COMPUTERISATION OF ACCOUNTING RATIO

(A CASE STUDY OF GUARANTY TRUST BANK, MINNA BRANCH)

BY

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DECLARATION

This project was done based on my research and the write up was my original handwriting. This project was a new project that was never written by anybody.

CERTIFICATI0N

The project has been cleared and approved by the Department of Mathematics/ Computer, School of science, Federal Technology Minna, Niger State. The research has met the award of Postgraduate Diploma, In Mathematics/ computer.

(ALHAJI AUDU ISAH)
SUPERVISOR ***DATE***

(MR. L N EZEAKOR)
HEAD OF DEPARTMENT ***DATE***

EXTERNAL EXAMINER ***DATE***

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EXTERNAL EXAMINER ***DATE***

DEDICATION

I dedicated this write up to the Almighty God and His Beloved son, Jesus Christ.

ACKNOWLEDGEMENT

My profound gratitude goes to Almighty God who's Strength, Mercy and love never failed during my post graduate course.

I thank my honourable supervisor a person of Alhaji Audu Isah for the time spent in correcting my works and also ensuring that the research conduct was successfully carried out and also his advice.

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ABSTRACT

This project was basically based on how to use the program such as Database management system software to develop a computerised accounting ratios system in order to make the tedious work easier and faster as against the conventional method for computing accounting ratios.

The financial ratios such as liquidity, leverage, and profitability ratio can be analysed and financial position of an organisation such as Guaranty Trust Bank, be assessed in other to discover the bank' efficiency so that profit can be generated as well as its ability to meet its financial obligation. The writing of this programme to compute the accounting ratio, results of this accounting ratio can be used to determine financial performance of the bank over the period of two years.

The performance evaluation is the evaluation of a bank financial performance which is regarded as techniques being used to analyse the financial positions of the bank.

Times series analysis is the method used to measure a bank' performance overtime, it compares the current performance with past performance.

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CHAPTER ONE

GENERAL INTRODUCTION

The project is emphasizing on the problem confronting the banks on their daily activities or transactions before the computer came into existence and after the introduction of computer, there are still problem occurring which make difficult for the banks to accomplish their objectives. Such problem is inability of the bankers to know the program that suitable for accounting ratios that also could make the management works more effective. In computerization of this accounting ratio the financial position of the bank would be revealed to the management and entire investors.

1.1 BACKGROUND OF THE STUDY

In decades ago, before computer comes into existence, people have suffered on the activities of the society, but when computer came into existence, many problems have been resolved. Many of the economy activities were changed, from barter economy to a monetary economy. (Monetary is the using of currency instead of trade by barters that does not involve currency) When the monetary came into existence, numbers, computation of figure, and keeping of records become apparent. As a result of monetary economy people like Abacus who in china as early as 2600 B.C went- into research and came up with the result aided in computation of accounting records. Before the computer came into existence there were lots of problem which bankers face such problem includes the calculation done manually that were tedious and time-consuming especially the overall difficult tasks or activities of the day. In addition, due to what Abacus did as a stated above, the accounting record problem was only minimized but problem still occurred because as the economy grew wide, the problem increased. (For instance preparation of

daily transactions was very slow and not timely. No trained staff to do the work effectively.) The record needs to be timely so that it can be used in the time needed by the management. The improper record keeping too have led to many data losses, with this problem, the actual figures or records may not be there for computation to discover or reveal the financial state of the Guaranty Trust bank. All the activities on financial aspect were done manually, for instance accounting records, saving and current account, general ledger, debtors and creditor account most of their works done manually, above. These are the records need for accounting ratios computation may lead to improper records keeping, which allow lost of accounting data and at the same time leads to difficult in computations of accounting.

Due to what is written above, the management had discovered the computation method using electronic devise, which enables the cumbersome figure to be computed accurately. After the discovery of the electronic machine called computer above there is a problem, which the bank has not found to reduce their problem that is the application of computer programming which is called database management system that can ease and make their work faster.

In computer terms, the power or ability to test different values or conditions and depending on the results take different actions, so it is this ability which enables the computer to take decisions and make it qualitatively different from other machines. There is lots of work done by computer, which characterized its ability to perform better. Computers are good at rapid and accurate calculation (It does the calculation in a minute fraction of the time it would take manually especially cumbersome figures).

Besides the problem above, the application of computer to accounting ratios in analysing the Guaranty Trust Bank financial performance will

reveal the problem of this bank to the investors and the shareholders such problems include among others, insufficient liquid asset, high debtors, limited asset to cater for future need or capital reserve to meet up with the demand of daily needs.

In the view of the above, the usefulness of computer in aiding the computerization of the financial ratio in order to determine the financial performance of the bank over the period of two years. Database management system software has the features which ease the computation of accounting ratio easier and faster, unlike other electronic machine which when used may be slow in computation of this financial ratios such as the use of electronic calculator will be done which may even take length period of time before the task is being performed and also some application packages which when wisdom is applied to computer with the software basically developed for this accounting ratios.

The researcher has discovered the software suitable or applicable to accounting ratio computation. A database was defined as a collection of structured data, with minimum duplication, which is common to all users of the system but is independent of programs that use the data. The database can grow and change and is built up stage by stage within the organisation. The database concept allows data to be available for numerous applications. Redundancy and duplication are reduced and potentially, there is more flexibility and an increase in data reliability, accuracy and consistency. It also means that some data will support both transaction processing and serve as a reservoir for management in decision support systems. With the assistance of computer, the speed, calculating analysis power and decision-making ability enables the accountant to extend the scope of his analysis beyond that which would be feasible manually, except a special once –off exercise.

1.2 STATEMENT OF THE PROBLEM

Before the existences of computer, the financial activities or transaction in banking sector were done manually. Such problems include the keeping of records in difficult area like debtors account, creditors account, saving account, fixed asset account, current asset and the current liabilities, shareholders account and so on. These are the accounting activities that make the computation of the accounting ratios in bank difficult. These activities are very slow because of the old method adopted for the work. There are improper records keeping due to the activities done above that were very slow and the records not organized. Such problem will make the computation of accounting difficult and also problem difficult to analyse for the bank to improve upon.

The computation of accounting ratio are done manually are tedious and time consuming compare with what computers do in minute fraction of time. The work or activities said above can be replaced by the use of computer electronic machine which speed up the work in million of a second using program There were programs used which were not actually designed for it.

Besides, the program that can be used for the computation of the accounting ratios is Database Management System that has a feature that can process the statement of affairs of the bank that is lengthy in nature Improper record keeping may lead to wrong figures computation due to that problem of the bank will not be visible or apparent for management or investors.

The wrong computation above will lead to another problem, such as the financial position of the bank will not be visible.

Due to the problem said above Dbase System Software has features noted for processing accounting information. Such features were as follows:

(a) Reduce data duplication and consequently increase its ability.

(b) Increase the speed in implementing system.

(c) Increase the integrity of the data.

(d) Increase data independence.

(e) Provide a management view of the organisation.

With the introduction of computer, the calculation of financial ratios can be slow compare with the use of Database Software Management which was basically developed purposely for the easy computation of these financial ratios. If not because of computer technological development, it has been a problem for bankers and making it difficult for them to analyse the financial performance of the bank in order to know its financial position.

1.3 OBJECTIVE OF THE STUDY

The objectives of the project are:

a. To write a program that will compute accounting ratio.
   Use the ratio to reveal banks financial position.

b. Provision of comprehensive financial information about the banks conditions.

c. Determination of the credit worthiness of the bank

d. Compare the banks financial performance within two years

e. Suggest ways in improving the banks performance.

1.4 SIGNIFICANCE OF THE STUDY

The most important of this study is use of program that will compute the accounting ratio easier than works done manually. With the aid of computer technology, the use of accounting ratios to analyse statements of affairs via the use of Database Management System Software will ease the work done manually.

All this work could be done electronically using computer devices, because computers are good a rapid and accurate calculations and also incorporate inbuilt checking features which ensure for all practical purposes hundred percent accuracy and permit the rapid updating, amendment of huge volume of data that would be virtually impossible using manual system.

1. The financial report that covered 2 years between 2002-2003 will be used to discover the lapses in the bank over this period of two(2) years.
2. This accounting ratios computation using financial report, this revealed the lapses to determine credit worthiness of the bank.
3. Suggestion or ways of improving it will be analyzed

In addition, all the monthly financial activities performed by the bank over the 2-3 years can be calculated easily to discover the financial performance of the bank over the years. The financial performance of the bank activities between 2-3 years can be computed and verified.

Financial analysis is the term used to interpret the Bank's past performance and current financial position. So the performance evaluation in any bank is very important.

Time series is a method used by financial analysis to measure a firm's performance over time. It compares this current performance with past performance (it is also called tread analysis, employed when financial data are presented for three or more years). In fact, this enables the firm's management to determine whether it is progressing as planned or not. The theory behind time series analysis is that the firm must be evaluated in relation to its past performance over time, so as to be able to predict future performance.

In addition, the activities or task performed by the bankers were manually and tedious, and time-consuming, but with the aid of computer which is useful in terms of speeding, accuracy, filing and retrieval

abilities, calculations and decision making capabilities, input and output facilities.

So, database was defined as a collection of structured data, with minimum duplication, which is common to all users of the system data. Database can grow and change and is built up stage within the organisation.

The usefulness of Database management system packages to compute the financial ratio in order to determine the financial ratio in order to determine the financial performance of the banks can provide information for decision support system so that bank performance will be viewable and also credit worthiness to the inventors, financial analysts, bankers, shareholders, accountant and so on.

1.5 SCOPE OF THE STUDY

The scope of the study is usefulness of Dbase management system software to compute financial ratios analysis, instead of the computation done manually, because with the aid of the computer, DBase management software was basically developed for such financial ratio computation.
The study will focus on financial ratio analysis to evaluate, analyse and interprets the activities, conditions and performance of Guaranty Trust Bank Plc. Time series analysis is a method used by financial analysis to measure bank performance overtime. It compares the current performance with past performance. (It is also called trend analysis employed when financial data are presented for two or more years). This enables the banks management to determine whether it is progressing as planned or not.

1.6 DEFINITION OF TERM AND ABBREVIATION

1. Performance evaluation- The evaluation of a company's financial performance
2. Shareholders: ownership interest in a firm represented by shares of the firm's shares. The owners are called shareholders.
3. Financial year: The period of twelve (12) months, which is adopted for the preparation of a firm's accounts?
4. Financial ratio analysis: The use of accounting ratios to analyse the financial structure or performance of corporations.
5. Debtors: A Parties that own the bank e.g if customer borrowed money outside.
6. Creditor: The debts owned by the bank e.g. customers account credit balance.
7. Trend analysis: Time series analysis: The analysis of a company's performance over a period of time usually five (5) years.
8. Efficiency: Measures a means whether or not the goal was met within the expected coats or target

CHAPTER TWO

LITERATURE REVIEW

2.1 HISTORICAL BACKGROUND OF GUARANTY TRUST BANK PLC AT NATIONAL LEVEL

Guaranty trust bank plc was incorporated on 20th July 1990 as a private limited liability company, wholly owned by Nigerian citizen. The bank obtained its commercial banking licence on 1st august, 1990, and commerce full operations on 11th February 1991. The bank because a quoted pushes limited liability company on 9th September, 1996, following the listing of its shares by introduction on the Nigerian stock exchange. On 5th February 2001, the bank was issued a universal banking licence by the central bank of Nigerian. Furthermore, through its successful initially public offer in 2001 the Bank raised in excess of ₦ 2.5 billon from the Nigerian capital market and its shares have since become one of the most actively traded stock exchange. Presents, Guaranty Trust Bank p lc h as o ver 6 3.000 s hareholders. The bank presently has thirty-nine branches strategically located in major commercial centre across the country. In pursuit of its regional expansion initiatives, the commissioned two offshore subsidiaries, Guaranty trust bank (Gambia) limited, thus establishing itself as an international financial institution.

