different ways, innovating to include affordable products such as Ruut Extra and Gilbey's Dry Gin" said Greenstreet "the company is particularly aware of the growing middle class in Africa and that is one of the reasons we have effectively brought the spirits business, which used to operate through agents, inside the business."the company have all the top brands such as Johnnie Walker, Baileys, Gordon's and Smirnoff which we see as covering the space for the middle income consumer. "The company is also now trying to serve the more affluent end of the market with our reserve range of products such as Johnnie Walker Platinum, Gold and Blue." Baileys is also being directed at the sophisticated female consumer and for the mainstream market, GGBL has innovated a new portable spirits packaging line, nick-named "The Cube' which enables the company to blend and package spirits locally. The award-winning company won the first Best Taxpayer of the Year Award (Beverage category) from the Ghana Revenue Authority in 2011 for contributing three percent of total tax income to Ghana together with its value chain. In a bid to play a socially responsible role within the community it operates, GGBL has implemented its local raw material initiative and has actively sought home-grown ingredients that it can use in the beer making process. GGBL engaged with the Government of Ghana and it responded by providing graduated concessionary excise

duty rates on utilization of local raw materials (LRM) in the production of alcoholic beverages. In line with the brewery's commitment to move its LRM usage to 50 percent by mid-2015 it has shifted from 12 percent usage in December 2012 to 38 percent today. Greenstreet said: "This has had a significant impact along the chain: we find that our increased local purchasing has created, broadened and deepened the supply chain, from farmers, through to aggregators and processors, as well as the provision of ancillary services to each of these groups." GGBL is also currently undertaking a baseline study to establish the ground position for the farmers in the cassava chain. She said: "The excise duty concession has provided additional value primarily through an exciting new product, RUUT Extra Premium Beer, that has enabled us undertake the investment needed to integrate new brewing materials into our processes." The company now works with more than 7,000 Ghanaian farmers in the north of the country to source sorghum and maize and a further 3,000 farmers and a couple of large industrial farming companies to provide the cassava which underpins the formulation of its successful Ruut Extra Premium Beer. Its wide-ranging Corporate Social Responsibility strategy has also involved the company and other partners in helping to provide access to safe drinking water for more than 500,000 people across 65 communities in all 10 regions of Ghana. The GGBL Water of Life program has received numerous awards including the best company in CSR from the Association of Ghana Industry. The company also takes a very strong stance towards responsible drinking through its Alcohol in Society program. Its program is based on the five-pronged CEO Commitments adopted by the presidents of the leading alcohol producer companies of the world. In service of this and in the last year alone GGBL has undertaken four programs, they are: What's your Drink IQ – an engaging alcohol

education initiative rolled out to 2,000 tertiary students of the University of Ghana and the Kwame Nkrumah University of Science and Technology (and soon to be available via internet link to all other tertiary students); Twa Kwano Mmo, an anti- drink driving initiative run in five transport terminals across Accra and Kumasi which engaged with 1,230 commercial drivers; training of 600 bar tenders through its Responsible Serving Program under the Master Bar Academy (MBA) training; and the commissioning of research into alcohol consumption patterns, behaviors and attitudes. Taking care of employees and helping them to develop and grow their own careers is also high on the agenda and it is testament to the company that many of their staff has been with the business for 10 years or more. The company was adjudged the best employer by the Association of Ghana Industries in 2013. ―The company is hunting ground for many of the other multi-national companies operating in Ghana, which is a real challenge for us, but we work hard to ensure that the people we employ are aligned with our values and ethos as a company, and are motivated and engaged" said Greenstreet. ―The company offer a variety of training from the shop floor through to leadership and mentoring. Also through Diageo our employees can seek information online and take advantage of international training opportunities that build brand awareness and employee effectiveness. ―the company is very much believe in not taking our employees for granted and ensuring they are happy and to this end we carry out an annual survey, the Diageo Value Survey, to measure how employees are feeling and to obtain their feedback on a wide variety of issues," she concluded. The success was built on an outstanding collection of brands across a range of categories, including beer, stout and spirits today, Guinness Ghana Brewery Limited is the only beverage company in Ghana listed on the

Ghana Stock Exchange. Their business is sustained through innovation and they are constantly looking to create new experiences for its consumers. In 2015, they introduced Orijin Bitters to the Ghanaian market and have since developed variants such as the non-alcoholic Orijin Zero and Orijin Herbal Gin. In a fast-paced and dynamic market, they have also introduced plastic packaging for Malta Guinness, Alvaro and Orijin Zero to meet growing consumer demand for convenience. At the same time, they work to ensure alcohol can be enjoyed as part of a balanced lifestyle through a range of initiatives and programmes that tackle misuse and promote moderation. They are also committed to having a positive impact where they operate and are proud of their work to address issues such as water efficiency, carbon emissions, inclusion and diversity. They are inspired by programmes such as Water of Life, which has reached more than 700,000 people in over 70 communities in the last 10 years. Their wide portfolio of much-loved brands include Guinness, Star Beer, Malta Guinness, Orijin and Smirnoff and are enjoyed by Ghanaians from all walks of life. Their performance ambition is to be the best performing, most trusted and respected consumer products company in Ghana. They are also committed to having a positive socio-economic impact in the communities in which we operate. They have invested Gh₵ 313,018,757.82 in Ghana over the last five years. We have invested heavily in their plants and equipment in order increase sourcing of local raw materials. As a result, their local raw material sourcing has risen from 12% in 2012 to 48% in 2018. They continue to invest in local raw material and are working toward reaching our target of 70% local raw material by 2020.They provide ongoing technical support to farmers to improve yield and quality and help ensure they can benefit from a stable, growing income. They employ over 1,500 people, including contractors, across our two sites in

Achimota and Kaasi. People are at the heart of their business. They are a diverse company where everyone has the opportunity to develop their careers at every stage of their working life. Their wide range of professional development initiatives include an early career programmed that offers university graduates the opportunity to build their careers and a women‘s network that promotes gender diversity, especially in our supply chain. In 2017, they were awarded the Best Organization in Employee Relations Practice, Best Workplace Diversity Strategy and Most Innovative Use of Technology at the HR Star awards. They believe their industry can play an important role in improving the current situation. The first step is for producers and importers to embrace robust standards. By collaborating and partnering with government, enforcement agencies and civil society, we can play a key role in mitigating irresponsible alcohol marketing and advertising in the country. They believe that governments, producers and relevant stakeholders need to work together to ensure compliance of marketing and advertising standards across the industry. They believe that responsible drinking can be part of a balanced lifestyle and they encourage people to enjoy alcohol safely. They are proud of their commitment to promoting responsible drinking and tackling the misuse of alcohol among group such as young people and commercial drivers.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.0 Introduction

