RISK MANAGEMENTAND BANK PERFORMANCE. A CASE STUDY OF FIRST ATLANTIC MERCHANT BANK GHANA LIMITED (FAMBL)

By

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DECLARATION

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

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ABSTRACT

The recent financial crisis and scandal such as Enron have raised several questions with respect to the growing awareness and the need for appropriate Risk Management of financial institutions. It calls for thorough assessments of the structure and components of the risk management frameworks and practices of banks by regulators, analysts and financial watchers from time to time, to ascertain the adequacy of the systems, policies and procedures for managing risks as well as their conformity to current best practices. As a contribution to this exercise, this study is focused on First Atlantic merchant Bank Ghana Limited (FAMBL) with the aim of evaluating the bank's risk profile as well as assessing its risk management framework to ascertain its soundness and conformity to international best practices. This study also investigates whether efficient risk management translate into enhanced performance of banks. It combines and further develops relevant previous findings from two major areas of research: risk management, enterprise risk management (ERM), and their effect on bank performance.

 Analytical based approaches were adopted in assessing the risk condition of FAMBL. By applying analytical tools such as ratios, tables and charts, to the bank's 2010 financial statements, and those of years 2009 and 2008 serving as references for comparison. Trends and relationships in the financial statements and other financial data were also established. This helped in making well-reasoned analysis of the bank's capital adequacy, balance sheet structure and composition, profitability and reliability of earnings, credit exposure size and quality, liquidity, interest rate and currency risks situations.. The study also revealed that FAMBL had a fairly adequate risk management structures to ensure sound management of financial and operational risks. There was an appropriate environment in place for managing risk, in that; the governance structure was solid with clear obligations and lines of authority set out.

DEDICATION

To the Ancient of Days, Jehovah Almighty and our Risen Saviour. You have brought me this far, giving me strength and guidance through the journey. To you be all the glory and adoration now and forever more. Amen

To my beloved Emelia, you will forever live in my heart and my Guardians. God bless you for your support. You have been my bedrock and encouragement.

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CHAPTER ONE

1.1 BACKGROUND OF THE STUDY

The past decade has seen the world witnessing one of the most shocking financial meltdowns. The effects of the crisis were pervasive and hit almost every sector of global businesses; the most affected sector was the financial services industry, specially the banking sector. The banking sector did not only witness the dramatic disappearance of the most renowned institutions like Leman-Brothers and Bear Stearns, it also became a regular target for tougher regulations, public anger and academic criticism (Valencia, 2010; Nocera, 2009).There are numerous explanations on the causes of the current financial crisis. One factor that has received significant attention during this crisis is *risk management discourse*. It seems that risk management has become an important tool, from which banks try to achieve legitimacy in

the eyes of the public and regulators. This triggering effect has given stakeholders in the Ghanaian banking industry cause not only to consider the returns made in the sector, but also critically examine frameworks used to manage risks in the sector and safeguard their interests. This is because the failures faced by the industry in recent times have been blamed largely on the weaknesses of the regulatory frameworks and the risk management practices of the financial institutions. The greatest impact of the crisis has been on the banking industry where some banks which were hitherto performing well suddenly announced large losses with some of them going burst. Some reasons put forward for the failures in risk management in this regard include the limited role of risk management in the granting of loans in most banks. This is largely because the banks are unable to influence business decisions of its borrowers coupled with the fact that their considerations are subordinated to profitability interests and lack of capacity to adequately make timely and accurate forecasts. This has resulted in the flouting of basic risk management rules such as avoiding strong concentration of assets and minimising the volatility of returns.

Though the impact of the global financial crisis on the banking sector in Ghana has been quite minimal such that it did not threaten the survival of banks in the sector, it serves as a wake up call to all financial institutions. This is largely because the sector has little exposure to complex financial instruments and relies mainly on low-cost domestic deposits and liquidity unlike banks in the developed countries. However, the deterioration of asset quality (impairment charge / gross loans and advances) of the banks in Ghana, from about 1.5% to 4.2% , in the past three years due to significant balances of bad and doubtful debts on their books is an indication that all is not well with the sector.(Ghana Banking Survey, 2010).

Various reasons have been put forward by analysts for the deterioration in the quality of bank loans and advances. These include increased cost of funds, inflation, depreciation of the Cedi and the delay by government in paying contractors and other service providers. The current economic reforms, improvements in budget deficit, and the new oil find will definitely attract foreign investments and lead to buoyant economic activity. The appetite for credit will increase and banks would have to focus on developing an efficient, effective, and flexible banking infrastructure to sustain growth and manage the associated risks. In the light of these, banks would need to develop the right balance between risk management and growth by: ensuring full transparency across all risks and organisations, putting in place vigorous risk governance structures, clearly defining and complying with the bank's risk appetite, and instilling strong risk culture focused on optimising risk-return trade-offs within a defined risk strategy. While new avenues for banks have opened up, they have brought with them new risks as well, which banks will have to handle and overcome. Applying the above principle will improve asset quality and risk management practises of banks.

1.2 INTRODUCTION OF COMPANY

First Atlantic Merchant Bank Limited (FAMBL) is one of the three (3) subsidiaries of the First Atlantic Merchant Bank Group. It was incorporated under Ghana's companies' code on August 1994 as a private limited liability company to engage in the business of banking and commenced operations in November 1995. Following the introduction of universal banking by the Bank of Ghana in 2003, the bank has now incorporated retail banking into its wide array of products. FAMBL operates two (2) subsidiaries: First Atlantic Brokers Ltd and First Atlantic Asset Management. Together with its subsidiaries, FAMBL provides corporate banking, private banking, asset management, investment banking and custodial services to wholesale, retail and individual customers both in and outside Ghana.

1.3 REASON FOR CHOICE OF INSTITUTION

First Atlantic Merchant Bank Limited (FAMBL) was chosen for this study because of its reputation as being among the top twenty banks in Ghana in terms of assets. It also has its financial and other regulatory reports published, making it easy to access basic information on its operations. Over the past decade, FAMBL has won several banking awards in various categories. According to the 2010 Banking Survey Report released by PricewaterhouseCoopers Ghana in collaboration with the Ghana Association of Bankers (GAB), FAMBL is ranked the sixteenth bank in terms of total assets contributing 2.2% to total assets of the banking industry. The year 2009 was a challenging year for FAMBL as it lost almost 50% of its market share of total banking operating assets, slipping from quartile two grouping to quartile three and finally the fourth quartile at the close of 2009. Although the industry registered a strong growth in deposit during the year, the bank was brutally hit. The bank's total deposits declined by 22% between 2008 to 2009 from GH¢67.4 million in 2008 to GH¢ 20.5million in 2009. FAMBL's share of industry assets, deposits, and loans and advances, over the last three years, are indicated below.

Table 1.1: Summary of FAMBL'S Performance in Ghanaian Banking Industry

	2008		2009		2010	
	% Contribution	Ranking	% Contribution	Ranking	% Contribution	Ranking
Share of Industry Assets	2.2	16	3.8	11	2.3	12
Share of Industry Deposits	2.7	14	4.4	7	1.8	15
Share of Industry Gross Loans & Advances	1.5	19	3.2	11	1.8	14

Source: Ghana Banking Survey 2010

1.2 STATEMENT OF THE PROBLEM

Risk management is considered by researchers as a yard stick for determining failure or success of a financial institution. It has not been given much attention in recent times. This research work seeks to bring to light the need for financial institutions to pay attention to the management of risk. An assessment of First Atlantic Merchant Bank's risk management framework provided the state of the bank's ability to handle the inherent risks in its operations. It is obvious that the aim of every business is to maximize

shareholders wealth and acquire substantial profit either for expansion or to undertake new product development. Across the banking industry, the most prominent area that erodes the mass of their profit is risk management (credit, market and operational). The problem of this study is to cram the causes of risk and how this can be anticipated and managed to improve performance of the bank.

There is the general belief that the banking sector in Ghana is relatively stable with individual banks having good risk profiles and sound risk management frameworks. The banking industry

has not experienced major losses in the face of the global financial crises. The industry however witnessed worsening asset quality of banks largely as a result of weak macro economic factors like depreciating local currency, high inflation rates and interest rates resulting in high default rates. Also, the supervisory and regulatory bodies did not find any of the banks in Ghana culpable of flouting prudential arrangements aimed at protecting the interests of clients and shareholders as was experienced in Nigeria. There has, however, not been any major test to ascertain the resilience of the banking industry to withstand major shocks. There is therefore a vacuum between the general belief on the risk position of the Ghanaian banking industry and the evidence to back this belief. To do this, it requires thorough assessment of the risk profiles of banks in Ghana as well as evaluate the adequacy of the risk management frameworks employed by the banks to handle the various risks they are exposed.

1.3 OBJECTIVE OF THE STUDY.

The main objective of the study is to assess the role of risk management in the banking sector using First Atlantic Merchant Bank as a test case. The study specifically seeks to achieve the following objectives;

- To ascertain why banking risk exposure is evolving.
- To examine and assess steps and methodologies used by banks to identify, assess and develop a framework for the analysis and mitigation of risk (steps in the risk management process).
- To determine the relationship between theorical and empirical risk management in the banking world.

- To recommend the credit risk management tools that can help improve bank's performance.

1.4 RESEARCH QUESTION

1. How is Risk evolving in the banking industry globally.

2. What is the relationship between resourceful risk management and bank performance globally?

3 What are the methodologies used to identify risk in the banking industry?

1.5 RESEARCH METHODOLOGY

The population taken for research was the industry. The sample taken for the production of a good work was therefore FAMBL. Risk management tools were employed in assessing the level of the bank's risk. The information used was entirely secondary data, obtained from various articles on risk management from the internet, Bank of Ghana Annual Reports, Ghana Banking Survey 2010 by Pricewaterhousecoppers, Ernst and Young Annual report on risk and Basel Committee report were used. An Appraisal of the bank's risk profile as contained in its Annual Reports from 2008 to 2010 financial years and the financial reports were also examined.

This involved an assessment of the income statement and balance sheet to identify inherent risks in their components and structure. It also involved using various tools (ratios, charts and tables) to ascertain the level of credit and market risks (liquidity, interest rate, foreign currency) the bank is exposed to. These tools will also enable an evaluation of the effectiveness of the bank's risk management framework for managing its credit, market and operational risks.

1.6 SIGNIFICANCE OF THE STUDY.

It is expected that this study will provide an indication of how the risk management landscape looks like in Ghana's banking sector since there are no significant differences in the structural and operational models in the various banks in Ghana. It will also provide a guide for further studies on risk management in the industry. In addition, this study will add to the stock of knowledge available on risk management which other researchers had conducted in the past.

The recommendations in the study would also help risk managers mitigate risks associated with their operations, hence improve profitability.

Another immense contribution is that a wide pool of shareholders may emerge out of a good risk management resulting in the increment of the price of a firm's share as demand for the firm's share will rise and companies would be able to charge higher premium. In connection with the above, a company can attain a competitive advantage over its existing and potential competitors and will also serve as a reference material for lectures and students who wish to know much in this area.

1.7 SCOPE AND LIMITATION OF STUDY

The term risk management cuts across every kind of firm or industry Amongst such industries are bank and non-bank financial institutions, finance houses, investment banks, insurance companies and other financial intermediaries. This research is however limited to the performance of banking industry.

In conducting a risk-based analysis of FAMBL, information were mainly gathered from financial statements and other disclosures contained in the bank's annual reports. In this regard, annual reports of the last three years (2008, 2009 and 2010) were considered to ensure consistency in the comparative analysis.

This is because the bank migrated from the use of International Accounting Standards (IAS) to International Financial Reporting Standards (IFRS), in conformity with requirements by The Institute of Chartered Accountants (Ghana).

The bank's risk management policy manuals and other independent reports on its financial performance was used to gather relevant information concerning the bank's current financial health and capacity to remain stable in the face of instability in the industry and the global economy as a whole. However, the bank considers most information, except those contained in the annual report and official releases, sensitive and for that matter detailed but relevant information was not available for use. The research strategy however took care of this challenge with the use of other sources of information outside the annual reports. These included the bank's operations manuals. Also, due to lack of adequate comparable data on other players in the Ghanaian banking industry, the study was unable to provide a complete picture of FAMBL's risk in relation to peer group trends and industry norms in all cases.

This limitation was neutralised by taking into consideration the categorisation of banks into the tier system by both the BOG and the Ghana Banking awards committee to facilitate comparative analysis.

1.8 ORGANISATION OF THE STUDY.

The research is organized into five chapters. It allocates the chapters to the following segments of the study.

CHAPTER ONE: This is assigned to the introduction of the study. It contains the background of the study, the statement of the problem, the objective of the study, the significance of the study, the methodology, and the scope of the study and the limitations of the study.

CHAPTER TWO: Reviews relevant literature of other authors in relation to the topic under study. The literature review explains basic terminologies and deliberations to give good picture of what risk management is. The chapter also delved into understanding the concept of risk, its measurement, as well as the dimensions of the bank risk

CHAPTER THREE: This chapter concentrates on the methodology of the study. It explains the various methods of data collection that is used and the tools of the analysis.

CHAPTER FOUR: This chapter deals mainly with the presentation of data and analysis of data collected and also a general assessment of FAMBL's risk profile. It employed pictorial tools including the use of graphs in making the presentation clearer and comprehensive.

CHAPTER FIVE: This deals with the conclusions, summary of findings and recommendations for use by the various stakeholders including managers of banks, shareholders, regulators and bank clients. The recommendations also indicate areas for future research.
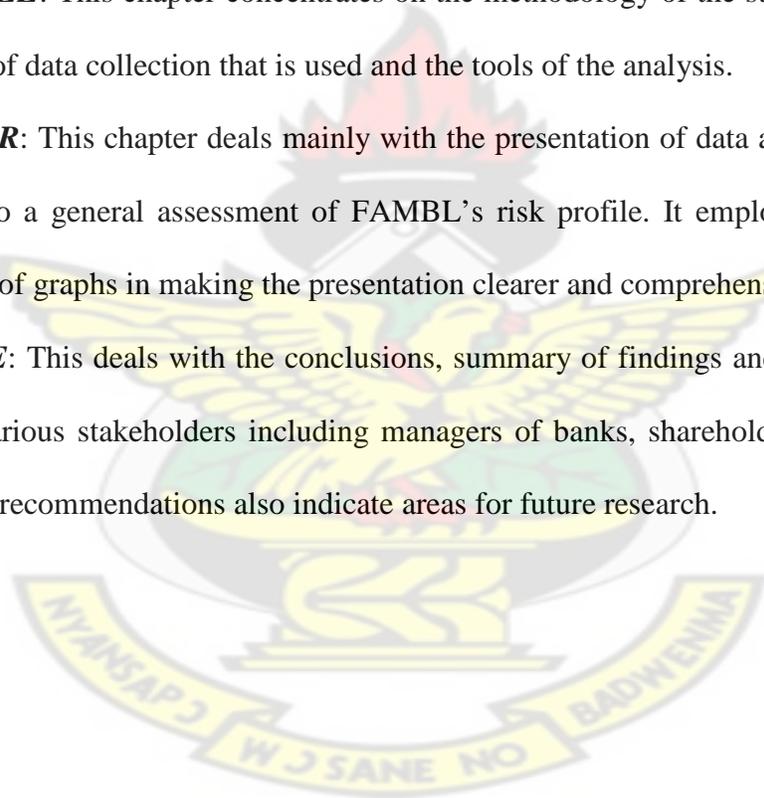
2.0 INTRODUCTION

This chapter reviews the literature on risk management in banking. It discusses issues on risk management from different perspectives and with the view of giving a theoretical foundation to the study. It starts with an exposition on risk management, followed by reviews of literature on the rationales and categories of risk management activities as well as the kinds of risk faced by banks and Enterprise Risk Management are also discussed in this chapter.

