AN EVALUATION OF THE FINACIAL POSITION OF ACCRA BREWERY LIMITED

BY

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DECLARATION

I here by declared that this submission is my own work towards the Masters of Business Administration and that, to the best of my knowledge, it contains no materials previously published by another person nor materials which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

I dedicate this thesis to my wife, Mrs. Patricia Adjei and the kids for their total support during the entire programme.

ABSTRACT

The study is designed to evaluate the financial position and the profitability position of ACCRA BREWERY LIMITED a public traded company listed on Ghana Stock Exchange over seven years period from 2000 to 2006.

It assesses ABL's risk of bankruptcy using bankruptcy prediction model called Altman's Z-score. The study reveal that ABL's risk of bankruptcy were dominantly within the "gray area" (that is between: 1.8-3.0) over the entire seven years period. The situation was more threaten in year 2000 and 2006.where ABL scored below the lower limit.

The study again applied traditional ratios analysis in appraising the financial performance of ABL focusing on the assessment of its liquidity, solvency and finally its profitability. Based on the ratios analysis the study reveal trends of ABL's key financial ratios and the results showed both an impressive and unimpressive performance:

The company liquidity in totality was not satisfactory enough to guarantee total safety to its creditors. It experience downward trend for the entire reviewed period except year 2004.

The study further revealed that the company depended more on debt relative to owner's funds, thus, experiencing relatively higher debt ratios. Not withstanding that has shown good interest coverage until the year 2006 that recorded a threaten result.

The flow of the study considers various theories and models and eventually selecting the applicable methodology and defining key variables used in the studies. It prepared relevant data and discussed the results. It finally summarized the entire studies and concludes with recommendations.

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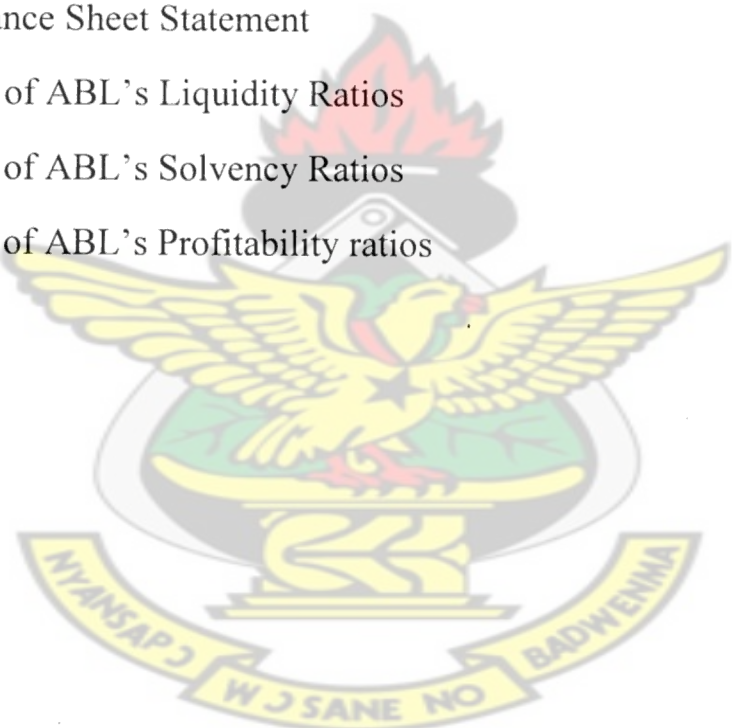

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the study

It is very difficult to assess the financial well being of your company by merely looking at the cedi values reported on your financial statements. Volatile economic conditions as well as internal factors make it imperative that today's business owners have an in-depth understanding of their company's financial position and performance.

Financial analysis is one of the major tools available to business owners or analysts that allowed them to evaluate the financial position and performance of firms. Analysis of any firm financial statement help highlights its shortcomings and that information can be used to improve performance. Financial analysis can also be used to forecast how such a strategic decisions as to the sale of a division, a major marketing program or expanding a plant are likely to affect future financial performance.

Performance evaluation has received much attention from today corporate managers in small and large companies. Board of Directors of many companies at all sizes and types of today corporate world are recognizing the need for formal and effective programs to measure management's performance of a company. Performance evaluation is a valuable tool available for recognizing a firm's strength and weakness, developing management talents and is also an essential part of a company's business plan.

A manager who wants to reward employees based on the performance would like to evaluate their performance and know how well they have performed. Managers also conduct performance evaluation to kwon how well a particular division or department has performed.

1.2 The Problem Statement

Some users of accounting ratio information have very specific concerns:

Lenders are interested in the firm's ability to meet the payments over the life of the loan.

Auditors are interested in judging whether financially troubled companies are likely to continue business in a foreseeable future or as a "going concern".

Managements are interested in knowing the problems they are about to face and, where appropriate, taking corrective action and also how best to strategies effectively base on the evaluation of financial position.

The concern of the study is to evaluate the financial statements of the company to know its financial position and profitability position.

1.3 Relevance of the study

Is been assumed that company's annual financial statement is the reliable source for evaluating its financial position and performance. The purpose of preparing financial statements is used for decision-making. Financial analysis is one of the major tools available to business owners or analysts that allowed them to perform evaluation planning and forecasting. The analysis and the interpretation of the financial statements are used to judge the meaning and significance of the financial statements. An opinion is formed in report of the financial position and performance of the company of concern.

1.4 Objective of the study

The study seeks to evaluates the financial statement of ACCRA BREWERY LIMITED over seven years period for its risk of bankruptcy in the near future without any intervention in its operations , and also assess its financial health and profitability position.

The specific objectives of the studies are:

i. To assess the risk of bankruptcy of the company.

ii. To find out the financial position and ability of the company to meet its short-term financial obligations.

iii. To evaluate the ability of the business to earn profit over review period.

1.5 Scope of the Study

The scope of the study is limited to collecting the financial data publish in annual reports of ACCRA BREWERY COMPANY LIMITED on yearly from 2000 to 2006 with reference to the objectives listed above. Ratios and trends are performed as well as testing bankruptcy potentials and suggested solutions given.

1.6 Data Sources

Data for the study are secondary data obtained from published annual financial reports of ACCRA BREWERY COMPANY LIMITED for the years 2000 to 2006.

1.7 Methods of Data Analysis

Evaluating the financial position and profitability of a firm can be undertaken by different persons and for different purpose. Thus the methodology adopted may also be varied from one

situation to another. The techniques used for this study are:

- Bankruptcy prediction model (Altman Z-Score Model)
- Ratio analysis
- Trend analysis

1.8 Limitations of the Study

The study suffers from the following limitations:

i. Unavailability of industrial average values and/or major competitor financial data for the period in question for relevant comparison.

ii. Altman's bankruptcy prediction model, ratio analysis and trend analysis are used

iii. The study was conducted with data available and analysis was made accordingly.

iv. "Book value of Equity" was used as a proxy for" market value of Equity".

1.9 Organisation of the Study

Chapter one looks at the problem statement, the objectives and the research methodology of the study. The chapter two also s examines the concept of the financial statement evaluation, review Altman's bankruptcy prediction model, ratio analysis, trend analysis and eventually settled on conceptual frame work of the study. Chapter three details the methodology for the study and also describes the profile of the case study company. Chapter four performed analysis on the company data and interprets the results. Finally, chapter five form opinion on the results and conclude the studies with recommendations.

CHAPTER TWO

2.0 Literature Review

2.1 Introduction

Evaluating financial performance is a significant exercise in financial arena. This exercise is paramount to many stakeholders including: auditors, lenders, shareholders, speculators, competitors, investors, management, etc. Although some parties might have a specific concern, others have a cross section of concerns. For instance, whiles auditors are focusing on the going concern of the company, lenders are also interested in the company's ability to meet payment over the loan life period. While investors are interested in potentials of the company or its undervalued stocks, management is bent on the problems the company is likely to face, possible corrective measures and strategies to give competitive advantage.

2.2 Assessment Models

Assessment models are statistical devices, which are used in an attempt to separate observations into more groups. In terms of financial analysis though performing essentially the same function, they may be separated into the following:

- Credit appraising model which attempt to differentiate between good borrowers and bad ones.
- Bankruptcy prediction models which provide an indication of whether a firm is heading for bankruptcy or not.
- Models which attempt to separate problem companies from non problem companies.

2.3 Bankruptcy Predicting Models

Eivind (2001) indicates that the study of Beaver in 1966 is the pioneering work on bankruptcy prediction models. In the study, 30 ratios were identified to capture relevant aspects and were applied by a univarate discriminant analysis on 79 pairs of bankrupt/non-bankrupt firms. The best discriminators were 'working capital funds flow/total assets' and 'net income/total assets' which correctly identified 90% and 88% respectively of the cases. Various authorities have devised different models which are discussed below.

Chartkou et al (2008) suggest four basic frameworks for probability of bankruptcy assessment:

- based on accounting measures
- based on stock prices
- based on interest rates
- based on full information analysis.

The research will focus only on the first item. Two criteria influenced the choice of this framework. The first criterion was simplicity in terms of technical implementation and the second one was availability of data. Penman, (2003), indicates that "Models based on accounting measures are undoubtedly the most popular and intuitive means to measure "probability of bankruptcy" Sources of accounting data are publicly available and ratios are easy to compute and interpret.

This method varies from simple univariate analysis to more complex bankruptcy prediction models (like Altman's Z-score (Altman, 1968) or Ohlson's O-score (Ohlson, 1980). But a number of academic papers question the quality of accounting models. These models employ

financial statements data that measures past performance of the firm and may not be applicable to its future perspectives. Additionally, accounting conservatism distorts the real picture.

Another important deficiency of accounting models is a failure to capture a measure of asset/cashflow volatility. Volatility is a crucial variable in bankruptcy prediction because according to Caouette et al, 1998, it incorporates the likelihood of default – when the firm's asset value drops below its debt value.

2.4 Accounting Based Measures

Accounting based measures have been used for a long time as predictors of bankruptcy.

Eivind (2001) indicates that Beaver, (1966) was the first scholar, who had performed an essential study of financial ratios as bankruptcy indicators. According to Beaver, The firm is viewed as a "reservoir of liquid assets, which is supplied by inflows and drained by outflows. The solvency of the firm can be defined in terms of the probability that the reservoir will be exhausted, at which point the firm will be unable to pay its obligations as they mature". By this framework beaver state four propositions:

i. The larger the reservoir, the smaller the probability of failure.
ii. The larger the net liquid-asset flow from operations, the smaller the probability of failure
iii. The larger the amount of debt held, the greater the probability of failure,
iv. The larger the fund expenditures for operations, the greater the probability of failure.

Beaver analyzed 30 different financial ratios aggregated in six groups: cash-flow ratios, net income ratios, debt to total asset ratios, liquid asset to total asset ratios, liquid asset to current debt ratios, and turnover ratios. Ratios were selected according to the following criteria:

opularity or appearance in the literature and their performance (which had been reported by arlier studies). All 30 ratios were tested for their ability to predict bankruptcy. As a result, the ample of 30 ratios was narrowed down to seven, which exhibited best performance. Among hem were six accounting ratios and one accounting measure:

- Cash flow/Total debt
- Net income/Total assets
- Total debt/Total assets
- Working capital/Total assets or (Current assets – Current liabilities)/Total assets
- Current ratio or Current assets/Current liabilities
- No credit interval or (Defensive assets – Current liabilities)/Expenditures for operations
- Total assets

The results indicated that not all ratios predicted equally well. The ability of failure prediction is the strongest in *Cash flow/Total debt* ratio. *Net income/Total assets* ratio predicted second best. The result was expectable because both ratios are flow based and they show high correlation.

The most important contribution of Beaver study was the development of methodology employing accounting data for company's failure prediction. The analysis conducted by Beaver was univariate analysis; it examined the predictive ability of ratios one at a time. But the practice suggests this method suffers from a number of deficiencies, namely, there are too many ratios to be considered and combination of different ratios can have different implications. This issue called for a method of combining ratios into one composite score that would indicate the overall probability model of the firm. Next breakthrough in probability of bankruptcy prediction analysis was composite credit score model called Altman Z – score analysis.

2.5 Altman Z-Score Model

Like that of Beaver, Altman (1968) conducted a similar study applying multivariate discriminant analysis on data sample consisted of 66 firms, half of which had filed for bankruptcy under "Chapter 7". All businesses in the database were manufacturers, and small firms with assets of less than $1 million were eliminated.

It combines seven ratios; return on assets, stability of earnings, debt service, cumulative profitability, liquidity, capitalization and size. It was derived based on data from manufacturing firms, but has since proven to be also effective (with some modifications) in determining the risk that a services firm will go bankrupt.