2.2 COMMENCEMENT OF BUSINESS IN STATE LEVEL

Minna Branch of Guaranty Trust Bank was formally on for business in November 2003 with about 25 corporate customers for the first 3 days of operation and after two weeks the number was increased to about 65 including Personal Savings and other Accounts.

2.3 OBJECTIVE

In Nigeria today, there are six settlement banks, out of these six-settlement bank, Guaranty Trust Bank is one of them. However in order 2to conform to the Central Bank of Nigeria's recent specification that for

economic developmental purposes, the entire settlement bank must open a branch offices in all the state where there is Central Bank offices.

One of the main objectives of opening the Minna Branch office for Guaranty Trust Bank (GTB) is to maximise profit. The aim of every businessmen is to make profit but in the case of GTB, feasibility studies was carried out and it was discovered that there are enough business prospects in Niger State being a developing state closer to the Federal Capital Territory, Abuja. The bank is also set up in Minna to create developmental environment for the growing economy in Minna and its environment. Also, as a result of the recent political, religious and ethnics' problems in both Kaduna and Platue State, most businessmen and investor decided to shift their locations to Minna in order to make use of the business opportunity in Abuja, the seat of the Federal Government. To make the environment conducive for prospective businessmen, the environment need easy access to finance, hence the Guaranty Trust Bank (GBT) was established to provide finance to prospective business around since the major city like Lagos, Abuja, Port Harcourt and Kaduna has been saturated with financial institutions.

2.4 METHOD USED BY GUARANTY TRUST BANK:

The Guaranty Trust Bank has been using or applied old method to compute their ratios. The data needed for this computation are always gathered from the report done by the old method, therefore the bank need to change this old method of gathering data and also look for the way of computerizing the ratio as easier as possible.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

INTRODUCTION

ACCOUNTING RATIOS MANUAL: This is the formula applied in the old system way of computation of accounting ratio which bankers applied to data acquired at the ending of accounting year. These ratios are analyzed below.

TYPES OF FINANCIAL RATIO

Financial ratio can be categorize or classified into three:

1. Liquidity ratios
2. Leverage ratios
3. Profitability ratios

LIQUIDITY RATIOS

Liquidity rations the relation of bank cash and other current assets to its current obligations (liability). The aim of liquidity is for a company or bank to have enough funds on hand to pay bills when they are due and to meet unexpected needs for cash.

The liquidity ration are divided into three

i. CURRENT RATIO
ii. QUICK RATIO
iii. CASH RATIO

CURRENT RATIO

Current assets express the relationship of current assets to current liabilities .Its indicate the extent to which assets expected to be converted into cash in the near future cover the claims of short-term creditors. It is an indication of a company or bank liquidity and short-term debt paying ability.

Current ratio = current assets

— Current liabilities

QUICK RATIO: Expresses or measures this relationship of the more liquid current assets (cash marketable securities or short term investments and receivable) to current

liabilities. This is sometimes called acid –test ration. Some firms did not rely on the sale of inventories in paying off shot-term obligations. Likewise banks too do not rely on the sale of inventories in settlement of their obligations; the ratio is computed by deducting inventories from current assets and dividing the remainder by current liabilities.

$$\text{Quick ratio} = \frac{\text{Current assets} - \text{inventories}}{\text{Current liabilities}}$$

Or

$$\text{Quick ration} = \frac{\text{currents assets} + \text{marketable securities} + \text{receivables}}{\text{Current liabilities}}$$

CASH RATIO

Cash is the most liquid assets, as financials analyst examined this ratio. Trade investment or marketable securities are equivalents of cash; therefore, they may be included the computation of cash ratio.

$$\text{Cash ratio} = \frac{\text{cash} + \text{marketable securities}}{\text{Current liabilities}}$$

Cash ratio is computed as shown above, cash plus marketable securities or trade investment by the current liabilities.

LEVERAGE RATIO

Financial leverage or capital structure ratio are calculated to measure the financial risk and the bank's ability of using debt for the benefit of shareholders. It may be calculated from the balance sheet items to determine the proportion of debt in total financial. It may be computed from the income statement items by determining the extent to which operating profits are sufficient to cover the fixed changes. Leverage ration cover the following ratio.

i. Total debt ratio

ii. Debt equity ratio

iii. Other debt ratio.

Total Debt Ratio

Debt ratio may be used to analyse the long-term solvency of a firms. The bank may be interest in knowing the proportion of the interest bearing debt (called funded debt) in the capital structure. Total debt ratio is computed by dividing total debt by capital employed or total net assts total debt includes short-and – long-term borrowing financial institutions. Debentures/ bonds, deferred payment arrangements for buying capital equipment and bank borrowing and public deposits and any other interest-bearing loan. Capital employed includes total debt and net worth.

$$\text{Total Debt Ratio} = \frac{\text{Total debt}}{\text{Total debt} + \text{Net worth}}$$

OR

$$\text{Total debt ratio} = \frac{\text{total debt}}{\text{Capital employed.}}$$

Debt Equity Ratio

The owners and lenders relationship describe the contribution compared with owner's contribution is called debt equity ration.

Debt equity ratio can be also be computed by dividing total by net worth.

$$\text{Debt- equity ratio} = \frac{\text{total debt}}{\text{Net worth}}$$

Other Debt Ratios

Current liabilities are important determinants of the bank's financial risk since they represent obligations and exert pressure on the form and restrict its activities. To assess the proportion of total fund, short term and long term provided by out sides to finance total assets

Total liabilities to total assets ration = $\frac{\text{total liabilities}}{\text{Total assets}}$

PROFITABILITY RATIOS

Profit is the ultimate output of a company profit is the difference between revenue and expenses over a period of time. The profitability of the company should be evaluated in term of the bank's investment in assets and in terms of capital contributed creditor and owners.

i. Return on investment (ROI)
ii. Return on shareholder's equity
iii. Earning per share (EPS)
iv. Dividends per share (DPS)
v. Dividends yield.

Return on investment (ROI)

The term investment may refer to total assets or net assets. The funds employed is known as capital employed.. Net assets equal net fixed assets plus current asset minus current liabilities, excluding bank loan, It can be calculated or computed on ROTA or RONA (ie Return on Total Asset or Return on Net Assets.

ROTA = $\frac{\text{EBIT}}{\text{Total assets.}}$

(EBIT ie Earnings before interest tax).

OR

RONA = $\frac{\text{EBIT (I-T)}}{\text{Net assets.}}$

Return on shareholder's Equity

A return on shareholder Equity or net worth is calculated to see the profitability of ne owner's investment. The shareholder's equity or net worth include common share, remium, reserve and surplus less accumulated losses. The return on shareholder's equity s net profit after taxes divided by shareholders equity.

ROE = profit after tax

Net worth

Earnings per share (EPS)

It is calculated by dividing the profit after taxes by the number of common share outstanding.

EPS = profit after tax

Number of common share outstanding

The earrings per share calculation made over years indicates whether or not the form's earn power on per-share basis has changed over the period

Divided yield

Divided yield is the dividends, per share divided by the market value per share.

Divided yield = Divided per share

Market value per share.

Earning yield

The earning yield is the earring per share divided by the market value per share.

Earning yield = Earnings per share

Market value per share.

3.3 TIME SERIES ANALYSIS

This is method used by financial analysis to measure a firms performance overtime .It compares the current performance with past performance. This enables the Management to determine whether it is progressing as planned or not. Developing trends can seen by using multi-yea comparative analysis, a knowledge of which assist the firm in planning future operations. The theory behind times series analysis is that the firm must be evaluated in relation to its past performance over time, so as to be able to predict future performance. This method is also called trend analysis

PROBLEM IDENTIFIED

System analysis and design is a process similar to problem solving. In the case of this research, it was discovered that several problems militate against the efficiency of the manual operation currently being used with respect to the accounting ratios computation. Such problem could be as following:

a) Large amount of data difficult to compute
b) Error
c) Old system of doing it were very slow
d) Not accurate
e) Process delayed

System design is the task of structuring the system under study following specification of the processing requirements such as input, storage, output and segmentation of the processed into programs. The objective of this system design is to produce an envisage system that:

a) Meets the users requirements. These requirements include accuracy, efficiency, speed, data consistency, access control, simplicity, etc

b) Conforms to the specification and boundaries established during data collection phase.

3.4 COMPUTER PACKAGES AND COMPUTER APPLICATION

These are suits of programs designed to solve day to day users practical problems computer pages are increasingly available in the market to over come the problem of programming A package user has no more burden of computer expertise to contend with because the program has been developed for him all he has to do is to load or slot in the appropriate package and on request by the packages, provided the necessary parameter information in an interactive computing mode. The most common computer packages are word processing; spreadsheet etc to mention few among the package is database management software.

DATABASE MANAGEMENT SOFTWARE

With database software, it is possible to create and maintain a database software, it is important to fist identify the format that will permit interactive entry of the database.

Once the database is created, its records (related data about a particular event or thing)

Can be deleted or revised and other records can be added. All database management software systems are equipped with feature to:

i. Create and maintain (add, delete, and revised records) in a database.
ii. Search and list all record, or only these records that meet certain condition.
iii. Make an inquiring.
iv. Arrange or sots records in ascending or descending order.
v. Produce report based on the inquiries to the database.

3.4 SYSTEM DEVELOPMENT CYCLE.

Development includes development of a new system (computer based), conversion of an old system from manual/mechanical into a computerized system or change of an existing computer base system the following:

1. **Feasibility studying**: before staring any system development exercise, a feasibility study must be carried out on the exercise. This study will show the methodology to be adopted the work to be done, and the finding the study showing whether the development exercise is a feasible project or not with appropriate recommendations.
2. **System investigation**: following the recommendation from the feasibility study, an undertaken.

   This exercise will show:

   i. the task performed under the current system
   ii. user requirement under the current system
   iii. devices in use under the current system
   iv. control in the under the current system

3 **System analysis:** which extends a detailed analysis of the existing system as a new one to be developed in order to ascertain strength and weakness of the existing once and know the requirement of user in the one to be designed.

4. **System design:**- based on the requirements analysis, a design is made of what the New system wills extent. This involves a step by step detail of what is required to satisfy the user' requirement.
5. **System specification**: This is made of the compete configuration of the hardware with which to run the system.
6. **Program writing: With** the designed system and the system specification, the program to run the system is written. A program

is a step-by-step instruction, which the computer follows in executing or computing a task.

7. **Program conversion**: - this is the conversion of the written program to machine sensible from before loading.
8. Program testing: - on conversion and loading a test data similar to the live data that the program will eventually, run will be used to tests data the program system for possible errors.
9. **Documentation**:- if the program is okay, the record of individual step as we will be compiled together and documented for future programming and maintenance to the system.
10. **Parallel running**: - for converting an old system into computerized system, their should be a parallel running of the new program system with the old one for a minimum or 6 months before total change over to the new one for comparison of ht anew result with the old one.

3.5 BENEFIT OF A COMPUTERIZED ACCOUNTING SYSTEM

The following benefits could be accrued in keeping accounting records under a computerized system.

1. Time saving: - The time an average person spends waiting for transaction business can be considerable reduced thereby putting that into better and productive use since the necessary verifications are speedy.
2. Ability to perform complex tasks: under centralized computer system a computer that can verify accounts which it maintains somewhere else thousand of kilometres, away from you location.
3. Accuracy: - Accurate and faster computation of interest and bank change is available.

4. Accuracy in documentation: - customer's account and other document record can be maintained accuracy.
5. Extensive Reporting Facilities: -for listened, overall figure. For annual or quarterly operations can be easily and quickly, obtained, and returns can be renders at a fast rats.
6. Less manpower is employed: resulting in reduction of salary and other expenditure for the banker.
7. Compact information storage and ease of ret rival.
8. It has ability to store a very large amount of data in the very small plan.
9. Manipulation of large volume of data accurately and at an incredibly fast speed. Within a split of seconds, computer can perform task that could take many several days to performance and efficiency by providing account, up-to-dates and timely information.