2.1 DEFINITION OF RISK

In the field of safety and health, risk is linked with possible hazards and dangers, while in finance it is a technical matter of unpredictability in expected outcomes, both negative and positive. In other businesses and political settings, risk is closely associated with the spirit of enterprise and value creation (Power, 2007, p.3). Ewald, (1991) states: "*Nothing is a risk in itself; there is no risk in reality. But on the other hand anything can be a risk; it all depends on how one analyses the danger, consider the event*" (p.199). Willet (as cited in Ale, 2009, p. 4) defined risk as "the objectified uncertainty regarding the occurrence of an undesired event". Risk is inherent in any walk of life and can be associated with every human decision-making action of which the consequences are uncertain.

Over the last decades, risk analysis and corporate risk management activities have become very important elements for both financial as well as non-financial corporations. Firms are exposed to different sources of risk, which can be divided into operational risks and financial risks.

Operational risks – or alternatively business risks – relate to the uncertainty regarding the firm's investments and investment opportunities, and are influenced by the product markets in which a

firm operates. In addition to operational risks, unexpected changes in e.g. interest rates, exchange rates, and oil prices create financial risks for individual companies. As opposed to operational risks, which influence a specific firm or industry, financial risks are market-wide risks that can affect the financial performance of companies in the whole economy. Both kinds of risk exposure can have substantial impact on the value of a firm.

2.2 RISK MANAGEMENT IN BANKING

Risk management evolved from a strictly banking activity, related to the quality of loans, to a very complex set of procedures and instruments in the modern financial environment. It underscores the fact that the survival of an organization depends heavily on its capabilities to anticipate and prepare for the change rather than just waiting for the change and react to it. Risk is associated with uncertainty and reflected by way of charge on the fundamental /basic i.e in the case of business it is the capital, which is the cushion that protects the liability holders of an institution. These risks are interdependent and events affecting one area can have ramifications and penetrations for a range of other categories of risk.

There is therefore, the need to understand the risks run by banks and to ensure that the risks are properly confronted, effectively controlled and rightly managed. Each transaction that a bank undertakes however changes the risk profile of the bank thereby making it a near impossibility to provide real time risk update and profile of the institution.

Risk Management (RM) is described as the performance of activities designed to minimise the negative impact (cost) of uncertainty (risk) regarding possible losses (Schmidt and Roth,1990). Redja (1998) also defines risk management as a systematic process for theidentification, evaluation of pure loss exposure faced by an organisation or an individual, and for the selection and implementation of the most appropriate techniques for treating such exposures. The process

involves: identification, measurement, and management of the risks. Bessis (2010) also adds that in addition to it being a process, risk management also involves a set of tools and models for measuring and controlling risk. The objectives of risk management include the minimization of foreign exchange losses, reduction of the volatility of cash flows, protection of earnings fluctuations, increment in profitability and assurance of survival of the firm (Fatemi and Glaum, 2000). Another group of researchers stated that RM is about ensuring that risks are taken consciously with full knowledge, clear purpose and understanding so that it can be measured and mitigated to prevent a firm from suffering unacceptable loss causing it to fail or materially damage its competitive position.

To ensure that banks operate in a sound risk management environment with reduced impact of uncertainty and potential losses, managers need reliable risk measures to direct capital to activities with the best risk/reward ratios. Management needs estimates of the size of potential losses to stay within limits set through careful internal considerations and by regulators. They also need mechanisms to monitor positions and create incentives for prudent risk taking by divisions and individuals. According to Pyle (1997), risk management is the process by which managers satisfy these needs by identifying key risks, obtaining consistent, understandable, operational risk measures, choosing which risks to reduce, which to increase and by what means, and establishing procedures to monitor resulting risk positions.

Bessis (2010) indicates that the goal of risk management is to measure risks in order to monitor and control them, and also enable it to serve other important functions in a bank in addition to its direct financial function.

These include assisting in the implementation of the bank's ultimate strategy by providing it with a better view of the future and therefore defining appropriate business policy and assisting in developing competitive advantages through the calculation of appropriate pricing and the formulation of other differentiation strategies based on customers' risk profiles.

According to Santomero (1995), the management of the banking firm relies on a sequence of steps to implement a risk management system. These normally contain four parts which are standards and reports, position limits or rules, investment guidelines or strategies and incentive contracts and compensation. These tools are generally established to measure exposure, define procedures to manage these exposures, limit individual positions to acceptable levels, and encourage decision makers to manage risk in a manner that is consistent with the firm's goals and objectives.

2.3 RATIONALES FOR RISK MANAGEMENT IN BANKING

The main aim of management of banks is to maximise expected profits taking into account its variability/volatility (risk). This calls for an active management of the volatility (risk) in order to get the desired results. Risk management is therefore an attempt to reduce the volatility of profit which has the potential of lowering the value of shareholders'wealth. Various authors including Stulz (1984), Smith et al (1990) and Froot et al (1993) have offered reasons why managers should concern themselves with the active management of risks in their organizations.

According to Oldfield and Santomero (1995), recent review of the literature presents four main rationales for risk management. These include managers' self interest of protecting their positions and wealth in the firm. It is argued that due to their limited ability to diversify their investments in their own firms, they are risk averse and prefer stability of the firm's earnings to volatility. This is because, all things being equal, such stability improves their own utility. Beyond managerial motives, the desire to ensure the shouldering of lower tax burden is another rationale for managers to seek for reduced volatility of profits through risk management. With progressive tax schedules, the expected tax burden are reduced when income smoothens therefore activities which reduce the volatility of reported taxable income are pursued as they help enhance shareholders' value. Perhaps the most compelling rationale for managers to engage

in risk management with the aim of reducing the variability of profits is the cost of possible financial distress. Significant loss of earnings can lead to stakeholders losing confidence in the firm's operations, loss of strategic position in the industry, withdrawal of license or charter and even bankruptcy. The costs associated with these will cause managers to avoid them by embarking on activities that will help avoid low realisations. Finally, risk management is pursued because firms want to avoid low profits which force them to seek external investment opportunities. When this happens, it results in suboptimal investments and hence lower shareholders' value since the cost of such external finance is higher than the internal funds due to capital market imperfections.

This undesirable outcome encourages managers to actively embark upon volatility reducing strategies, which have the effect of reducing the variability of earnings. It is believed that any of the above mentioned rationales is sufficient to motivate management to concern itself with risk and embark upon a careful assessment of both the level of risk associated with any financial product and potential risk mitigation techniques.

2.4 CATEGORIES OF RISK MANAGEMENT

As noted by Merton (1989), a key feature of the franchise of financial institutions (including banks) is the bundling and unbundling of risks. However, not all risks inherent in their business should be borne directly by them; some can be traded or transferred whiles others can be eliminated altogether. It is therefore useful to defragment the risks inherent in their activities and assets into three distinctive subgroups in accordance with their nature so that the

appropriate strategies can be adapted to mitigate them. Oldfield and Santomero (1995) argue therefore that risk facing financial institutions can be segmented into three distinguishable categories from a management outlook. These are risks that can be eliminated or avoided by simple business practices, risks that can be transferred to other participants, and risk that must be actively managed at the firm level. Avoiding risk altogether by business practices has the goal of

ridding the bank of risks that are not essential to the services provided or absorbing on the optimal quantity of a particular kind of risk. This is done by engaging in actions such as underwriting standards, diversification, hedging, reinsurance and due diligence investigation to reduce the chances of idiosyncratic losses by eliminating risks that are superfluous to the bank's business purpose.

After this is done, what will be left is some portion of systematic and operational risks which should be minimised to the greatest extent possible and their level and costs communicated to stakeholders. This is because an attempt to aggressively avoid these risks will constrain risks alright but will also reduce the profitability of the business activity. Some risks can also be transferred by the bank, when there is no value-added or competitive advantage associated with absorbing and/or managing them, to other parties who are in better positions to manage and benefit from them.

There is yet another class of risks which should be adsorbed and aggressively managed at the originating bank level because good reasons exist for using further resources to manage them. Some activities whose inherent risks have to be managed by the bank include those where the nature of the embedded risk may be complex and difficult to reveal to non-firm interests. For instance, banks holding complex illiquid and proprietary assets may find communicating the nature of such assets more difficult or expensive than hedging the underlying risk. Moreover, revealing information about customers or clients may give competitors an undue advantage. Internal management of some risks may also be necessary because it is central to the bank's business purpose because they are the raison d'être of the firm. This includes propriety positions that are accepted because of their risks and expected return. In all these circumstances when risk is absorbed, risk management activity requires the monitoring of business activity risk and returns and it is considered as part of doing business. In effect, banks should accept only those

risks that are uniquely a part of the bank's array of unique value-added services (Allen &
Santomero, 1996, Oldfield & Santomero, 1995).

2.5 MAJOR TYPES OF RISKS FACED BY BANKS

Banking is the intermediation between financial savers on one hand and the funds seeking
business entrepreneurs on the other hand. As such, in the process of providing financial services,
banks assume various kinds of risk both financial and non-financial. Moreover this risk inherent
in the provision of their services differs from one product or service to the other.

These risks have been grouped by various writers in different ways to develop the frameworks
for their analyses but the common ones which are considered in this study are credit risk, market
risks (which includes liquidity risk, interest rate risk and foreign exchange risk), operational risks
(which sometimes include legal risk, and more recently, strategic risk) and reputational risk.

2.5.1 Credit Risk

The analysis of the financial soundness of borrowers has been at the core of banking activity
since its inception. This analysis refers to what nowadays is known as *credit risk*, that is, the risk
that counterparty fails to perform an obligation owed to its creditor. It is still a major concern for
banks, but the scope of credit risk has been immensely enlarged with the growth of derivatives
markets. Another definition considers credit risk as the cost of replacing cash flow when the
counterpart defaults. In an article by Elmer Kunke Kupper on *Risk Management and Banking* he
defines credit risk as the potential financial loss resulting from the failure of customers to honour
fully the terms of a loan or contract. This definition can be expanded to include the risk of loss in
portfolio value as a result of migration from a higher risk grade to a lower one .Greuning and
Bratanovic (2009) define credit risk as the chance that a debtor or issuer of a financial
instrument— whether an individual, a company, or a country— will not repay principal and

other investment-related cash flows according to the terms specified in a credit agreement. Inherent to banking, credit risk means that payments may be delayed or not made at all, which can cause cash flow problems and affect a bank's liquidity.

The objective of credit risk management is to maximise a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. More than 70 percent of a bank's balance sheet generally relates to credit risk and hence considered as the principal cause of potential losses and bank failures. Time and again, lack of diversification of credit risk has been the primary culprit for bank failures. The dilemma is that banks have a comparative advantage in making loans to entities with whom they have an ongoing relationship, thereby creating excessive concentrations in geographic and industrial sectors. Credit risk includes both the risk that a obligor or counterparty fails to comply with their obligation to service debt (default risk) and the risk of a decline in the credit standing of the obligor or counterparty.

While default triggers a total or partial loss of any amount lent to the obligor or counterparty, a deterioration of the credit standing leads to the increase of the possibility of default. In the market universe, a deterioration of credit standing of a borrower does materialise into a loss because it triggers an upward move of the required market yield to compensate the higher risk and triggers a value decline (Bessis, 2010). Normally the financial condition of the borrower as well as the current value of any underlying collateral are of considerable interest to banks when evaluating the credit risks of obligors or counterparties (Santomero, 1997). According to Greuning and Bratanovic (2009), formal policies laid down by the board of directors of a bank and implemented by management plays a vital part in credit risk management. As a matter of fact, a bank uses a credit or lending policy to outline the scope and allocation of a bank's credit facilities and the manner in which a credit portfolio is managed— that is, how investment and financing assets are originated, appraised, supervised, and collected.

There are also minimum standards set by regulators for managing credit risk. These cover the identification of existing and potential risks, the definition of policies that express the bank's risk management philosophy, and the setting of parameters within which credit risk will be controlled. There are typically three kinds of policies related to credit risk management. The first set aims to limit or reduce credit risk, which include policies on concentration and large exposures, diversification, lending to connected parties, and overexposure. The second set aims at classifying assets by mandating periodic evaluation of the collectability of the portfolio of credit instruments. The third set of policies aims to make provision for loss or make allowances at a level adequate to absorb anticipated loss.

2.5.2 Market Risks

Elmer Funke Kupper in his article on *Risk Management and Banking* defined Market Risk as the risk to earnings arising from changes in underlying economic factors such as interest rates or exchange rates, or from fluctuations in bond, equity or commodity prices. Banks are subject to market risk in both the management of their balance sheets and in their trading operations. Market risk is generally considered as the risk that the value of a portfolio, either an investment portfolio or a trading portfolio, will decrease due to the change in value of the market risk factors. There are three common market risk factors to banks and these are liquidity, interest rates and foreign exchange rates. Market Risk Management provides a comprehensive framework for measuring, monitoring and managing liquidity, interest rate, foreign exchange and equity as well as commodity price risk of a bank that needs to be closely integrated with the bank's business strategy.

2.5.2.1 Liquidity Risk

According to Greuning and Bratanovic (2009), a bank faces liquidity risk when it does not have the ability to efficiently accommodate the redemption of deposits and other liabilities and to

cover funding increases in the loan and investment portfolio. These authors go further to propose that a bank has adequate liquidity potential when it can obtain needed funds (by increasing liabilities, securitising, or selling assets) promptly and at a reasonable cost. The Basel Committee on Bank Supervision, in its June 2008 consultative paper, defined liquidity as the ability of a bank to fund increases in assets and meet obligations as they become due, without incurring unacceptable losses. Bessis (2010) however considers liquidity risk from three distinct situations. The first angle is where the bank has difficulties in raising funds at a reasonable cost due to conditions relating to transaction volumes, level of interest rates and their fluctuations and the difficulties in funding a counterparty. The second angle looks at liquidity as a safety cushion which helps to gain time under difficult situations. In this case, liquidity risk is defined as a situation where short-term asset values are not sufficient to match short term liabilities or unexpected outflows. The final angle from where liquidity risk is considered as the extreme situation. Such a situation can arise from instances of large losses which creates liquidity issues and doubts on the future of the bank. Such doubts can result in massive withdrawal of funds or closing of credit lines by other institutions which try to protect themselves against a possible default. Both can generate a brutal liquidity crisis which possibly ends in bankruptcy. There are many factors that affect banks own liquidity and in turn affect the amount of liquidity they can create.

These factors have a varying degree of influence on the balance between liquidity risk and liquidity creation, or a bank's liquidity management. A bank's assets and liabilities play a central role in their balancing of liquidity risk and creation.