This chapter is about data analysis and discussion of research findings. The analysis and discussions were done with understanding of research objectives which includes;

4.1 Data Analysis on Profitability

Table 1: Ratios analysis of Profitability for Guinness Ghana Breweries Ltd

Profitability	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %	2014 %	2015 %	2016 %	2017 %
ROCE	22	22	-5	0.6	20	15	-3.6	-16	-0.4	2.8
Net profit	14.4	8	-2.1	0.2	11.3	8.6	-3.3	-11	-0.3`	1.9
Gross Profit	39.8	29.6	34.7	26.3	34	28.7	20.9	23.5	26.5	30
ROA	8.5	5.3	-2.4	0.26	10	6.1	-2	-9.4	-1.4	1.3
ROE	22	21.1	-10.2	1.1	17.9	11.9	-6	-47.7	-2.9	2.5

Data Source: Field Survey, May 2019

The table shows the financial performance from the period of 2008 to 2017 in terms of profitability ratios of the organization within the relevant period of the study. The relevant ratio under profitability comprises return on capital employed, Net profit margin, gross profit margin, return on asset and return on equity.

Table 2: Mean and Standard Deviation analysis on Profitability for Guinness Ghana Breweries Ltd

Profitability	Mean	Standard Deviation
ROCE	5.74	13.19025
Net profit	2.77	7.719535
Gross profit	29.4	5.611298
ROA	1.626	5.896787
ROE	0.97	20.58322

Data Source: Field Survey, May 2019

The table shows the mean and standard deviation for various ratios which fall under the profitability ratios of the organization within the relevant period of the study. The relevant ratio under profitability comprises return on capital employed, net profit margin, gross profit margin, return on asset and return on equity.

4.1.1 Interpretation of Return on Capital Employed on Performance of Organization

Return on Capital Employed ratio for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 22%, 2009 is 22%, 2010 is -5%, 2011 is 0.6%, 2012 is 20%, 2013 is 15%, 2014 is -3.6%, 2015 is -16%, 2016 is -0.4% and 2017 is 2.8%. It shows that the company‘s performance on return on capital employed ratio initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact both 2008 and 2009 recorded the highest percentages

which is 22% and that was the best performance in all following 2012 for 20% but 2015 recorded the worst performance which was -16%. The mean of the return on capital employed was 5.74 whiles the standard deviation too was recorded as 13.19025.

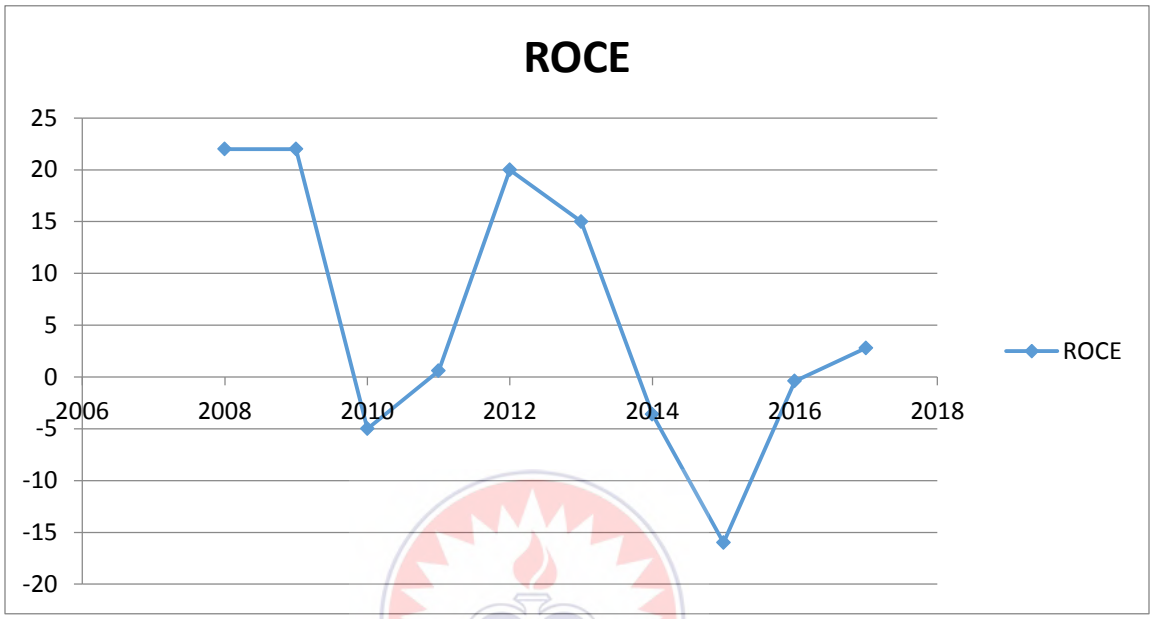

Figure 4.1; Return on Capital Employed

4.1.2 Interpretation of Net Profit Margin on Performance of Organization

Net profit margin for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 14.4%, 2009 is 8%, 2010 is -2.1%, 2011 is 0.2%, 2012 is 11.3%, 2013 is 8.6%, 2014 is -3.3%, 2015 is -11%, 2016 is -0.3% and 2017 is 1.9%. It shows that the company‘s performance on net profit margin initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2008 recorded the highest percentage which is 14.4% and that was the best performance in all following 2012 for 11.3% but 2015 recorded the worst performance

which was -11%. The mean of the net profit margin was 2.77 whiles the standard deviation too was recorded as 7.719535.