This score uses statistical techniques to predict a company's probability of failure using the following 8 variables from a company's financial statements:

- Net Sales
- Earnings Before Interest & Taxes (EBIT)
- Retained Earnings
- Total Assets
- Market Value of Equity
- Total Liabilities
- Current Assets
- Current liabilities

The first-three of the variables are from the income statement whiles the reaming five variables are also balance sheet elements. The model for public companies takes the following form:

$$Z - Score = 1.2\left(\frac{WC}{TA}\right) + 1.4\left(\frac{RE}{TA}\right) + 3.3\left(\frac{EBIT}{TA}\right) + 0.6\left(\frac{E_{market}}{TL}\right) + 1.0\left(\frac{Sales}{TA}\right)$$

Where:

WC – working capital,

TA – total assets,

RE – retained earnings,

EBIT – earnings before interest and taxes,

E_{market} – market value of equity, and

TL – total liabilities.

i. Working Capital to Total Asset Ratio

The ratio of Working Capital to Total Assets is the Z-Score component, which is considered to be a reasonable predictor of deepening trouble for a company. A company that experiences repeated operating losses generally will suffer a reduction in working capital relative to its total assets.

ii. Retain Earnings to Total Assets

The ratio of Retained Earnings to Total Assets is a Z-Score component, provides information on the extent to which a company has been able to reinvest its earnings in itself. An older company will have had more time to accumulate earnings, so this measurement tends to create a positive bias towards older companies.

iv. EBIT to Total Assets

The EBIT to Total Assets ratio adjusts a company's earnings for varying income tax factors and makes adjustments for leveraging due to borrowings. These adjustments allow more effective measurements of the company's utilization of its assets.

v. Market Value of Equity to Total liabilities

The 'Market Value' ratio gives an indication of how much a company's assets can decline in value before debts may exceed assets. Equity consists of the market value of all outstanding common and preferred stock. For a private company, the book value of equity is used for this ratio. This depends on the assumption that a private company records its assets at market value.

v. Sales to Total Assets

The Sales ratio measures the ability of the company's assets to generate sales. This ratio is not included in the Z-Score of a private company.

In analyzing the result of Z-core method there is the need to exercise restrain by placing the judgment within context. Z-core is a formula for a measurement of the financial health of a company and a powerful tool to diagnose the probability that a company will go bankrupt within a 2-year period. The Z-score represents a point in time. As such, the Z-scores should be examined over time. Consistently low scores each year are more of a concern than a one time low score. Bankruptcyaction.com also gives Some Words of Caution! "All developers of prediction models warn that the technique should be considered as just another tool of the analyst and that it is not intended to replace experienced and informed personal evaluation. Perhaps the

›est use of any of these models is as a "filter" to identify companies requiring further review or o establish a trend for a company over a number of years"

According to Altman (1968), making judgment of the results depend on the nature of the company under study that is, public manufacturing, private manufacturing company or private general company. Caoutte et' al (1998) analyzed the Z score in terms of the following;

Original Z-Score [For Public Manufacturer]: If the score is 3.0 or above - bankruptcy is not likely to happen. The company is considered 'Safe' based on the financial figures only. Again, if the Score is between 2.7 and 2.99, then the company is 'On Alert'. This zone is an area where one should 'Exercise Caution'. On other hand, if the Score is between 1.8 and 2.7, there is a good chance of the company going bankrupt within 2 years of operations from the date of financial figures given. On more serious range, if the Score is 1.8 or less, Probability of Financial Catastrophe is Very High. A score between 1.8 and 3.0 is the gray area.

Probabilities of bankruptcy within the above ranges are 95% for one year and 70% within two years. Obviously, a higher score is desirable. From the interpretation given by Altman, it is worth note that if the Altman Z-Score is close to or below 3, then it would be as well to do some serious due diligence on the company in question before even considering investing.

Model 'A' Z-Score [For Private Manufacturer]: Model 'A' of Altman's Z-Score is appropriate for a private manufacturing firm. You should not apply Model 'A' to other companies. 'A' score of 2.90 or higher indicates that bankruptcy is not likely. But a score of 1.23 or below is a strong

indicator that bankruptcy is likely. Probabilities of bankruptcy in the above ranges are 95% for one year and 70% within two years. Obviously, a higher score is desirable.

Model 'B' Z-Score [For Private General Firm]: Edward Altman developed this version of the Altman Z-Score to predict the likelihood that a privately owned non-manufacturing company will go bankrupt within one or two years. Model 'B' is appropriate for a private general (non-manufacturing) firm. Model 'B' should not be applied to other companies. A score of 1.10 or lower indicates that bankruptcy is likely, while a score of 2.60 or higher can be an indicator that bankruptcy is not likely. 'A' score between the two is the gray area. Probabilities of bankruptcy in the above ranges are 95% for one year and 70% within two years. Again, obviously, a higher score is desirable. Below are "table 2.1, 2.2 and 2.3" respectively which indicates the summary of scores and their trend of probability of failure.

Table 2.1: Original Z-Score (For Public Manufacturer)

SCORE	PROBABILITY OF FAILURE
1.80 or less	Very High
1.81 to 2.7	High
2.80 to 2.9	Possible
3.00 or higher	Very low

Table 2.2: Model 'A' Z-Score (For Private Manufacturer)

SCORE	PROBABILITY OF FAILURE
1.23 or less	Very high
2.9 or higher	Very low

Table 2.3: Model 'B' Z-Score (For Private General Firm)

SCORE	PROBABILITYI OF FAILURE
1.1 or less	Very high
2.6 or higher	Very low

Altman's Z score is the tried and tested formula for bankruptcy prediction and has proven successful in the real world. It has been demonstrated to be quite reliable in a variety of contexts and countries. Eivind (viz. op cit,) indicate that the application on 33 pairs of bankrupt /non bankrupt firms the model correctly identifies 90% of the case one year prior to failure. A decade ago, the use of Z Scores was virtually unheard of among practicing accountants. Today they are used by auditors, management consultants, and courts of law, and as part of many database systems used for loan evaluation. Those who advocate the use of these approaches argue as follows:

- They are more precise and lead to clearer conclusions than a mass of contradictory ratios. They measure the extent of our uncertainty.
- They are uniform and leave less room for the quirks and inaccuracies of judgment that some individuals possess.

Their reliability can be evaluated statistically. They are based on past experience rather than merely on someone's unverified opinion.

They are faster and less costly to work with than traditional tools.

They can weed out the two extremes of the spectrum in an economical fashion. This allows the analyst to focus on the gray area where experience and judgment are needed to compensate for what the computer misses.

Like any other financial models, it involves pitfalls and it is relevant for users to take note of them. Some of these are as follows:

- Many scoring systems can behave strangely; when ratios take on abnormal values they often produce erroneous results. It is dangerous to assume that sophisticated tools can be used by the untrained. They can be blinded by their apparent accuracy and sophistication. Models move us one stage further from the raw accounting data. Only experienced users realize how imprecise "exact" information sometimes is.
- Models often do not give a clear result. Whenever there is doubt, we must look to the intangibles and address the qualitative issues.
- Most users lack an adequate database to construct their own models. As a result, they must purchase a custom-built one (expensive) or rely on models like those described here that may not meet their specifications exactly.

2.6 Financial Ratio Analysis (Univariant Models)

The basic purpose for preparing financial statement is for decision-making. Notwithstanding, the information contained in the financial statement is of great value when it is put to analysis and interpretation. The common financial statement prepared for the purpose of external reporting of

owners investors and creditors are 'Balance sheet' and 'Profit and loss account'.

Therefore, the study will rely on the "Balance sheet" and "Profit and loss account" from the annual financial statements, through the application of ratio analysis to determine the financial position and profitability of the firm.

Ratio analysis is a powerful tool of financial analysis. Ratio is the mathematical relationship between two quantities in the form of a fraction or percentage. Pandey (2002) also defines a ratio as "the indicated quotient of two mathematical expressions" and as "the relationships between two or more things". According to financial theories, a "financial ratio" is a ratio of chosen numerical quantities picked up from the financial statements of a company.

A ratio is used as a benchmark for evaluating the financial position and performance of a firm. Financial ratios are also used by security analysts for the purpose of comparison between the positives and negatives of different firms. When the trading of shares of a particular firm is going on in the financial market, the market value of the stocks is utilized for specific financial ratios.

Ratio analysis is essentially concerned with the calculation of relationships which after proper identification and interpretation may provide information about the operations and state of affairs of a business enterprise. Ratio analysis can be invaluable aid to the management in the discharge of its basic duties and functions like forecasting, planning, coordination, communication and control. The analysis is used to provide indicators of past performance in terms of critical success factors of a business. This assistance in decision-making reduces reliance on guesswork and intuition and establishes a basis for sound judgment.

The absolute accounting figures reported in the financial statements do not provide a meaningful understanding of the performance and financial position of a firm. The relation between two accounting figures expressed mathematically is known as financial relations. Ratios help to summarize the large quantity of financial data and make qualitative judgment about firm's performance. The importance of ratio analysis for a business lies in bringing into hold relief to the inter relationship which exists between various segments of business, as expressed through accounting statement, avoiding any distortions that may result from an absolute study of accounting information. The financial ratios are applied by the probable and present shareholders of a company, the creditors of a company and the managers of a company.

However, a ratio on its own has little or no meaning at all. For example, consider a current ratio of 2:1. This means that for every 1 monetary value of current liabilities there are 2 of assets. However each business is different and each has different working capital requirements. From this ratio, we cannot make any comments about the liquidity of the business, whether it carries too much or too little working capital. The significance of a ratio can only truly be appreciated when:

- It is compared with other ratios in the same set of financial statements.
- It is compared with the same ratio in previous financial statements (trend analysis).
- It is compared with a standard of performance (industry average). Such a standard may be either the ratio which represents the typical performance of the trade or industry, or the ratio which represents the target set by management as desirable for the business.

To evaluate the financial position and performance of a firm the financial executive needs a

certain yardstick. The yard stick frequently used is ratio analysis. It is an instrument for analysis of the health of an enterprise. Thus it does by evaluating in a broader context important aspects of the conduct of business like liquidity, solvency, profitability, capital bearing etc. Such an evaluation enables conclusion to be drawn regarding the financial requirements.

For the purpose of evaluating the financial position and profitability of a corporation or business the concept of financial analysis takes into account the past, present and future performances of the particular company or project. A number of ratios are used for the purpose of assessment. Beaver (1966) compared the financial ratios of 79 manufacturing firms which failed with 79 which remained solvent. His study revealed five ratios which could discriminate between failed and non failed firms. These are : i) working capital to total assets ii) net income to total assets iii) total debt to total assets iv) working capital to total assets and v) current ratios.

Gupta, (1979) attempted a refinement of Beaver's method in the Indian context. His study revealed five ratios with a high degree of predictive power which are; i) Earnings before depreciation, interest and taxes (EBDIT) to sales ii) Operating cash flow (OCF) to sales iii) EBDIT/Total assets including accumulated depreciation iv) OCF/Total assets including accumulated depreciation and v) EBDIT/(interest+0.25 debt). This ratio measures the extent of the firms estimated debt servicing ability.

Salmi et al (1990) researched on the financial ratios of 32 publicly traded companies from 1974-1984 and were able to classify financial ratios into the following three groups:

- Accrual ratios - which include: ratios covering liquidity, capital adequacy, profitability and

efficiency.

Cash flow ratios - comprise net cash income to cash from sales, cash operating income to total assets, cash flow to capital investments divided by cash based sales, cash outflow to materials supplies and staff costs divided by cash from sales, and outflow to interest payments divided by cash operating income.

Market based ratios - contain market information and are therefore distinct from the conventional financial ratios by definition. These are divided in the study into the following three groups.

a) Ratios directly based on financial statements such as Dividend Payout Ratio.

b) Ratios where the numerator comes from the financial statement and the denominator from market based information or vice versa, such as Dividend Yield, Price Earnings Ratio and Market to Book Ratio.

c) Ratios based solely on market indicators such as return on Security, Security Beta and Security Total Risk.

The U.S Business Reporter, February (2006) gives the following ratios as the most pertinent information to analyze financial institutions' financial statements;

- Return on Assets (ROA)

  Return on Average Assets = net operating income/ total assets.

- Return on Equity (ROE)

  Return on equity = net income- preferred dividends/ stockholder equity.

- Rate Paid on funds

  Rate Paid on funds =total interest expense/total earning assets

- Net interest Margin

Net interest Margin = net interest income/earning assets

- Provision for Loan Losses

The report analyses this ratio into the entire reserves as a percentage of advances (Reserve/total loans), or particular charge offs as a percentage of advances (charge offs/total advances).