A bank's liabilities include all the banks sources of funds. Banks have three main sources of funds: deposit accounts, borrowed funds, and long term funds. The amounts and sources of funds clearly affect how much liquidity risk a bank has and how much liquidity it can create. The easier a bank can access funds the less risk it has and the higher amount of funds it holds the

more liquidity it can create. Liquidity is necessary for banks to compensate for expected and unexpected balance sheet fluctuations and to provide funds for growth (Greuning and Bratanovic, 2009). Santomero (1995) however, posits that while some would include the need to plan for growth and unexpected expansion of credit, the risk here should be seen more correctly as the potential for funding crisis. Such a situation would inevitably be associated with an unexpected event, such as a large charge off, loss of confidence, or a crisis of national proportion such as a currency crisis. Effective liquidity risk management therefore helps ensure a bank's ability to meet cash flow obligations, which are uncertain as they are affected by external events and other agents' behaviour.

The Basel Committee on Bank Supervision consultative paper (June 2008) asserts that the fundamental role of banks in the maturity transformation of short-term deposits into long-term loans makes banks inherently vulnerable to liquidity risk, both of an institution-specific nature and that which affects markets as a whole. A liquidity shortfall at a single bank can have system-wide repercussions and hence liquidity risk management is of paramount importance to both the regulators and the industry players.

The price of liquidity is conversely a function of market conditions and the market's perception of the inherent riskness of the borrowing institution (Greuning and Bratanovic, 2009). So if there is a national crisis such as acute currency shortage or decline, or perception of the bank's credit standings deteriorates, or fundraising by the bank becomes suddenly important and recurrent or has unexpected fluctuation, funding becomes more costly. Financial market developments in the past decade have increased the complexity of liquidity risk and its management.

2.5.2.2 Interest Rate Risk

In general, interest rate risk is the potential for changes in interest rates to reduce a bank's earnings or value. Most of the loans and receivables of the balance sheet of banks and term or saving deposits, generate revenues and costs that are driven by interest rates and since interest rates are unstable, so are such earnings. Though interest rate risk is obvious for borrowers and lenders with variable rates, those engaged in fixed rate transactions are not exempt from interest rate risks because of the opportunity cost that arises from market movements (Bessis, 2010). According to Greuning and Bratanovic (2009), the combination of a volatile interest rate environment, deregulation, and a growing array of on and off-balance-sheet products have made the management of interest rate risk a growing challenge. At the same time, informed use of interest rate derivatives— such as financial futures and interest rate swaps— can help banks manage and reduce the interest rate exposure that is inherent in their business. Bank regulators and supervisors therefore place great emphasis on the evaluation of bank interest rate risk management, particularly since the Basel Committee recommends the implementation of market risk– based capital charges.

Greuning and Bratanovic (2009) posits that banks encounter interest rate risk from four main sources namely repricing risk, yield curve risk, basis risk, and optionality. The primary and most often discussed source of interest rate risk stems from timing differences in the maturity of fixed rates and the repricing of the floating rates of bank assets, liabilities, and off-balance sheet positions. The basic tool used for measuring repricing risk is duration, which assumes a parallel shift in the yield curve. Also, repricing mismatches expose a bank to risk deriving from changes in the slope and shape of the yield curve (nonparallel shifts). Yield curve risk materialises when yield curve shifts adversely affect a bank's income or underlying economic value. Another important source of interest rate risk is basis risk, which arises from imperfect correlation in the adjustment of the rates earned and paid on different instruments with otherwise similar repricing

characteristics. When interest rates change, these differences can give rise to unexpected changes in the cash flows and earnings spread among assets, liabilities, and off-balance-sheet instruments of similar maturities or repricing frequencies (Wright and Houpt, 1996).

An increasingly important source of interest rate risk stems from the options embedded in many bank asset, liability, and off-balance-sheet portfolios. If not adequately managed, options can pose significant risk to a banking institution because the options held by customers, both explicit and embedded, are generally exercised at the advantage of the holder and to the disadvantage of the bank.

Moreover, an increasing array of options can involve significant leverage, which can magnify the influences (both negative and positive) of option positions on the financial condition of a bank.

Broadly speaking, interest rate risk management comprises various policies, actions and techniques that a bank uses to reduce the risk of diminution of its net equity as a result of adverse changes in interest rates from any of the sources mentioned above.

Risk factors related to interest rate risk are estimated in each currency in which a bank has interest-rate-sensitive on and off-balance sheet positions. Since interest rate risk can have adverse effects on both a bank's earning and its economic value, an approach which focuses on the impact of interest rate changes on a bank's net interest income is combined with another which takes a more comprehensive view of the potential long-term effects of such interest rates changes on its economic value is used to assess the interest risk exposure.

2.4.2.3 Foreign Exchange Risk

This is the risk incurred when there is an unexpected change in exchange rate altering the amount of home currency need to repay a debt denominated in foreign currency. Bessis (2010)

defines foreign exchange risk as incurring losses due to changes in exchange rates. Such loss of earnings may occur due to a mismatch between the value of assets and that of capital and liabilities denominated in foreign currencies or a mismatch between foreign receivables and foreign payables that are expressed in domestic currency. According to Greuning and Bratanovic (2009), foreign exchange risk is speculative and can therefore result in a gain or a loss, depending on the direction of exchange rate shifts and whether a bank is net long or net short (surplus or deficit)in the foreign currency.

In principle, the fluctuations in the value of domestic currency that create currency risk result from long-term macroeconomic factors such as changes in foreign and domestic interest rates and the volume and direction of a country's trade and capital flows. Short-term factors, such as expected or unexpected political events, changed expectations on the part of market participants, or speculation based currency trading may also give rise to foreign exchange changes. All these factors can affect the supply and demand for a currency and therefore the day-to-day movements of the exchange rate in currency markets.

Foreign exchange risk is generally considered to comprise of transaction risk, economic risk and revaluation risk. Transaction risk is the price-based impact of exchange rate changes on foreign receivables and foreign payables, that is, the difference in price at which they are collected or paid and the price at which they are recognised in local currency in the financial statements of a bank or corporate entity. Alternatively known as business risk, economic risk relates to the impact of exchange rate changes on a country's long-term or a company's competitive position. With increasing globalisation, capital moves quickly to take advantage of changes in exchange rates and therefore devaluations of foreign currencies can lead to increased competition in both overseas and domestic markets. This phenomenon makes this component of foreign exchange risk very critical for its management. The third component, revaluation or translation risk arises when a bank's foreign currency positions are revalued in domestic currency, and when a parent

institution conducts financial reporting or periodic consolidation of financial statements. Banks conducting foreign exchange operations are also exposed to foreign exchange risk in forms of credit risks such as the default of the counterparty to a foreign exchange contract and time-zone-related settlement risk.

2.4.3 Operational Risk

The Basel Accord (2007) defines operational risk as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. Malfunctions of the information systems, reporting systems, internal monitoring rules and internal procedures designed to take timely corrective actions, or the compliance with the internal risk policy rules result in operational risks (Bessis, 2010). Operational risks, therefore, appear at different levels, such as human errors, processes, and technical and information technology. Because operational risk is an ―event risk, in the absence of an efficient tracking and reporting of risks, some important risks will be ignored, there will be no trigger for corrective action and this can result in disastrous consequences. Developments in modern banking environment, such as increased reliance on sophisticated technology, expanding retail operations, growing e-commerce, outsourcing of functions and activities, and greater use of structured finance (derivative) techniques that claim to reduce credit and market risk have contributed to higher levels of operational risk in banks (Greuning and Bratanovic, 2009).

The recognition of the above-mentioned contributory factor in operational risk has led to an increased attention on the development of sound operational risk management systems by banks with the initiative being taken by the Basel Committee on Banking Supervision. The Committee addressed operational risk in its Core Principles for Effective Banking Supervision (1997) by requiring supervisors to ensure that banks have risk management policies and

processes to identify, assess, monitor, and control or mitigate operational risk. In its 2003 document, Sound Practices for the Management and Supervision of Operational Risk, the Committee further provided guidance to banks for managing operational risk, in anticipation of the implementation of the Basel II Accord, which requires a capital allocation for operational risks. Despite all these efforts by the regulators at addressing operational risk, practical challenges exist when it comes to its management. In the first place, it is difficult to establish universally applicable causes or risk factors which can be used to develop standard tools and systems of its management since the events are largely internal to individual banks.

Moreover, the magnitude of potential losses from specific risk factors is often not easy to project. Lastly, it is difficult designing an effective mechanism for systematic reporting of trends in a bank's operational risks because very large operational losses are rare or isolated. Because of the data and methodological challenges raised by operational risk, the first stage of developing an effective framework to manage it is to set up a common classification of loss events that should serve as a receptacle for data gathering process on event frequency and costs. The data gathered is then analysed (risk mapping) with various statistical techniques such as graphical representation of the probability and severity of risks. This helps to find the links between various operational risks. The process then ends with some estimates of worst-case losses due to events risks. Modelling of loss distributions due to operational risks will enable the right capital charges to be made for operational risk as required by current regulations (Bessis, 2010).

In order for the objectives of setting up an operational risk management framework to be accomplished, it may require a change in the behaviour and culture of the firm. Management must also not only ensure compliance with the operational risk policies established by the board, but also report regularly to senior executives. A certain amount of self-assessment of the controls in place to manage and mitigate operational risk will be helpful.

2.4.4 Strategic Risk

While financial risk and credit risk in banking have been rigorously explored, the risk management implications of many corporate strategies and the external market and industry uncertainties have received relatively little attention (Miller, 1992). Slywotzky and Drzik (2005), define strategic risk as the array of external events and trends that can devastate a company's growth trajectory and shareholder value. Whiles these two authors consider strategic risk as a sole consequence of external occurrences, other authors look at strategic risk as the current and prospective impact on earnings and/or capital arising from internal business activities such as adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes. They therefore consider strategic risk as a function of the compatibility of an organisation's strategic goals, the business strategies developed to achieve those goals, the resources deployed against these goals, and the quality of implementation. Emblemsvåg and Kjølstad (2002), also define strategic risk as risk which arises as a firm pursues its business objectives either by exploiting opportunities and/or reducing threats.

Which ever way this is considered, strategic risk encompasses a variety of uncertainties which are not financial in nature, but rather credit or operational related caused by macro-economic factors, industry trends or lapses in a firm's strategic choices which affects the firm's earnings and shareholders' value adversely. Strategic risks often constitute some of a firm's biggest exposures and therefore can be a more serious cause of value destruction. Unfortunately, as strategic risks are often highly unpredictable and of different forms, managers have also not yet been able to systematically develop tools and techniques to address them (Slywotzky and Drzik, 2005).

This is because the more formalised risk management approaches often remain focused on identifiable exposures and thus less suitable to deal with many of the unexpected economic and

strategic events that characterise contemporary business environment in which strategic risks are embedded. Slywotzky and Drzik (2005) attempted to identify significant events which contribute to strategic risk and categorised them into seven main classes. These include industry margin squeeze, threat of technology shift which has the possibility of driving some products and services out of the market, brand erosion, emergence of one-of-a-kind competitor to seize the lion share of value in the market, customer priority shift, new project failure and

market stagnation. The idea was to provide a framework for assessing a company's strategic risks and develop counter measures to address them. The authors intimate that the key to surviving strategic risks is; knowing how to assess and respond to them and therefore devoting resources to it. They also advice management to adjust their capital allocation decisions by applying a higher cost of capital to riskier projects and to build greater flexibility into their capital structure when faced with riskier competitive environments. How these risks can be managed is determined by the organisational characteristics – the strengths and weaknesses. They include communication channels, operating systems, delivery networks, and managerial capacities and capabilities.

The organisation's internal characteristics must be evaluated against the impact of economic, technological, competitive, regulatory, and other environmental changes.

An effective strategic risk management approach should embrace both the upside and downside of risk. It should seek to counter all losses, both from accidents and from unfortunate business judgments, and seize opportunities for gains through organisational innovation and growth. Seizing upside risk involves searching for opportunities and developing plans to act on these opportunities when the future presents them. Countering downside risk on the other hand

is done by reducing the possibility of occurring (probability) and scope (magnitude) of losses; and financing recovery from these losses (Herman and Head, 2002). Beasley and Frigo (2007) posit that the first step in strategic risk management is finding a way to systematically evaluate a

company's strategic business risk. Thus, strategic risk management begins by identifying and evaluating how a wide range of possible events and scenarios will impact a business's strategy execution, including the ultimate impact on the valuation of the company.

Before management can effectively manage risks that might be identified by various scenario analyses, they need to define an overriding risk management goal. Stephen Gates (2006) argues that due to the complexity of the concept of strategic risk, no single quantitative measure will prove satisfactory in all strategic situations. Because of the distinctiveness of the set of strategic risk faced by every/each financial institution, regulators have not been able to develop general guidelines for all the institutions for managing strategic risk. Some consultants and scholars have come out with some recommendations and guidelines for managing strategic risk.

One such guide is by Slywotzky and Drzik (2005). Building a thorough strategic risk management framework requires an institution to revise both its internal practices and its external environment, and to understand how closely the two are connected.

2.5 Reputation Risk

Reputation is often referred to as "Emotional Capital/ Equity" of a firm and as capital, it is subjected to risk. According to Atkins, Drennan, Bates (2006) a significant part of many successful companies share price is not made up of tangible asset such as property and reserves but from the goodwill element. Hence, a company's reputation includes various intangibles such as the potential future profit stream and the value of its brand. These intangibles may be several times the value of tangible assets in companies with good reputation.

Conversely a company with a poor reputation can have negative reputation equity where the company is valued at less than the value of its tangible assets. In a paper by the Economist Intelligent Unit (EIU) 2005 reputation risk is seen as becoming one of the emerging and

increasingly important class of risk on the priority list of most managers. With an index score of 52, reputational risk is perceived as substantially more significant than regulatory, human Capital, IT, market and credit risks. The Basel II committee on banking supervision: *Reputational risk and implicit support* defined Reputational risk as the current or prospective risk to earnings and capital arising from adverse perception of the image of the financial institution on the part of customers, counterparties, shareholders, investors or regulators that can adversely affect a bank's ability to maintain existing or establish new, business relationship and continued access to sources of funding (eg. through the interbank or securitisation markets).

However, some prominent authorities acknowledge that it also one of the most difficult assets to protect .As cited by Warren Buffet and Goldman Sachs Business Principles. "It takes twenty years to build a reputation and five minutes to destroy it." "If you lose dollars I will be understanding. If you lose reputation, I will be ruthless". *(Warren Buffet)* "Our assets are our people, capital and reputation. If any of these are ever diminished, the last is the most difficult to restore." *(Goldman Sachs).*

These buttress the point that though cash, stocks and asset such as buildings are the most valuable assets of a bank and the shortage of these could send its customers to its competitors, it is trust that most frequently deals the final blow

2.5.1 Sources of Reputational Risk

Reputational risk, in large part, arises from the intersection between a financial firm and the competitive environment, on the one hand, and the direct and indirect network of controls and behavioural expectations within which the firm operates on the other hand.

Financial firms by nature of their work are torn between the two benchmarks – market performance and corporate conduct. In an attempt to meet the demands of social and regulatory controls, firms usually are confronted with the risk of poor performance in the market and hence, punishment by shareholders.