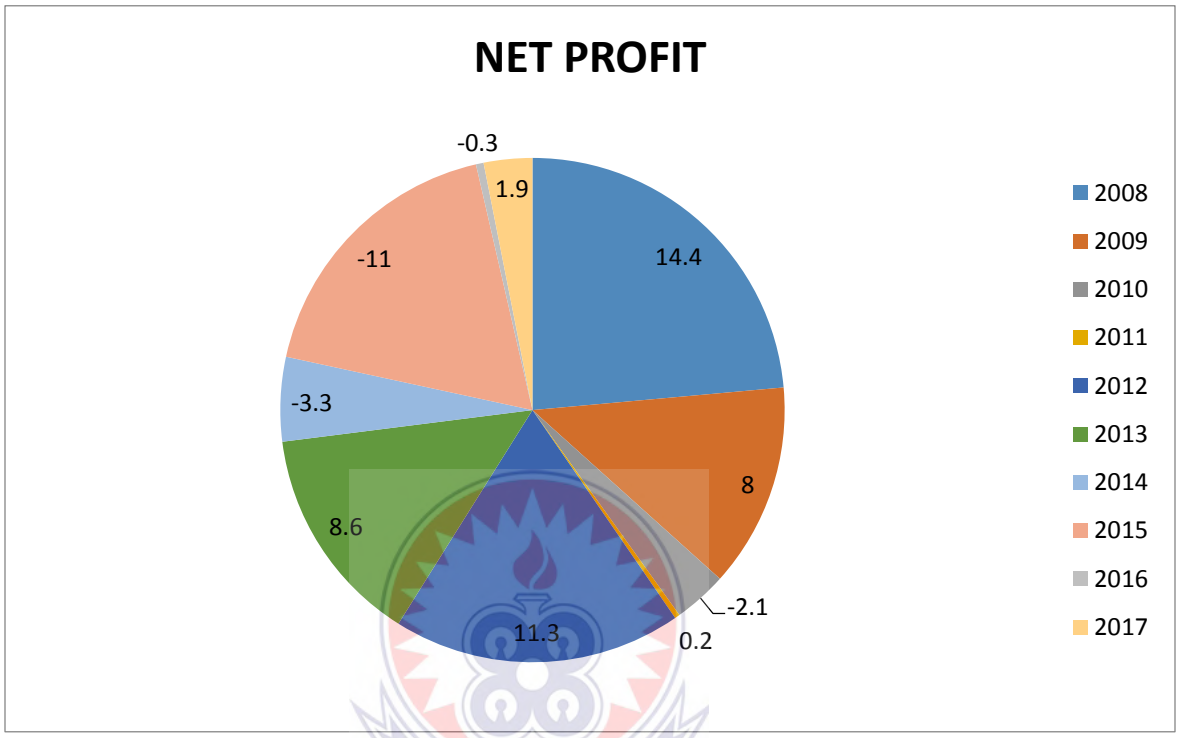

Figure 4.2; Net Profit Margin

4.1.3 Interpretation of Gross Profit Margin on Performance of Organization

Gross profit margin for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 39.8%, 2009 is 29.6%, 2010 is 34.7%, 2011 is 26.3%, 2012 is 34%, 2013 is 28.7%, 2014 is 20.9%, 2015 is 23.5%, 2016 is 26.5% and 2017 is 30%. It shows that the company‘s performance on gross profit margin initially started with positive and stable rate of returns but later on it keeps on fluctuating up and down from 2008 to 2013 with every two years intervals. From 2014 the performance also started increasing from year to year and eventually it

runs upwards. As matter of fact 2008 recorded the highest percentage which is 39.8% and that was the best performance in all following 2010 for 34.7% but 2014 recorded the worst performance which was 20.9%. The mean of the gross profit margin was 29.4 whiles the standard deviation too was recorded as 5.611298.

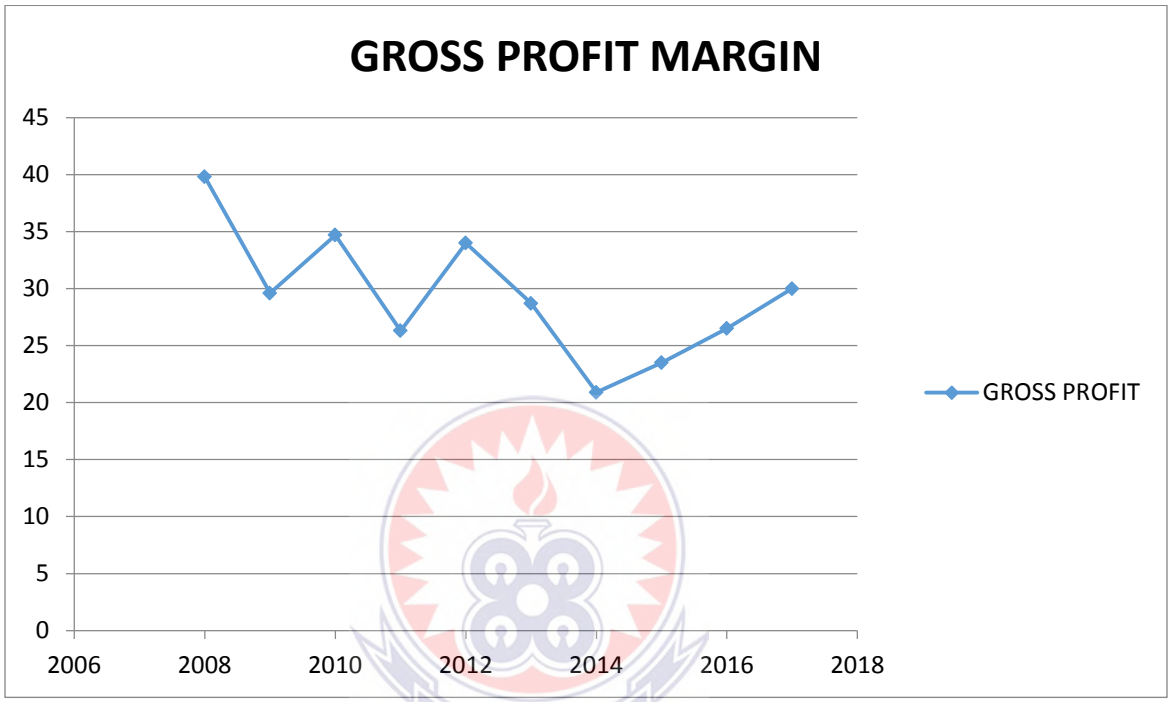

Figure 4.3; Gross Profit Margin

4.1.4 Interpretation of Return on Asset on Performance of Organization

Return on assets for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 8.5%, 2009 is 5.3%, 2010 is -2.4%, 2011 is 0.26%, 2012 is 10%, 2013 is 6.1%, 2014 is -2%, 2015 is -9.4%, 2016 is -1.4% and 2017 is 1.3%. It shows that the company‘s performance of return on asset initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2012 recorded the highest percentage which is 10% and that was the best

performance in all following 2008 for 8.5% but 2015 recorded the worst performance which was -9.4%. The mean of the return on asset was 1.626 whiles the standard deviation too was recorded as 5.896787.