3.6 FEASIBILITY STUDY

To determine whether a solution to the problem is feasible. This is to prevent waste of many mouths of effort and many thousand of Naira if the project is too large, too uncontrollable or simply impossible to carry out. The feasibility study is a miniature system analysis and design effort that entails an exploration of alternative design options and an analysis of the costs and benefits of each alternative. If several alternatives seem to be realistic in their potential costs and benefits, the project proceeds to the next phase ,.

3.7 TESTING PROJECT FEASIBILITY

For testing project feasibility, the following hence to be undertaken

a) Operationnal feasibility

b) Technical feasibility

c) Economy feasibility

a) Operational feasibility: This relates or is concerned with the workability of the proposed information system when develop and installed.

b) Technical feasibility: This test seeks to clarify if the proposed project can be done with current equipment, existing software technology, and available personnel.

c) Economy feasibility: This test for financial feasibility is undertaking to assess cost of implementing a proposed project via the benefit derived in implementing the project.

3.8 CURRENT SYSTEM

The new system demand the following:

1) A programmer that has adequate knowledge about the software adopted such as Dbase management system software operator.

2) System design analyst is required in maintain the program and system itself.

3) The system needed must be installed in each of the relevant office so that there will be access to the file at anytime.

4) The financial information should be typed in by the software operator as input to the system so that it can be stored and upgraded for future use.

5) All relevant information about the financial statement should be kept in the system and not to be deleted in future, for future use.

6) The result information in (5) above can be retrieved and supply to the investors, shareholders, accountant e t c

3.9 BENEFIT, COST AND ANALYSIS OF THE NEW APPROACH

Operating cost	N	K
Consultancy fees	50,000: 00	
Equipment maintenance	20,000: 00	
Program maintenance	20,000: 00	
Software operator(5)@N5,000	25,000: 00	
2 Air conditions	200,000:00	
Misllaneous expenses	10,000: 00	

Developmental cost	
5pc	300,000:00
System analysis& design for 4weeks	300,000:00
Software development/implementation	20,000:00
2 printer (Laser jet1200)	165,000:00
Installation	10,000:00
Staff training	30,000.00

3.10 COMMON AND FORMULAS MODULE NAMES

These are the twelve (12) formulas used in the program to computes the different types of financial ratio. The financial ratios are the owes written as one in depicted from the financial ration itself used as command which will run through the 12 formulas by which computer picked the formulas modules along the modules names that suit the ratio formula in other to achieve the objectives of the project work.

These are twelve (12) formula used in the program to compute the different types of the program to computer the different types of financial ratios.

1. current ratio => CR
2. quick ratio => Qr
3. cash ratio => Cr
4. total debt ratio => Tdr
5. Debit –Equity ratio =>Der
6. total liabilities assets ratio => TLtas
7. Return on Earring total asset => ROTA
8. Return on Earring => ROE
9. Earning per share => EPs
10. Divided per share =>DPS
11. Divided yield => DY
12. Earning yield => EY

Therefore, the command and formulas modules name can be in programming language choose database management system. Such as written below:

1. Cr = current assets/ current liabilities
2. Qr = current assets- inventories/ current liabilities
3. Cr = cash + marketable securities/ current liabilities
4. Idr =Total debt/ Total debt + net worth
5. Der= Total debt/ net worth
6. Titra = Total liabilities/ total assets
7. ROTA = EBIT/ Total assets
8. ROE = profit after tax/ net work

9. EpS =profit after tax/ number of common shares outstanding.
10. Dps =Earring paid to shareholder/ number of common share outstanding.
11. DY = Dividends per share/market value per share
12. Ey =Earnings per share /market value per share.

CHAPTER FOUR

SYSTEM IMPLEMENTATION

4.1 INTRODUCTION

The system to be implemented has been carefully designed to computerized accounting ratio with particular emphasis to the Guaranty Bank Plc, Minna. The program has been coded, tested and is operational.

4.2 CHOICE OF PROGRAMMING LANGUAGE USED

The programming language used for this project is Visual Basic 6.0. It provides a relational database structure where data are entered and stored into the database file in rows and columns called records and fields respectively.

4.3 FEATURE OF LANGUAGE CHOSEN

This is complex software system, which constructs, expands and maintains data in the base. It provides an interface between users and the data in the base. It also allocates storage to data, maintains indices so that any required data can be retrieved and so that separate data item in the base can be changed as needed. DBMS maintain data in the base by adding records, deleting, and amending records. It expands the so that new records can be added.

Files can be processed sequentially or serially. It also has the function of providing security for the data in the base against the use by unauthorized persons and against corruption. DBSM as software is therefore aimed at the following.:

- DATA INTEGRATION: Where information from many files and be assessed, coordinated and operated upon as though they were from a single file. It is also possible for two or more application s to share the data in the base. So, it is important for the success of the database system to control the creation, deletion and update of data and to ensure its correctness

- ELIMINATING REDUNDANCY: Redundancy occurs when the data in the base cannot be arranged to suit all application programs assessing them. If this happens, some data may appear in more than one file leading to wastage of storage space and duplication of efforts during data entry.

- ACHIEVING DATA INDEPENDENCY: Which is rather an insulation of application programs from the physical or logical storage of data in such away that it allows modification in the contents and organization of the data with out reprogramming and vice –versa.

- CENTRAL CONTROL: Here, data and operations on data are centrally controlled and this leads to abetter management of data by enforcing standard data for all users.
- ACHIEVE DATA INTEGRITY: Duplication is eliminated giving room for consistent information.

- STANDARD: With a central database, it is possible to impose standards for file access and update and to impose good privacy and security features.

4.4. PROGRAM CODE (CODE_LISTING)

CODE__LISTING

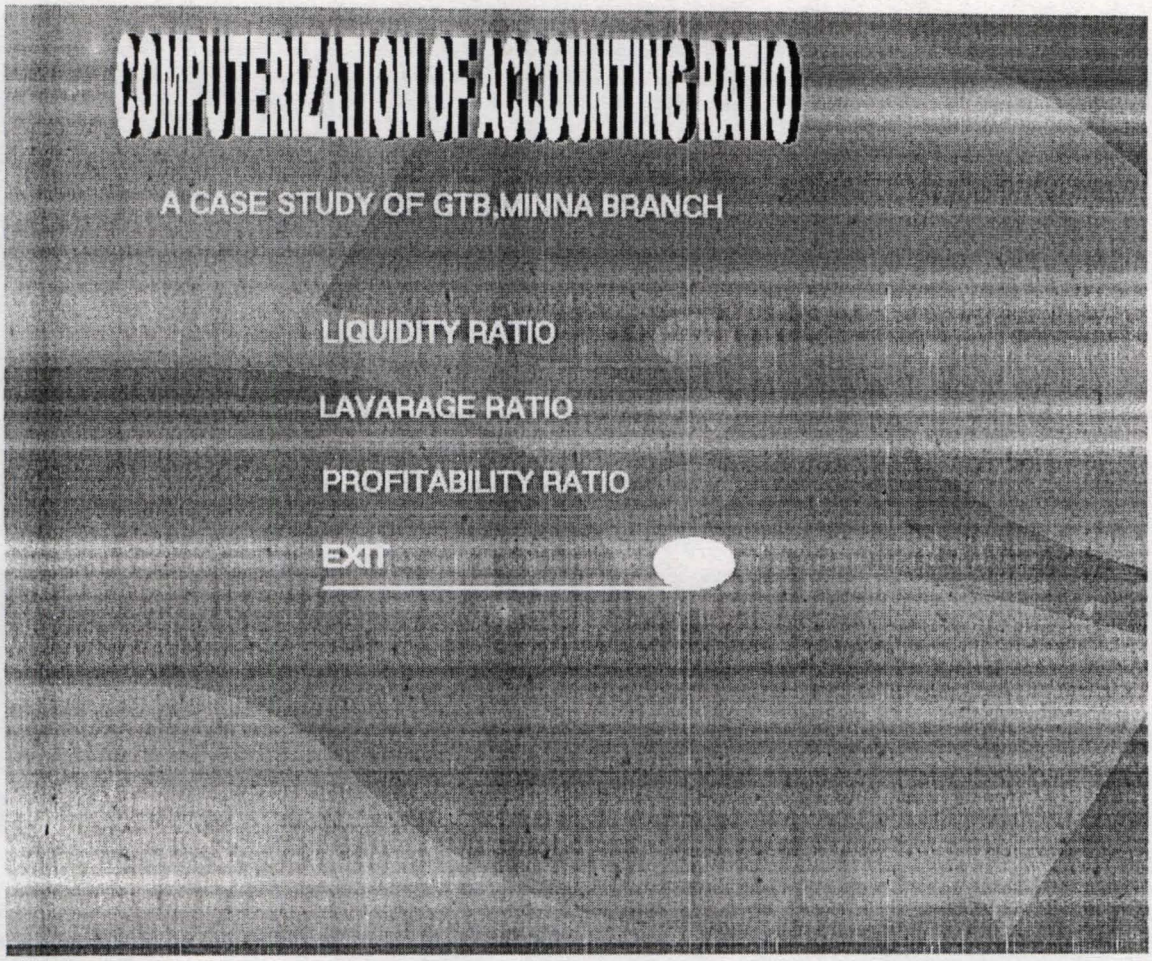
```
Private Sub Form_Load()
Me.Height = Screen.Height
Me.Width = Screen.Width
End Sub

Private Sub lbLavRat_Click()
   frmLevRat.Show
End Sub

Private Sub lbLRat_Click()
   frmLRat.Show
End Sub

Private Sub lbPRat_Click()
   frmProRat.Show
End Sub

Private Sub LBx_Click()
End
End Sub

Private Sub cmdCalc1_Click()
Dim dr1, dr2 As Double
dr1 = Val(txtTLV.Text) / Val(txtTAV.Text)
dr2 = Val(txtTLV1.Text) / Val(txtTAV1.Text)
txtDR.Text = dr1
txtDR1.Text = dr2
With lbMsg1
If dr1 > dr2 Then
   .Caption = "THE RECENT RATIO IS FAVOURABLE"
Else: .Caption = "THE RECENT RATIO IS NOT FAVOURABLE"
End If
End With

End Sub

Private Sub cmdCalc2_Click()
Dim Tdr1, Tdr2 As Double
Tdr1 = Val(txtTDV.Text) / (Val(txtTDV.Text) + Val(txtTNV.Text))
Tdr2 = Val(txtTDV1.Text) / (Val(txtTDV1.Text) + Val(txtTNV1.Text))
   txtTDR.Text = Tdr1
   txtTDR1.Text = Tdr2
   With lbMsg2
If Tdr1 > Tdr2 Then
   .Caption = "RECENT YEAR RATIO IS FAVOURABLE"
Else: .Caption = "RECENT YEAR RATIO IS NOT FAVOURABLE"
End If
End With
End Sub

Private Sub cmdX1_Click()
Unload Me
End Sub

Private Sub cmdX2_Click()
Unload Me
End Sub
```