Long Term Liabilities to Total Equity, which is an indication of banks ability to borrow funds.

Long term debt to total liabilities and equity = long term debt /total liabilities +equity.

Equity to Assets is an indicator of the capital adequacy of the bank.

Equity to Assets = Stockholders equity/Average total assets.

Equity to loans reflects the degree of equity coverage to outstanding advances.

Equity to loans= average common equity / average total assets.

Fraser et al (2001) put forward the view that the key ratios commonly used to evaluate different dimensions of financial performance are as follows.

- Profit Ratios - of which the most important are Return on Equity (ROE), Return on Assets (ROA) and Net Interest Margin.
- Asset Quality Ratio - which include Provision for Loss Ratio, Loan Ratio and Net Charge Offs.
- Operating Efficiency Ratios - this can be calculated to provide information on cost control by dividing various expenses for different expense categories.
- Liquidity ratios – which include temporary investment ratios and volatile liability dependency.

(http://finance.mapsofworld.com/corporate-finance/concepts/ratios.html) (20th October, 2008), indicates that "Financial ratios" are classified depending on the financial features of the institution that the ratio calculates. Liquidity ratios calculate the accessibility of cash for payment of loans. Activity ratios compute how fast a company can exchange cash properties with non-cash properties. Debt ratios calculate the capability of a company to pay off its long-term loans. Profitability ratios compute the application of the properties of a company and handling of its disbursals for yielding a satisfactory rate of return. Market ratios compute the feedback from the investors with regards to possessing the shares of a company and in addition, the expenses related to the issuance of stock.

The article also believes "Financial ratios" help in carrying out the following comparisons:

i. Between industries
ii. Between companies
iii. Between a particular firm and the industry average of the firm
iv. Between various periods of time for a firm

From theories reviewed so far the study recognized the complexity in the process of evaluating a company's financial position and profitability position in terms of the environment, internal operations and external activities. It also accepts the fact that classification may vary from one situation to another base on the institution and for different purpose. Thus the classifications of ratios adopted by study to analyze the financial position and profitability of ABL are: liquidity ratios; solvency ratios and profitability ratios.

2.7 Measuring Liquidity

Liquidity is the ability to generate cash to meet cash demands as they occur during the year and to provide for unanticipated events. Liquidity seeks to answer the question 'Can we make required payments? They are of particular interest to those extending short-term credit to the firm. It identifies the relationship between current assets and current liabilities Liquidity ratios frequently used are the current ratio, the quick ratio and cash ratio.

- **Current Ratio**

Current ratio is also called working capital ratio. It is the ratio of current assets to current liabilities:

$$\text{Current Ratio} = \frac{\text{Curent Assets}}{\text{Current Liability}}$$

(http://www.answers.com/topic/financial-ratio#wp-_ref-22") (2nd November 2008) indicates that though the ideal current ratio depends to some extent on the type of business, a general rule of thumb is that it should be at least 2:1. A lower current ratio means that the company may not be able to pay its bills on time, while a higher ratio means that the company has money in cash or safe investments that could be put to better use in the business.

Short-term creditors prefer a high current ratio since it reduces their risk. Shareholders may prefer a lower current ratio so that more of the firm's assets are working to grow the business. For example firms in cyclical industries may maintain a higher current ratio in order to remain

solvent during downturns.

One drawback of the current ratio is that inventory may include many items that are difficult to liquidate quickly and that have uncertain liquidation values. The quick ratio is an alternative measure of liquidity that does not include inventory in the current assets.

- **Quick ratio**

The quick ratio is defined as follows:

$$\text{Quick Ratio} = \frac{(\text{Current Assets} - \text{Inventory})}{\text{Current Liability}}$$

An alternative method is:

$$\text{Quick Ratio} = \frac{(\text{Current Assets} - \text{Inventories} - \text{Prepaid Expenses})}{\text{Current Liabilities}}$$

The current assets used in the quick ratio are cash, account receivables, and marketable Securities (notes receivable). These assets essentially are current assets less **inventory. The** quick ratio is often referred to as the acid test.

- **Cash ratio**

Finally, the cash ratio is the most conservative liquid ratio. It excludes all current assets except

the most liquid: cash and cash equivalents. The cash ratio is defined as follows:

$$\text{Cash Ratio} = \frac{(\text{Cash} + \text{Marketable Securities})}{\text{Current Liabilities}}$$

The cash ratio is an indication of the firm's ability to pay off its current liabilities if for some reason immediate payment was demanded.

2.8 Measuring Solvency

These ratios are sometimes referred to as "net worth ratios" or "financial leverage ratios" or "debt management ratios". Solvency measures the ability of the firm to pay all debts if the assets of the business are sold. Generally, if the market value of total assets exceeds existing debt obligations against those assets, the business is solvent. This type of ratio is often referred to as a leverage ratio. It is a good indicator of how much financial risk the company has taken on.

There are two types of financial leverage ratios: component percentage and coverage ratios. Component percentages compare a company debt with either its total capital (debt plus equity) or equity capital. Coverage ratios reflect a company's ability to satisfy fixed obligations, such as interest, principal payment, or lease payments. Ratios in this category designed to measure the long-run solvency of ABL are Deb/Assets, Debt to Equity and Interest Coverage.

- Debt Ratio

The Debt Ratio measures the level of debt in relation to our investment in assets. The Debt Ratio tells us the percent of funds provided by creditors and to what extent our assets protect us from creditors. The ratios depend on the classification of long-term leases and on the classification of

some items as long-term debt or equity. The Debt Ratio is calculated as follows:

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

A low Debt Ratio would indicate that we have sufficient assets to cover our debt load.

The lower the ratio, the more security they have. Creditors and management favor a low Debt Ratio. Gunse (1995), indicate that if the ratio moves above 1:1, it could mean that bankruptcy occurred, they might not recover the full amount owed them.

- Deb-to-Equity Ratio

It compares the funds provided by creditors to the funds provided by shareholders. As more debt is used, the Debt to Equity Ratio will increase. Since we incur more fixed interest obligations with debt, risk increases. On the other hand, the use of debt can help improve earnings since we get to deduct interest expense on the tax return. So we want to balance the use of debt and equity such that we maximize our profits, but at the same time manage our risk. The Debt to Equity Ratio is calculated as follows:

$$\text{Debt} - \text{To} - \text{Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

- Number Of Times Interest Earned

In addition to the leverage ratios that use information about how debt is related to either assets or equity, there are a number of financial leverage ratios that capture the ability of the company to

satisfy its debt obligations. The most common one is the Interest Coverage ratio. It indicates margin of safety in meeting debt or fixed interest payments. It is calculated as follows:

$$\text{Interest Coverage} = \frac{\text{EBIT}}{\text{Enterest Espenses}}$$

A high ratio is desirable from both creditors and management. Gunse (via. op cit), considered Times Interest Earned ratio as satisfactory if interest is earned two more times a year.

2.9 Measuring Profitability

Profitability is an indication of the level of income produced by your company and is measured in terms of rates of return produced by the labour, management, and capital investment of the business. The objective of profitability relates to a company's ability to earn a satisfactory profit so that the investors and shareholders will continue to provide capital to it. A company's profitability is linked to its liquidity because earnings ultimately produce cash flow. Investors and business owners use these to determine management's overall operating efficiency and the level of return on their capital investment.

The question often asked are do sales prices exceed unit costs, and are sales high enough as reflected in Profit Margin (PM), Return on Capital Employed (ROCE), Return on Equity (ROE), and Return on Assets (ROA) budgeted? Profitability ratios offer several different measures of the success of the firm at generating profits. Examples on profitability ratios include: Gross Profit Margin, Net Profit Margin, and Return on Capital Employed, Return on Equity and Return on Assets.

- **Gross Profit Margin (GPM)**

This ratio is used to measure the financial performance of the business. The ratios show how aggressive the entity was in its sales promotion. The gross profit margin is a measure of the gross profit earned on sales. The gross profit margin considers the firm's cost of goods sold, but does not include other costs. It is defined as follows:

$$Gross\ Profit\ Margin = \frac{(Sales - Cost\ of\ Goods\ Sold)}{Sales} \times 100\%$$

- **Net Profit Margin**

Profit Margin measures the percent of profits you generate for each cedi of sales. Profit Margin reflects your ability to control costs and make a return on your sales. The ratio is given by:

$$Profit\ Margin = \frac{Net\ Income}{Sales}$$

Management is interested in having high profit margins. A low profit margin can be compensated for with a higher asset turnover. Thus this ratio must be viewed in the context of the capital turnover. Highly capitalized operations tend to have a higher profit margin combined with a low capital turnover.

- **Return on Capital Employed (ROCE)**

How productive are your business's assets? Asset values come from earning power. Therefore, whether or not liabilities exceed the true value of assets (insolvency) depends upon earnings generated. It is impossible to assess profits or profit growth properly without relating them to the amount of funds (capital) that were employed in making profits. ROCE is one of the most important profitability ratios which assess how much the capital invested has earned during the period. ROCE is an opportunity cost to the potential investor and when making decisions investor will always compare the return which the entity will generate as opposed with the return they can earn on other investments (that is Bank's investment rates). Return on Capital Employed is expressed as:

$$ROCE = \frac{PBIT}{Capital\ Employed} \times 100\%$$

- **Return on Equity (ROE)**

For publicly traded companies, the relationship of earnings to equity or Return on Equity is of prime importance since management must provide a return for the money invested by shareholders This ratio is specifically for shareholders and is aimed at measuring the return they should expect from their shares in the business (i.e. measuring the profits earned for each cedi or other monetary unit invested in the firm's stock). Return on Equity is calculated by:

$$Return\ on\ Equity = \frac{Net\ Income}{Shareholders\ Equity} \times 100\%$$

"Return on Equity" can also be expressed by using the "DuPont System" to reveal its three components. The three ratios that make up Return on Equity are: profit margin, assets turnover, and financial leverage as defined above and the later is given by:

$$Equity\ Multipier = \frac{Total\ Assets}{Common\ Equity}$$

Therefore;

$$Return\ on\ Equity = (Profit\ Margin) \times (Total\ Assets\ Turnover) \times (Equity\ Multiplier)$$

- **Return on Total Assets (ROA)**

Return on assets is a measure of how effectively the firm's assets are being used to generate profits and is also useful in assessing the likelihood of obtaining more debt financing for explanation. Return on Assets is expressed by:

$$Return\ on\ Assets = \frac{Net\ Income}{Total\ Assets} \times 100\%$$

2.10 Trend Analysis

Trend analysis depicts behavior of the ratios over period of time and the trends in the operation of the enterprise. This is a horizontal analysis of the financial statement, often called as pyramid method of ratio analysis guide to yearly changes. Under this form of analysis, generally financial ratios are studied for a specified number of years. It is dynamic analysis depicting the changes over a stated period. Over the course of the business cycle, sales and profitability may expand

and contract, so the ratio analysis for one year may not present an accurate picture of the firm. Therefore we look at trend analysis of performance over a number of years. However without industry comparisons even trend analysis may not present a complete picture.