The biggest threat to reputation is seen to be a failure to comply with regulatory/legal obligations governing corporate conduct. However the perception that an organization is unable to manage such risks can plant doubt in the minds of its partners, clients and regulators, diverting potential business elsewhere and eliciting a more intrusive and more costly regulatory stance. These are the *ultimate* benchmarks against which conduct is measured and can be the origins of key reputational losses. Unfortunately, values and expectations change with time, differ across cultures and are sometimes difficult to interpret.

2.5.2 Valuing Reputational Risk

For the majority of enterprises it is seen as the most critical risk, as reputation is becoming a key source of competitive advantage as products and services become less differentiated.

While firms today recognize the value of brand definition as competitive advantage in the marketplace, reputation remains an often underestimated component of a company's value.

Lerbinger (1997) contends that a firm's reputation is ultimately its most important asset because it is strongly correlated with the firm's profitability, growth and long-term survival.

Corporate reputation may be defined as the totality of the public and market awareness of a firm, its strengths and weaknesses and, in particular, the difficult to quantify but nonetheless significant qualities of "goodwill" and "confidence" that the firm inspires in the marketplace. Indeed, firms 'creatively' gain sustainable competitive advantage by cultivating intangible assets such as reputation. As experienced in the case of JP Morgan and Co's their close involvement in

1990s with Banco Español de Crédito caused about 10% loss in shareholder value translated into a loss in JPM market capitalisation of approximately US$1.5 billion versus a direct loss of perhaps US$10 million from the Banesto failure. The analysis suggests that the loss of an institution's franchise value can far outweigh an accounting loss when its reputation is called into question.

Lerbinger(1997) argues that the "erosion of a company's reputation is the greatest danger of a crisis."In terms of vulnerability to reputational risk, it is important to note that not all firms are alike in their reputation-sensitivity. There is a general consensus among reputational risk specialists that financial firms are more reputation-sensitive than non-financial companies. One reason for this may be that clients' switching and contracting costs are generally lower for financial firms, and thus they are particularly open to the discipline of the markets. As well, given that companies in the financial markets are operating with other people's money, they may be especially sensitive to any wavering of confidence in their brand.

2.5.5 Mitigation and Managing Reputational Risk

Preserving a strong reputation revolves around effectively communicating and building solid relationships. Communication between a bank and its stakeholders can be the foundation for a strong reputation.

Timely and accurate financial reports, informative newsletter, and excellent customer service are important tools for reinforcing a bank's credibility and obtaining the trust of its stakeholders.

Banks with good communications strategy that enables them to respond quickly and effectively to "bad news" are able to manage issues promptly and openly and often emerge with their reputations enhanced. There are three distinct tasks to managing reputational risk: establishing reputation to begin with, maintaining it through the rough and tumble of business operations, and

restoring it when it has been damaged. The latter two, especially, call for very different actions (and actors). Reputation is a dynamic asset, changing as organisations present new services and products in new markets, being held to changing criteria and facing unforeseen challenges.

This suggests that there is a role for risk managers both in maintaining and protecting the organisation's standing with its stakeholders, and in repairing its good name when events conspire to damage it. The potential of relatively minor failures of risk control to rebound on reputation means that, at the very least, risk managers must be aware of how an event might damage the company's image. But these issues may also require a specific response. Many kinds of risk, in addition to the narrow threat they pose to the business operation, have a reputational element that must be managed separately, whether by managing stakeholder expectations via corporate communications or by establishing processes for quickly addressing crises when they arise. Investors in banks and other financial intermediaries are sensitive to the going-concern value of the firms they own, and hence to the governance processes that are supposed to work in their interests.

Reputational risk is multidimensional and reflects the perception of other market participants Furthermore, it exists throughout the organization and exposure to reputational risk is essentially a function of the adequacy of the bank's internal risk management processes, as well as the manner and efficiency with which management responds to external influences on bank-related transactions.

 2.5.6 Reputational Risk on other Risks

Reputational risk, typically through the provision of implicit support, may give rise to credit, liquidity, market and legal risk – all of which can have a negative impact on a bank's earnings,

liquidity and capital position. Reputational risk also may affect a bank's liabilities, since market confidence and a bank's ability to fund its business are closely related to its reputation.

For instance, to avoid damaging its reputation, a bank may call its liabilities even though this might negatively affect its liquidity profile. In such cases, a bank's capital position is likely to suffer. Understanding how different aspects of an organisation's activities impinge on stakeholder perceptions is therefore a vital aspect of protecting a company's reputation.

2.5.7 Management involvement in Mitigating Reputational Risk

Reputational risk can arise from almost any business failure, making it too important and wide ranging to belong to any individual or department. Survey by EIU 2005 reveals that top executives co-ordinating role in personifying the values and conduct is paramount to ensuring a company's good standing and a focused stance on technical task of monitoring, mitigating and, where possible, quantifying reputational threats. Above all, there need to be a creation of a culture where employees take responsibility for enhancing corporate reputation through their everyday activities.

Responsibility for corporate reputation, and the threats that can undermine it, must extend from top to bottom in today's organisations.

Incurring reputational damage can be fatal, but establishing a robust reputation can provide a strong competitive advantage. A good reputation strengthens market position, reduces the price of capital and increases shareholder value. It insulates the brand, permits higher prices and helps to attract top talent. As the events of 2010 have shown, even global corporate titans such as Anderson and Northern Rock can be humbled by market discipline triggered by reputational risk crises. The potentially significant impact of such damage, in terms of market capitalization and even continuing corporate survival, is indicative of the need for management teams to appreciate

the real-world costs of reputational risk and, by extension, how important it is to protect a company's reputation in our risk society

2.6   ENTERPRISE RISK MANAGEMENT: A USEFUL TOOL FOR RISK INTEGRATION.

In recent times there has been an increased attention to risk management at the enterprise level and this can be linked to a number of policy decisions (Beasley et al, 2005). As mentioned earlier, regulators, board audit committees, rating agencies, and shareholders are all becoming interested in having an integrated corporate risk management approach to managing risk in order to account for all firms'risks, their interrelations with each other and their combined effect on firms. Standard and Poor's for instance has introduced Enterprise Risk Management analysis into its global corporate credit rating process beginning with the third quarter of 2008 (Standard and Poor's, May 2008). It is in this light that Enterprise Risk Management (ERM) has subsequently emerged as an increasingly popular strategy that attempts to holistically evaluate and manage all of the risks faced by the firm.

ERM uses the firm's risk appetite to determine which risks should be accepted and which should be mitigated or avoided. DeLoach (2000) describes ERM as a ―structured and disciplined approach: it aligns strategy, process, people, technology and knowledge with the purpose of evaluating and managing the uncertainties the enterprise faces as it creates value.

It means just that: an elimination of functional, departmental or cultural barriers. It is a truly holistic, integrated, forward-looking and process oriented approach to managing all kinds of business risks and opportunities – not just financial ones – with the intent of maximising shareholder value for the enterprise as a whole.

The Committee of Sponsoring Organisations of the Treadway Commission (COSO) report on enterprise risk management (ERM) in 2004 defines it as ―a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. The report posits that the underlying premise of ERM is that every entity exists to provide value for its stakeholders. ERM enables management to effectively deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value. ERM is able to do this because it assists in aligning risk appetite and strategy, enhancing risk response decisions, reducing operational surprises and losses, identifying and managing multiple and cross-enterprise risks, seizing opportunities and improving deployment of capital. These capabilities inherent in ERM help management achieve the entity's performance and profitability targets and prevent loss of resources. In sum, enterprise risk management helps an

entity get to where it wants to go and avoid pitfalls and surprises along the way.
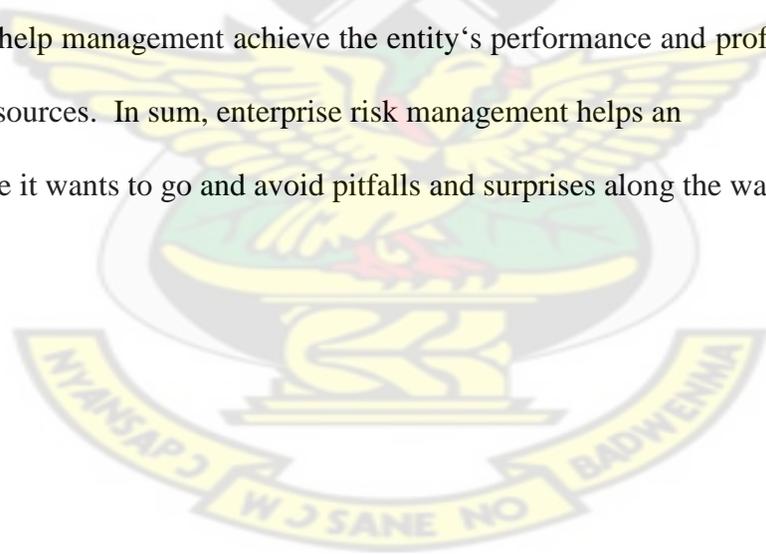
CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter lays down the methodology for the analysis. It presents a detailed and systematic process of how the significant risks faced by FAMBL are identified, measured and managed. The main discussions of this chapter includes data sourcing, benchmarking, analytical tools to be used, analytical techniques used for interpreting the data as well as an outline of the analytical components of the risks the bank is exposed to.

3.1 DATA SOURCE

The study relied mainly on secondary data. This was obtained from the annual reports and other reports issued by the bank and other organisations. Some of these external secondary data comes from the regulators, industry watchers and other financial analysts. The bank's policy documentations and guidelines concerning the management of the various risks are also a major source of information for determining whether the bank's structures and risk management tools are adequate in handling inherent risk in their business activities.

3.2 BENCHMARKS

The major benchmarks used for this assessment are the various documents released by the Risk Management Group of the Basel Committee on Banking Supervision regarding principles which ensure sound management of risks in banks. The financial stability reports issued by the Bank of Ghana on periodic bases were relied upon for industry data. Also, the 2010 Ghana Banking Survey report issued by PricewaterhouseCoopers served as useful benchmarks for assessing the risk profile of FAMBL.

3.3 ANALYSTICAL TOOLS

The analysis in this report relied heavily on excel models. These consisted of a series of spreadsheet-based data input tables that allowed data to be collected and manipulated in a systematic manner. The spreadsheet allowed for the generation of relevant tables, ratios and graphs which assisted in the interpretation and analysis of the data collected to help measure the bank's performance as well as judge the effectiveness of its risk management process.

3.3.1 Ratios

A ratio refers to the mathematical expression of one quantity relative to another. There are many relationships between financial accounts and between expected relationships from one point to another. In addition to giving an indication of current situations, ratios also aids in making forward-looking projections. The ratios covered the areas of risk management in varying degrees of detail using the balance sheet, income statement and cash flow schedules. Some of the areas of risk where ratios helped in expressing useful relationships include profitability, liquidity, debt and leverage and capital adequacy.

 Some of the ratios used in assessing bank risk can be found in table 3.1.

Table 3.1: Ratios in assessing bank risks

Category	Ratios
Solvency	Capital Adequacy: Total Qualifying Capital / Total Risk Weighted Assets
Profitability	Return on Assets: Profit After Tax / Average total Assets Return on Equity: Profit After Tax / Average total Shareholders' Funds
Efficiency	Net Interest Income / Average total Assets Net Interest Income / Gross Loans and Advances Operating Expenses / Average total Assets Operating Expenses / Gross Operating Income
Credit Risk	Customer Loans / Gross Loans and Advances Bank Loans / Gross Loans and Advances 50 Largest Exposures / Gross Loans and Advances Collateral / Non-performing Loans (Coverage ratio) Non-performing Loans / Gross Loans and Advances Impairment Charge / Gross Loans and Advances

	Allowances for Impairment / Gross Loans and Advances
Liquidity Risk	Customer Loans / Customer Deposits
	Interbank Loans / Interbank Deposits
	Readily Marketable Assets / Total Assets
	Liquid Assets / Volatile Liabilities (Volatility Coverage)
	Volatile Liabilities / Total liabilities
	Liquid Assets /Total deposits (Bank Run)
Interest Rate Risk	GAP / Total Assets
	GAP / Total Equity
	Interest Rate Sensitive Assets / Interest Rate Sensitive Liabilities
	Interest Rate Sensitive Assets / Total Assets
	Interest Rate Sensitive Liabilities / Total Liabilities
Currency Risk	Net Open Currency Position / Qualifying Capital

3.3.2 Graphs and Charts

Graphs and charts provided visual representations of some of the analytical results. They provided a quick snap short of the current situation of the bank by presenting the structures in the assets, liabilities and incomes. They also facilitated comparison of performance over time and show trend lines and changes in significant aspects of the bank's operations and performance. A high-level overview of the trends in the bank's risks was presented through graphs and charts as they were used to illustrate levels of profitability, capital adequacy, composition of portfolios, major types of credit risk exposures and exposures to interest rate, liquidity and currency risks.

3.4 ANALYTICAL TECHNIQUES

These refer to the ways in which the data is interpreted. Some of the common analytical techniques used in this report include ratio analysis, common-size analysis, and trend analysis.

3.4.1 Ratio Analysis

Ratio analysis involves attempts to put ratios into perspective and make them more meaningful. The ratios in this report were compared with those of the industry averages as put forward by the Bank of Ghana in the periodic Financial Stability Reports and PricewaterhouseCoopers Ghana in their 2010 banking Survey Report. The ratios for the previous two years were considered in addition to those of the current year in order to have a better view of the current year's performance and also provide a basis for making projections into the future.

In evaluating the performance of FAMBL using ratios, the bank's goals concerning the various risks it faces, the banking industry norms and the general economic conditions were taken into consideration.

3.4.2 Common-Size Analysis

This analysis involved converting all financial statement items to a percentage of a given financial statement item, such as total assets or total revenue. It revealed the composition of the various financial statement items and presents the structure of the financial statements. The compositions of financial statements are normally a result of risk management decisions and are normally in response to the bank's business orientation, market environment, desired customer mix or the general economic conditions. Therefore, in assessing the bank's risk profile, common-size analysis was useful in analyzing the relative share of the various asset and liabilities as well as the major sources of income and changes in the proportionate share over time.

In addition, a structural change in the balance sheet revealed through common-size analysis could disclose a shift to another area of risk. A review of the proportion of income earned in relation to the amount of energy invested through the deployment of assets allowed for challenging assessment of risk versus reward.

3.4.3 Trend Analysis

Trend analysis technique was used to show whether there was an improvement or otherwise in an amount or a ratio. It was used to provide useful information regarding the historical performance and growth of the bank. The growth of the bank was assessed through the expansion of its balance sheet and increase in its earning base. More importantly, trend analysis revealed the growth in the individual balance sheet and income statement items which gave an indication as to whether the growth was sustainable or was as a result of extraordinary items. The analysis in this report incorporated both currency and percentage changes for the last three years to ensure that significant currency changes are not hidden by small percentage changes.

3.5 ANALYTICAL COMPONENTS

The analysis of the FAMBL's risk profile was based the six main types of financial risks it is exposed to, which are: Balance sheet structure, Income statement structure, Credit, Liquidity, Interest rate and Currency risks. These risks are inter related as one can give rise to another or a transaction aimed at reducing one of the risks can end up shifting the risk to another area. In this regard, the analysis took cognizance of this interrelationship and adopted a holistic approach.