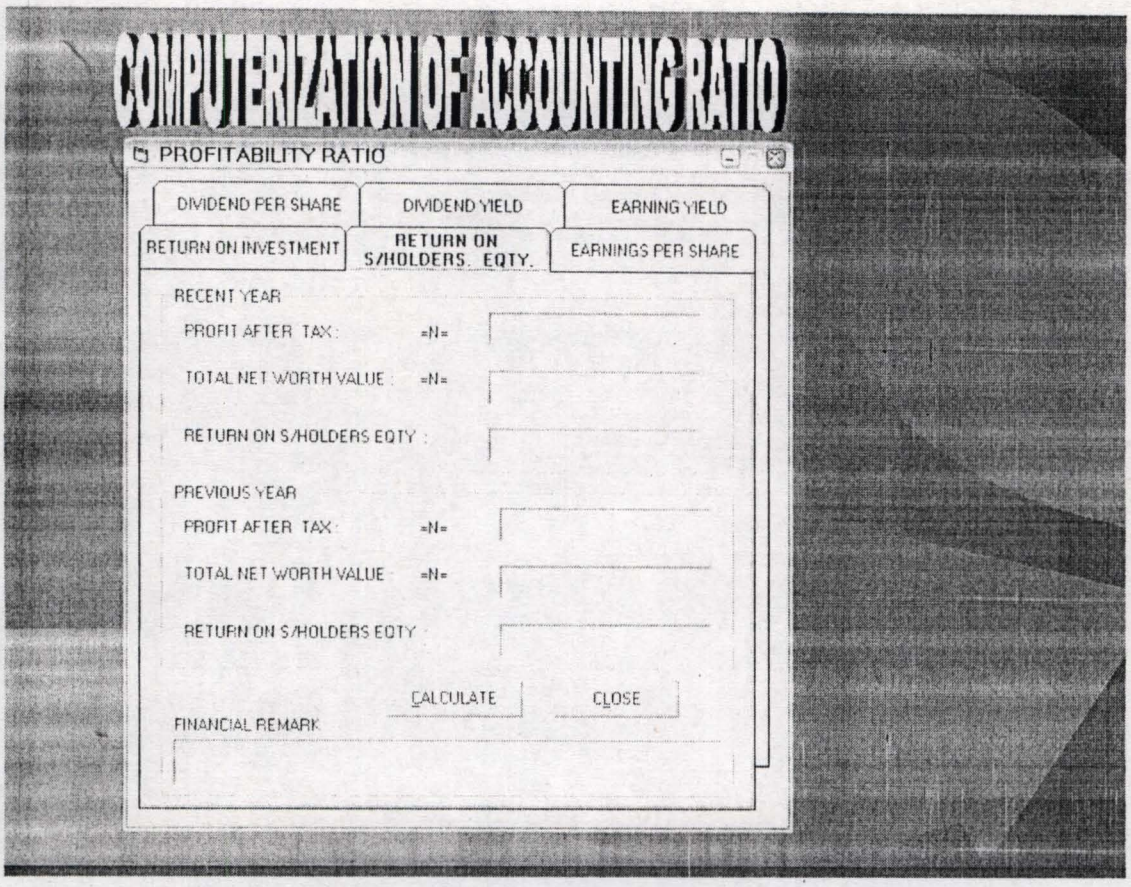
```
Private Sub cmdCalc_Click()
Dim msg As VbMsgBoxResult
Dim R1, R2 As Double

    R1 = Val(txtA1.Text) / Val(txtL1.Text)
    R2 = Val(txtA2.Text) / Val(txtL2.Text)
    txtR1.Text = R1
    txtR2.Text = R2
    If R1 > R2 Then
      lbFinRep.Caption = "Year1 has higher Liquidity Ratio"
    Else: lbFinRep.Caption = "Year2 has higher Liquidity Ratio"
    End If
End Sub

Private Sub cmdCalc2_Click()
Dim Qr1, Qr2 As Double
   Qr1 = (Val(txtC.Text) + Val(txtM.Text) + Val(txtR.Text)) / Val(txtL.Text)
   Qr2 = (Val(txtC1.Text) + Val(txtM1.Text) + Val(txtR3.Text)) / Val(txtC2.Text)
   txtQr.Text = Qr1
   txtQr1.Text = Qr2
   If Qr1 < Qr2 Then
    lbmsg2.Caption = "YOU CAN'T MEET YOUR OBLIGATION"
    Else: lbmsg2.Caption = "YOUR FINANCIAL STATUS IS STRONG"
   End If

End Sub

Private Sub cmdCalc3_Click()
Dim Cr1, cr2 As Double
Cr1 = (Val(txtTC.Text) + Val(txtMS.Text)) / Val(txtCL.Text)
cr2 = (Val(txtTC1.Text) + Val(txtMS1.Text)) / Val(txtCL1.Text)
txtCR.Text = Cr1
txtCR1.Text = cr2
With lbMsg3
If Cr1 > cr2 Then
.Caption = "THE RATIO IS OK, - REINVEST"
Else: .Caption = "THE RATIO NOT OK,DON'T INVEST"
End If
End With
End Sub

Private Sub cmdX_Click()
Unload Me
End Sub

Private Sub CMDx2_Click()
Unload Me
End Sub

Private Sub Command1_Click()
Unload Me
End Sub

Private Sub cmdCalc1_Click()
Dim Roi1, Roi2 As Double
Roi1 = Val(txtEBT.Text) / Val(txtTA.Text)
Roi2 = Val(txtEBT1.Text) / Val(txtTA1.Text)
txtROI.Text = Roi1
```

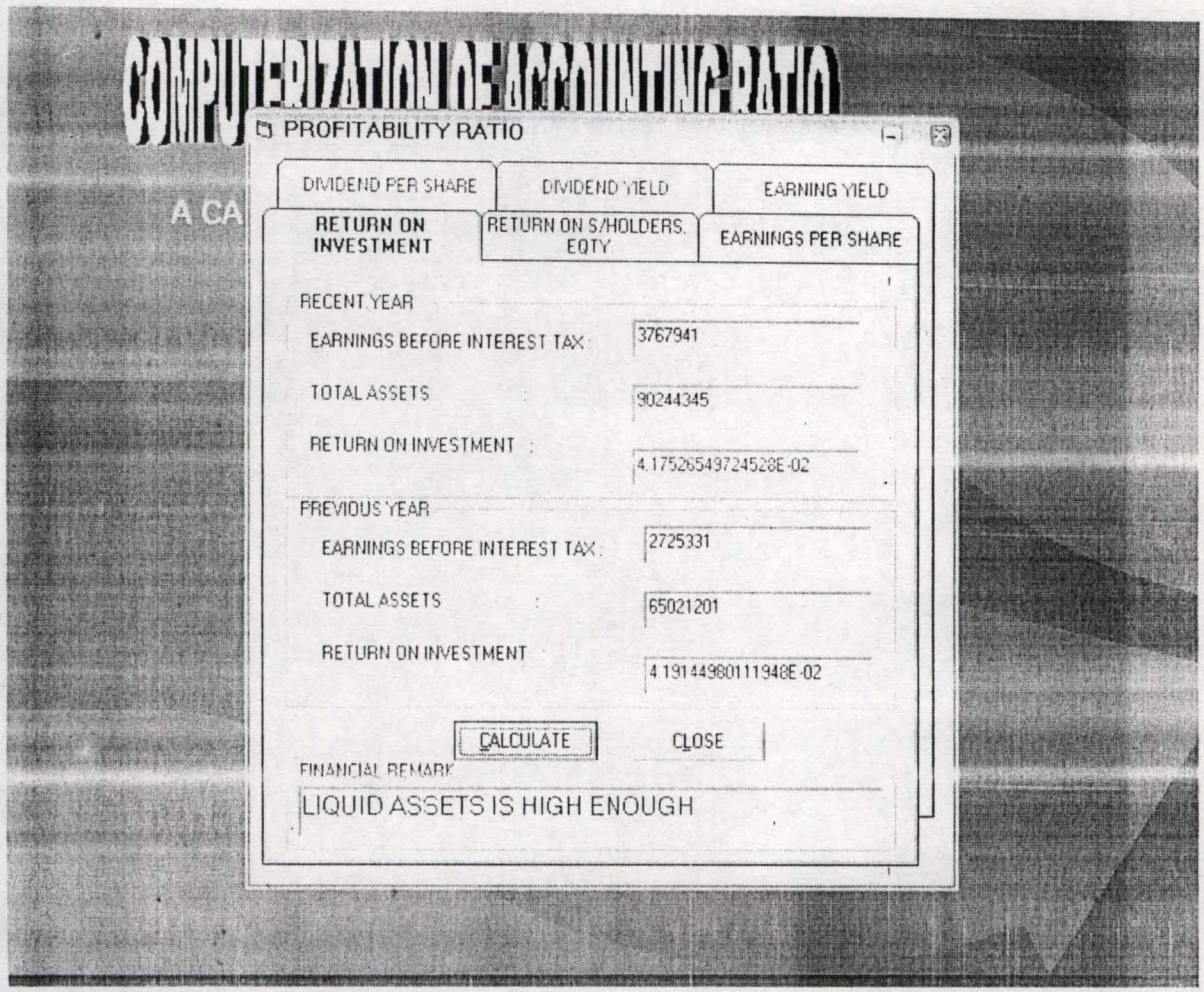
```
txtROI1.Text = Roi2
With lbMsg1
If Roi2 > Roi1 Then
.Caption = "LIQUID ASSETS IS HIGH ENOUGH"
Else: .Caption = "LIQUID ASSETS IS TOO LOW"
End If
End With

End Sub

Private Sub cmdCalc2_Click()
Dim Rse1, Rse2 As Double
Rse1 = Val(txtPAT.Text) / Val(txtTNV.Text)
Rse2 = Val(txtPAT1.Text) / Val(txtTNV1.Text)
txtRSE.Text = Rse1
txtRSE1.Text = Rse2

With lbMsg2
If Rse1 > Rse2 Then
 .Caption = "STOCK HOLDERS ARE FAVOURED"
Else: .Caption = "STOCK HOLDERS ARE NOT FAVOURED"
End If
End With

End Sub

Private Sub cmdX1_Click()
Unload Me
End Sub

Private Sub cmdx2_Click()
Unload Me
End Sub

Private Sub cmdCalc1_Click()
Dim Roi1, Roi2 As Double
Roi1 = Val(txtEBT.Text) / Val(txtTA.Text)
Roi2 = Val(txtEBT1.Text) / Val(txtTA1.Text)
txtROI.Text = Roi1
txtROI1.Text = Roi2
With lbMsg1
If Roi2 > Roi1 Then
.Caption = "LIQUID ASSETS IS HIGH ENOUGH"
Else: .Caption = "LIQUID ASSETS IS TOO LOW"
End If
End With

End Sub

Private Sub cmdCalc2_Click()
Dim Rse1, Rse2 As Double
Rse1 = Val(txtPAT.Text) / Val(txtTNV.Text)
Rse2 = Val(txtPAT1.Text) / Val(txtTNV1.Text)
txtRSE.Text = Rse1
txtRSE1.Text = Rse2

With lbMsg2
If Rse1 > Rse2 Then
 .Caption = "STOCK HOLDERS ARE FAVOURED"
Else: .Caption = "STOCK HOLDERS ARE NOT FAVOURED"
```

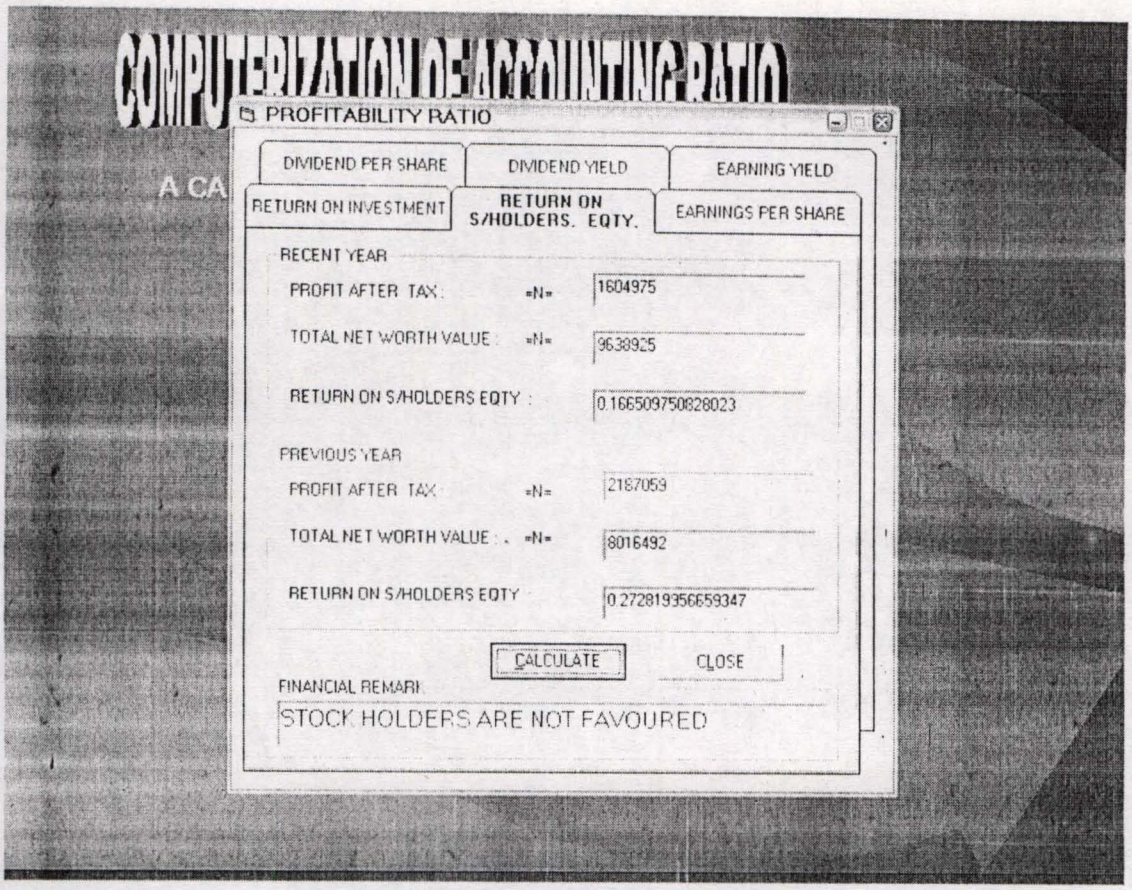
```
End If
End With

End Sub

Private Sub cmdX1_Click()
Unload Me
End Sub

Private Sub cmdx2_Click()
Unload Me
End Sub
```