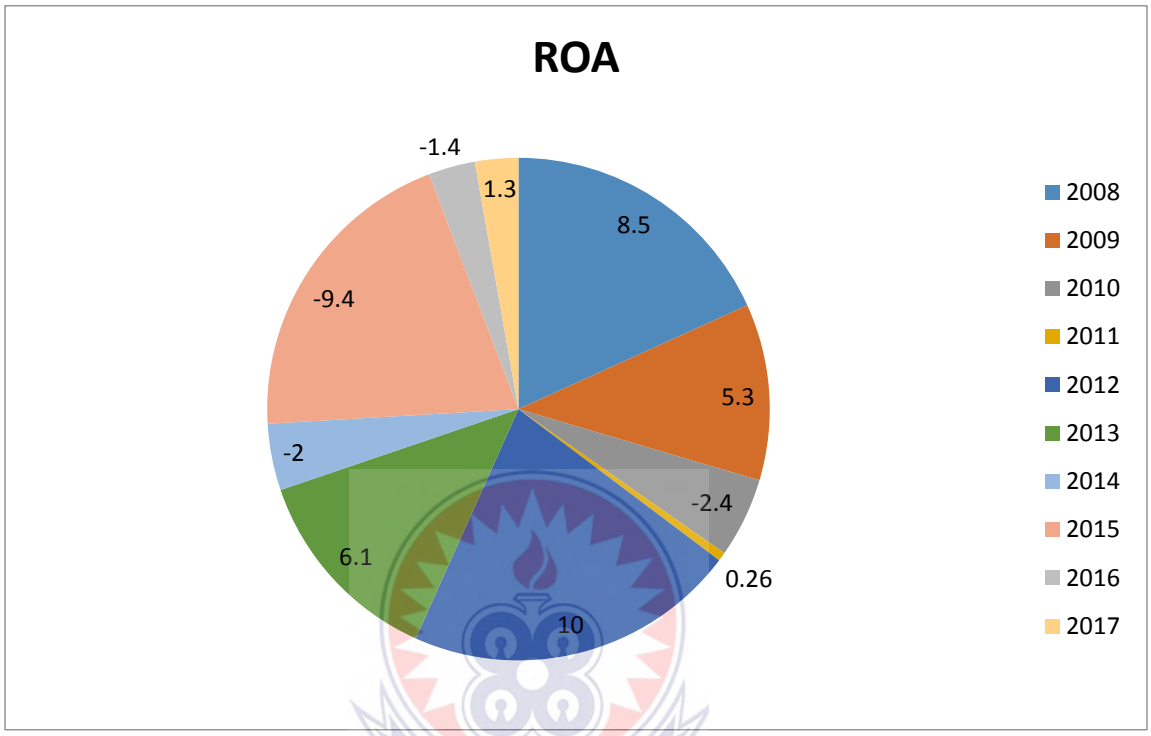

Figure 4.4; Return on Asset

4.1.5 Interpretation of Return on Equity on Performance of Organization

Return on equity for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 22%, 2009 is 21.1%, 2010 is -10.2%, 2011 is 1.1%, 2012 is 17.9%, 2013 is 11.9%, 2014 is -6%, 2015 is -47.7%, 2016 is -2.9% and 2017 is 2.5%. It shows that the company‘s performance of return on equity initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2008 recorded the highest percentage which is 22% and that was the

best performance in all following 2009 for 21.1% but 2015 recorded the worst performance which was -47.7%. The mean of the return on equity was 0.97 whiles the standard deviation too was recorded as 20.58322.

