UNIVERSITY OF CAPE COAST

# CREDIT RISK MANAGEMENT OF NON-BANK AND BANKING INSTITUTIONS: A COMPARATIVE STUDY OF TEACHERS'FUND FINANCIAL SERVICES AND UNIQUE TRUST BANK

BEN OWUSU EYIFAH

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BY

BEN OWUSU EYIFAH

DISSERTATION SUBMITTED TO THE DEPARTMENT OF ACCOUNTING AND FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF CAPE COAST, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR AWARD OF MASTER OF BUSINESS ADMINISTRATION DEGREE IN FINANCE

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# DECLARATION

## Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Name: BEN OWUSU EYIFAH

Signature:………………………… Date:…………………………

## Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Name: ANOKYE MOHAMMED ADAM

Signature:………………………… Date:………………………

## ABSTRACT

The issue of credit risk is of greater concern because of the higher levels of perceived risks resulting from some of the characteristics of clients and the business conditions that these clients find themselves in. The structure of risk management calls for a review that reflect on policies and procedures which will help manage risk as well as conform to the best practices. As a contribution to this exercise, this study focuses on Unique Trust (UT) Bank and Teachers' Fund (TF) Financial Services with the aim of comparing the firms' risk practices as well as assessing their risk management practices.

A structured interview guide covering understanding risk and risk management; risk identification; risk assessment and analysis; risk monitoring; risk management practices; and credit risk analysis was developed and posed to the credit officials of Unique Trust Bank and Teachers' Fund Financial Services. The study revealed that both firms have a good risk profile. It also found that Unique Trust Bank is somewhat efficient in risk management, and risk identification and risk assessment and analysis are the most influencing variables in risk management practices.

Finally, the results indicate that there is a significant difference between Unique Trust and Teachers' Fund Financial Services in the practice of risk assessment, risk analysis, risk monitoring and risk control. Thus the study recommends that TF should pay more attention to monitoring risk exposure and revising its traditional techniques of credit mitigation. Also UT and TF should review the methods used in risk assessment and analysis.

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Finally, my sincere admiration and very special thanks go to my wife and children for being the inspiration in it all.

# DEDICATION

To my wife¸ Margaret and children Yaw and Kojo for whom I am truly blessed.

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# CHAPTER ONE

# INTRODUCTION

## Background to the study

These days, the worth of credit risk management has been dramatically increased for financial institutions. Banks and other monetary institutions are too often faced with credit risks. Therefore, these institutions have to measure their risks and returns sooner than later. For banks, interest rate has a special importance. If a bank charges low interest rates in loan products, it will suffer from heavy losses. On the other hand, if the banks charge high interest rates on loan products, they will definitely earn an increased amount of return. Sometimes the banks are with faced with heavy losses, so they would need credit risk management to really overcome their financial disaster.

The importance of credit risk management for banking is tremendous. Banks and other financial institutions are often faced with risks that are mostly of financial nature. These institutions must balance risks as well as returns. For a bank to have a large consumer base, it must offer loan products that are reasonable enough. However, if the interest rates in loan products are too low, the bank will suffer from losses. In terms of equity, a bank must have substantial amount of capital on its reserve, but not too much that it misses the investment revenue, and not too little that it leads itself to financial instability and to the risk of regulatory non-compliance.

Risk often comes in investing and in the allocation of capital. The risks must be assessed so as to derive a sound investment decision. Likewise, the assessment of risk is also crucial in coming up with the position to balance risks and returns. Banks are constantly faced with risks. There are certain risks in the process of granting loans to certain clients. There can be more risks involved if the loan is extended to unworthy debtors.

Risk assessment is something that has become very important these days. With the credit crunch in 2008/9, credit risk was something that a lot of financial companies had to consider. Most companies had to rethink their acceptance process and also consider credit risk more carefully. For this reason, risk assessment and risk consulting has become a very important aspect of financial transactions.

Some companies often attempt to hide their credit history, particularly when it is unfavourable. Failures of credit payments or license issues can affect a company's credit history. If a company has a record of poor business practices, the financial institution can find out about these things through credit risk management reports. Before financial institutions begin any financial dealings with a new business, requesting a company credit report is crucial to ensure that this business is creditworthy. Credit reporting bureaus can provide financial institutions with updated information about any company that interest them within a few hours, so that you can make a smart credit decision quickly.

Adequately managing credit risk in banking and non banking financial institutions is critical for their survival and growth (Torben, 2009). In the case of non-banking financial institutions, the issue of credit risk is of greater concern because of the higher levels of perceived risks resulting from some of the characteristics of clients and the business conditions that these clients find themselves in. Credit creation is the main income generating activity for the non-banking financial institutions (BoG Quarterly Bulletin, 2004). However, the scope of banks is more than credit creation, depending on every bank and its stretch.