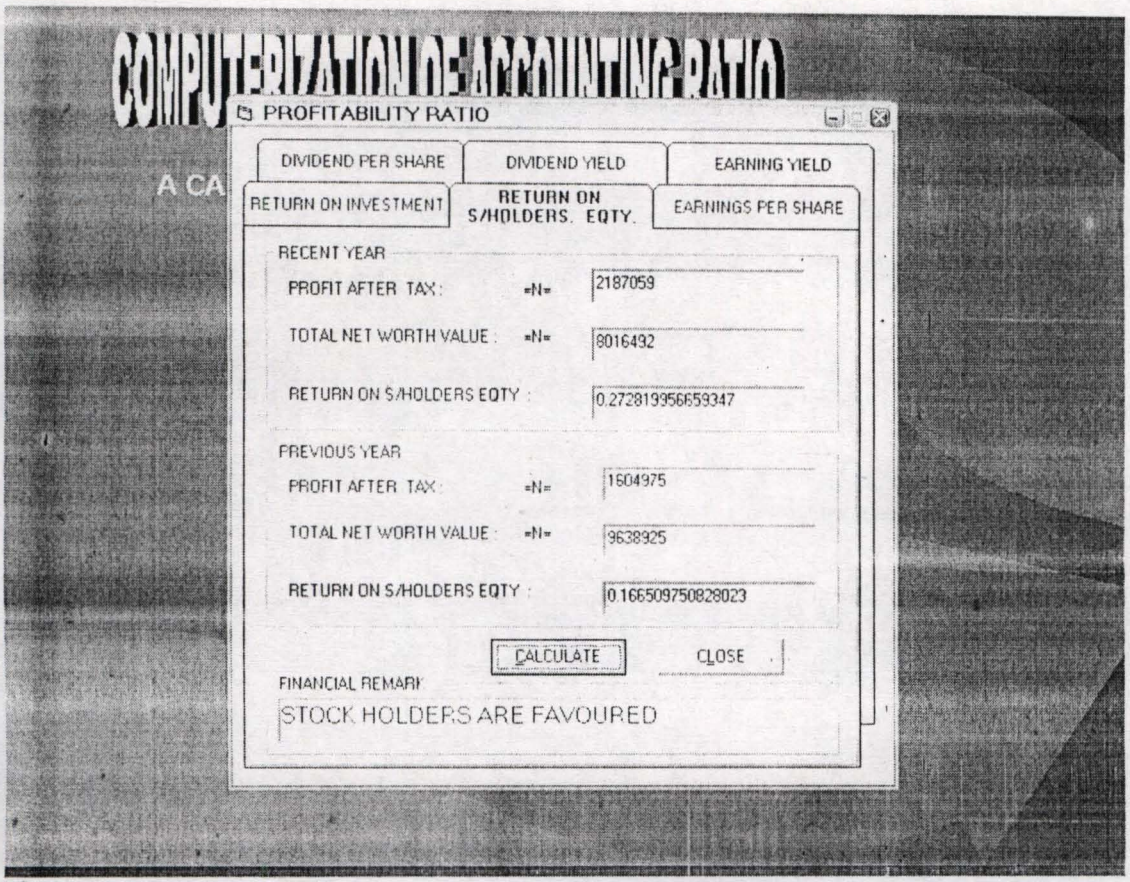
4.5. PROGRAM OUTPUT

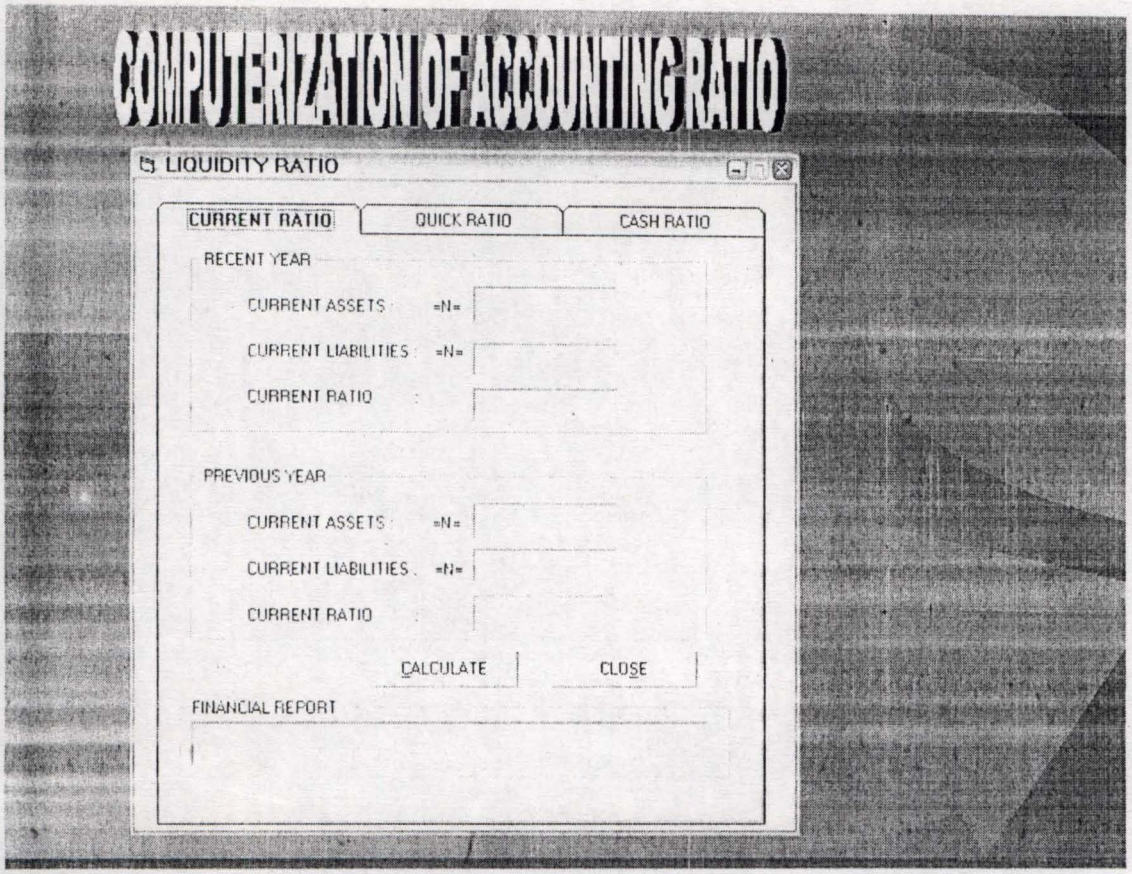

COMPUTERIZATION OF ACCOUNTING RATIO
A CASE STUDY OF GTB,MINNA BRANCH
LIQUIDITY RATIO
LAVARAGE RATIO
PROFITABILITY RATIO
EXIT

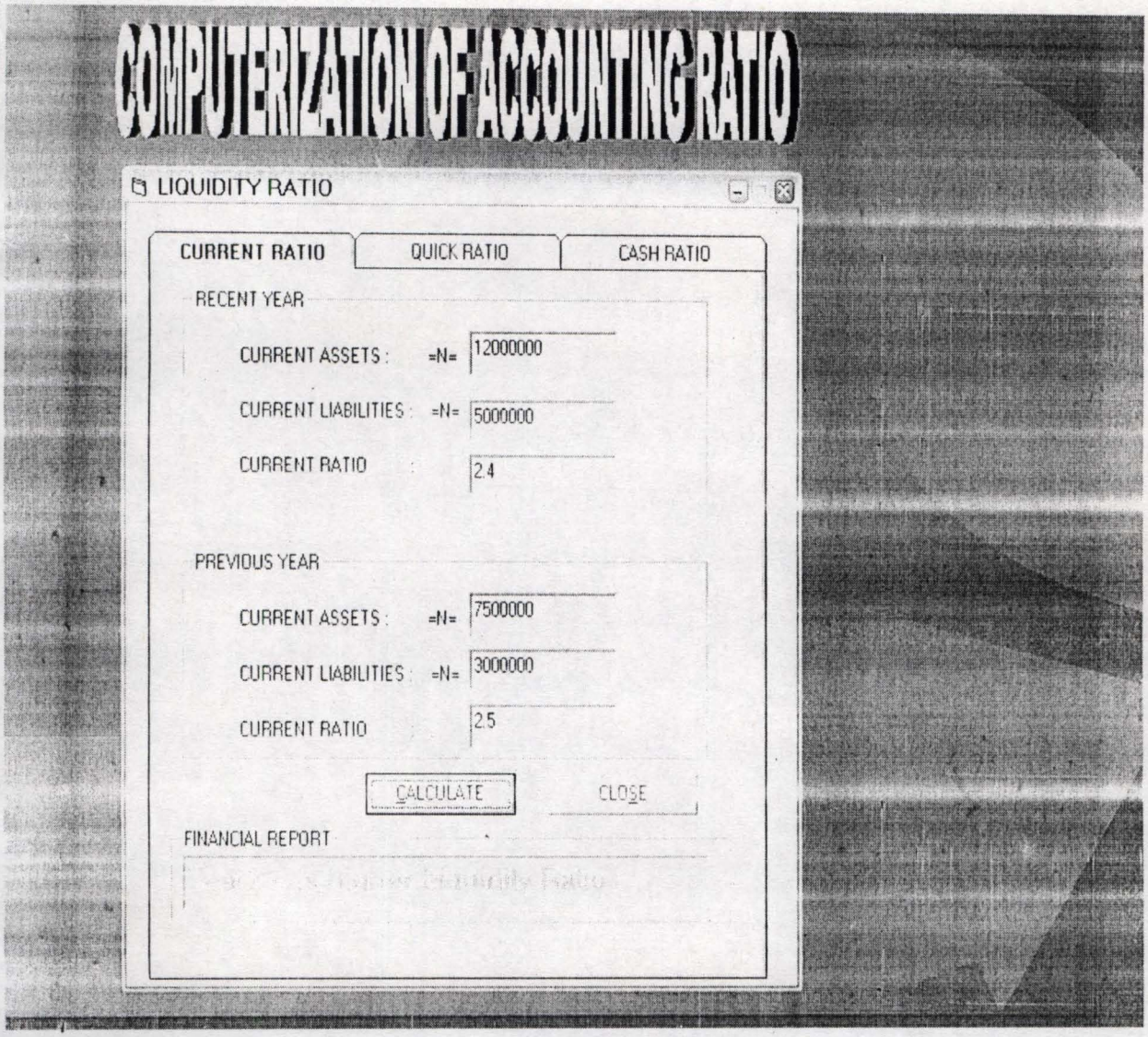

COMPUTERIZATION OF ACCOUNTING RATIO
PROFITABILITY RATIO
DIVIDEND PER SHARE
DIVIDEND YIELD
EARNING YIELD
RETURN ON INVESTMENT
RETURN ON S/HOLDERS. EQTY.
EARNINGS PER SHARE
RECENT YEAR
PROFIT AFTER TAX :
=N=
TOTAL NET WORTH VALUE :
=N=
RETURN ON S/HOLDERS EQTY :
PREVIOUS YEAR
PROFIT AFTER TAX :
=N=
TOTAL NET WORTH VALUE :
=N=
RETURN ON S/HOLDERS EQTY :
CALCULATE
CLOSE
FINANCIAL REMARK