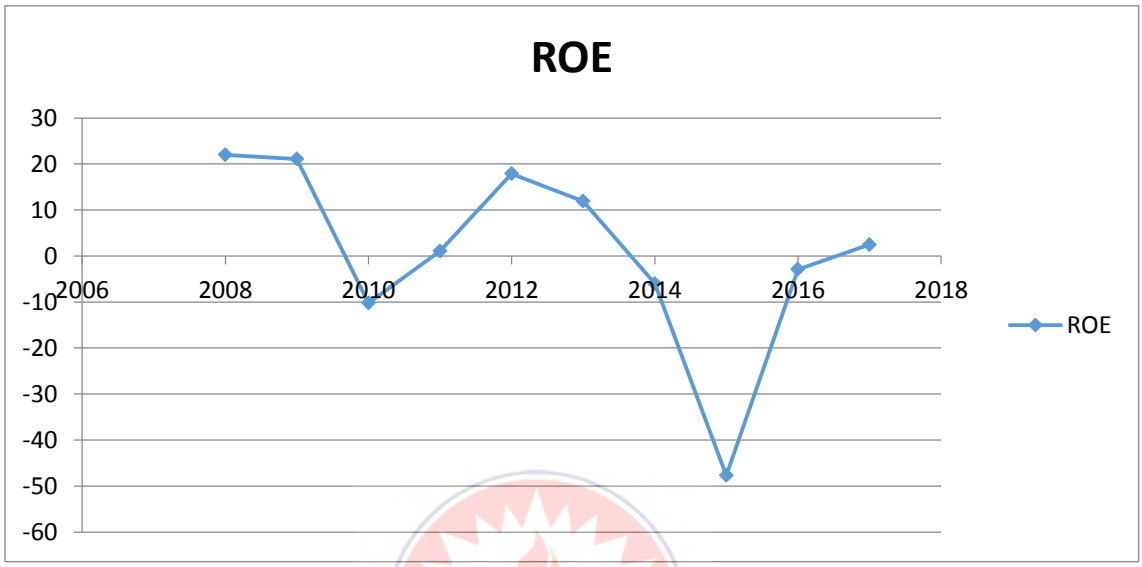

Figure 4.5; Return on Equity

4.1.6 Summary of Profitability Ratios on Performance of Organization

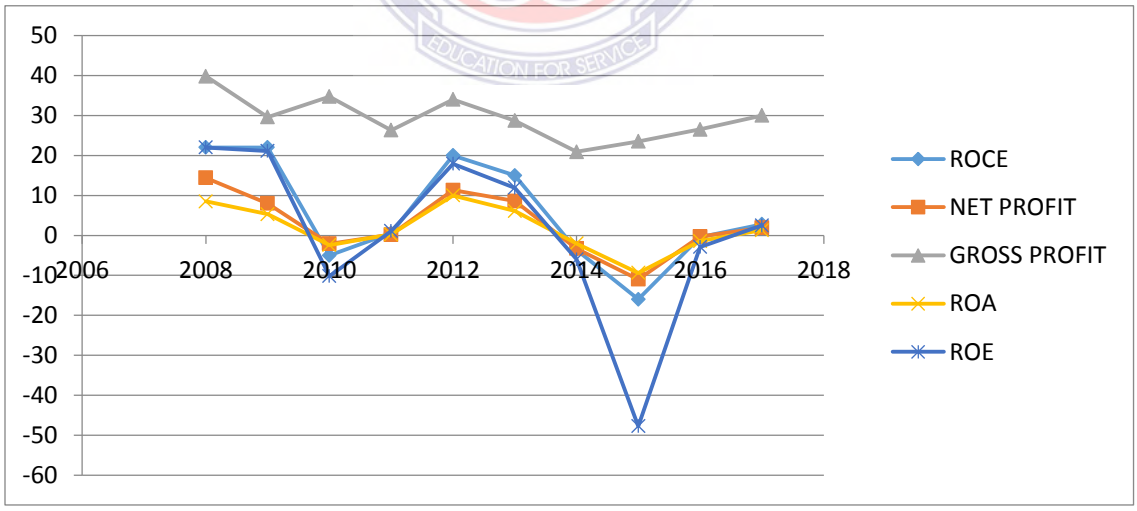

Figure 4.6; Summary of Profitability Ratio

The above diagram above represents the summary of profitability ratios on financial performance of organization (Guinness Ghana Breweries Ltd) from the period of 2008-2017. The ratio includes return on capital employed, net profit margin, gross profit margin, return on asset and return on equity. The company‘s performance on return on capital employed ratio initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact both 2008 and 2009 recorded the highest percentages which is 22% and that was the best performance and 2015 recorded the worst performance which was -16%. The company‘s performance on net profit margin initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2008 recorded the highest percentage which is 14.4% and that was the best performance but 2015 recorded the worst performance which was -11%. The company‘s performance on gross profit margin initially started with positive and stable rate of returns but later on it keeps on fluctuating up and down from 2008 to 2013 with every two years intervals. From 2014 the performance also started increasing from year to year and eventually it runs upwards. As matter of fact 2008 recorded the highest percentage which is 39.8% and that was the best performance but 2014 recorded the worst performance which was 20.9%. The company‘s performance of return on asset initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2012 recorded the highest percentage which is 10% and that was the best performance but 2015 recorded the worst performance which was -9.4%. The company‘s performance of return on equity initially started with positive and

stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2008 recorded the highest percentage which is 22% and that was the best performance but 2015 recorded the worst performance which was -47.7%.

4.2 Data Analysis on Liquidity

Table 3: Ratios Analysis of Liquidity for Guinness Ghana Breweries Ltd

Liquidity	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current Ratio	0.8	0.7	0.4	0.3	0.9	0.5	1.2	0.8	1.2	1.3
Quick Ratio	0.3	0.2	0.1	0.1	0.5	0.2	0.4	0.4	0.5	0.6

Data Source: Field Survey, May 2019

The table shows the financial performance from the period of 2008 to 2017 in terms of liquidity ratios of the organization within the relevant period of the study. The relevant ratio under liquidity comprises current ratio and quick ratio.

Table 4: Mean and Standard Deviation Analysis on Liquidity for Guinness Ghana Breweries

Liquidity	Mean	Standard deviation
Current ratio	0.93	0.62902
Quick ratio	0.33	0.176698

Data Source: Field Survey, May 2019

The table shows the mean and standard deviation for various ratios which fall under the liquidity ratios of the organization within the relevant period of the study. The relevant ratio under liquidity comprises current ratio and quick ratio.

4.2.1 Interpretation of Current Ratio on Performance of Organization

Current ratios for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 0.8, 2009 is 0.7, 2010 is 0.4, 2011 is 0.3, 2012 is 0.9, 2013 is 0.5, 2014 is 1.2, 2015 is 0.8, 2016 is 1.2 and 2017 is 1.3 it shows that the company‘s current ratio was little good but was not close to bench mark at initially but later on it started falling to give out worst performance within the period of 2010 and 2011 while there was an increasing effect from the period of 2014 to 2017 and yet still it could not attain the benchmark point. As matter of fact 2017 recorded the highest mark which is 1.3 times and that was the best performance in all following 2014 and 2016 for 1.2 times but 2011 recorded the worst performance which was 0.3 times. The mean of the current ratio was 0.93 whiles the standard deviation was recorded as 0.62902.

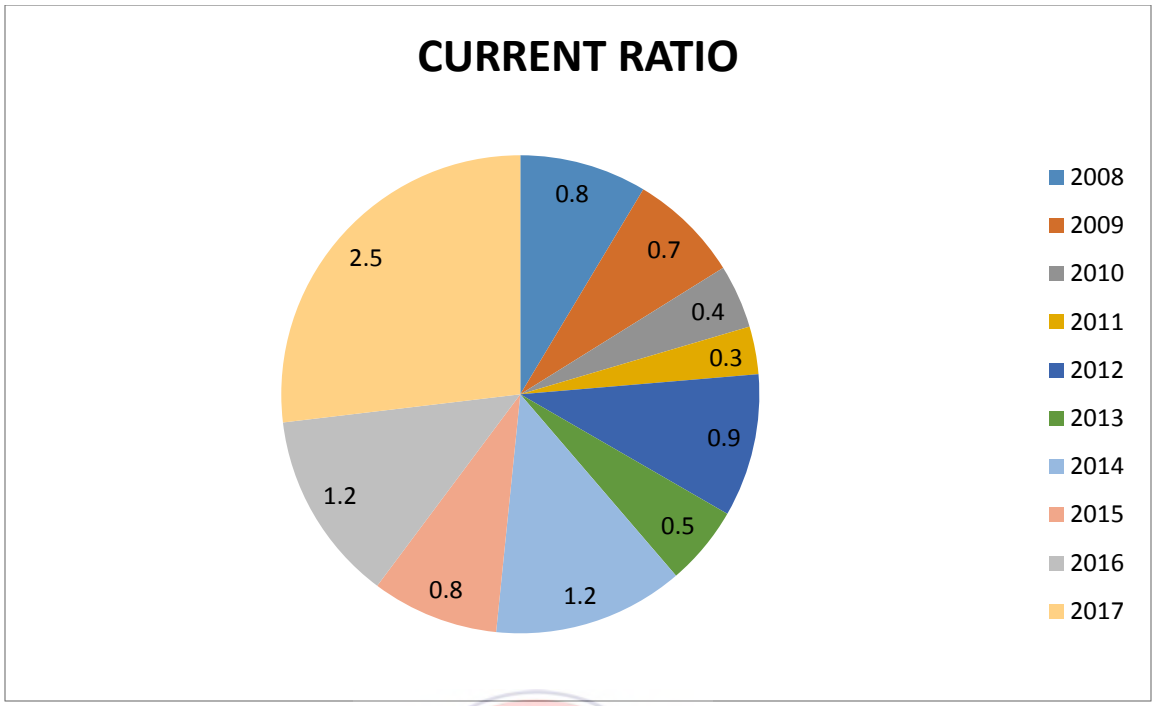

Figure 4.7; Current Ratio

4.2.2 Interpretation of Quick Ratio on Performance of Organization

Quick ratios for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is 0.3, 2009 is 0.2, 2010 is 0.1, 2011 is 0.1, 2012 is 0.5, 2013 is 0.2, 2014 is 0.4, 2015 is 0.4, 2016 is 0.5 and 2017 is 0.6 it shows that the company's quick ratio was little good but was not close to bench mark at initially but later on it started falling to give out worst performance within the period of 2010 and 2011 while there was an increasing effect from the period of 2014 to 2017 and yet still it could not attain the benchmark point. As matter of fact 2017 recorded the highest mark which is 0.6 times and that was the best performance in all following 2012 and 2016 for 0.5 times but 2011 recorded the worst performance which was 0.1 times. The mean of the quick ratio was 0.33 whiles the standard deviation was recorded as 0.176698.