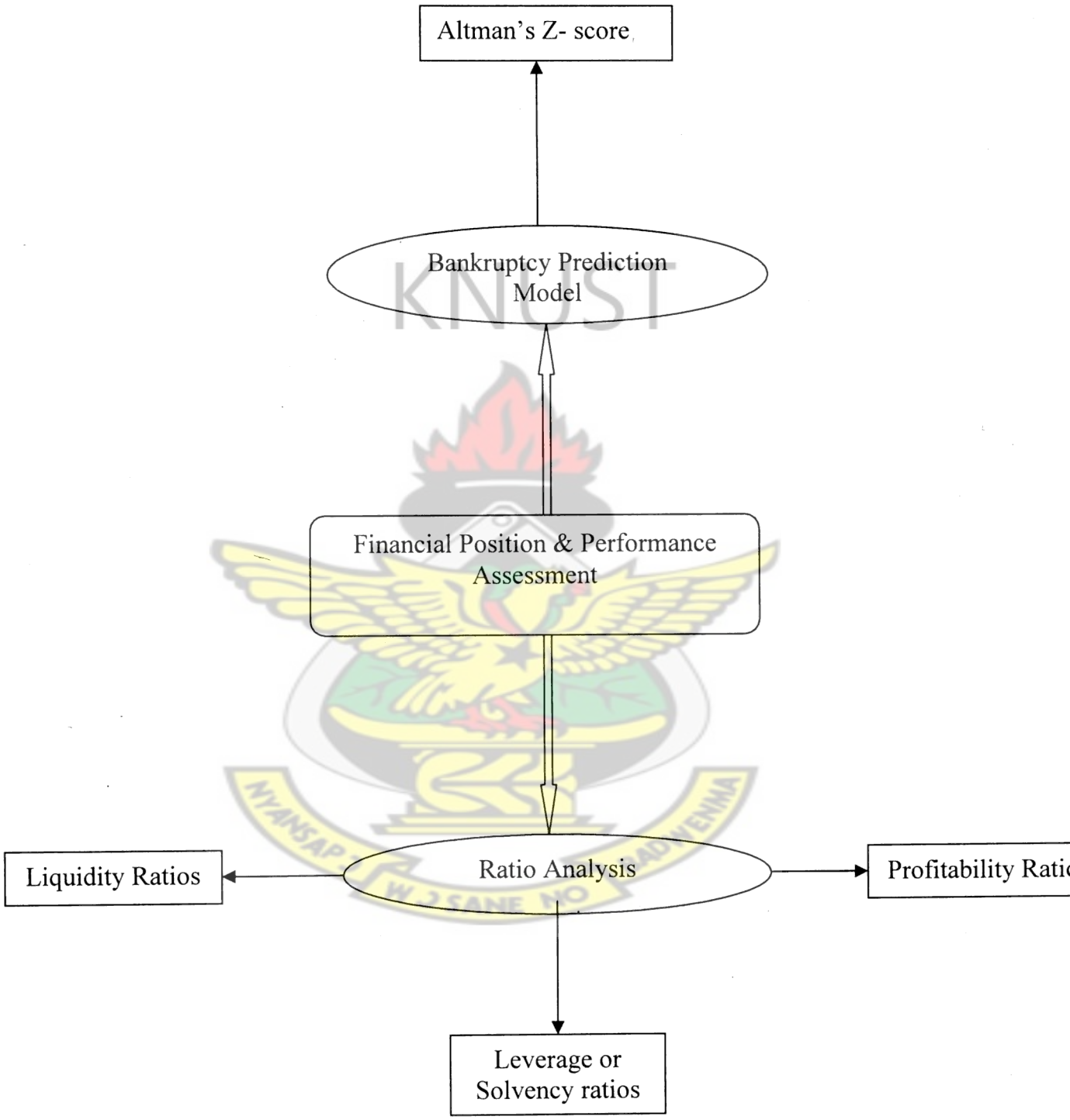
Financial statement may be analyzed by computing trends of series of information. This method determines the direction upward and downwards and involves the computation of the percentage relationship that each statement item bears involves the computation of the percentage relationship that each item bears to the year, generally the first year is taken as base year. The figures of the base year are taken hundred and trend ratios for other years are calculated on the basis of the base year. The analyst is able to see the trend of figures, whether upwards or downwards. This tool has its own limitations. It is necessary that the base year must be a normal year. Further, it places all items at par in the base year with the results that a variation in the least significant item may receive an emphasis out of all proportions to its importance.

2.11 Conceptual Framework

To achieve the set objectives the study is designed to involve the following:

An Assessment of the risk of bankruptcy or insolvency-through the use of the Altman Z-Score models. Financial position and performance assessment of the operations of the ABL in terms of: Liquidity Ratios, Debt Ratios, Activity Ratios and Profitability Ratios

Fig.2.1: CONCEPTUAL FRAMEWORK



CHAPTER THREE

3.0 Methodology and Case Study Profile

This chapter describes the principles and procedure for analyzing the study to achieve the set objectives. It also introduces the characteristics of the company which is being analyzed.

3.1 Methodology

The methodology for the study includes the following: scope of the study, data source, methods of data analysis and limitations of the study.

3.2 Scope of the Study

This study involves the evaluation of the financial position of ACCRA BREWERY COMPANY LIMITED over the past seven years. It is limited to collecting the audited financial data publish in annual reports of ABL for the period. Ratios and trends are performed as well as testing bankruptcy potentials and suggested solutions given with reference to the objectives listed above.

3.3 Data Sources

Data for the study are secondary data obtained from published annual financial reports of ACCRA BREWERY COMPANY LIMITED for the years 2000 to 2006. As companies strive for long-term prosperity, they must base their business decisions on data that are accountable, for which information obtained from financial analysis is of utmost importance. Published financial reports particularly give ease to companies as well as outsiders in performing a more objective analysis. Though, problems related to the use of published financial reports, such as bias in data

sampling may arise, financial reports are still essential and effective in understanding a company's health status.

3.4 Methods of Data Analysis

Evaluating the financial position and profitability of a firm can be undertaken by different persons and for different purpose. Thus the methodology adopted may also be varied from one situation to another. The techniques used for this study are:

- Bankruptcy prediction model (Altman Z-Score Model)
- Ratio analysis
- Trend analysis

A multivariate model the Altman's Z score model will be used to assess the risk of bankruptcy of the company on a year to year basis. We shall apply the model to the financial statements of the ABL for period under review to find out how the resultant Z score measures against the critical value prescribed by the developers of the model. If the Z score is above the critical value there is no risk of bankruptcy. If it is below, then there is a risk of bankruptcy.

Univariant models or financial ratios will be used to assess the company's performance in terms of profitability, liquidity and leverage and performed trend analysis over seven years. We shall through this find out the financial position and also if there has been steady growth over the seven years period.

3.5 Limitations of the Study

This study is meant to cover a seven year period in the life of ACCRA BREWERY COMPANY LIMITED from year 2000 to 2006. It involves an analysis of the audited financial statements of the company for that period. It also realized the unavailability of industrial average values and/or major competitor financial data for the study period for relevant comparison. Therefore, the study was conducted with data available and analysis was made accordingly. We shall therefore use Altman's bankruptcy prediction model, ratio analysis and trend analysis to analyze the financial statement for the seven years period.

3.6 Company Profile

Accra Brewery Limited (ABL) is a public traded company listed on Ghana Stock Exchange and categorized under beverage industry. ABL Company was established in 1931. It has its head office in Acccra. The Company principal activities are manufacture and distribution of beer, soft drinks and non-alcoholic malt beverage. Examples of some of the products are club beer, castle milk stout, x-cape, club minerals, vita malt, etc. the company ultimate holding company is SAMiller p/c, a company incorporated in the United Kingdom.

3.7 ABL Vision

To be the most admired company in the Beverage sector by being:

- the investment of choice
- the employer of choice
- the partner of choice

3.8 ABL Mission Statement

To be Ghana's most leading beverage company by any measure and in so doing create wealth for all our stake-holders, including the society in which we operate.

3.9 ABL Values

Our people are our enduring advantage

Accountability is clear and personal

We understand and respect our customers and consumers

Our reputation is indivisible

3.10 What ABL Believe

The company has designed an inner core of non-negotiable values with regard to integrity, honesty and our responsibilities to society.

Our company values guide us in our relations with all those who have a direct interest in the business – our stakeholders – and inform the guiding principles, which govern those relationships.

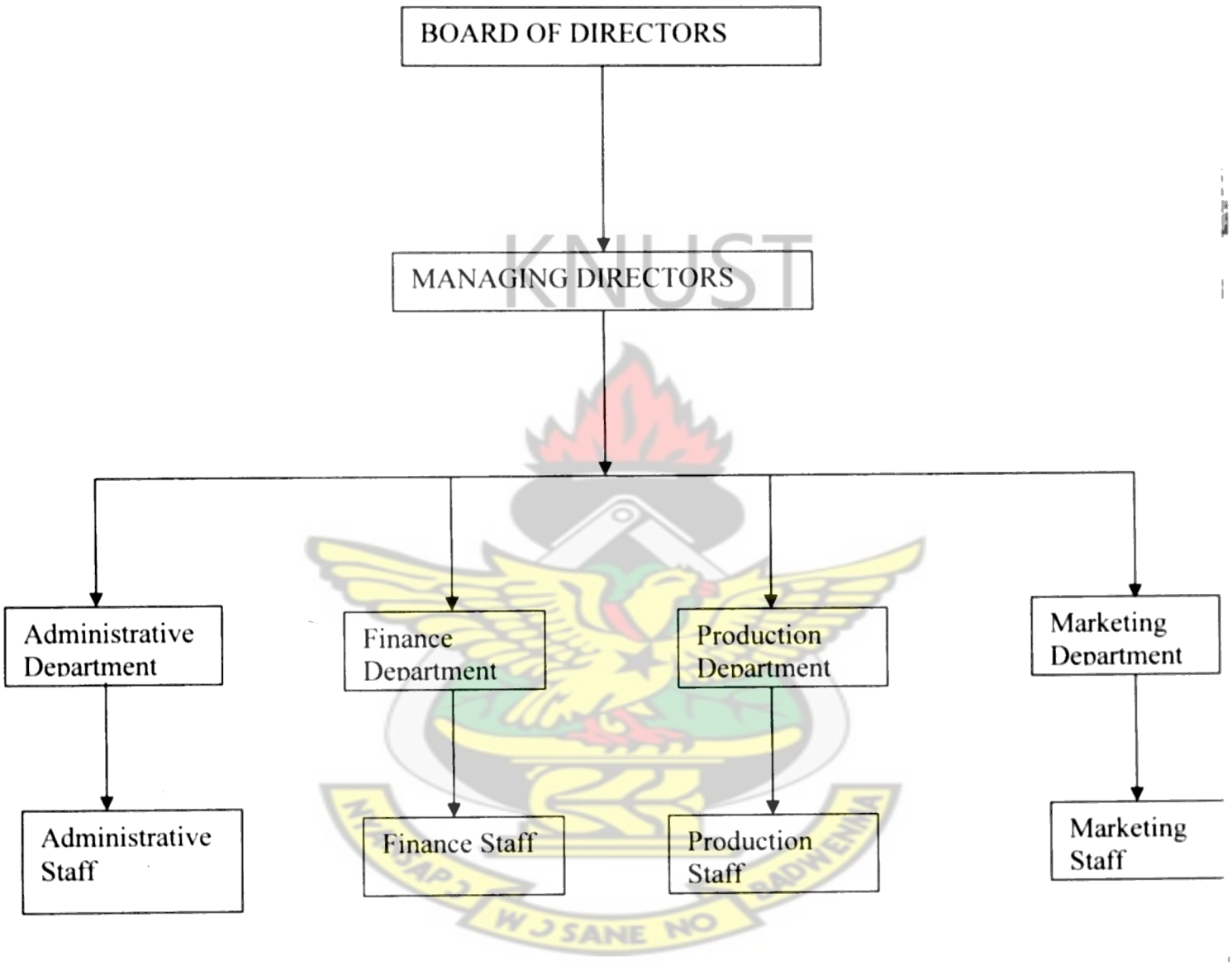
- We conduct our business with integrity.
- We support mutually beneficial and enduring relationships with our stakeholders.
- We seek to be open and accurate in our dealings and communication.
- We respect the right and dignity of individuals.
- We optimize the creation of wealth to provide fair reward and recognition for stakeholders.
- We meet the changing needs of our customers and consumers by providing consistently high-quality brands and services.

- We are responsible corporate citizen.
- We respect the values and cultures of the communities in which we operate.
- We respect free and fair competition.

Through this process, Accra Brewery Limited has ensured that there is consistency, which enables us to communicate to the outside world what we stand for.

The company's valued and principles are stated and treated, as the reality rather than a distant idea, but we recognize the inevitability of lapses and shortcomings. We commit ourselves to leaning from mistakes and to continuous improvement.

Fig.3.1: ORGANIZATIONAL STRUCTURE OF ABL



3.11 Organizational structure

The Organizational structure of ABL is provided in the diagram above. The highest body of the company is the Board of Directors. Beneath the Board is the Managing Director who oversees the day to day management of the Company. ABL is mainly organized into three departments namely; Finance, Administration, and Marketing.

- **Board of Directors and Management**

ABL has a four-member Board of Directors. It comprises four members. The Managing Director is also a member of the Board. The Board formulate polices, approve the company's quarterly and annual budgets of the company as well as specific management decisions.

The day to day management of ABL is in the hands of the Managing Director and his departmental heads comprising the Finance Manager, Administrative Manager and the Marketing Manager.

- **Account and Finance Department**

The Account and Finance department provides the financial information and services to ABL. It prepares financial projections and evaluates to assist management and the Board of Directors in decision making and policy formulation. In addition, it institutes financial controls and reports periodically on operational performance.

- **Administrative Department**

The Administrative Department provides the necessary personnel and administrative services to the company. It is responsible for staff recruitment, training and development and welfare. It also

oversees public relations and general administrative matters of ABL.