CHAPTER FOUR

ANALYSIS AND ASSESSMENT OF BANK RISK PROFILE

4.0 INTRODUCTION

This chapter assesses the risk exposures of FAMBL. It considers the various risks inherent in the assets and liabilities of the bank and the adequacy of the amount of capital and reserves available to safeguard against solvency. The chapter also considers the bank's level of profitability and whether it provided adequate cushion for short-term problems. Further, the level of credit and market risks the bank is exposed to is assessed. In addition this chapter looks at the risk management framework of FAMBL, the policies, procedures, standards, and processes designed to identify, measure, monitor and report significant risk exposures in a consistent and effective manner across the bank.

4.4 BALANCE SHEET RISKS

4.4.1 Assets

It is important to evaluate the composition and structure of a bank's assets to ascertain any inherent risks in them. Table D1 in the appendix shows a falling trend of the bank's assets over the three years spanning 2008 to 2010. Total assets fell from GH¢386.05 million to GH¢195.52 million signifying a fall by 49%. The drop in total assets was due to a decline in cash and cash balances, short-term investments, balances due from other banks and advances. It was not only FAMBL which suffered a decline in growth; a similar occurrence was experienced in the whole Ghanaian banking industry as there was relatively slow growth in the balance sheet in 2009 which fell behind the 37.2% growth recorded in 2008. (Ghana Banking Survey 2010).

Figure 4.1: Changes in the composition of assets over the past three years.

Structure and Growth of Assets

Legend:
- Cash and Cash Balances with central bank
- Investment securities
- Government securities
- Due from other banks
- Loans and receivables
- Tangible assets - Property, Plant and Equipment
- Other assets
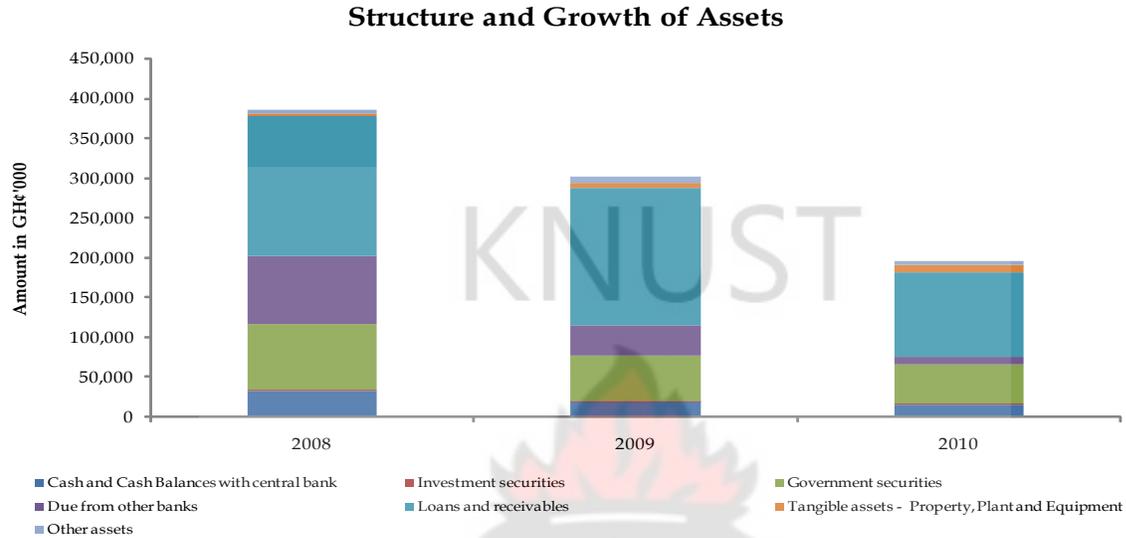
4.4.2. Liabilities

In direct relation to movement in assets the bank's liabilities also reduced by the same margin as the total asset. Being a bank it major liability has always being customer deposit which represent about 50% of the total liabilities, customer deposits reduced by 28.5% in 2010 whilst deposits from other banks also reduced by 19.91% This was induced by a continuous decline in deposits from other banks and credit institutions from GH¢93.97 million in 2008 to GH¢17.00 million in 2010 signifying a decline by 82%. Customer deposits also reduced by 48% from GH¢234.96 million in 2008, to GH¢122.67 million in 2010. This reflected a general low volume of business in 2009 largely as a result of the global financial crisis. Bank loans are a function of the bank's deposits. Based on this drop in customer deposits; the bank could not grow its loan portfolio. Thus, impacting directly on the total liabilities of the bank. There was a close relation with the industry trend which also saw an aggregate slowdown in the growth of total deposits.

Figure 4.3: Changes in the composition of liabilities over the past two years.

Composition of Liabilities - 2010

- Deposits from banks and other credit institutions
- Borrowings
- Deposits from customers
- Tax & other liabilities
- EQUITY

Composition of Liabilities - 2009

- Deposits from banks and other credit institutions
- Borrowings
- Deposits from customers
- Tax & other liabilities
- EQUITY
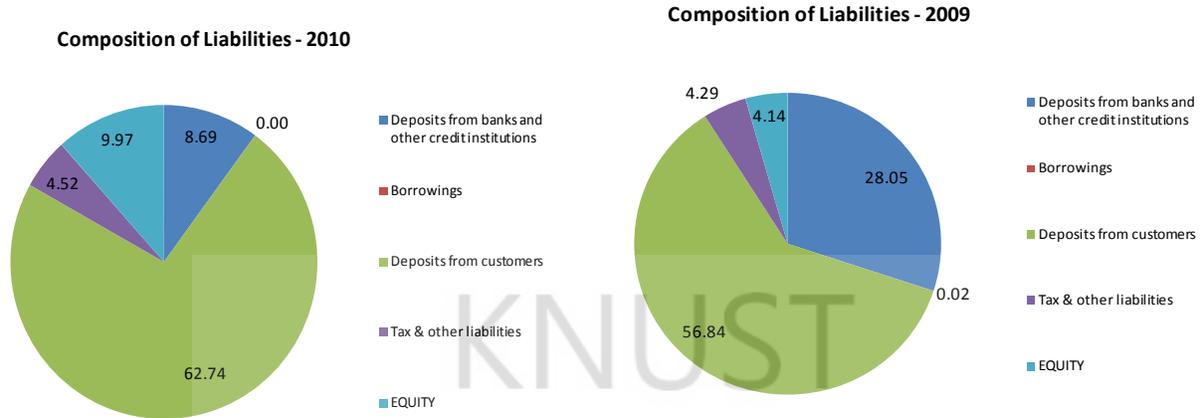
4.4.3 Equity and Capital Adequacy

Shareholder' funds fluctuated between 2008-2010. With new requirement by Bank of Ghana to increase capital base of locally owned bank from GHC 25 million to GHC 60 million by 2012. The bank is taken steps to boost its capital by negotiations with investors to meet the capital requirement set by the Central Bank. Consequently, the bank has been trying to maintain a good balance between regulatory capital requirements and its total assets and risk-weighted assets. FAMBL's regulatory capital adequacy ratio (CAR) increased from 8% in 2009 to 11.21% in 2010. However there was a significant increase than the industry average capital adequacy ratio of 17%.

A 48.32% growth in the bank's core capital adequacy ratio (tier 1) in year 2010 compared to that of 2009 contributed hugely to its growth in regulatory CAR (Table 4.1). Unfortunately the data for 2011 by Ghana Banking Survey is currently unavailable to make any significant assessment from the industry.

Table 4.1

Capital adequacy & Off-balance sheet Items	FAMBL			INDUSTRY			Growth		
	2008	2009	2010	2008	2009	2010	FAMBL		INDUSTRY
	%	%	%	%	%	%	2008	2009	2010
Core capital Adequacy (tier I CAR)	8.09	5.52	8.19	12.80	17.00		-31.69%	48.32%	
Capital adequacy ratio (CAR)	8.18	8.00	11.21	13.80	18.20		-2.28%	40.26%	
Off-balance sheet items as a % of total assets	1.30	2.04	6.16	16.37	10.53		57.27%	202.22%	
Risk-weighted assets/Total assets	33.38	51.84	67.84	78.10	69.80		55.32%	30.85%	

Table 4.1 also indicates that the ratios of off-balance sheet items and risk-weighted assets to total assets of the bank increased marginally whiles those of the industry declined. This means that the bank needed more capital than its peers to cover for contingent liabilities and increasing levels of risk-weighted assets on its books. Though the increase in the level of contingent liabilities presented the bank with additional financial risk, the corresponding trade fees appeared to provide adequate compensation for it. Greater attention should however be given to these items and adequate risk management system should be put in place for such exposures to ensure they do not get out of hand.

Table 4.2 Profitability & Efficiency

Profitability & Efficiency Ratios	FAMBL			INDUSTRY		
	2008	2009	2010	2008	2009	2010
Return on assets	0.80%	-0.59%	3.50%	2.50%	2.10%	2.70%
Return on average equity	29.36%	-14.26%	35.15%	30.10%	23.60%	28.60%
Net interest income as a % of Gross loans and advances	5.87%	6.28%	16.74%	54.20%	51.40%	51.80%
Total Cost as a % of Gross Income	41.07%	55.95%	68.07%	41.30%	39.40%	50.10%
Net Profit Margin	29.86%	-16.39%	39.05%			
Net interest income as a % of total assets	2.67%	3.60%	8.97%			

Fambl's Financial Statement 2008-2010

About 51% of the bank's total income was obtained from interest on loans and advances in 2010. This performance fell below the average industry contribution of 58.7%15 but was an improvement of the 2008 figure of 43%. Getting its main source of income from returns on loans and advances ensured the stability of the bank's earnings. This was good for the bank given that there is no provision on non-funded income as opposed to interest on loans and advances which can be provided for if those assets are impaired in future. Stiff competition in the Ghanaian banking industry coupled with the drop in interest rates due to the reduction of the prime rate by the Central Bank of Ghana, put pressure on interest income.

Fig4.2

Asset Composition - 2010

- Cash and Cash Balances with central bank
- Investment securities
- Government securities
- Due from other banks
- Loans and receivables
- Tangible assets - Property, Plant and Equipment
- Other assets

Income Composition - 2010

- Net Interest Income
- Fees and Commission Income
- Net trading income
- Other operating income
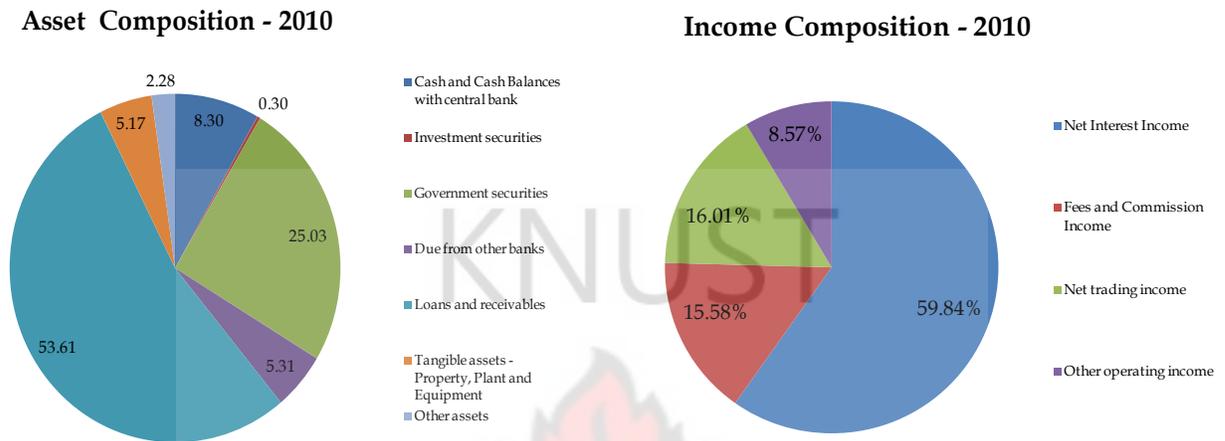
This situation compelled the bank to look at increasing its other businesses like international trade finance and trading operations as viable options to maintain its profitability.

Emphasis on fee-generating income reduces the bank's exposure to lending risk which is inherent in increasing interest margins in a stable market environment as that of Ghana. There are however higher levels of volatility surrounding these sources of earnings because they depend on general economic conditions and trading performances. In addition to them being less stable, these non-traditional sources of earnings are subject to market risk which can be substantial if not closely monitored.

It appeared the bank made some strides in its cost reduction effort as there was a slowdown in the growth in operating expenses. FAMBL has been efficient in the use of its funds as it recorded an impressive increase in its return on loans and advances from 6.28% in the previous year to 16.74% in 2010. (Table 4.2)

It is also worth noting that whiles the bank is increasing its loan portfolio, the level of nonperforming loans is also increasing (appendix D9). This indicates an increase in credit risk and the bank has responded by beefing up its remedial and collections unit to intensify the recovery of doubtful debts.

4.3 CREDIT RISK

The risk areas have to do with concentrations and large exposures, diversification, lending to related parties and over exposure to an economic sector.

In the year 2010 the bank was able to minimize the volume of exposure concentration on its fifty largest customers as against that of 2009. This minimized the risk that the bank carried on its loan book in the previous year. However the percentage of nonperforming loans to the total of gross loans and advances went up in 2010 signifying that the bank credit administration and loan monitoring had become weaker. Ironically the allowances for impairment to non performing loans remained the same. Thus recording more income than the bank should have prudently recognized. Incidentally non- performing loans in 2010 had more collateral backing in 2009 and perhaps the reason why the allowance for impairment remained the same in 2010 despite an increased non- performing loan.

Fig4.4

Credit Risk Measures
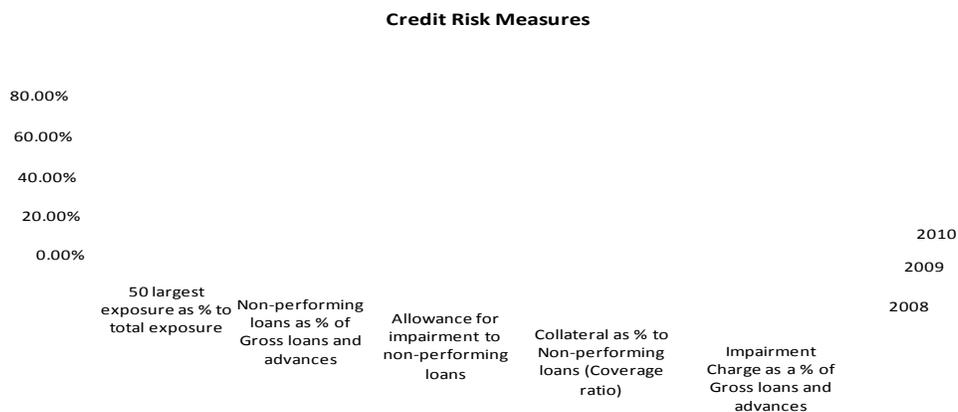
Table 4.3

Industry Concentrations		Composition				Growth	
		2008	2009	2010		2009	2010
Agriculture, forestry and fishing		2.81%	1.20%	0.86%		-50.51%	-19.05%
Mining and quarrying		0.71%	3.74%	3.23%		512.95%	-2.52%
Manufacturing		17.59%	11.26%	18.11%		-25.91%	81.51%
Construction		9.36%	16.93%	10.94%		109.26%	-27.05%
Electricity, gas and water		14.01%	12.24%	13.77%		1.03%	27.00%
Commerce and finance		31.38%	37.64%	32.51%		38.77%	-2.50%
Transport, storage and communication		8.07%	5.65%	2.00%		-18.95%	-60.12%
Services		9.94%	7.22%	10.20%		-15.91%	59.49%
Miscellaneous		6.13%	4.11%	8.38%		-22.38%	129.90%
Gross loans and advances		100.00%	100.00%	100.00%			

4.3.1 Concentration

The bank continued to support commerce and finance as against the other sectors of the economy with a 37.64 % concentration of its loans going to the commerce and finance sector in 2009, FAMBL repeated this phenomenon in 2010 by allocating 32.51 % of its loanable funds to the same sector; of less interest to the bank is agricultural, forestry and fishing sectors that enjoys about 1 % of the total loanable funds.