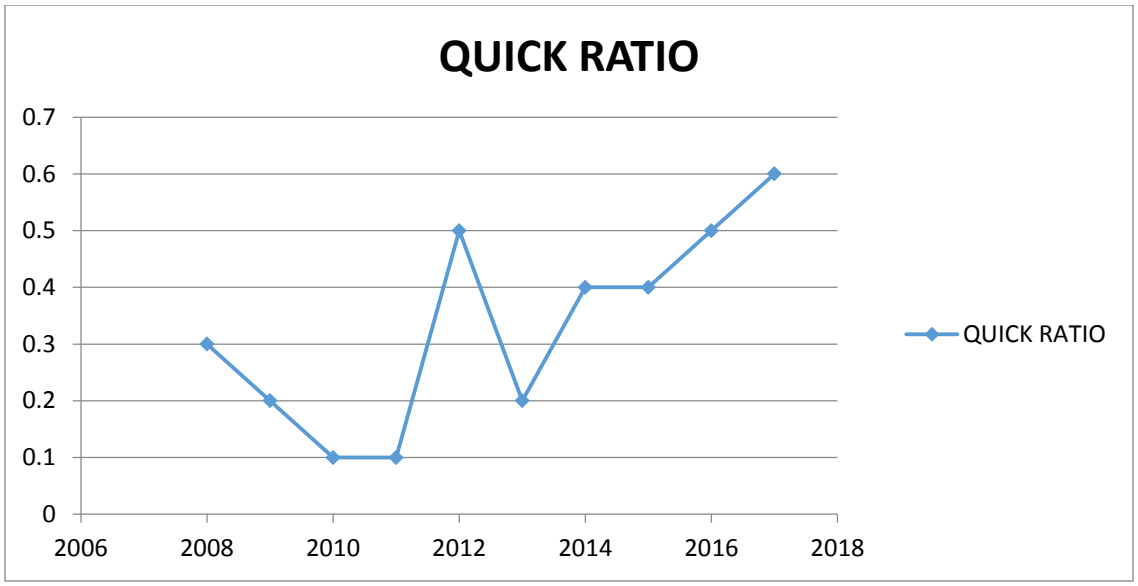

Figure 4.8; Quick Ratio

4.2.3 Summary of Liquidity Ratios of Performance of Organization

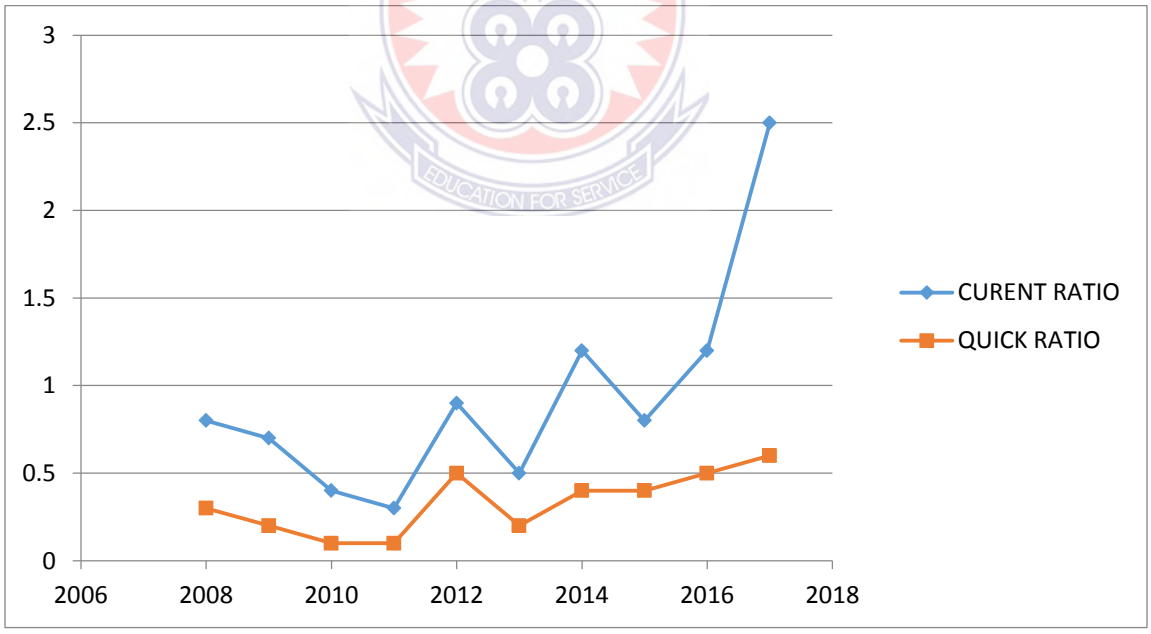

Figure 4.9; Summary of Liquidity Ratio

The above diagram above represents the summary of liquidity ratios on financial performance of organization (Guinness Ghana Breweries Ltd) from the period of 2008-2017. The ratio includes current ratios and quick ratios. The company‘s current ratio was little good but was not close to bench mark at initially but later on it started falling to give out worst performance within the period of 2010 and 2011 while there was an increasing effect from the period of 2014 to 2017 and yet still it could not attain the benchmark point. As matter of fact 2017 recorded the highest mark which is 1.3 times and that was the best performance. The company‘s quick ratio was little good but was not close to bench mark at initially but later on it started falling to give out worst performance within the period of 2010 and 2011 while there was an increasing effect from the period of 2014 to 2017 and yet still it could not attain the benchmark point. As matter of fact 2017 recorded the highest mark which is 0.6 times and that was the best performance.

4.3 Data Analysis on Capital Ratio

Table 5: Ratios Analysis of Capital Ratios for Guinness Ghana Breweries Ltd

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EPS	0.0830	0.069	(0.028)	0.003	0.133	0.086	(0.041)	(0.215)	(0.036)	0.022
P/E Ratio	26.39	18.26	(58.93)	433.33	17.37	51.40	(123.66)	(14.65)	(51.39)	65.91

Data Source: Field Survey, May 2019

The table shows the financial performance from the period of 2008 to 2017 in terms of capital ratios of the organization within the relevant period of the study. The relevant ratio under capital comprises earnings per share and price earnings ratio.

Table 6: Mean and Standard Deviation Analysis on Capital Ratios for Guinness Ghana Breweries Ltd

Capital	Mean	Standard Deviation
Earnings per share	0.0076	0.098114
Price / Earnings ratio	36.403	150.7245

Data Source: Field Survey, May 2019

The table shows the mean and standard deviation for various ratios which fall under the capital ratios of the organization within the relevant period of the study. The relevant ratio under capital comprises earnings per share and price earnings ratio.