Credit delivery constitutes a large proportion of financial institutions' operations and as a result, the firms' businesses are likely to face difficulties when there is a slight deterioration in the quality of loans (Hubbard, 2009). Credit delivery systems mean establishing the eligibility criteria for selection of the targeted clientele and adopting practical measures to screen out potential borrowers who do not qualify for loans. The problem often begins right at the loan application stage and increases further at the loan approval, monitoring and controlling stages, especially when credit assessment guidelines in terms of policy and strategies/procedures for credit processing do not exist or are weak or incomplete.

In order for financial institutions (banking and non banking) to deliver credit to their clientele, they need to conduct assessment as to whether the clients qualify or not (Torben, 2009). Credit assessment entails checks undertaken by institutional lenders to ascertain the credit-worthiness of their clientele. Sometimes, financial institutions face challenges in credit delivery due to several factors. For instance, very few places have street addresses; use of multiplicity of languages complicates recording of names and often no identification documentation is available. It is difficult to check corporate records to make sure a company is registered. More importantly, it is not possible to check if collateral is already being used for some other obligation and information about borrower credit-worthiness is not readily available. These make the issue of credit risk management in financial institutions important for their survival.

This study examines credit assessment, delivery, monitoring and recovery. The principal concern of this study is to ascertain the extent to which Teachers Fund (TF) Financial Services and Unique Trust (UT) Bank manage their credit risks, what tools or techniques are at their disposal and to what extent their performance can be augmented by proper credit risk management policies or strategies.

Furthermore, the research is to compare newly established non-bank and banking institutions which have almost the same level of risk. This emerges from the fact that both TF Financial Services and UT Bank operate in Accra (Head-Offices), and have branches in Kumasi and Takoradi which satisfies their geographical distributions.

The study focused on TF Financial Services and UT Bank due to similar characteristics they share. Both firms were incorporated to operate as financial services firms, largely focusing on loans as their prime activities. TF

Financial Services was granted a certificate to operate in 2006 and it is a wholly-owned subsidiary of the Teachers Fund. In delivering credit to their clients, TF Financial Services first and foremost, ensures that before any loan or other credit facility is extended or renewed, the authorising Director and Officers gather information (credit, financial and other pertinent information) on the obligator/grantor. This information are sourced from employers in the case of salary workers, (Audited) financial statements or its equivalent for the last 3 fiscal years for borrowing entities, debt-rating information from a credit rating agencies and telephone or written inquiries to banking and/or trade references.

Secondly, after the credit request has been approved, an offer letter is forwarded to the applicant from the Head of Operations through the manager and/or loan officer. Furthermore, the Head of Operations and his/her team complete and sign a loan documentation list. The customer signs binding documents after which the Administrative Manager files a loan funding sheet at the credit department. Disbursement Request Forms are used to inform the Head of Finance and Treasury of disbursement under existing credit facilities. Upon receipt of the form, Head of Finance and Treasury ensures that disbursed credit is within limits, records the loan and authorises disbursement of funds.

Finally, the Head of Operations ensures the safekeeping of all security documents. Original of all security documents including mortgages, debentures, trust receipts and hypothecation instruments are to be kept in Teachers' Fund Financial Services safe.

UT Bank was also granted a certificate to operate in 2009 and it is publicly owned firm. UT Bank used to be a non-bank financial institution in Ghana specialising in loans and investments. After acquisition of BPI Bank Ghana Ltd, UT Bank now operates as a licensed universal banking institution offering a suite of banking products and services to customers. In delivering credit to their customers, UT ensures that a prospective client is, firstly, interviewed by a Branch Manager to have a rough idea about their creditworthiness, should a credit is granted them. He sends the clients to the credit team (Credit Analyst, Project Analyst and Monitoring Officers) to have a detailed interview with them. This allows the team to determine if the client has the required collateral, which should be in a ratio of 2:1 (thus, the collateral value should be twice the required loan). The necessary documents are checked to determine the client's capabilities of servicing the loan when granted.

The team having satisfied itself fills an application form for the client. The Project officer then goes to the field with the client to confirm the information given by the client. The necessary documents are gathered to produce a loan report by the Project Analyst to the Credit Analyst. The Credit Analyst forwards it to the responsible manager for approval. An offer letter is prepared by the scheduled officers, i.e. Credit and Project Analysts which the client signs to accept the offer. The acceptance letter is scanned to the disbursement team at the Bank's HQRS. Loan Agreement form is signed between the client and UT Bank and filed awaiting the crediting of the client's account. The disbursement team files the acceptance letter with the GM Finance who upon receipt will authorize for the client's account to be credited and informed the client accordingly.