Overall loans distribution was well diversified to reduce the concentration in one sector, leading to a well managed credit risk in 2010

Industry Concentration of Loans - 2010

Legend:
- Agriculture, forestry and fishing
- Mining and quarrying
- Manufacturing
- Construction
- Electricity, gas and water
- Commerce and finance
- Transport, storage and communication
- Services
- Miscellaneous

Source: Own construction with data

Industry Concentration of Loans - 2009

Legend:
- Agriculture, forestry and fishing
- Mining and quarrying
- Manufacturing
- Construction
- Electricity, gas and water
- Commerce and finance
- Transport, storage and communication
- Services
- Miscellaneous

Source: Own construction with data

4.4.2 Loans distribution

The bank continued it trend of granting loans to the private enterprises as compared to individuals, government and staff. The government sector had approximately 200% increase in its loans in 2009 and maintained the same volume in 2010 apart from that the private enterprise sector kept a comfortable 80% over all the interested customer groups. In direct relationship to the high percentage of loans granted to the private enterprise sector, the private enterprise sector and individual contributed over 50 % of the total deposit of the bank.

The bank's total deposit is derived from three main sources; financial institutions, individuals and private enterprises and the public enterprises. The deposit from the financial institution was completely non existence in 2010 leaving only the other two major sources as the bank source of deposit. The public sector however contributed approximately 20% of the total deposit in 2010.

Figure 4.6: Customer loans by borrower group

Customer loans per borrower group
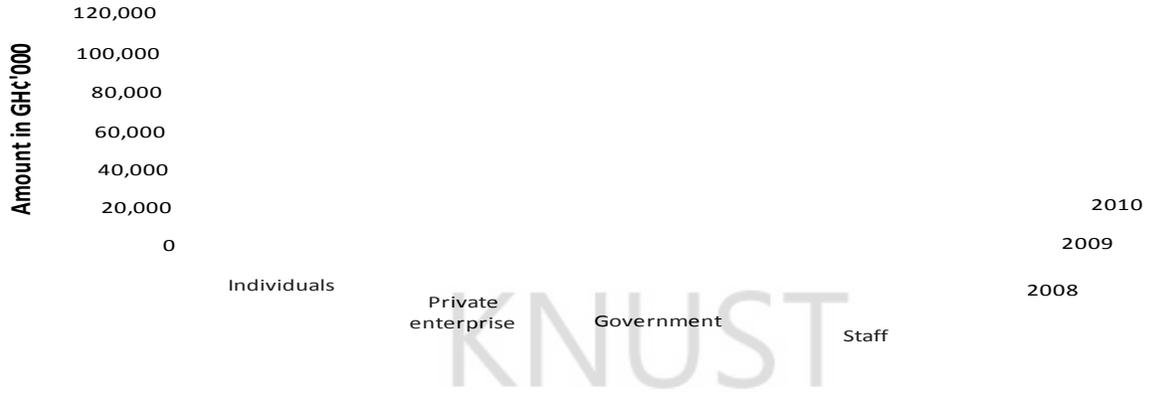
Source: Own construction with data

4.4.3 Customer loan distribution by tenor

Another classification of the deposit is derived by its nature either as time or demand deposit. Over the period 2008 to 2009 after which it increased by % in 2010. For the period 2008- 2010 the bank seems to lose it appetite for time deposit as it constantly reduced the volume of time deposit it held on behalf of customers. This trend is exhibited by a reduction of 140 million for 2008 to almost nothing in 2010.

Analysis of Customer Deposits by Customer group & Deposit Type
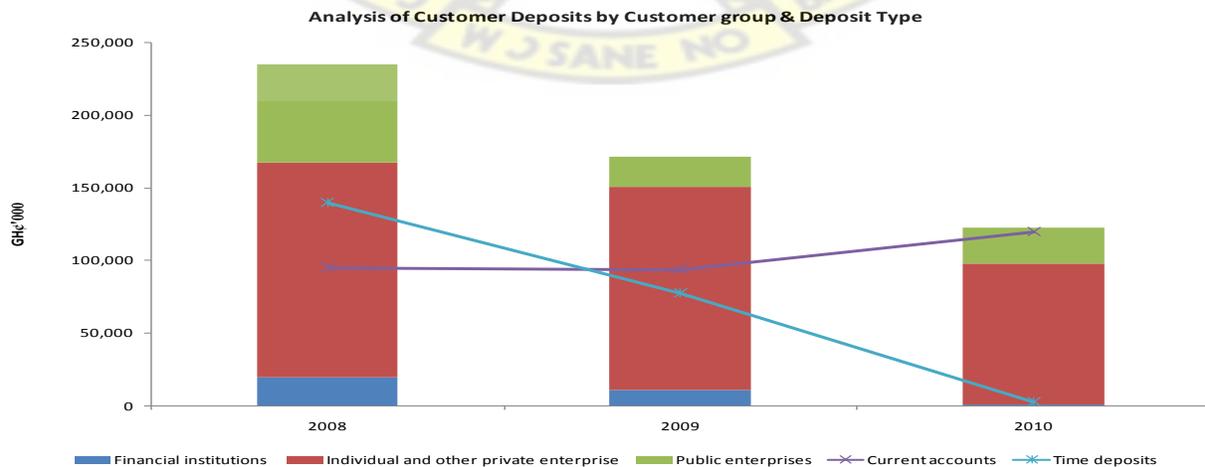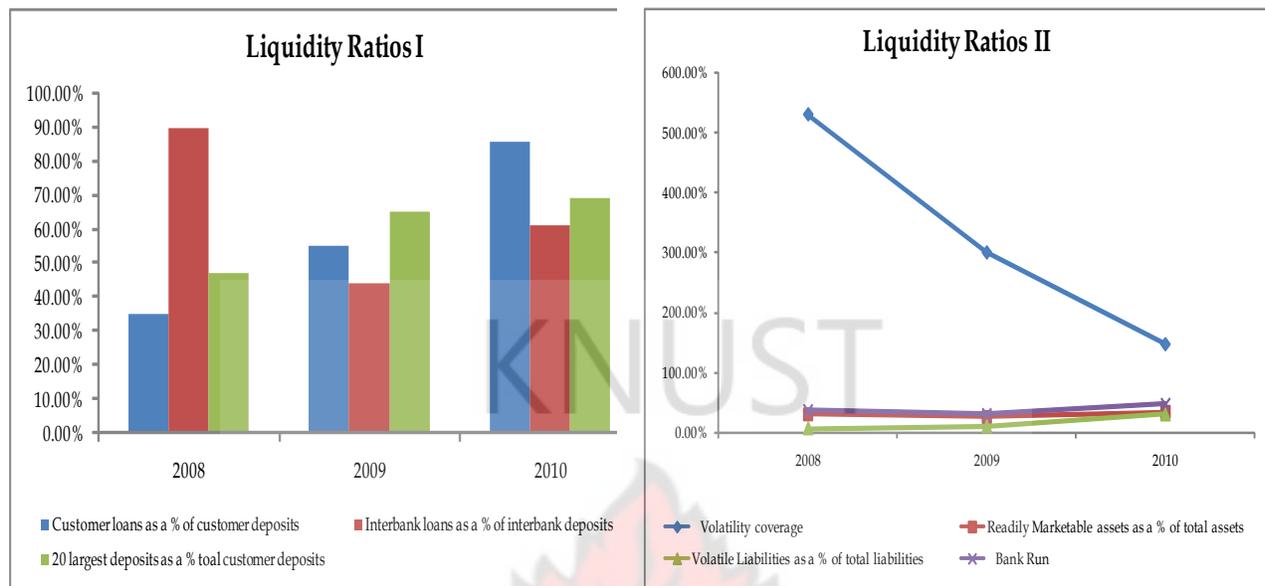
4.5 LIQUIDITY RISK

First Atlantic Merchant Bank Ghana's direct portfolio is funded by a mix of sources as presented in Figure 4.13. Its main funding source continued to be from customer deposits which constituted about 62% of the total funding base.

The significant contribution of customer deposits to the bank's funding base implied that the soundness of the bank's liquidity management hinged on the stability and quality of its customer deposit base.

A review of the product types employed by the bank to mobilise funds indicate that the greatest contribution to the bank's funding base was from current accounts. It formed the bulk of the bank's core deposits and ensured greater stability and cheaper source of funds for the bank. It however appeared that the majority of current accounts funds came from large depositors and therefore reduced the level of stability since these depositors could come for bulk funds without

notice and may cause liquidity problems. Since all the banks are after the same funds from these large depositors, the interest cost of these funds may be higher than the interest on current account funds. The deposits of these corporate are also dependent on the prospects of their business which fluctuates with response to both internal and macro-economic developments making it volatile in nature.

4.5.1 Liquidity Mismatches

A review of the maturity ladder (see table 4.4.3) indicates that the bank has maintained its positive liquidity profile in year 2010 with a total liquidity position of GHS 13,376. However the huge negative mismatch in the very short term (one to three months) indicated that the bank had problems funding all its contractual obligations during the period at a reasonable cost. This situation was as a result of the bank not having adequate liquid assets maturing during the period to meet deposits which are due for redemption in the same period. However the bank was sufficiently funded to meet its medium term liabilities, that is, those falling due between one and five years. A greater portion of its long-term borrowings fell due during this period and there were commensurate assets to meet such obligations, creating a positive net liquidity position. The liquidity surplus in the previous maturity bracket helps smoothen the shortfall and improves the net cumulative situation.

Table 4.4.3: Maturity Ladder

	2008	2009	2010
Maturity Profile of Assets and Liabilities	**GH¢'000**	**GH¢'000**	**GH¢'000**
Assets			
0 - 1 month	109,902	87,912	46,737
2 - 3 months	74,187	67,803	39,637
4months - 1 year	144,164	117,197	78,527
1 year - 5 years	52,673	11,653	39,727
Total	**380,926**	**284,565**	**204,628**

Liabilities				
0 - 1 month	110,360	17,922	51,387	
2 - 3 months	69,584	69,773	41,362	
4months - 1 year	126,420	29,437	71,248	
1 year - 5 years	68,870	10,872	27,255	
Total	**375,234**	**128,004**	**191,252**	
Liquidity Mismatches				Cumulative
0 - 1 month	*-458*	*69,990*	*-4,650*	-4,650
2 - 3 months	*4,603*	*-1,970*	*-1,725*	-6,375
4months - 1 year	*17,744*	*87,760*	*7,279*	904
1 year - 5 years	*-16,197*	*781*	*12,472*	13,376
Total	**5,692**	**156,561**	*13,376*	

4.6. INTEREST RATE RISK

An interest re-pricing schedule is used to generate simple indicators of the interest rate risk
sensitivity of both earnings and economic value to changing interest rates. It involves evaluating
earnings exposure of First Atlantic Merchant Bank Ghana to interest rate movements by
subtracting interest rate sensitive liabilities in different time bands from the corresponding
interest rate sensitive assets to produce a re-pricing "gap" for that time band. An analysis of First
Atlantic Merchant Bank Ghana's interest re-pricing schedule (appendix D20) indicated that there
was a negative of asset sensitive gap o f GHS (12,516) in the year 2010. This represented a 13%
increase in the situation in the previous year negative re-pricing gap. It meant that generally the
bank's interest income increase as a result of the increase in the average market interest rates.
This is because more assets were invested at lower market rates than liabilities during the period.

Interest Rate Risk Ratios

Legend:
- Interest rate sensitive assets/Interest rate sensitive liabilities
- Interest rate sensitive assets / Total assets
- Interest rate sensitive liabilities / Total Liabilities
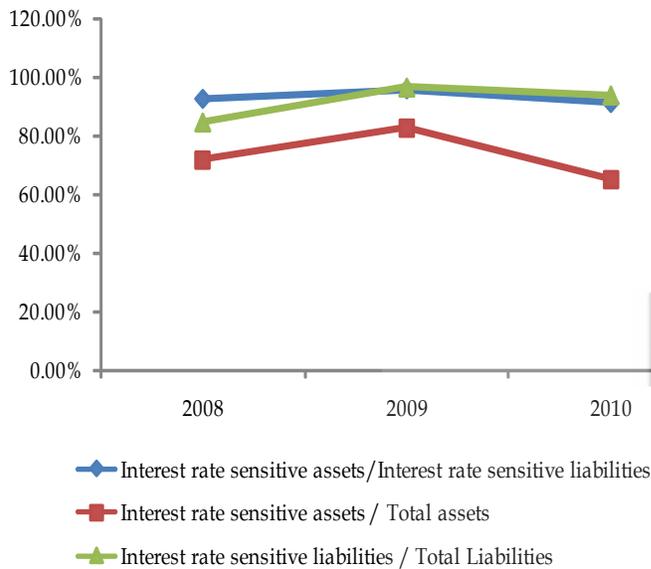
Source: Own construction with data from appendix

It is a prudent strategy for the bank to have a negative interest repricing mismatch which would have result in interest income of the bank increasing because declining average market interest rates meant more liabilities would have been taken on at lower market rates. In general, it appeared the bank's assets and shareholders equity are significantly exposed to risk associated with movements in interest rate.

The Gap to total asset ratio of 6.4 % for 2010 was extremely low even though it experienced a increase from about (3.65)% from the previous year considering that general prudent limits are between -15% to 15%. GAP to equity ratio was also about 64.22% in 2010 from a high of (88.13) % in the previous year. There was a significant decline in the ratio of interest rate sensitive assets to interest rate sensitive liabilities from about 95.76% in 2009 to 91.03% in 2010 in response to the falling market rates.

The bank however could not react adequately to reverse the mismatch situation to avoid losses in interest income basically because of the unpredictable nature of the macroeconomic conditions in the country and the global financial situation. The matching and mismatching of the maturities and interest rates of assets and liabilities is fundamental to the management of the bank. It is unusual for banks ever to be completely matched since business transacted is often of uncertain terms and of different types. An unmatched position potentially enhances profitability, but can also increase the risk.

4.7. CURRENCY RISK

Because First Atlantic Merchant Bank Ghana maintains correspondent banking relationships with foreign banks lend and borrow in foreign currency and supports customer transactions denominated in foreign currencies, it is prone to currency risks. A review of the currency mismatch schedule in table 4.5-6 indicated that the bank had positive net open currency positions for all its currencies in year 2010. Also all the contribution of the currencies in the assets of the bank adequately covered the contribution of the currencies to the liabilities. The currency structure of the bank's loans and deposits were also encouraging as its funding capacity provided by the deposit base in the various currencies exceeded its loan portfolio in the various currencies significantly. But it is worth noting that there seem to be a lot of concentration on the dollars loans, thus not diversifying the exposure and in times of increased foreign exchange rate the bank will be seriously affected.   In both the cases of loans and deposits, the bank kept a little above 50% of its exposure in Ghana cedis with the greater portion of the remainder taken by USD denominated exposures.