- **Marketing Department**

The marketing department is the commercial wing of ABL. It is responsible for the marketing activities of the organization. The marketing department facilitates the placing of order to ensure that products are always available and ensures efficient distribution of the products. The marketing department sees to advertise the products.

CHAPTER FOUR

4.0 Data Preparation and Analysis

This chapter introduces data extracted from financial statement of ABL of the period under review. The relevant ratios are performed and results are analyzed using models discussed in earlier chapters. It is designed to assess risk of bankruptcy through the use of Z-score model. The key financial ratios are performed and the result tabulated. Finally, the results are analyzed and discussed through graphs, models and trend analysis over time.

4.1 Assessment of Risk of Bankruptcy

Altman's indicates that for the Original Z-Score (For Public Manufacturer); if the score is 3.0 or above - bankruptcy is not likely to happen. The company is considered 'Safe' based on the financial figures only. Again, if the Score is between 2.7 and 2.99, then the company is 'On Alert'. This zone is an area where one should 'Exercise Caution'. On other hand, if the Score is between 1.8 and 2.7, there is a good chance of the company going bankrupt within 2 years of operations from the date of financial figures given. One more serious range, if the Score is 1.8 or less, Probability of Financial Catastrophe is Very High. A score between 1.8 and 3.0 is the gray area.

ABL's risk of bankruptcy is predicted by applying Altman's Z-score model to the table in "Appendix 1" The table 4.2 blow also represent the results from the application of the model and the graph in figure 4.1 also indicates the trend of the score over the review period.

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$$Z - Score = 1.2\left(\frac{WC}{TA}\right) - 1.4\left(\frac{RE}{TA}\right) + 3.3\left(\frac{EBIT}{TA}\right) + 0.6\left(\frac{E_{market}}{TL}\right) + 1.0\left(\frac{Sales}{TA}\right)$$

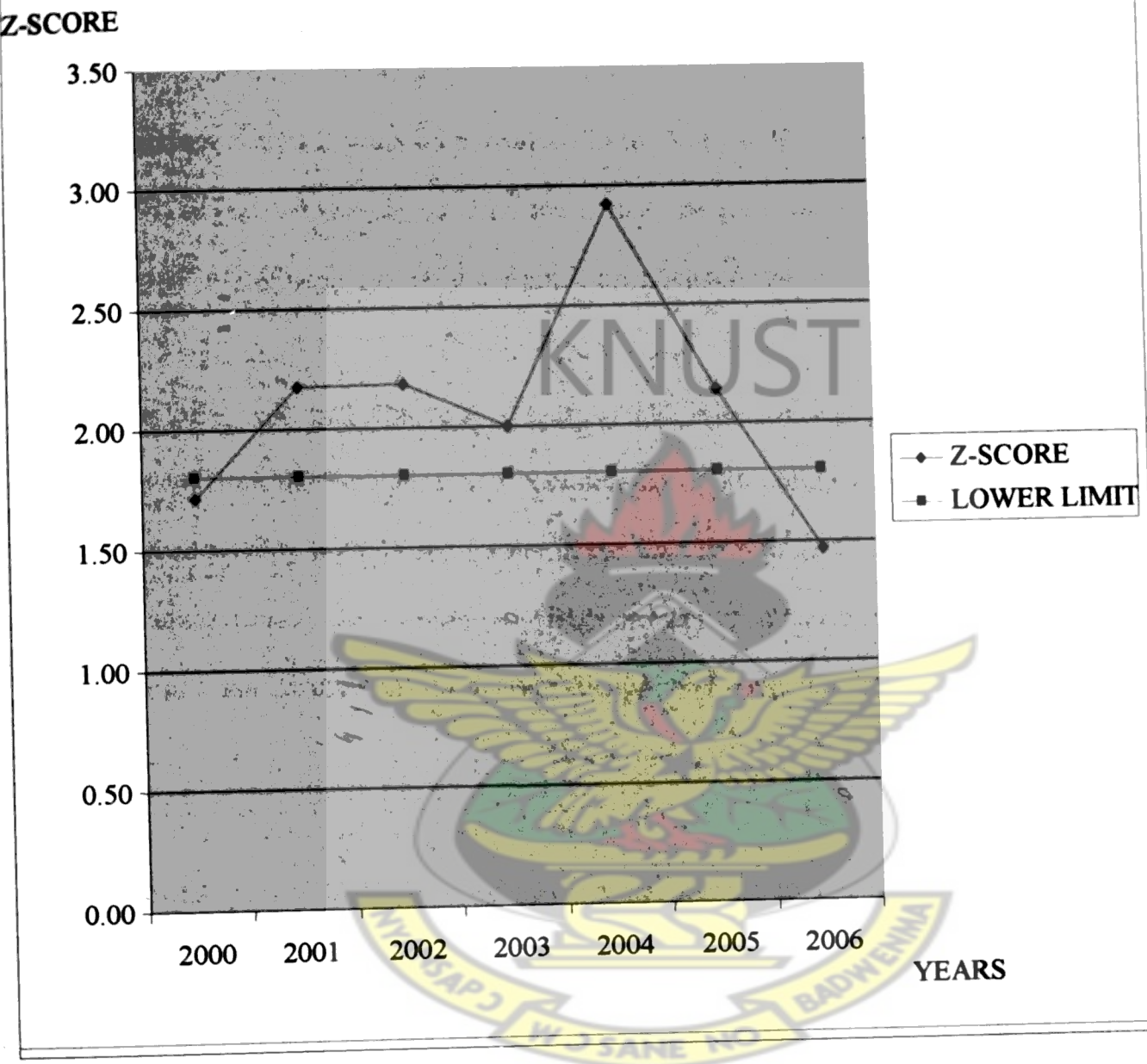
Table 4.1: Results of Z-Score

YEAR	2000	2001	2002	2003	2004	2005	2006
1.2(WC/TA)	0.3796	0.3530	0.0336	-0.0298	0.3030	0.0790	0.0023
1.4(RE/TA)	0.0304	0.0266	0.0869	0.0917	0.1176	0.0942	-0.0160
3.3(EBIT/TA)	0.1933	0.2874	0.4372	0.4395	0.5397	0.3708	0.0314
0.6(E_{book}/TL)	0.2736	0.7464	0.5220	0.3288	0.8318	0.6280	0.5337
1.0(Sales/TA)	0.8410	0.7638	1.1007	1.1717	1.1319	0.9711	0.9189
Z-SCORE	**1.72**	**2.18**	**2.18**	**2.00**	**2.92**	**2.14**	**1.47**

Where:

E_{book} – Book Value of Equity

FIG.4.1. Z-Score Trend Analysis



From the table 4.2 above, ABL's scored 1.72 for year 2000, little below the lower limit of the Altman' Z-score. According to Altman, accompany score within this zone is serious and that "Probability of Financial Catastrophe is Very High". For the 2001 and 2002, the company scored 2.8 which form Altman's interpretation is out of serious zone but still have a good chance of going bankrupt within 2 years of operations from the date of financial figures given. On year 2003, ABL scored 2.0, which is 8.26% lower than the previous year but still maintained it in "higher zone" of probability of failure, from Altman's interpretation.

In the year 2004, ABL had relative good score of 2.92, a 46% increment from the previous score, pushing it up from the high zone to a "possible zone" according Altman's classification. The score reduced steadily in 2005 and further in the year 2006 to 2.14 and 1.47 respectively. From Altman's interpretation, the score move ABL's chances of failure from "possible" zone through "higher zone" and finally back to a "very higher" and dangerous zone than all the years the reviewed

For seven years review, ABL recorded mix scoring: dominantly operated within the "gray area" (i.e. between: 1.8-3.0) and on two occasions scoring badly hence, moving the company into "serious range" (i.e. below 1.8) with the current year being the worst of all. According to Altman, if score is close to or below 3, then it would be as well to do some serious due diligence on the company in question before even considering investing.

As per the model, ABL consistently for the seven years scored below the upper limit of 3, therefore position it in a tag of companies' that require serious due diligence before consider

investing as stated by Altman. Also as per the model, the performance of ABL has so far not been impressive enough to rescue it from bankruptcy threaten zone thus, raising alarm on its "going concern".

Caution given by all model developers indicates that "the technique should be considered as just another tool of analyst - it is not intended to replace experienced and informed personal evaluation". It also further indicates that these models are a "filter" to identify companies requiring further review or to establish a trend for a company over a number of years".

Year on year analysis of variable component of the state of affairs of ABL reveal that:

- For year 2000 and 2001; the major contributors of state of affairs were "Retain Earnings/Total Assets" followed by "Earning before Interest and Taxes/Total Assets".
- For year 2002 and 2003; the major contributors were "Working Capital/Total Assets" with "Retain Earnings /Total Assets being next.
- For year 2004; we have "Retain Earning/Total Assets" being the major contributor, followed by "Working Capital/Total Assets"
- For year 2005; we have "Working Capital/Total Assets" followed by "Retain Earnings /Total Assets" being the major contributors
- For year 2006; we have "Retain Earnings/Total Assets" contributing negatively followed by "Working Capital/Total Assets".

4.2 Ratios Calculations and Assessment

The key performance indicator ratios to be considered are: liquidity, solvency, profitability, financial efficiency or operational ratios. Find in "Appendix 4 and 5" tables of income and Balance sheet statements of ABL for computation of various ratios.

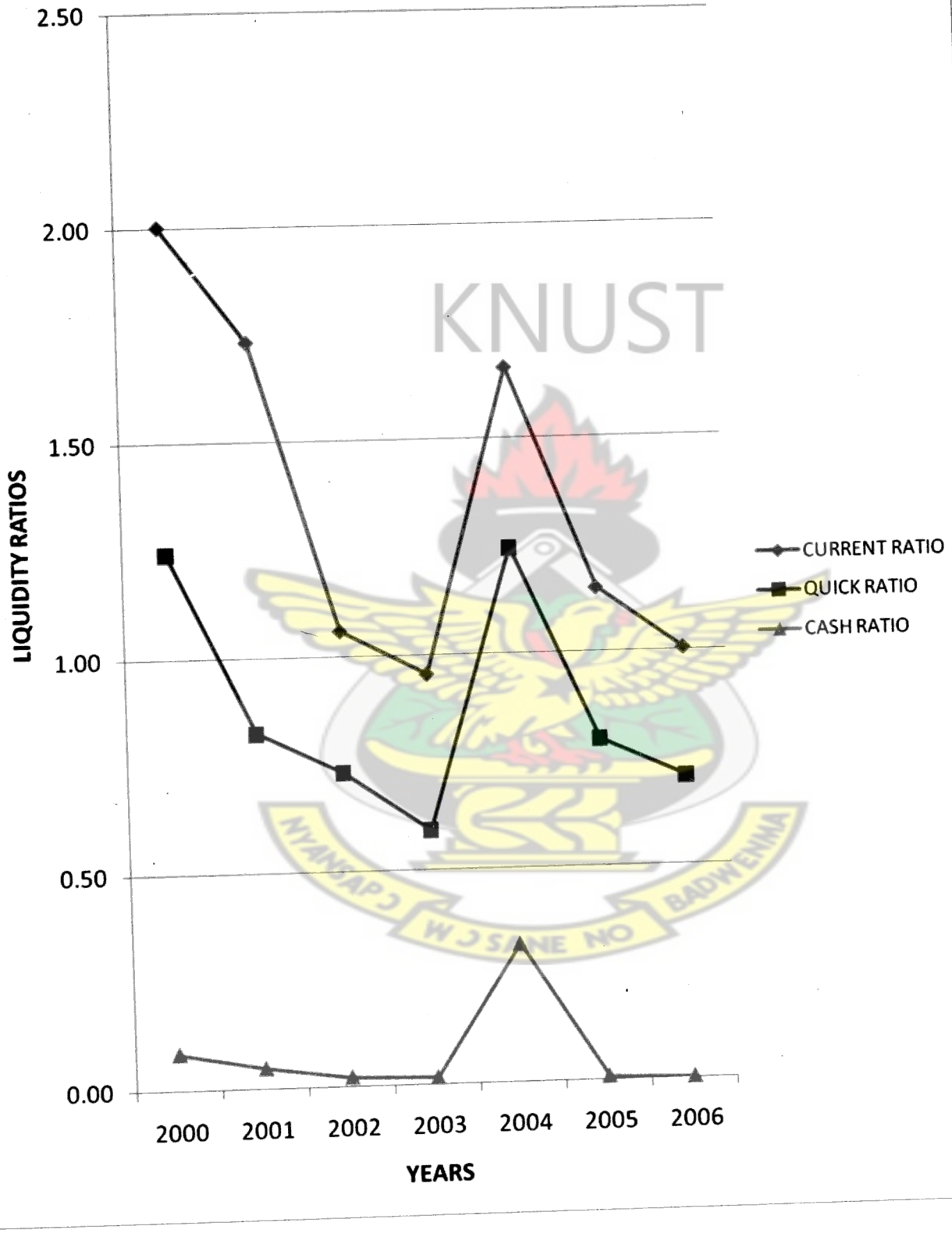
4.3 Liquidity Ratios

ABL's liquidity ratios determined include the following: Current Ratio, Quick Ratio and Cash Ratio. Find in "Appendix 6" for the calculation of liquidity ratios. Below is "table 4.2" which summarized the results of the various liquidity ratios. "Figure 4.2" below also indicate a graph of liquidity ratios over periods.