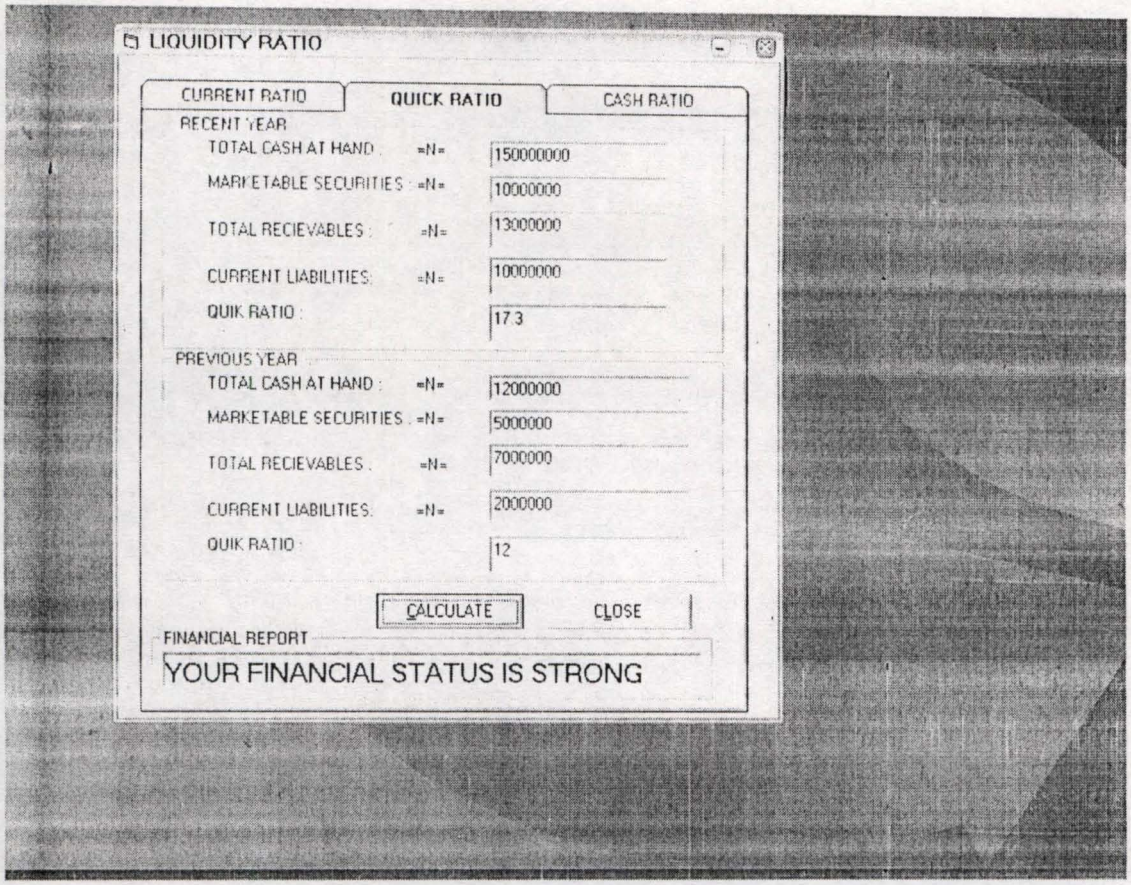

COMPUTERIZATION OF ACCOUNTING RATIO
A CA
PROFITABILITY RATIO
DIVIDEND PER SHARE
DIVIDEND YIELD
EARNING YIELD
RETURN ON INVESTMENT
RETURN ON S/HOLDERS. EQTY
EARNINGS PER SHARE
RECENT YEAR
EARNINGS BEFORE INTEREST TAX :
3767941
TOTAL ASSETS :
90244345
RETURN ON INVESTMENT :
4.17526549724528E-02
PREVIOUS YEAR
EARNINGS BEFORE INTEREST TAX :
2725331
TOTAL ASSETS :
65021201
RETURN ON INVESTMENT :
4.19144980111948E-02
CALCULATE
CLOSE
FINANCIAL REMARK
LIQUID ASSETS IS HIGH ENOUGH

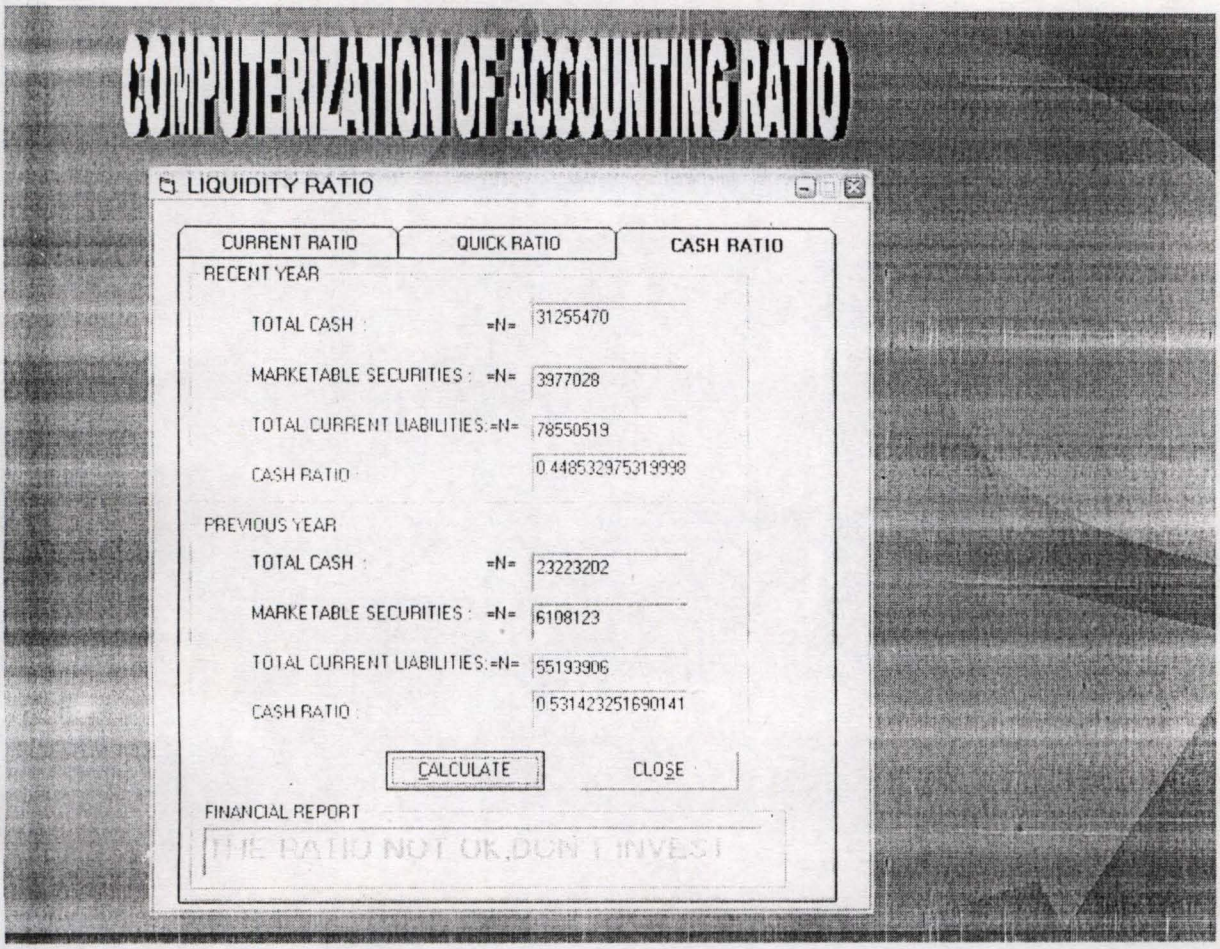

COMPUTERIZATION OF ACCOUNTING RATIO
A CA
PROFITABILITY RATIO
DIVIDEND PER SHARE
DIVIDEND YIELD
EARNING YIELD
RETURN ON INVESTMENT
RETURN ON S/HOLDERS. EQTY.
EARNINGS PER SHARE
RECENT YEAR
PROFIT AFTER TAX: =N= 1604975
TOTAL NET WORTH VALUE : =N= 9638925
RETURN ON S/HOLDERS EQTY : 0.166509750828023
PREVIOUS YEAR
PROFIT AFTER TAX: =N= 2187059
TOTAL NET WORTH VALUE : =N= 8016492
RETURN ON S/HOLDERS EQTY : 0.272819356659347
CALCULATE
CLOSE
FINANCIAL REMARK
STOCK HOLDERS ARE NOT FAVOURED

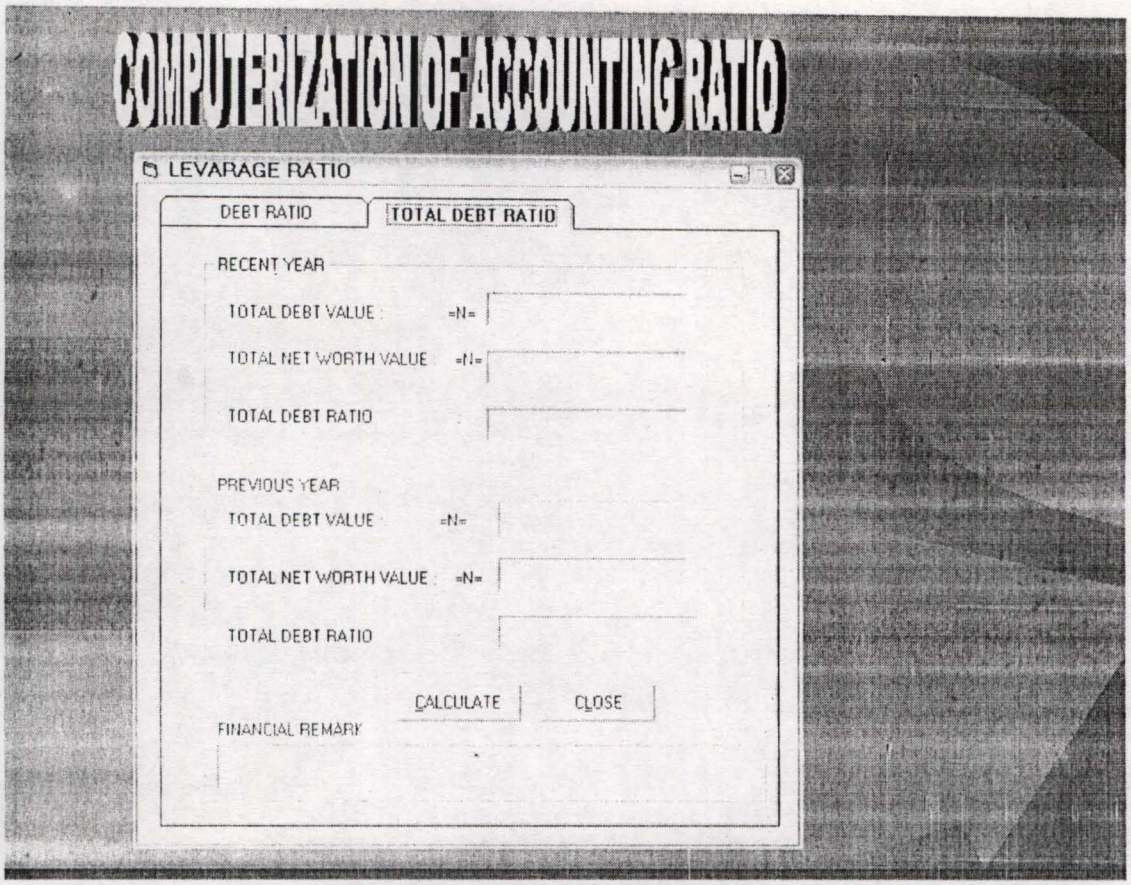

COMPUTERIZATION OF ACCOUNTING RATIO
A CA
PROFITABILITY RATIO
DIVIDEND PER SHARE
DIVIDEND YIELD
EARNING YIELD
RETURN ON INVESTMENT
RETURN ON S/HOLDERS. EQTY.
EARNINGS PER SHARE
RECENT YEAR
PROFIT AFTER TAX : =N= 2187059
TOTAL NET WORTH VALUE : =N= 8016492
RETURN ON S/HOLDERS EQTY : 0.272819356659347
PREVIOUS YEAR
PROFIT AFTER TAX : =N= 1604975
TOTAL NET WORTH VALUE : =N= 9638925
RETURN ON S/HOLDERS EQTY : 0.166509750828023
CALCULATE
CLOSE
FINANCIAL REMARK
STOCK HOLDERS ARE FAVOURED