Currency Structure Loans - 2010

Currency Structure Deposits- 2010
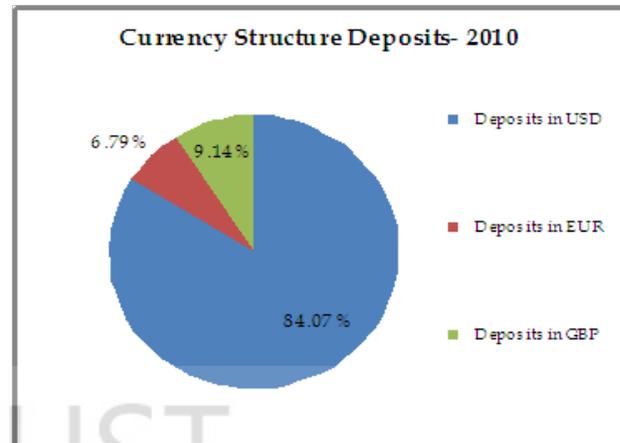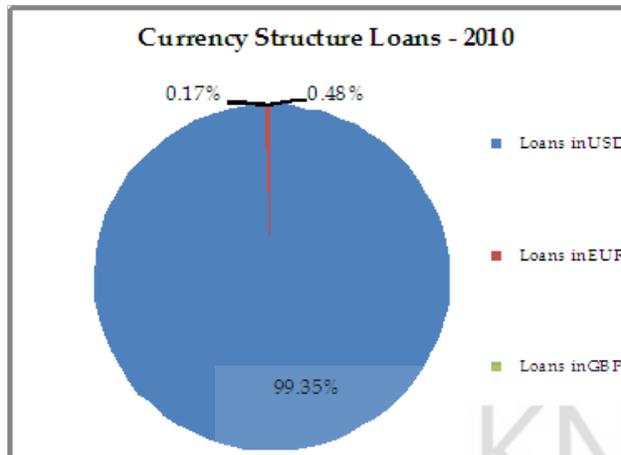
Table 4.5	2008	2009	2010
Currency Analysis	**GH¢'000**	**GH¢'000**	**GH¢'000**
Assets			
USD	167,248	128,846	27,355
EUR	5,390	5,978	1,520
GBP	3,241	4,140	2,596
Total	**175,879**	**138,964**	**31,471**
Liabilities			
USD	166,783	118,646	21,628
EUR	4,561	2,118	1,403
GBP	2,714	2,044	2,073
Total	**174,058**	**122,808**	**25,104**
Net Open Currency Position			
USD	*465*	*10,200*	*5,727*
EUR	*829*	*3,860*	*117*
GBP	*527*	*2,096*	*523*
Total	**1,821**	**16,156**	**6,367**

	2008	2009	2010
Qualifying capital	10,544	12,505	14,875
Currency Risk Exposure as % of Qualifying Capital:			
USD	4.41%	81.57%	38.50%
EUR	7.86%	30.87%	0.79%
GBP	5.00%	16.76%	3.52%
Total	**17.27%**	**129.20%**	**42.80%**

	2008	2009	2010
Currency Structure of Loan Portfolio :			
Loans in USD	95,180	99,036	17,103
Loans in EUR	1,715	104	82

Loans in GBP	1,372	27	30
Total	98,267	99,166	17,215

Currency Structure of Customer deposits :			
Deposits in USD	71,991	78,957	17,283
Deposits in EUR	4,210	0	1,396
Deposits in GBP	2,480	2,041	1,879
Total	78,681	80,998	20,558

Table 4.6

Composition		
2008	**2009**	**2010**
96.86%	99.87%	99.35%
1.75%	0.10%	0.48%
1.40%	0.03%	0.17%
100.00%	100.00%	100.00%

Composition		
2008	**2009**	**2010**
91.50%	97.48%	84.07%
5.35%	0.00%	6.79%
3.15%	2.52%	9.14%
100.00%	100.00%	100.00%

Basel Accord requires that certain capital charges be made for market risks including currency risks. Currency exposure as a percentage of qualifying capital indicated that the bank had adequate capital base to cover current currency risk exposures (refer figure 4.19).

Currency Risk : Currency Exposure as % of Qualifying Capital
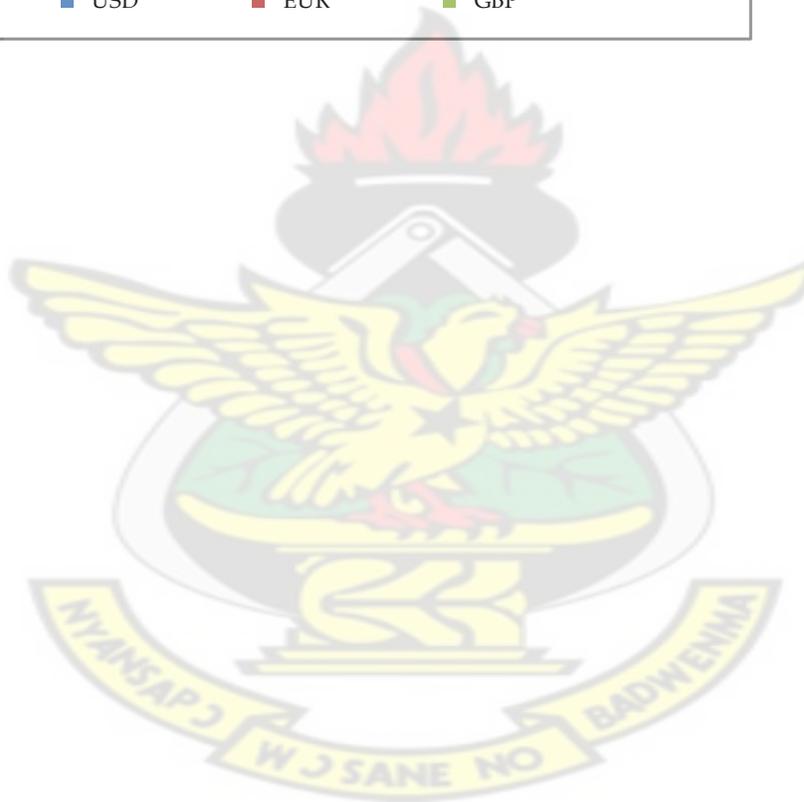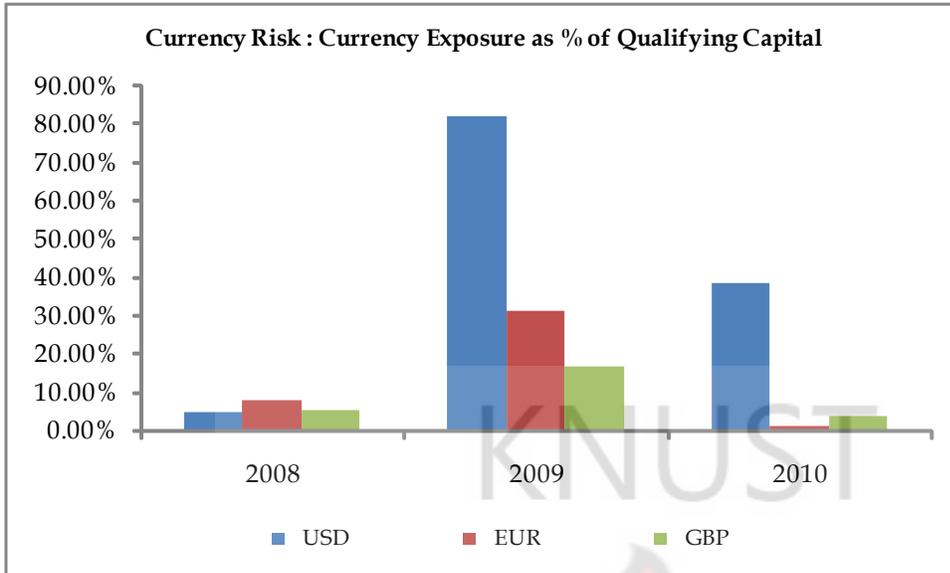
CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

This chapter provides concluding statements on First Atlantic Merchant Bank Limited's financial risk condition as at the end of its 2010 financial year and the adequacy of its risk management framework in handling the risks confronting it. The conclusions are supported by a summary of the results from the analysis on the bank's risk profile and the evaluation of the components of its risk management framework vis-à-vis recommended structures by the Basel Committee on Banking Supervision. The chapter also contains some recommendations aimed at improving the bank's risk management system.

Risk management evolved from a strictly banking activity, related to the quality of loans, to a very complex set of procedures and instruments in the modern financial environment. Firms that had been performing well suddenly announced large losses due to credit exposures that turned bad, interest rate positions taken or derivative exposures that may or may not have been assumed to hedge balance sheet risk. In response to this, banks have universally embarked upon an upgrading of their risk management and control systems. The first remarkable step to build a framework for systematic risk analysis was the Basel Capital Accord, issued in July 1988. The aim of the Basel initiative was to reach international convergence of rules governing the calculation of levels of capital reserves for banks. The analysis of the financial soundness of borrowers has been at the core of banking activity since its inception. This analysis refers to what is popularly known as **credit risk;** the risk that counterparty fails to perform an obligation owed to its creditor. The extraordinary development and globalisation of the financial markets facilitated by the information technology revolution, brought about another kind of risk almost unheard of many years ago: **market risk**. This risk stipulates that an adverse movement in asset prices will result in a loss to the firm. The definition encompasses not only financial intermediaries, but all kinds of firms, even governmental agencies including Ministries, Departments and Agencies (MDA) which might be engaged in derivative transactions. Another

result of the growing complexity of financial markets and instruments is the increasing importance of **operational risk** which refers to the risk of loss due to human error or deficiencies in firms' systems and/or controls as a result of the day to day operations of the institutions. In the same way, more complex arrangements and contracts bring about **legal/ reputational risk**, or the risk that a firm suffers a loss as a result of contracts being unenforceable or inadequately documented. Liquidity which is the life blood of every functional institution especially with finance related mandate generates its own risks known as liquidity risk. This refers to the type of risk that arises as a result of the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimize a loss.

Risk methodology can be broken down into five distinct steps as follows;

1. Risk identification (risk, source, cause, occurrence, when, where, consequences)

2. Risk analysis (qualitative, quantitative, likelihood, controls).

3. Risk evaluation (treatment needs, options, priorities)

4. Risk treatments (prevent, correct, avoid, share, accept, allocate resources, and allow cost contingency).

5. Risk monitoring (work on treatment, changes to risk).

A systematic approach to identify risk stands with an agreed and clear understanding of the context in which the risk identification is to take place. Risk analysis then develop a clear understanding of risk and involves further consideration of each risk's source consequence and likelihood of occurrence. Existing process, device and practices that act to minimize

negative risks or enhance positive risk are identified and this strength or weaknesses assessed.

Based on the outcomes of risk analysis, risk evaluation makes decision about what risks need treatment, what treatment options are, and what treatments are priorities. The treatment chosen is dependent upon the possible consequences of the risk and the cost of applying the treatment versus perceived benefit.

Risk management is an iterative process where the effect of the treatment is regularly reassessed to determine whether the risk is now acceptable, if it is continually monitored. If it is not accepted then further treatment is required until risk is reduced to acceptable level.

The rise of ERM has given risk management a new dimension. ERM provides a comprehensive framework for risk management which spans from the lower level staff to the top executives with the top hierarchy of the company taking ultimate responsibility. The approach identifies and proactively addresses risks and opportunities at the enterprise level and compares the results with the industry bench marks with the aim of creating value for the various stakeholders, including shareholders, employees, customers and regulators. This in essence, provides detailed information on the broad spectrum of risk facing complex organizations to ensure they are appropriately managed. ERM can also be seen as a risk-based approach to managing internal control.

Continuous Control Monitoring (CCM) is an emerging governance risk and compliance technology that monitors the control process in ERM and other applications to automatically monitor and verify transactional rules and automate audit processes. CCM is a business management monitoring function used to ensure that the control function operates as designed and that transactions are processed appropriately. It improves the reliability of the control

systems, management oversight, policy enforcement and operational efficiency for critical financial processes.

There is the general belief that the banking sector in Ghana is relatively stable with individual banks having good risk profiles and sound risk management frameworks. The banking industry has not experienced major losses in the face of the global financial crises. The industry however witnessed worsening asset quality of banks largely as a result of weak macro economic factors like depreciating local currency, high inflation rates and interest rates resulting in high default rates. However analysis of the financials of FAMBL reveals the following.

Though there was an expansion of the size of the bank's balance sheet, the resulting structural changes lead to a healthy asset mix balancing liquidity with profitability. The consecutive approach taken by the bank in 2010 saw its investments in government securities constituting the largest portion of its asset mix so as to avoid increasing lending risk. The growth in assets was also backed by stable funding sources from customer demand deposits and adequate capital base which saw a huge increase through additional capitalization by shareholders.

The profitability level of the bank was also commendable which provided a cushion for short-term liquidity problems and a stable source of capital generation. This was fueled by significant growth in the bank's main revenue streams; net interest income and fee-based incomes. This demonstration of efficiency by the bank in the use of its potential (assets) and in its operations, indicated in the stable Return on Assets and relatively high Net Income as a percentage of Gross Loan and Advances ratios, provides confidence of its ability to sustain profitability.

Expanded credit exposure with significant concentration levels to few large corporate in the service sector of the economy creates some worry for the bank's credit risk. However, the loan quality improved as the level of non-performing loans in the loan portfolio declined with

tightened lending processes and increased monitoring and recovery activities. The bank's capacity to absorb credit losses was also improved with adequate collateral cover and allowance made for impairments

1. By keeping more short term interest sensitive assets compared to log term interest sensitive liabilities in the face of falling interest rate levels, the bank incurred loss of interest income.

2. The level of the bank's exposure to interest rate risk was further revealed by the GAP to total assets ratio which even fell outside the general prudential limits. The bank however appears to have adequate equity to cushion it against any threats from adverse interest rate movements.

3. FAMBL had adequate funding in foreign currency to back foreign currency loans and meet demands for foreign currency transactions shielding it from adverse foreign currency risk exposure**.**

The evidence from the study suggests that the risk profile of First Atlantic merchant Bank Limited was commendable based on the boe observations:

5.2 RECOMMENDATIONS

Despite a fairly good risk management framework in place to adequately manage the various types of risk FAMBL faces, this study made a couple of recommendations which is believed would help strengthen it risk management system and make it more competitive. These are primarily related to interest rate risk measurement and risk integration and aggregation.

5.2.1 Assets and Liability Management.

The supervision and management of market risk in the bank is vested on the Asset and Liability Committee (ALCO) who meet monthly and anytime market conditions warrant it.