4.3.1 Interpretation of Earnings Per Share on Performance of Organization

Earnings per share for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is GH₵0.0830, 2009 is GH₵0.069, 2010 is (GH₵0.028), 2011 is GH₵0.003, 2012 is GH₵0.133, 2013 is GH₵0.086, 2014 is (GH₵0.041), 2015 is (GH₵0.215), 2016 is (GH₵0.036) and 2017 is GH₵0.022. It shows that the company's performance of earnings per share initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2012 recorded the highest value which is GH₵0.133 and that was the best performance in all following 2013 for GH₵0.086 but 2015 recorded the worst performance which was (GH₵0.215). The mean of the earnings per share was 0.0076 whiles the standard deviation too was recorded as 0.098114.

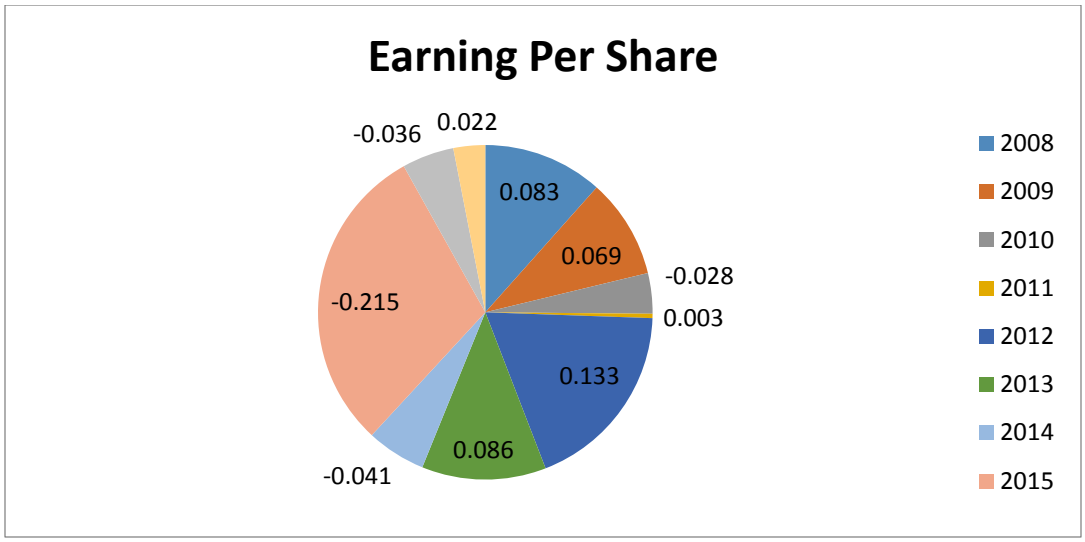

Figure 4.10; Earning per Share

4.3.2 Interpretation of Price Earnings Ratios on Performance of Organization

Price earnings ratio for ten years of the study from 2008 to 2017 shows below from the data collected from Guinness Ghana Breweries Ltd are as follows 2008 is GH₵26.39, 2009 is GH₵18.26, 2010 is (GH₵58.93), 2011 is GH₵433.33, 2012 is GH₵17.37, 2013 is GH₵51.40, 2014 is (GH₵123.66), 2015 is (GH₵14.65), 2016 is (GH₵51.39) and 2017 is GH₵65.91. It shows that the company's performance of price earnings ratio initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2011 recorded the highest value which is GH₵433.33 and that was the best performance in all following 2017 for GH₵65.91 but 2014 recorded the worst performance which was (GH₵123.66). The mean of the price earnings ratio was 36.403 whiles the standard deviation too was recorded as 150.7245.