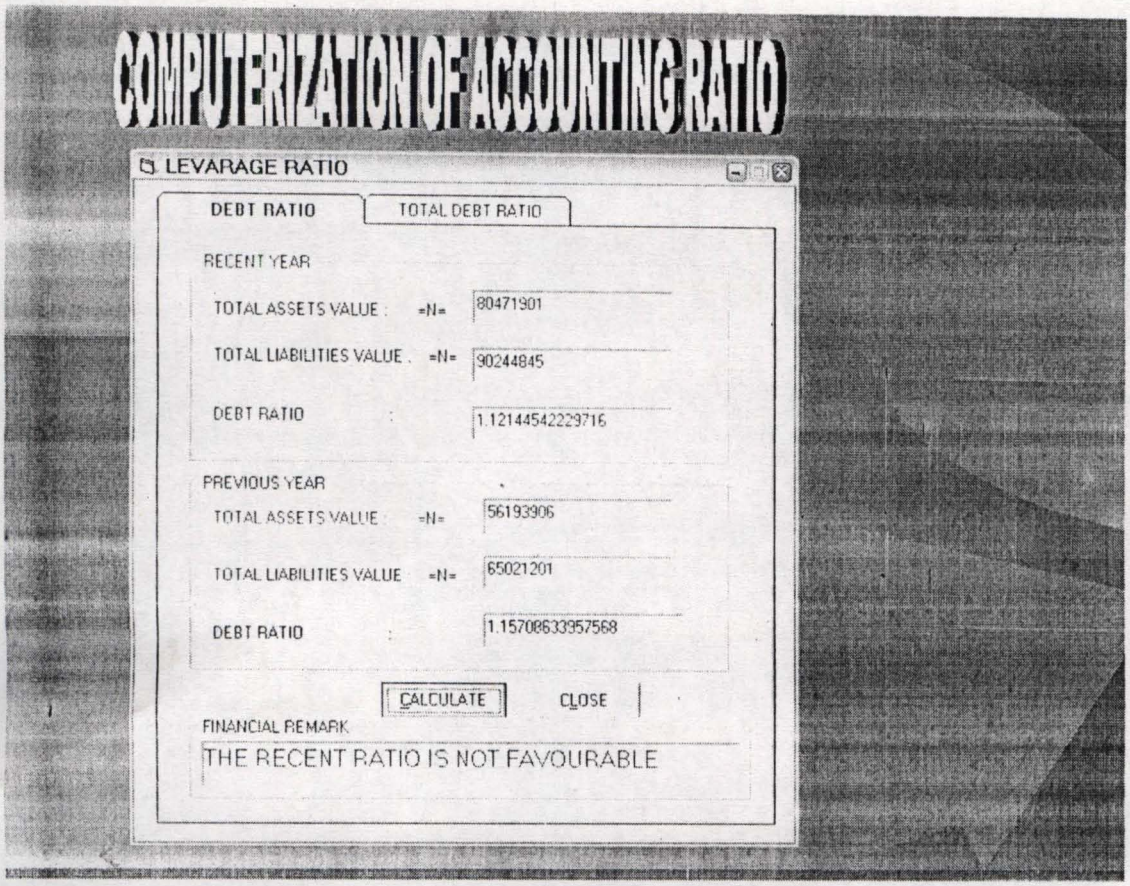

COMPUTERIZATION OF ACCOUNTING RATIO
LIQUIDITY RATIO
CURRENT RATIO
QUICK RATIO
CASH RATIO
RECENT YEAR
CURRENT ASSETS =N=
CURRENT LIABILITIES =N=
CURRENT RATIO
PREVIOUS YEAR
CURRENT ASSETS =N=
CURRENT LIABILITIES =N=
CURRENT RATIO
CALCULATE
CLOSE
FINANCIAL REPORT

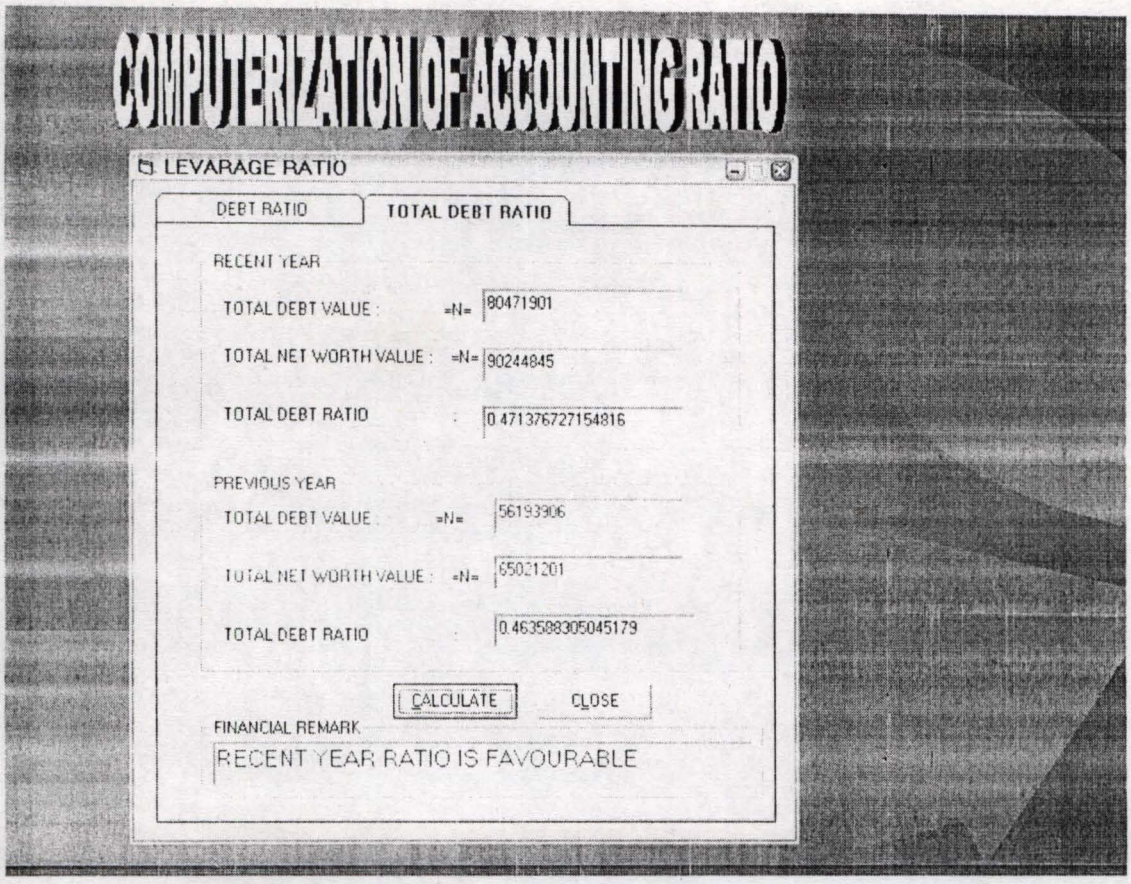

COMPUTERIZATION OF ACCOUNTING RATIO
LIQUIDITY RATIO
CURRENT RATIO
QUICK RATIO
CASH RATIO
RECENT YEAR
CURRENT ASSETS : =N= 12000000
CURRENT LIABILITIES : =N= 5000000
CURRENT RATIO : 2.4
PREVIOUS YEAR
CURRENT ASSETS : =N= 7500000
CURRENT LIABILITIES : =N= 3000000
CURRENT RATIO : 2.5
CALCULATE
CLOSE
FINANCIAL REPORT


LIQUIDITY RATIO
CURRENT RATIO
QUICK RATIO
CASH RATIO
RECENT YEAR
TOTAL CASH AT HAND : =N= 150000000
MARKETABLE SECURITIES : =N= 10000000
TOTAL RECIEVABLES : =N= 13000000
CURRENT LIABILITIES: =N= 10000000
QUIK RATIO : 17.3
PREVIOUS YEAR
TOTAL CASH AT HAND : =N= 12000000
MARKETABLE SECURITIES : =N= 5000000
TOTAL RECIEVABLES : =N= 7000000
CURRENT LIABILITIES: =N= 2000000
QUIK RATIO : 12
CALCULATE
CLOSE
FINANCIAL REPORT
YOUR FINANCIAL STATUS IS STRONG


COMPUTERIZATION OF ACCOUNTING RATIO
LIQUIDITY RATIO
CURRENT RATIO
QUICK RATIO
CASH RATIO
RECENT YEAR
TOTAL CASH : =N= 31255470
MARKETABLE SECURITIES : =N= 3977028
TOTAL CURRENT LIABILITIES: =N= 78550519
CASH RATIO : 0.448532975319998
PREVIOUS YEAR
TOTAL CASH : =N= 23223202
MARKETABLE SECURITIES : =N= 6108123
TOTAL CURRENT LIABILITIES: =N= 55193906
CASH RATIO : 0.531423251690141
CALCULATE
CLOSE
FINANCIAL REPORT
THE RATIO NOT OK,DON'T INVEST


COMPUTERIZATION OF ACCOUNTING RATIO
LEVARAGE RATIO
DEBT RATIO
TOTAL DEBT RATIO
RECENT YEAR
TOTAL DEBT VALUE :
=N=
TOTAL NET WORTH VALUE :
=N=
TOTAL DEBT RATIO :
PREVIOUS YEAR
TOTAL DEBT VALUE :
=N=
TOTAL NET WORTH VALUE :
=N=
TOTAL DEBT RATIO :
CALCULATE
CLOSE
FINANCIAL REMARK


COMPUTERIZATION OF ACCOUNTING RATIO
LEVARAGE RATIO
DEBT RATIO
TOTAL DEBT RATIO
RECENT YEAR
TOTAL ASSETS VALUE : =N= 80471901
TOTAL LIABILITIES VALUE : =N= 90244845
DEBT RATIO : 1.12144542229716
PREVIOUS YEAR
TOTAL ASSETS VALUE : =N= 56193906
TOTAL LIABILITIES VALUE : =N= 65021201
DEBT RATIO : 1.15708633957568
CALCULATE
CLOSE
FINANCIAL REMARK
THE RECENT RATIO IS NOT FAVOURABLE


COMPUTERIZATION OF ACCOUNTING RATIO
LEVARAGE RATIO
DEBT RATIO
TOTAL DEBT RATIO
RECENT YEAR
TOTAL DEBT VALUE : =N= 80471901
TOTAL NET WORTH VALUE : =N= 90244845
TOTAL DEBT RATIO : 0.471376727154816
PREVIOUS YEAR
TOTAL DEBT VALUE : =N= 56193906
TOTAL NET WORTH VALUE : =N= 65021201
TOTAL DEBT RATIO : 0.463588305045179
CALCULATE
CLOSE
FINANCIAL REMARK
RECENT YEAR RATIO IS FAVOURABLE

4.6. TIME SERIES ANALYSIS

This is a method used by financial analysis to measure bank performance overtime. It compares the current performance with past performance. (it is also called trend analysis employed when financial data are presented for two or more years).This enables the banks management to determine whether it is progressing as planned or not. Developing trends can be seen by using multi year comparative analysis, acknowledge of which assists the bank in planning future operations. The theory behind times series analysis is that the bank must be evaluated in relation to its past performance.