Table 4.2: Summary of Liquidity Ratios Results

LIQUIDITY RATIOS:	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Current Ratio	2.00	1.73	1.06	0.95	1.66	1.15	1.00
Quick Ratio	1.24	0.82	0.73	0.59	1.24	0.79	0.70
Cash Ratio	0.09	0.05	0.02	0.02	0.32	0.01	0.00

FIG. 4.2: Liquidity Ratios Over Period



- **Current Ratio**

ABL recorded cash ratio of 2.00 for year 2000; and dropped steadily through 1.73 in year 2001, 1.06 also in year 2002 and eventually to all time low of 0.95 in the year 2003. It then went up again to 1.66 in the year 2004. However ABL could not sustain the increase thus, declining again to 1.15 in 2005 and eventually to 1.00. The graph of current ratios over the period generally, depict downward trend aside year 2004.

The rule of thumb says that the current ratio should be at least 2, that is, the current assets should meet current liabilities at least twice. Aside year 2000, ABL recorded current asset ratio less than 2 throughout the period. This means that for every one cedi of liabilities the company had less than two cedis of assets to cover the debt. The situation indicate low current asset/liability margin of safety. However, it appropriate to note that high current ratio is not necessarily good, and a low current ratio is also not necessarily bad. Therefore, further investigation is required to know the time it takes to convert a company's working capital assets into cash to pay its current obligations which, is key to its liquidity.

- **Quick Ratio**

ABL experience quick ratios of 1.24, 0.82, 0.73, 0.59, 1.24, 0.79, and 0.70 in year 2000, 2001, 2002, 200, 2004, 2005 and 2006 respectively. The graph of quick ratios over the period generally, depict downward trend aside year 2004. (http://www.answers.com/topic/financial-ratio#wp-_ref-22") (2nd November 2008) indicates that ideally, this ratio should be 1:1. If it is higher, the company may keep too much cash on hand or have poor collection period for its accounts receivable. Aside year 2000 and 2004, ABL recorded relatively lower "quick ratio"

values for the rest of the years which may suggest poor collection program for accounts receivable for the period. Clearly this ratio will be lower than the current ratio, but the difference between the two (the gap) will indicate the extent to which current assets consist of stock. . Therefore, lower quick ratio relative to current ratio suggests the extent to which the business relies heavily on inventory to meet its obligations. For ABL, the degrees of dependency on inventories to meet its obligations were: 37.8%, 52.4%, 31.2%, 38.2%, 25.3%, 30.7% and 29.8% for year 200, 2001, 2002, 2003, 2004, 2005, and 2006 respectively. Thus, suggesting that in the year 2001 the business relied more than 50% on inventory to meet its obligation.

- **Cash Ratio**

ABL cash ratio was 0.09 in 2000 and declined to 0.05 in the year 2001. In 2002 and 2003 maintained a cash ratio of 0.02. It managed an all period higher increment of 0.32 in 2004. But could not sustain it and declined again to 0.01 in year 2005 and finally settled at 0.00 in year 2006. The graph of cash ratios over the period generally, depict downward trend aside year 2004

Cash ratio measures the portion of a company's assets held in cash or marketable securities. Although a high ratio may indicate some degree of safety from a creditor's viewpoint, excess amounts of cash may be viewed as inefficient. It is not realistic for a company to purposefully maintain high levels of cash assets to cover current liabilities. The reason being that it's often seen as poor asset utilization for a company to hold large amounts of cash on its balance sheet, as this money could be returned to shareholders or used elsewhere to generate higher returns. Very few companies will have enough cash and cash equivalents to fully cover current liabilities, which are not necessary, a bad thing.

For ABL, the 'cash ratio' recorded over the review period (exception 2004) were very far from covering its liabilities and therefore reduced its level of assurance of total safety given to creditors. Not withstanding the interesting liquidity perspective, the usefulness of this ratio is limited.

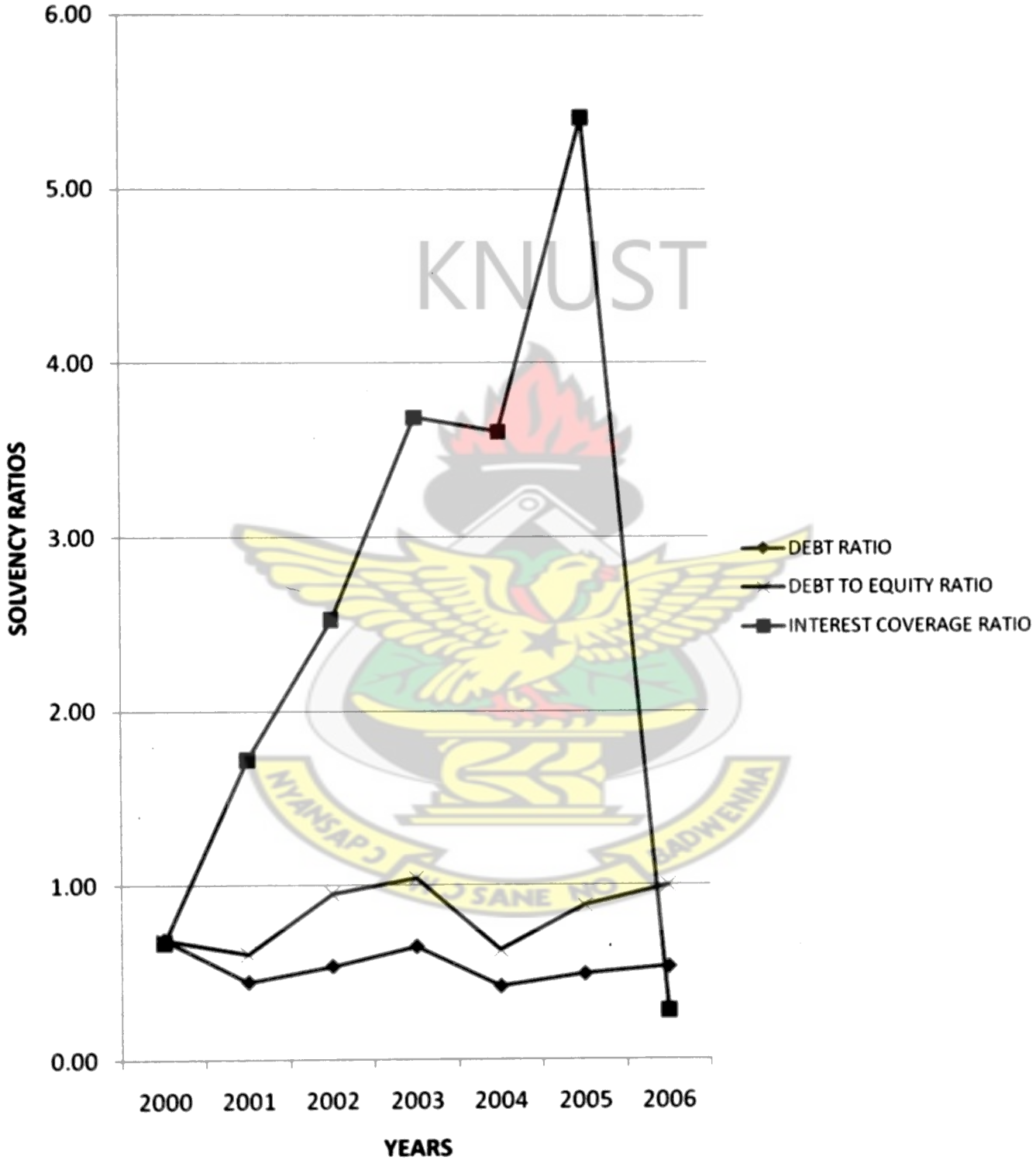
4.4 Solvency Ratio

Ratios designed to calculate ABL's state of solvency include the following: Debt ratio, Debt to Equity, and Interest coverage ratio. Find in "Appendix 7" for the calculation of solvency ratios. Below is "table 4.3" which summarized the results of the various liquidity ratios. "Figure 4.3" below also indicate a graph of solvency ratios over periods.

Table 4.3: Summary of Solvency Ratios Results

SOLVENCY RATIOS:	2000	2001	2002	2003	2004	2005	2006
Debt Ratio	0.69	0.45	0.53	0.65	0.42	0.49	0.53
Debt To Equity Ratio	2.19	0.80	1.15	1.83	0.72	0.96	1.12
Interest Coverage (times)	0.67	1.72	2.52	3.69	3.60	5.41	0.27

FIG 4.3: SOLVANCY RATIO OVER PERIOD



- **Debt Ratio**

Debt ratio measures the portion of a company's capital that is provided by borrowing.

ABL over the review period experienced a mixed trend of 'debt ratio'. It started with 0.69 in year 2000 and decline to 0.45 in year 2001. It then experienced upward trend to 0.53 and 0.65 in year 2002 and 2003. It declined again to 0.42 in 2004, and started another upward trend to 0.49 in 2005 and finally settled at 0.53 in 2006.

(http://www.answers.com/topic/financial-ratio#wp-_ref-22) (2nd November 2008) technically agree on the fact that Debt ratio greater than 1.0 means the company has negative net worth, and is technically bankrupt. ABL's debt to total asset ratio for the years reviewed were below 1 and as per Answer.com is not technically bankrupt. However, the debt ratios for the years: 2000, 2002, 2003 and 2006 exceeded 50% of the total assets. Hence, suggesting relatively lower protection to creditors. Indeed, the higher the debt ratio the more difficult it becomes for the firm to raise debt.

- **Debt to Equity ratio**

The Debt/Equity ratio showed undulating trend, it started with relatively high note of 68% in 2000 and dropped marginally to 60% in 2001. The proportion of debts went up steadily in 2002 and 2003 to 95% and 104% respectively. It then went down again to 62% in 2004 and started the upward trend again to 88% in 2005 and finally settled at 100% in 2006.

Kumar (2008) indicates that capital intensive industries such as auto manufacturing tend to have debt equity ratio above 2, while personal computer companies have debt/equity of under 0.5.

A high ratio here means less protection for creditors. A low ratio, on the other hand, indicates a wider safety cushion (that is, creditors feel the owner's funds can help absorb possible losses of income and capital). A firm with a low debt/worth ratio usually has greater flexibility to borrow in the future. A more highly leveraged company has a more limited debt capacity.

ABL throughout the period used more debts to equity to the extent of having the proportion its debt being about twice as total equity in the year 2002, 2003, 2005 and 2006.The dependency on more debt relative to owners funds, implies that ABL is adding more financial risk to the existing business risk (debt legally obligates the company to pay interest and to repay the principal as promised).

- **Interest Cover**

ABL recorded a steady growth in its margin of safety in making fixed interest payments in the first 3 years from 2000 to 2002 by 0.67, 1.72 and 2.52 with a year-on-year rate of 157.3%, 46.9% and 46.0% respectively. At 2004 its Interest Coverage sinks marginally by 2.3% to 3.60. It then went up again significantly at a rate of 50.3% to 5.41 in 2005 and finally dropped steeply at a margin of 94.9% to 0.27. The Times Interest Earned ratio indicates how well the firm's earnings (before interest and taxes) can cover the interest payments on its debt. A high ratio is desirable for both creditors and management.

ABL recorded satisfactory and progressive growth in trend for its PBIT/Interest expenses until 2006 that it experiences a free fall to all periods low ratio of 0.27, largely contributed by high growth in Selling, General and Administration Expense relative to low growth in Sales.