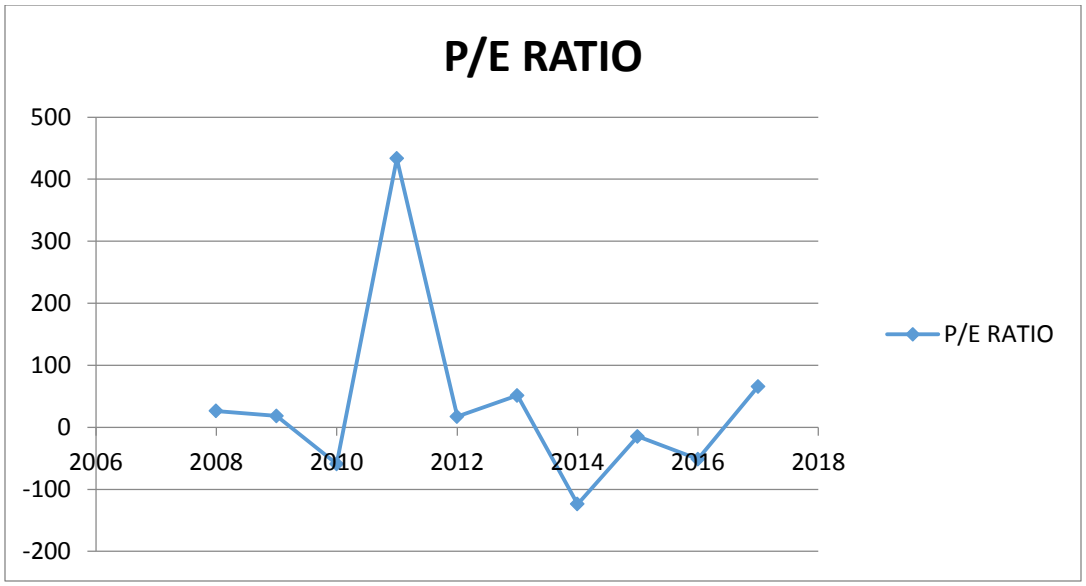

Figure 4.11; Price Earnings Ratio

4.3.3 Summary of Capital Ratios of Performance of Organization

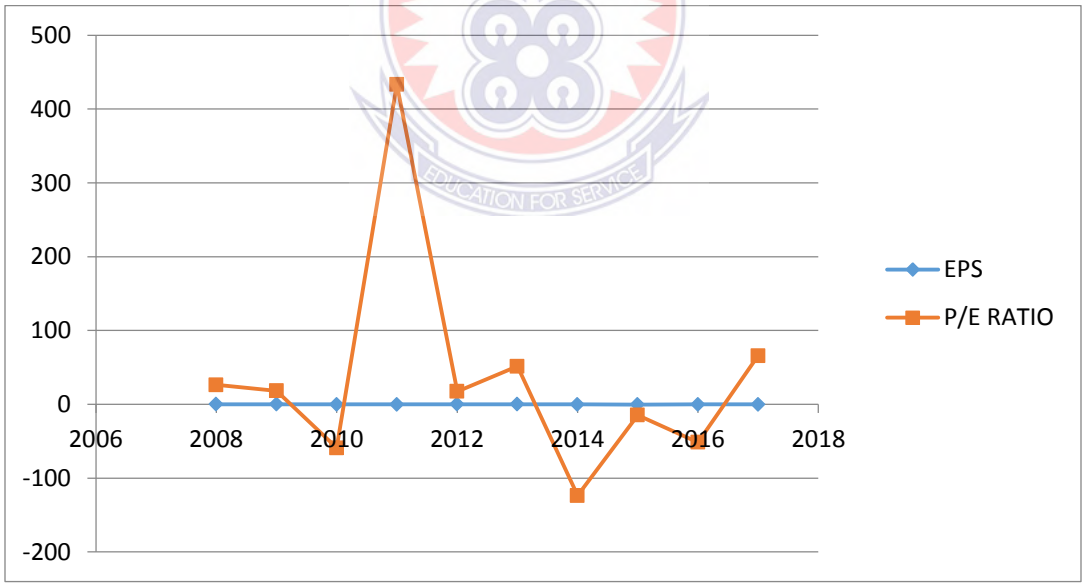

Figure 4.12; Summary of Capital Ratio

The above diagram above represents the summary of capital ratios on financial performance of organization (Guinness Ghana Breweries Ltd) from the period of 2008-2017. The ratio includes earnings per share and price earnings ratios. The company‘s performance of earnings per share initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2012 recorded the highest value which is GH₵0.133 and that was the best performance. The company‘s performance of price earnings ratio initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2011 recorded the highest value which is GH₵433.33 and that was the best performance in all following 2017 for GH₵65.91 but 2014 recorded the worst performance which was (GH₵123.66).

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter deals with the summary of the entire study especially of the findings; the conclusions drawn from the findings; and the recommended measures stipulated by the findings of the study. This chapter also links the results of the major findings to the general and specific objectives outlined by the study.

5.2 Summary of Major Findings

The researcher from the investigations identified some key factors that have analyzed based on the performance of manufacturing organizations through ratios. Under the profitability ratio, return on capital employed was analyzed the company‘s performance on return on capital employed ratio initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact both 2008 and 2009 recorded the highest percentages which are 22% on the return on capital employed. For the net profit margin the company‘s performance on net profit margin initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2008 recorded the highest percentage which is 14.4% and that was the best performance on the entities net profit margin. Under the gross profit margin the company‘s performance on gross profit margin initially started with positive and stable rate of returns but later on it keeps on fluctuating up and down

from 2008 to 2013 with every two years intervals. From 2014 the performance also started increasing from year to year and eventually it runs upwards. As matter of fact 2008 recorded the highest percentage which is 39.8% and that was the best performance on the entities gross profit margin. For the return on asset the company‘s performance of return on asset initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2012 recorded the highest percentage which is 10% and that was the best performance on the entities return on asset. Under the return on equity the company‘s performance of return on equity initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2008 recorded the highest percentage which is 22% and that was the best performance on the entities return on equity.

Under liquidity ratio, current ratio the company‘s current ratio was little good but was not close to bench mark at initially but later on it started falling to give out worst performance within the period of 2010 and 2011 while there was an increasing effect from the period of 2014 to 2017 and yet still it could not attain the benchmark point. As matter of fact 2017 recorded the highest mark which is 1.3 times and that was the best performance on the entities current ratio. With quick ratio the company‘s quick ratio was little good but was not close to bench mark at initially but later on it started falling to give out worst performance within the period of 2010 and 2011 while there was an increasing effect from the period of 2014 to 2017 and yet still it could not attain the benchmark point. As matter of fact 2017 recorded the highest mark which is 0.6 times and that was the best performance on the entities quick ratio.

Under capital ratio, the company‘s performance of earnings per share initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2012 recorded the highest value which is GH₵0.133 and that was the best performance on the entities earning per share. The company‘s performance of price earnings ratio initially started with positive and stable rate of returns but later on it keeps on decreasing from years to years and eventually it runs down to negative values. As matter of fact 2011 recorded the highest value which is GH₵433.33 and that was the best performance in all following 2017 for GH₵65.91 but 2014 recorded the worst performance which was (GH₵123.66) on the entities price earnings ratio.

5.2 Conclusion

Analysis based on financial ratios is the most important method to evaluate company‘s performance from different aspects of business. Financial ratio analysis is one of the best tools use to analysis performance of any company. Regular review of company‘s financial health status is a valuable practice. Performance of a company is usually related to how well a company can use it assets, shareholder equity and liability, revenue and expenses. Financial are considered as the optimal tools for analysis to reflect the financial conditions and performance of the company during certain period. Ratios help to form a solid foundation for financial analysis by properly establishing relationships between items in the statement of financial position and income statement within the firm. Financial accounting and reporting agreed that there are certain relationships between items shown in the income statement and those in the statement of financial position.

Financial analysis as a process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the firms items in statement of financial position and the income statement. Generally, the study was down to use financial ratios to analysis the performance of a manufacturing company. Relating to specific objectives which includes examine the liquidity or solvency of Guinness Ghana breweries limited, analyze the profitability performance of Guinness Ghana Breweries limited and finally examine the efficient use of capital employed by Guinness Ghana Breweries Limited.

The results of the empirical analysis have shown that liquidity ratios such as current ratios and quick ratios were considered under the relevant period of the studies and it review that the entity was not financially stable and solvency. Again financial performance through profitability ratio such return on capital employed, net profit margin, gross profit margin, return on asset, and return on equity were deployed to measures management efficiency as to how best they have properly manage the entities assets but the study shows that management were inefficient in terms of managing the resources of the entity. Another ratio considered under capital such as earning per share and price earnings ratio were employed under the relevant period of the study to determine investors return and their market value but the study shows that investors were not earning any considerable any returns but rather the value of their investment were deterioration.

5.3 Recommendations

Based on the findings and conclusions made, l recommends that there is the need to bring organizations system under control. Liquidity and profitability are two very important and vital aspects of corporate business life. No firm can survive without liquidity. A firm not making profit may be considered as sick but, one having no liquidity may soon meet its downfall and ultimately die. Management of Guinness Ghana Breweries LTD should ensure that liquidity is neither excessive nor inadequate because excessive liquidity indicates accumulated idle funds do not earn any profit for the firm, and inadequate liquidity not only adversely affect the credit worthiness of the firm, but also interrupts the production process and hampers its earning capacity to a great extent.

The liquidity position of the firm depends on the quality of debtors to a great extent. Therefore, management of the Guinness Ghana Breweries LTD should maintain a high debtor‘s turnover ratio by giving discounts to enable quick payment because it will help in increasing their investment by reinvesting the funds collected from their customers. Management should utilize its assets efficiently in generating more income for the company.

It is also recommended that corporate financial managers should ensure effective and prudent management of their working capital so as to ensure that there is enough cash for the day to day running of the firm. Cash availability would reduce the need to go for debt.

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