As times series analysis stated above, it will be used in comparing the current with past performance. The comparison will be done on the financial ratio computation of 2002 to 2003.

LIQUIDITY RATIO

CURRENT RATIO

It indicates the relationship of current assets to current liabilities. A low ratio indicates that bank would be unable to meet its short- term debt in an emergency. A high ratio is considered favourable to creditors. The year 2002 was 1.13 while year 2003 was 1.10,since the year 2002 was little bit higher by 0.03 was considered favourable to creditors.

QUICK RATIO

A quick or acid test ratio provides rigorous measure of liquidity .The higher the ratio the more liquid the bank is considered. A lower ratio indicated that bank would be unable to meet its immediate obligations. A bank with more liquid is considered a favourable bank. The year 2002 was 0.6 compare with year 2003 which was 0.5 , year 2002 was considered favourable because of the greater ratio in cash, marketable securities + net receivable compared with current liabilities because high liquid will give room for investment and the bank would be a to meet its immediate obligations.

CASH RATIO

The year 2002 was 0.53 compare with year 2003 which was0.5.The year 2002 was a little higher by 0.03, it was therefore considered favourable too because the ratio of cash + marketable securities was higher than current liabilities.

LEVERAGE RATIO

DEBT RATIO

Debt ratio is total liabilities to total assets ratio. Current liabilities are important determinants of the bank financial risks since they represent obligations while total asset were the total funds provided by outsiders. The year 2002was 0.86while 2003 was0.89, therefore year 2003 was high by0.03 and considered unfavourable while year 2002 was favourable because of more liquid assets.

TOTAL DEBT RATIO

Total Debt ratio is total liabilities to total assets. Current liabilities are important determinants of the firm's financial risk since they represent obligations while total assets were the total funds provided by outsiders. The year 2003 was 0.89 compare with the year 2002, which was 0.876 both years, are more favourable ratio to settle their debts.

PROFITABILITY RATIO

RETURN ON INVESTMENT (ROI)

The return on investment, which is often called bank's return on total assets, measures the overall effectiveness of management in generating profit with its available asset. The higher the bank's same two years (2002 & 2003).

RETURN ON SHAREHOLDER EQUITY

The return to the common stockholders may be greater or lesser than the return on total assets, because of the bank 's use of financial leverage. If the banks are able to earn more on the borrowed funds than the fixed amount that must be paid to the creditors or preferred stockholders, the return to the common stockholders will be greater than the return on total assets. High percent of return will benefit stockholders and also improve financial strength of the bank the year 2003 was16.7% that was considered favourable compare with year 2002, which was 7.3%.

EARNING PER SHARE (EPS)

The earning per share is the amount of net income earned on one share of stock. The EPS of 2002 shows 0.75k compare with the year 2003, which was 0.60k,the year 2002 was highly better than year 2003.

DIVIDENDS PER SHARE (DPS)

The dividend per share of the year 2002 was0.75k which was favourable or good compared with the year 2003.and also it will encourage stockholder due to high dividend earnings.

DIVIDEND YIELD

The dividend yield in 2002 was 50.6%, which was high compared with 2003, which was 50%. So there was return on investment, which was good to common stockholders in year 2002.

EARNING YIELD

The earnings yield in the year 2002 was0.11kcompared with the year 2003 which was0.11k.The earning yield was the same for both years, therefore there was no change in profitability ratio.

4.7 CHANGE OVER PROCEDURE

The change over is the method adopted by the bank management to change from the previous old system to the new system. as analysed by the system analyst. The Guaranty Trust bank decided to use pilot running to implement their daily works The pilot running is the process whereby the data run on the old system will compared with the data run on the new system.

CHAPTER FIVE

5.1 DOCUMENTATION

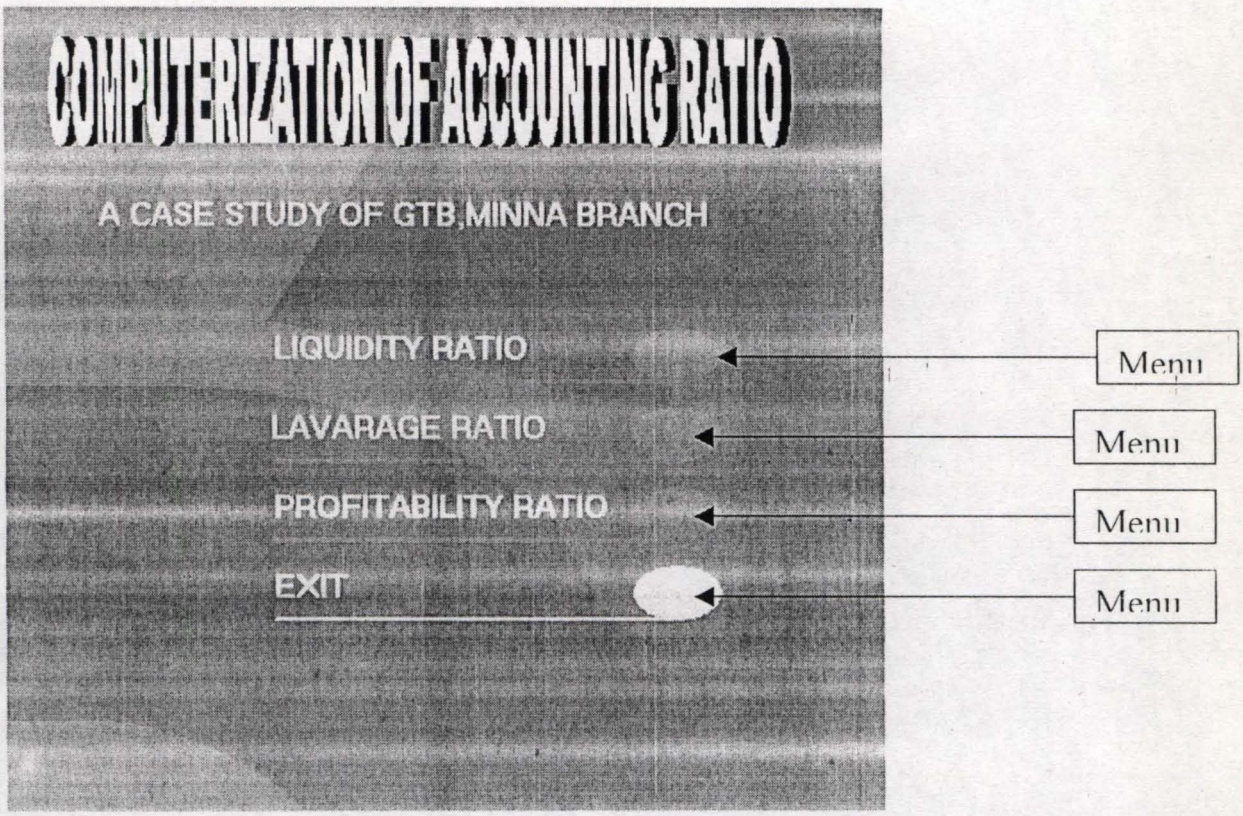
Documentation explained the necessary procedures that are needed to be follow for successful implementation of the Computerised Accounting Ratio program.

Since the application is developed using Visual Basic 6.0, codes are compiled such that it can be run on any system, even where Visual Basic as a compiler is not installed. The entire program codes are stored into a Folder called LOLA PROJECT CODES with an Icon such as

This file folder has been compiled such that it is automatically executable as shown in the Icon above. Upon double clicking on this Icon, the Computer Automatically load the application and prompt the user to the application prompt.

The system is menu driven, so it become easy for anybody to run without much technical bottleneck.

APPLICATION FLASH SCREEN



LIQUIDITY RATIO:

This module contain other sub modules like:

- CURRENT RATIO
- QUICK RATIO
- CASH RATIO

LEVERAGE RATIO:

This module contain other sub modules like:

- DEBT RATIO
- TOTAL DEBT RATIO

PROFITABILITY RATIO

This module contain other sub modules like:

- RETURN ON INVESTMENT
- RETURN ON SHAREHOLDERS EQUITY
- EARNING PER SHARE
- DIVIDEND YIELD
- EARNING YIELD
- EARNING PER SHARE

On clicking on any of the Main Module, the other sub modules will be automatically displayed on the screen and the rest of the application is self explanatory and user friendly.

5.2 SUMMARY

The background of this project was the use of conventional method of computing figures which some of these banks were facing especially the Guaranty Trust Bank, Minna Branch. This problem was later solved by the introduction of the programming language which can it can compute the accounting ratios easier and faster.

The objective were analyzed based of the computation of accounting ratios result, the bank financial state were revealed which predict the future of the bank performance for the management decision.

Times series analysis method was adopted to measure the bank's performance overtime. This method is used to compare the current performance with past performance.

Bank's performance was actually revealed which serve as determinant for the investors, shareholders and management to decide whether to invest in the banks and also whether bank can meet up with their immediate obligations.

In nutshell, the computerisation of accounting ratios using the programming language such as Data base management system will solve the problem facing the bankers today.

5.3 LIMITATION

The program chosen is only limited to the computerisation of accounting ratio that may be difficult when applied to other parameters?

The programming language used here is useful currently since there is know new programming language that can serve as barrier.

The trend analysis carried out was done for two years instead of the recommended five years, which is on the financial report.

The published annual report and account of the case study were used in the analysis; it may not give a true picture of confidential data that are not disclosed.

Financial ratios are constructed for accounting data, and accounting data are subjected to different interpretation and manipulation

It is difficult to generalized about whether a particular ratio is" good" "bad" for example, a high current ratio may show a strong liquidity position, which is good ,or excessive cash , which is bad because excess cash in the bank is a non gearing asset. Similarly high asset utilization ratios may denote either a bank that simply cannot afford to buy enough assets. A bank may have enough ratios, which look "good" and others, which look "bad", making it difficult to tell whether the bank is on balance, in a strong or a weak position.

5.4 CONCLUSION

The conclusion is that the conventional way of computing accounting ratios were replaced using programming language visual Qbasic to write out the accounting ratios So, the computation of accounting ratios using programming language has displayed the financial position of the bank which revealed the financial performance to the management, investors and shareholders whether to invest or not and also for the ban to pay their debts.

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PROFITABILITY RATIO

This module contain other sub modules like:

- RETURN ON INVESTMENT
- RETURN ON SHAREHOLDERS EQUITY
- EARNING PER SHARE
- DIVIDEND YIELD
- EARNING YIELD
- EARNING PER SHARE

On clicking on any of the Main Module, the other sub modules will be automatically displayed on the screen and the rest of the application is self explanatory and user friendly.

5.2 SUMMARY

The background of this project was the use of conventional method of computing figures which some of these banks were facing especially the Guaranty Trust Bank, Minna Branch. This problem was later solved by the introduction of the programming language which can it can compute the accounting ratios easier and faster.

The objective were analyzed based of the computation of accounting ratios result, the bank financial state were revealed which predict the future of the bank performance for the management decision.

Times series analysis method was adopted to measure the bank's performance overtime. This method is used to compare the current performance with past performance.

Bank's performance was actually revealed which serve as determinant for the investors, shareholders and management to decide whether to invest in the banks and also whether bank can meet up with their immediate obligations.

In nutshell, the computerisation of accounting ratios using the programming language such as Data base management system will solve the problem facing the bankers today.

5.3 LIMITATION

The program chosen is only limited to the computerisation of accounting ratio that may be difficult when applied to other parameters?

The programming language used here is useful currently since there is know new programming language that can serve as barrier.