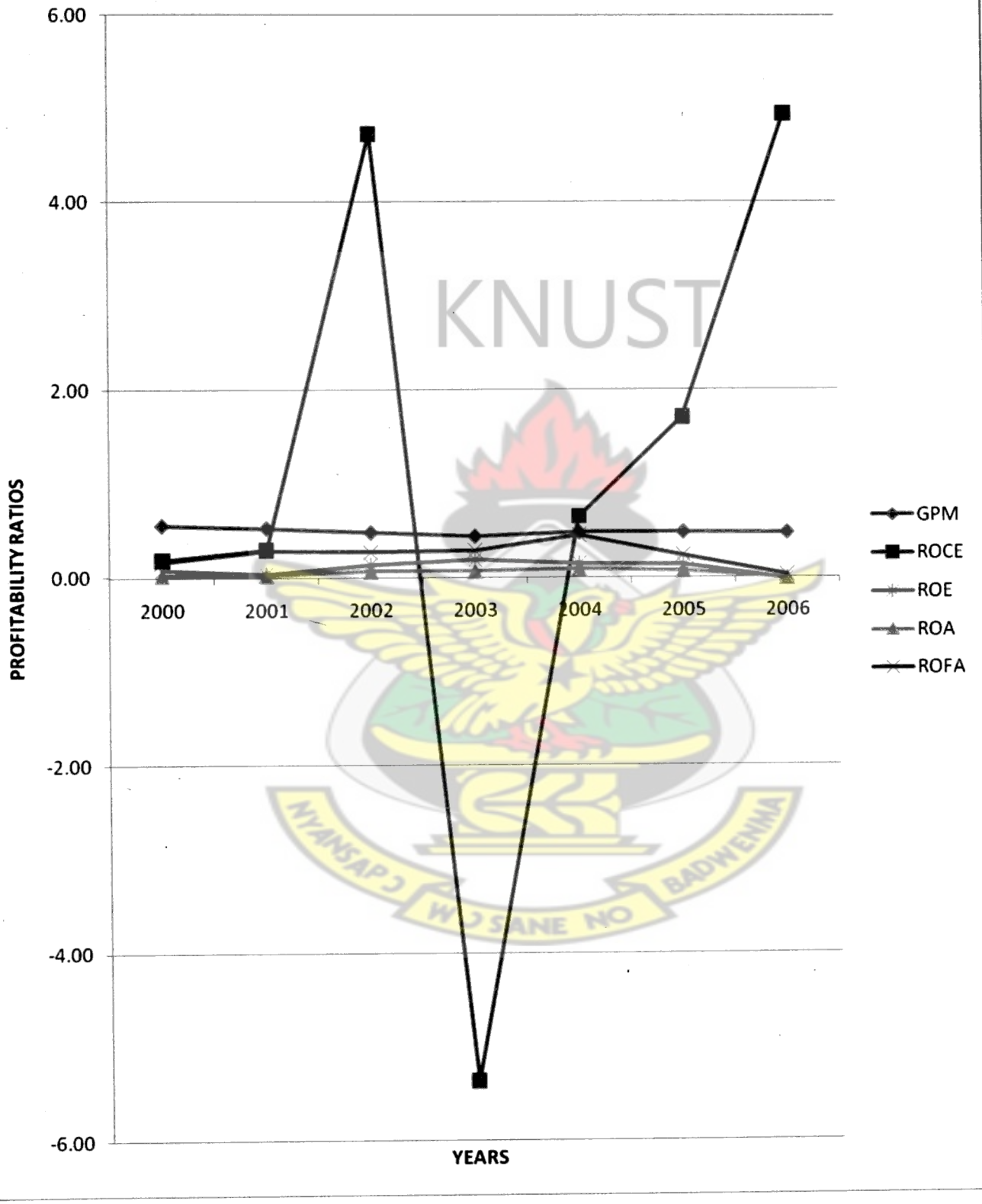
4.5 Profitability Ratios

Ratios used in determined the profitability of ABL include the following: Gross Profit Margin, Net Profit Margin, Return on Capital Employed , Return on Equity, Return on Total Assets and Return on Fixed Assets. Find in "Appendix 8" for the calculation of profitability ratios. Table 4.12 below presents the summarized results for ABL profitability ratios and figure 4.4 also plot graphs of profitability ratios over time.

Table 4.4: Summary of Profitability Ratios Results

PROFITABILITY RATIOS:	2000	2001	2002	2003	2004	2005	2006
Gross Profit Margin (GPM)	0.55	0.52	0.48	0.43	0.47	0.47	0.47
Return On Capital Employed (ROCE)	0.19	0.30	4.73	-5.37	0.65	1.71	4.95
Return On Equity (ROE)	0.07	0.03	0.13	0.18	0.14	0.13	-0.02
Return On Asset (ROA)	0.02	0.02	0.06	0.07	0.08	0.07	-0.01
Return On Fixed Asset(ROFA)	0.16	0.29	0.27	0.28	0.45	0.23	0.02

FIG. 4.4: Profitability Ratios Over Period



- **Gross Profit Margin**

The ratio indicates how much of every cedi of sales is left after costs of good sold. It also indicates how efficiently management uses labor and supplies in the production process.

ABL recorded a Gross Profit Margin ratio of 55.15% in 2000 and sinks consecutively through 52.29% in 2001, 47.54 in 2002, and eventually to 43.21% in 2003. The ratio went up to 47.09% in 2004 and able to maintain same ratio for 2005 and reduced slightly to 46.72% in 2006. ABL experience mixed Gross Profit Margin ratios for the periods.

- **Return on Capital Employed (ROCE)**

ROCE in year 2000 was 18.51% and went up to 29.61% in 2001. Significant improvement realized and went up again to 4732.91% in 2002. In the year 2003 negative growth of 536.55% return was recorded. This means for every cedi value of capital employed lost of 536.55is realized. It started the positive trend again from 64.78% in 2004 , went up further to 170.64% in 2005 and finally settled at all time high return of 494.95%.

Asset values come from earning power. Therefore, whether or not liabilities exceed the true value of assets (insolvency) depends upon earnings generated. Though, it is appropriate to compare ABL's ROCE with either bank rats or industrial values for meaningful judgment, but it is obvious that the business's assets of ABL for the periods were generally satisfactory except year 2003 which experience negative return.

- **Return on Equity**

The return on Equity ratio was 6.94% in the year 2000, dropped by almost half to 3.43% in 2001.

It went up again to 13.34% in the year 2002 and further upwards to 18.50% in 2003. ROE began dropping from 14.45% in 2004 to 13.16% in 2005 and finally settled at negative 2.42%.

- **Return on Assets**

Return on Assets was 2.17% in year 2000 and reduced slightly to1.90% in 2001. It went up steadily to 6.21% in 2002, 6.55% in 2003 and ended the upward trend at 8.40% in 2004. In 2005 the Return on Assets ratios dropped to 6.73% in 2005 and finally sinks further to settled at -1.14% in 2006.

This ratio indicates the rate of return being generated by the assets of the business. ABL Return on Assets for year 2000, 2001 and 2006 were not satisfactory. A negative ratio p indicates poor utilization of plant and operating equipment and is a cause for concern. However, it more worry when there are consecutive periods of diminishing ratios.

- **Return on Fixed Assets**

The trend for ABL's Return on Assets Ratio has been up and down, from 15.93% in year 2000, went up to 28.64% in 2001 and dropped down slightly to 26.65% in 2002. In 2003 the ratio moved up again to 27.95% and further upwards to 44.55% in 2004. It stepped down to 23.05% in 2005 and further downwards to 1.93% in 2006.

CHAPTER FIVE

5.0 Summary, Conclusions and Recommendations

These chapter summaries the entire study, outlines the findings and finally recommendations are given on how best ABL's problems can be managed efficiently and effectively and improve its financial position and profitability in totality.

5.1 Summary of the Analysis

The study is concerned about the performance of ABL and why it has not witness significant improvement of its tock price over a longer period and therefore seeks to inquire on its financial position. It embarked the objectives of assessing its risk of bankruptcy through the use of Z-score model and finally appraised it financial performance with the aid of traditional ratios analysis to reveal trends in its key financial ratios.

Risk of Bankruptcy: this was predicted by Altman Z score model which reveal that ABL dominantly operated within the "gray area" (that is between: 1.8-3.0) and scored below the lower limit in year 2000 and 2006, placing it within bankruptcy treating zone thus making it unhealthy financially.

Traditional Ratio Analysis: Based on the ratios the Company showed both an impressive & Unimpressive performance for some of the key ratios within the period under review.

Liquidity: The Company's liquidity was assessed by looking at the trends of four main ratios

namely Current ratio, Quick Ratio and Cash Ratio. The ratios showed an undulating trend throughout the period under review, which indicated the following:

Current Ratios: ABL recorded Current ratio lower than 2:1 throughout the review period except year 2000. The situation indicates weak current ratio. A lower current ratio means the company may not be able to pay its bills on time. However, high current ratio is not necessarily good, and a low current ratio is also not necessarily bad as well. Therefore, further investigation is required to know the time it takes to convert a company's working capital assets into cash to pay its current obligations which, is key to its liquidity.

Quick ratio: In year 2000 and 2004 ABL recorded ratio greater than 1:1 which resulted from keeping too much cash on hand. However, for the rest of the years recorded quick ratios lower than 1:1. Lower Quick ratio indicates the company may or have a poor collection program for accounts receivable

Cash ratio: with exception of 2004 ABL the recorded unsatisfactory ratios over the period that could assure its creditor's of total safety. However, the usefulness of this ratio is limited because it is often seen as poor asset utilization for a company to hold large amounts of cash on its balance sheet, as this money could be returned to shareholders or used elsewhere to generate higher returns.

Leverage: The Company's leverage was measured in terms of its Debt ratio, Asset ratio, Debt to Equity and Interest coverage. The ratios showed an undulating trend throughout the period under review, which indicated the Company's reliance on its bankers and suppliers.

Total Liabilities/Total Assets: ABL's capital was greatly financed by assets relative to borrowing over the entire period. However, the debt ratios for the years: 2000, 2002, 2003 and 2006 exceeded 50% of the total assets. Higher debt ratio (low equity ratio) means a very small cushion has developed thus not giving creditors the security they require.

Debt to Equity: ABL assets financing were largely of debt than owner's funds for the entire period. They were as much as twice in the following periods: 2000, 2002 ,2003and 2006, indicating more financing risk on top of business risk and as a result more limited debt capacity

Interest cover: though, ABL recorded satisfactory and progressive interest coverage until 2006 that it experiences a poor ratio which, largely resulting from high growth in Selling, General and Administration Expense relative to low growth in Sales.

Profitability ratio: Under the profitability ratio, for major ratios were designed to analyze the trend of profitability of ABL. The ratios are; Gross Profit Margin, Return on Capital Employed, Return Equity, and Return on Assets,

Gross Profit Margin:

The trend displayed by the ratios were all positive though, not consistence. The ratios were within the range of 43% and 55% indicating how efficiently management uses labor and supplies in the production process.

- **Return on Capital Employed (ROCE)**

The trend displayed by the ratios indicated that the company recorded losses in ROCE year 2003. Aside year 2003, the business's as sets of ABL for the rest of the periods were generally satisfactory.

- **Return on Equity**

The trend in ROE in the first three years undulating, however, from year 2004 to 2006 dropped consecutively and finally settled at negative zone. Generally there is the need to improve on ROE.

- **Return on Assets**

The ROA were generally low but positive except year 2006 which experience a negative return. It experience an upward trend from the beginning of the of the year till it got to the peak at 2004 with a return of 8.40%. it recorded continues diminishing return till 2006 where it recorded a poorest return of -1.14%.

- **Return on Fixed Assets**

The trend for "return on assets" for the periods was undulating but quiet good relative to "return on assts". However, the 2% return recorded in year 2006, was not strong enough and therefore require attention.

5.2 Conclusion of the Analysis

- **Risk of Bankruptcy**

The company did show unsatisfactory level of risk of bankruptcy. It was realized that all the ratios for the period under review were in the unhealthy region. Once the trend of the Company's Z score over the period under review is in unhealthy region, we can conclude that the Company is under some degree of threat of bankruptcy. The situation can be improved if factors that adversely affect profitability are addressed and the capital based of the Company is improved.

- **Liquidity**

The company liquidity in totality was not impressive enough to guarantee total safety to its creditors. It experience downward trend for the entire reviewed period except year 2004. The company may require improvement in its cash level to make it more liquid.

- **Leverage**

The Company seems to depend more on outsider's funds to finance its activities and also does not have enough assets to meet its liabilities. Improvement in its assets base and efficiency in its operation will help improved profitability and attraction injection.

- **Profitability**

The Company's profitability has been quiet impressive and occasionally impacted negatively due to the high operating cost and relatively low growth in sales. High administrative cost and other expenses have accounted for the low level of profitability in the Company.

The trends displayed indicate the ratios were not strong enough and therefore required attention.