As a way of improving risk management ALCO should ensure that risk management is not confined to collection of data. It should rather ensure that detailed analysis of assets and liabilities is carried out so as to assess the overall balance sheet structure and risk profile of the bank. Major responsibilities of the committee should include: To keep an eye on the structure /composition of bank's assets and liabilities and decide about product pricing for deposits and advances, Decide on required maturity profile and mix of incremental assets and liabilities, Articulate interest rate view of the bank and deciding on the future business strategy, Review and articulate funding policy, decide the transfer pricing policy of the bank.

Currently, FAMBL applies the Maturity Gap Analysis method where assets and liabilities are categorized by their re-pricing dates to identify mismatches within specific time periods, for estimating interest rate risk.

An alternative which will help address the shortfalls in this accounting approach of evaluating interest rate risk will be one which focuses on estimating the interest rate sensitivity of the economic value of a bank's on- and off-balance-sheet positions. Economic Value Analysis (EVA) can serve as a good indicator of quality of net interest margins over a long term and help identify risk exposures such as changes in market conditions not evident in the analysis of short term. This can help the bank to avoid strategies that maximize current earnings at the cost of exposing future earning to great risk.

Two such approaches which have been recommended in recent times are the simulation technique and duration analysis. Simulation involves the use of sophisticated computer models to generate the effects of a wide array of interest rate scenarios on a bank's financial condition. The measures it generates can address both the accounting and economic perspectives of FAMBL's interest rate risk exposure.

However, simulations are highly data intensive, and the results rely heavily on assumptions as with many computer modeling techniques. Moreover, these assumptions on target variables such as net interest income it is difficult to objectively isolate the influence of changing interest rates on the measures. In the light of these, duration analysis is highly recommended to FAMBL to maintain a balance between simplicity and results. Duration is the measure of the sensitivity of the present value (economic value) of the assets and liabilities to changing interest rates. Duration analysis therefore helps in estimating the durations of assets, liabilities, and off-balance-sheet positions.

6.2.2 Adopting an integrated approach to risk management

Currently, the structure of FAMBL's risk management framework allows for specific risk-related decisions to be multiple levels of the bank. Also different approaches are used in managing the different risk types at various units in the bank.

This result in fragmented risk management practices and a disjointed approach for dealing with the risks the bank is exposed to. There is therefore the need for the bank to develop an integrated system which ensures a systematic and comprehensive approach to managing risk across the bank. An integrated risk management system is necessary because as its business activities becomes more varied; the likelihood of having more than one type of risk inherent in an activity or one type of risk triggering other risks is quite high. Management will therefore need a portfolio view of all the various risks and developing a strategy to manage them with the view of benefiting from diversification effects. Such an integrated approach can help senior management see the relationships between the various risk exposures as well as their multidimensional effect on the bank. The possibility of some risks not being appropriately covered is reduced.

FAMBL's risk management function should champion this due to the enormous authority it wields in issues of risk management as well as its significant responsibility of coordinating and facilitating unit risk management activities.

The bank's Risk Management Committee should be expanded to include the heads of other departments with some responsibilities for some risks such as IT, Operations, Internal Control the three business segments (Corporate Banking, Retail Banking and Treasury). The expanded committee can be used to promote an integrated framework of policies, procedures and defined processes for bank-wide risk management with the view of ensuring accountability for decisions related to the management of risk. Frank discussions can also take place between the owners of these risks about how their activities affect each others and increase their risks. The various strategies being used to manage the various risks can be synchronized to ensure more efficiency and effectiveness in the risk management process. Synchronizing these bank-wide metrics for risk with the bank's information technology system will aid accurate data capture, analysis and reporting.

The bank should consider the use of the economic capital methodology. An economic capital method attempt to assess the amount of capital needed to support a given set of business activities or risks. When stress testing or scenario analysis are incorporated in the economic capital method, it can be used to aggregate the different types of risks it face such as credit risk, market risks and operational risk. The common outcome of these risks is the possible lose of net asset value which economic capital seeks to safeguard against. There are various ways by which FAMBL can go about aggregating its risk.

The above approach will enable FAMBL to know the risk profile of each of its business units in addition to getting the bank-wide total exposure. FAMBL can now set aside an amount of money

(economic capital) with the help of statistical tool such as VAR (for market risk). The economic capital will be the amount the bank believes will be necessary to absorb potential losses from each risk type, business unit and the bank under extreme market conditions after all the various individual risks and their related effects on each other has been accounted for. Aggregation of risks and estimation of economic capital can assist FAMBL in its risk management efforts in many ways. It can assist the bank in risk control, in that, the amount ofeconomic capital allocated to business unit constraints the risks it takes.

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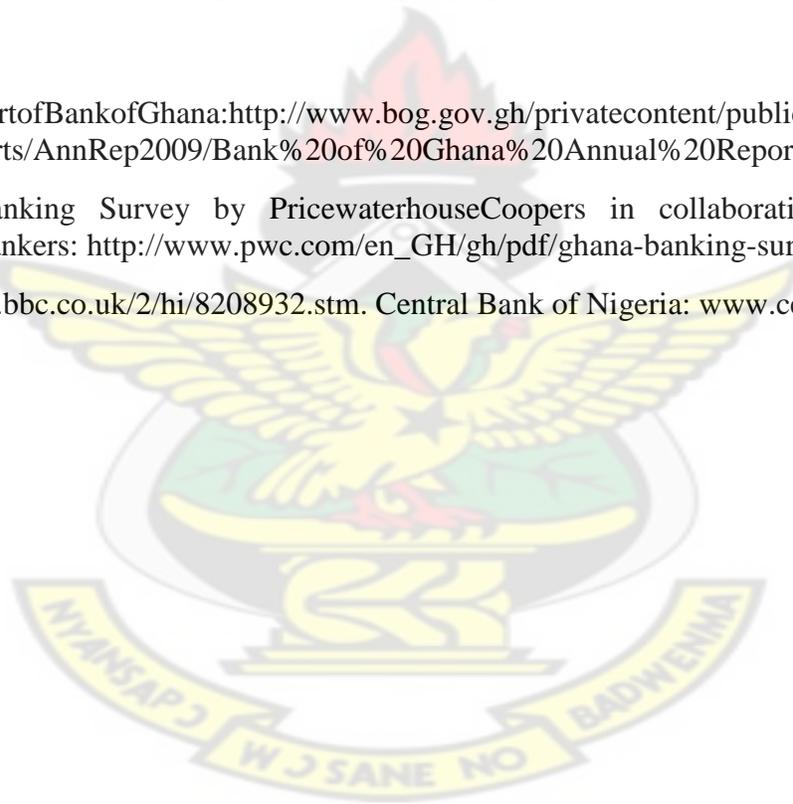
APPENDIX A: Comparative Financial Statements of FAMBL for 2008 – 2010

BALANCE SHEET			
	2008	**2009**	**2010**
ASSETS	GH¢'000	GH¢'000	GH¢'000
Cash and Cash Balances with central bank	33,661	19,975	16,235
Investment securities	343	342	590
Government securities	83,439	57,016	48,944
Due from other banks	84,154	37,306	10,386
Loans and receivables	175,645	173,203	104,812
Tangible assets - *Property, Plant and Equipment*	3,549	6,049	10,100
Other assets	5,255	7,770	4,457
Total Asset	**386,046**	**301,661**	**195,523**
Risk-weighted assets	128,859	156,391	132,633
LIABILITIES & EQUITY	GH¢'000	GH¢'000	GH¢'000
Deposits from banks and other credit institutions	93,972	84,627	17,000
Borrowings	50	50	0
Deposits from customers	234,956	171,457	122,673
Tax & other liabilities	24,433	12,933	8,841
EQUITY	10,486	12,497	19,489
Total	386,046	301,661	195,523
Contigency liabilities and commitment	**5,003**	**6,148**	**12,043**
Qualifying Capital	10,544	12,505	14,875

Appendix B2: Income Statement

	2008	2009	2010
INCOME STATEMENT	GH¢'000	GH¢'000	GH¢'000
Net Interest Income	10,312	10,872	17,543
Fees and Commission Income	3,986	3,595	4,569
Net trading income	3,004	526	4,693
Other operating income	17,285	14,993	2,513
Total Income	34,587	29,986	29,318
Operating Expenses	10,856	13,606	12,566
Impairment charge on loans and advances	2,183	2,848	3,941
Taxation and levy	1,167	322	3,449
Profit attributed to Non controlling interest	22	0	31
Total Cost	14,206	16,776	19,956
Profit for the year	3,079	-1,782	6,850

Appendix C1: Common Size and Trend analysis of Balance Sheet of FAMBL

BALANCE SHEET					Composition				Growth	
	2008	2009	2010		2008	2009	2010		2009	2010
ASSETS	GH¢'000	GH¢'000	GH¢'000		%	%	%		%	%
Cash and Cash Balances with central bank	33,661	19,975	16,235		8.72	6.62	8.30		-40.66	-18.72
Investment securities	343	342	590		0.09	0.11	0.30		-0.43	72.77
Government securities	83,439	57,016	48,944		21.61	18.90	25.03		-31.67	-14.16
Due from other banks	84,154	37,306	10,386		21.80	12.37	5.31		-55.67	-72.16
Loans and receivables	175,645	173,203	104,812		45.50	57.42	53.61		-1.39	-39.49
Tangible assets - *Property, Plant and Equipment*	3,549	6,049	10,100		0.92	2.01	5.17		70.44	66.96
Other assets	5,255	7,770	4,457		1.36	2.58	2.28		47.86	-42.64
Total Asset	386,046	301,661	195,523		100.00	100.00	100.00		-21.86	-35.18
Risk-weighted assets	128,859	156,391	132,633						21.37	-15.19
LIABILITIES & EQUITY	GH¢'000	GH¢'000	GH¢'000							
Deposits from banks and other credit institutions	93,972	84,627	17,000		24.34	28.05	8.69		-9.94	-79.91
Borrowings	50	50	0		0.01	0.02	0.00		0.00	-100.00
Deposits from customers	234,956	171,457	122,673		60.86	56.84	62.74		-27.03	-28.45
Tax & other liabilities	24,433	12,933	8,841		6.33	4.29	4.52		-47.07	-31.64
EQUITY	10,486	12,497	19,489		2.72	4.14	9.97		19.18	55.95
Total	386,046	301,661	195,523		94.26	93.34	85.92		-21.86	-35.18
Contingency liabilities and commitment	5,003	6,148	12,043						22.89	95.89
Qualifying Capital	10,544	12,505	14,875						18.60	18.95

C 2

	2008	2009	2010		Composition				Growth	
INCOME STATEMENT	GH¢'000	GH¢'000	GH¢'000		2008	2009	2010		2009	2010
Net Interest Income	10,312	10,872	17,543		29.81%	36.26%	59.84%		5.43%	61.36%
Fees and Commission Income	3,986	3,595	4,569		11.52%	11.99%	15.58%		-9.81%	27.09%
Net trading income	3,004	526	4,693		8.69%	1.75%	16.01%		-82.49%	792.21%
Other operating income	17,285	14,993	2,513		49.98%	50.00%	8.57%		-13.26%	-83.24%
Total Income	34,587	29,986	29,318		100.00%	100.00%	100.00%		-13.30%	-2.23%
Operating Expenses	10,856	13,606	12,566		76.42%	81.10%	62.97%		25.33%	-7.64%
Impairment charge on loans and advances	2,183	2,848	3,941		15.37%	16.98%	19.75%		30.46%	38.38%
Taxation and levy	1,167	322	3,449		8.21%	1.92%	17.28%		-72.41%	971.12%
Profit attributed to Non controlling interest	22	0	31		0.00%	0.00%	0.00%			
Total Cost	14,206	16,776	19,956		100.00%	100.00%	100.00%		18.09%	18.96%
Profit for the year	3,079	-1,782	6,850							

D3: Table of growth in capital adequacy and off-balance sheet item

Capital adequacy & Off-balance sheet Items	FAMBL			INDUSTRY			Growth		
	2008	2009	2010	2008	2009	2010	FAMBL		INDUSTRY
		%	%	%	%	%	2009	2010	2010
Tier I Capital	10,422	8,640	10,868						
Qualifying Capital	10,544	12,505	14,875						
Risk-weighted assets	128,859	156,391	132,633						
Core capital Adequacy (tier I CAR)	8.09	5.52	8.19	12.80	17.00		-31.69%	48.32%	
Capital adequacy ratio (CAR)	8.18	8.00	11.21	13.80	18.20		-2.28%	40.26%	
Off-balance sheet items as a % of total assets	1.30	2.04	6.16	16.37	10.53		57.27%	202.22%	
Risk-weighted assets/Total assets	33.38	51.84	67.84	78.10	69.80		55.32%	30.85%	

D4: Table of profitability and efficiency ratios

Profitability & Efficiency Ratios	FAMBL			INDUSTRY		
	2008	2009	2010	2008	2009	2010
Return on assets	0.80%	-0.59%	3.50%	2.50%	2.10%	2.70%
Return on average equity	29.36%	-14.26%	35.15%	30.10%	23.60%	28.60%
Net interest income as a % of Gross loans and advances	5.87%	6.28%	16.74%	54.20%	51.40%	51.80%
Total Cost as a % of Gross Income	41.07%	55.95%	68.07%	41.30%	39.40%	50.10%
Net Profit Margin	29.86%	-16.39%	39.05%			
Net interest income as a % of total assets	2.67%	3.60%	8.97%			

D5: Table of Industry Concentration of Customer Loans

Industry Concentrations	Composition				Growth	
	2008	2009	2010		2009	2010
Agriculture, forestry and fishing	2.81%	1.20%	0.86%		-50.51%	-19.05%
Mining and quarrying	0.71%	3.74%	3.23%		512.95%	-2.52%
Manufacturing	17.59%	11.26%	18.11%		-25.91%	81.51%
Construction	9.36%	16.93%	10.94%		109.26%	-27.05%
Electricity, gas and water	14.01%	12.24%	13.77%		1.03%	27.00%
Commerce and finance	31.38%	37.64%	32.51%		38.77%	-2.50%
Transport, storage and communication	8.07%	5.65%	2.00%		-18.95%	-60.12%
Services	9.94%	7.22%	10.20%		-15.91%	59.49%
Miscellaneous	6.13%	4.11%	8.38%		-22.38%	129.90%
Gross loans and advances	100.00%	100.00%	100.00%			

D6: Table of customer loans distribution by maturity

Maturity Profile of Assets and Liabilities	2008 GH¢'000	2009 GH¢'000	2010 GH¢'000	Cumulative
Assets				
0 - 1 month	109,902	87,912	46,737	
2 - 3 months	74,187	67,803	39,637	
4months - 1 year	144,164	117,197	78,527	
1 year - 5 years	52,673	11,653	39,727	
Total	**380,926**	**284,565**	**204,628**	
Liabilities				
0 - 1 month	110,360	17,922	51,387	
2 - 3 months	69,584	69,773	41,362	
4months - 1 year	126,420	29,437	71,248	
1 year - 5 years	68,870	10,872	27,255	
Total	**375,234**	**128,004**	**191,252**	
Liquidity Mismatches				**Cumulative**
0 - 1 month	*-458*	*69,990*	*-4,650*	-4,650
2 - 3 months	*4,603*	*-1,970*	*-1,725*	-6,375
4months - 1 year	*17,744*	*87,760*	*7,279*	904
1 year - 5 years	*-16,197*	*781*	*12,472*	13,376
Total	**5,692**	**156,561**	*13,376*	