5.3 Recommendations

Following the analysis of the financial performance of ABL and the identifications of certain weaknesses some recommendations are made. They would be in line with capital, Expenditure and credit policy.

- **Risk of Bankruptcy**: Consistently low scores each year are more of a concern and therefore suggested holistic examination is required to conclude on ABL "going concern".

- **The Capital Base of the Company**

One area of major concern that needs to be looked at to enhanced profitability is capital of the company.

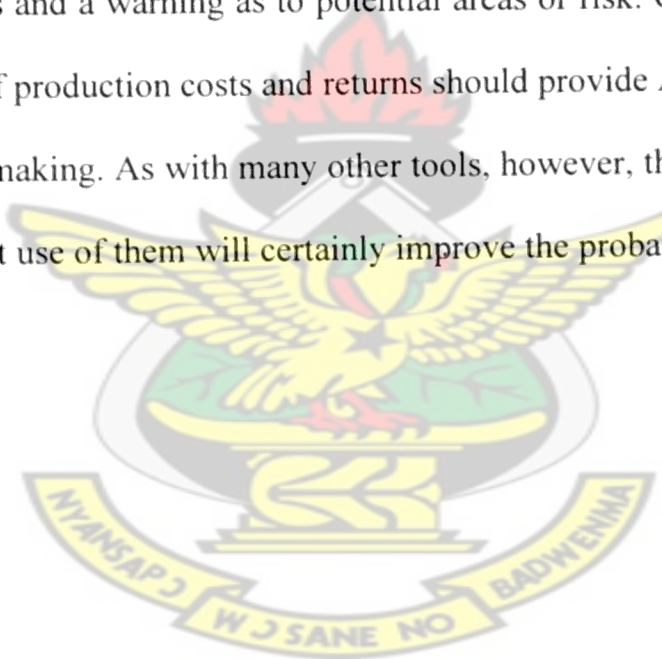
The management of the company needs to revalue its assets in order to improve its financial position. As a results of the Company's liquidity problem there is the need to raise fresh capital aside the capital surplus arising out of the revaluation of the company's assets.

The option for management with respect to raising of capital are; internal generation and public floatation of the remaining authorized shares (the study released ABL has 75% of its authorized shares unissued). However, the study will further suggest the later should be shelved for a while till the company becomes attractive.

Internal generation required improvement in profitability leading enhancement in liquidly and eventually capital base. This is will required the management of ABL to embark on vigorous profit making strategies by cutting down expenditures, improving on its operational efficiencies

mechanisms such as inventory turn over, and credit policy. Management should set credit policy that would not be too short or too long for their debts collection. A reasonable amount of time should be given to their debtors.

Models and financial ratios can be useful in managing the ABL's business by providing a check on the performance of assets and a warning as to potential areas or risk. Combining these ratios with an economic analysis of production costs and returns should provide ABL managers with an excellent basis for decision making. As with many other tools, however, these ratios and margins do not guarantee success, but use of them will certainly improve the probability of success.



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APPENDICES

Appendix 1: Excerpt of ABL's Income and Balance Sheet Figures for Altman Z-Score Calculation

ITEM	YEAR						
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Sales	38,955	48,548	89,780	143,609	183,909	198,246	198,949
PBIT	2,713	5,536	10,806	16,322	26,575	22,939	2,059
Retain Earnings	1,007	1,209	5,064	8,026	13,645	13,742	-2,471
Book Value of Equity	14507	35234	37,949	43384	94397	104397	101926
Total Assets	46319	63559	81568	122563	162485	204142	216509
Working Capital	14653	18697	2285	-3042	41022	13443	416
Total Liabilities	31812	28325	43619	79179	68088	99745	114583

Appendix 2: Original Z-Score Model, Critical Values and Interpretation

$$Z = 1.2\left(\frac{WC}{TA}\right) + 1.4\left(\frac{RE}{TA}\right) + 3.3\left(\frac{EBIT}{TA}\right) + 0.6\left(\frac{E_{MARKET}}{TL}\right) + 1.0\left(\frac{Sales}{TA}\right)$$

Z-score	Prob. Of Failure	Interpretations
≥ 3.0	Very low	bankruptcy is not likely to happen. The company is considered 'Safe' based on the financial figures only.
2.7 - 2.99	Possible	the company is 'On Alert'. This zone is an area where one should 'Exercise Caution'.
1.8 - 2.7	High	good chance of going bankrupt within 2 years of operations from the date of financial figures given.
≤ 1.8	Very High	Probability of Financial Catastrophe is Very High
1.8 - 3.0	Gray Area	the co. is operating within the gray area.

Appendix 3: ABL Z-Score Results

Year	Z-Score	Probability Of Failure	Interpretations
2000	1.72	Very High	Probability of Financial Catastrophe is Very High
2001	2.18	High	there is a good chance of the company going bankrupt within 2 years of operations from the date of financial figures
2002	2.18	High	there is a good chance of the company going bankrupt within 2 years of operations from the date of financial figures
2003	2.00	High	there is a good chance of the company going bankrupt within 2 years of operations from the date of financial figures
2004	2.92	Possible	the company is 'On Alert'. This zone is an area where one should 'Exercise Caution'.
2005	2.14	High	there is a good chance of the company going bankrupt within 2 years of operations from the date of financial figures
2006	1.47	Very High	Probability of Financial Catastrophe is Very High

Appendix 4: ABL Income Statement

ITEM	2000	2001	2002	2003	2004	2005	2006
	'000000	'000000	'000000	'000000	'000000	'000000	'000000
Sales	38,955	48,548	89,780	143,609	183,909	198,246	198,949
Cost Of Sales	17,471	23,163	47,097	81,551	97,308	104,229	105,996
Gross Profit	**21,484**	**25,385**	**42,683**	**62,058**	**86,601**	**94,017**	**92,953**
Selling, General & Administrative Expenses	19,198	22,125	34,594	45,904	60,026	73,452	93,057
Operating Profit	**2,286**	**3,260**	**8,089**	**16,154**	**26,575**	**20,565**	**-104**
Other Income	427	2,276	2,717	168	0	2,374	2,163
PBIT	**2,713**	**5,536**	**10,806**	**16,322**	**26,575**	**22,939**	**2,059**
Finance Cost	4,062	3,221	4,280	4,429	7,378	4,238	7,496
Exchange (Loss) / Gain	2,356	-967	0	0	0	0	0
PBT	**1,007**	**1,348**	**6,526**	**11,893**	**19,197**	**18,701**	**-5,437**
Tax	0	139	1,462	3,867	5,552	4,959	2,966
Net Profit	**1,007**	**1,209**	**5,064**	**8,026**	**13,645**	**13,742**	**-2,471**

Appendix 5: ABL Balance Sheet Statement

ITEM	2000	2001	2002	2003	2004	2005	2006
	'000000	'000000	'000000	'000000	'000000	'000000	'000000
Fixed Assets	**17,034**	**19,328**	**40,542**	**58,399**	**59,647**	**99,507**	**106,732**
Property Plant and Equipment	17014	19,317	40,539	58,396	59,644	**99,504**	106,732
Investment	20	11	3	3	3	3	0
Current Assets	**29,285**	**44,231**	**41,026**	**64,164**	**102,838**	**104,635**	**109,777**
Inventories	11,082	23,182	12,796	24,486	25,997	32,146	32,724
Receivables	16,464	19,537	27,000	38,554	56,953	71,695	76,698
Bank and Cash Balance	1,255	1,235	876	1,124	19,888	794	355
Taxation	484	277	354	0	0	0	0
Total Assets	**46,319**	**63,559**	**81,568**	**122,563**	**162,485**	**204,142**	**216,509**
Current Liabilities	**14,632**	**25,534**	**38,741**	**67,206**	**61,816**	**91,192**	**109,361**
Trade And Other Payables	6,912	6,465	11,367	16,593	19,572	34,097	35,965
Intercompany Balances	3,729	9,116	18,884	29,982	23,042	20,736	33,644
Current Portion Of Long Term Loan	0	448	1,055	5,445	1,585	577	0
Bank Overdrafts	3,492	9,195	5,462	12,292	9,291	30,029	39,387
Dividend Payable	499	310	1,973	2,494	3,742	3,742	0
Taxation	0	0	0	400	4,584	2,011	365
Net Current (Liabilities) / Assets	14,653	18,697	2,285	-3,042	**41,022**	**13,443**	**416**
Non Current Liabilities	**17,180**	**2,791**	**4,878**	**11,973**	**6,272**	**8,553**	**5,222**
Long Term Loans	17,078	2,689	2,888	6,870	**523**	0	0
Deferred Tax	102	102	1,990	5,103	5,749	8,553	5,222
Total Liabilities	**31,812**	**28,325**	**43,619**	**79,179**	**68,088**	**99,745**	**114,583**
Net Total Assets	**14,507**	**35,234**	**37,949**	**43,384**	**94,397**	**104,397**	**101,926**
Shareholders Funds	**14507**	**35234**	**37949**	**43384**	**94397**	**104397**	**101926**

Appendix 6: Calculation of ABL Liquidity Ratios

LIQUIDITY RATIOS:	2000 000000	2001 000000	2002 000000	2003 000000	2004 000000	2005 000000	2006 000000
Current Ratio = Curent Assets / Current Liability	29,285 14,632 2.00	44,231 25,534 1.73	41,026 38,741 1.06	64,164 67,206 0.95	102,838 61,816 1.66	104,635 91,192 1.15	109,777 109,361 1.00
Quick Ratio = (Current Assets – Inventory) / Current Liability	18,203 14,632 1.24	21,049 25,534 0.82	28,230 38,741 0.73	39,678 67,206 0.59	76,841 61,816 1.24	72,489 91,192 0.79	77,053 109,361 0.70
Cash Ratio = (Cash + Marketable Securities) / Current Liabilities	1,255 14,632 0.09	1,235 25,534 0.05	876 38,741 0.02	1,124 67,206 0.02	19,888 61,816 0.32	794 91,192 0.01	355 109,361 0.00

Appendix 7: Calculation of ABL Solvency Ratios

SOLVENCY RATIOS:	2000 000000	2001 000000	2002 000000	2003 000000	2004 000000	2005 000000	2006 000000
Debt Ratio = Total Liabilities / Total Assets	31,812 46,319 0.69	28,325 63,559 0.45	43,619 81,568 0.53	79,179 122,563 0.65	68,088 162,485 0.42	99,745 204,142 0.49	114,583 216,509 0.53
Debt to Equity Ratio = Total Debt / Total Equity	31,812 46465 0.68	28,325 47022 0.60	43,619 45904 0.95	79,179 76137 1.04	68,088 109110 0.62	99,745 113188 0.88	114,583 114999 1.00
Interest Coverage = EBIT / Interest Espenses (times)	2,713 4,062 0.67	5,536 3,221 1.72	10,806 4,280 2.52	16,322 4,429 3.69	26,575 7,378 3.60	22,939 4,238 5.41	2,059 7,496 0.27

Appendix 8: Calculation of ABL Profitability ratios

PROFITABILITY RATIOS:	2000 000000	2001 000000	2002 000000	2003 000000	2004 000000	2005 000000	2006 000000
$GPM = \frac{(Sales - CoGS)}{Sales} \times 100\%$	21,484 38,955 55.15	25,385 48,548 52.29	42,683 89,780 47.54	62,058 143,609 43.21	86,601 183,909 47.09	94,017 198,246 47.42	92,953 198,949 46.72
$ROCE = \frac{PBIT}{Capital\ Employed} \times 100\%$	2,713 14,653 0.19	5,536 18,697 0.30	10,806 2,285 4.73	16,322 -3,042 -5.37	26,575 41,022 0.65	22,939 13,443 1.71	2,059 416 4.95
$ROE = \frac{Net\ Income}{Shareholders\ Equity} \times 100\%$	1,007 14507 0.07	1,209 35234 0.03	5,064 37949 0.13	8,026 43384 0.18	13,645 94397 0.14	13,742 104397 0.13	-2,471 101926 -0.02
$ROA = \frac{Net\ Income}{Total\ Assets} \times 100\%$	1,007 46,319 0.02	1,209 63,559 0.02	5,064 81,568 0.06	8,026 122,563 0.07	13,645 162,485 0.08	13,742 204,142 0.07	-2,471 216,509 -0.01
$ROFA = \frac{PBIT}{Fixed\ Assets} \times 100\%$	2,713 17,034 0.16	5,536 19,328 0.29	10,806 40,542 0.27	16,322 58,399 0.28	26,575 59,647 0.45	22,939 99,507 0.23	2,059 106,732 0.02