With UT being the latest licensed bank and having run non-bank financial services, it was deemed satisfactory to compare with TF Financial Services, which is running only non-banking financial services.

**Statement of the problem**

Financial institutions have challenges in lending because Ghana does not have sufficient requisite infrastructure in monitoring and tracking credits. According to Boateng (2004), lack of infrastructure makes lending challenging as very few places have street addresses and often no identification or documentation is available. Most likely it is tricky to ensure if collateral has already been used for some other commitment or exists at all. As a result, most lending institutions rely on local market and community knowledge. Information about borrower credit-worthiness can make lending institutions such as TF Financial Service and UT Bank vulnerable to fraud. Such vulnerability can only be reduced if proper examination of processes and procedures are adopted. The study examines processes and procedures adopted by TF Financial Services and UT Bank in giving out loans.

**Research objectives**

The main objective of this study was to evaluate the credit risk management processes and procedures employed by TF Financial Service and UT Bank. Specifically, the study sought to;

1. Compare the criteria employed by TF Financial Services and UT Bank to deliver credit.
2. Compare risk management practices employed by TF Financial Services and UT Bank.
3. Compare the monitoring of credit delivery by TF Financial Services and UT Bank.
4. Compare the challenges faced by TF Financial Services and UT Bank in their delivery of credit to customers.

**Research questions**

The Research would also address the following questions:

1. What are the criteria employed by the two institutions to deliver credit?
2. What are the risk management practices employed by the two institutions?
3. How do TF Financial Services and UT Bank monitor the credits they deliver?
4. What are the challenges facing TF Financial Services and UT Bank in the delivery of credits to customers?

**Significance of the research**

Effective credit risk management has been given much attention in recent years, largely due to the fact that inadequate credit risk policies are still the main source of problems within the banking industry. The significance of this research as embedded in the overall objective of the study is to examine possible and efficient ways of re-engineering the credit management systems in the banking sector in order to enable financial institutions reduce the risk associated in giving out loans to its customers. The research is also significant in the sense that it will contribute to knowledge in the areas of best credit risk practices. The lessons drawn from this research can also help other financial intermediaries in managing their credit systems in a most efficient way to increase their profitability.

Given the importance of credit assessment, it is surprising to observe that not much is known about the extent by which financial institutions engage in the practice of credit assessment. Academically, the research will contribute to existing theoretical knowledge on credit risk management, especially in the area of localized constraints faced by Ghanaian financial institutions.

**Organisation of the study**

This study is divided into five sections; the first chapter deals with the background to the study and cuts across a general introduction, statement of problem, objective of the study, and layout of the study. Chapter two gives a review of literature on the subject. The third chapter presents the methodology. The fourth chapter presents and discusses the results of the study. The last chapter concludes and provides implications of the results.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## Introduction

In order to conceive a clear understanding of the research problem a review of the relevant literature is necessary. This section presents the meaning of credit risk; empirically reviews on credit risk management in banking and non-banking institutions and evaluate credit risk management in banking and non-banking institutions among others. Since the literature on these variables is sparse in Ghana, the bulk of the literature focuses on researches outside Ghana.

## Meaning of credit risk

According to the Basel (1999), credit risk is defined as "the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed term". And the Monetary Authority of Singapore (2006) has defined it to be the "risk arising from the uncertainty of an obligor's ability to perform its contractual obligations", where the term "obligor" refers to any party that has either direct or indirect obligations under the contract. Regarding the importance of this kind of financial risk, Jackson and Perraudin (1999), thinks it is the largest element of risk in the books of most banks and if not managed in a proper way, can weaken individual banks or even causes many episodes of financial instability by impacting the whole banking system.

### Credit risk management in banking institutions

Credit risk as a dominant risk in financial institution is widely accepted by many writers and institutions including International Financial Risk Institution (IFRI). In their view, among the risks that face financial institutions, credit risk is the most dominant risk and it is also the risk to which supervisors of financial institutions pay the closest attention because it is considered the risk most likely to cause a financial institution to fail. According to IFRI (2009), credit risk creates bad loans and loss of fees, interest income and principal loan amount. This affects the capacity of the financial institution to continue to pay for its operations and therefore performing its functions as expected.

However, it must be noted that it is not just financial institutions that are subject to credit risk. Fund managers and investors are directly exposed to credit risk in their fixed-income investments. Insurance companies are exposed to it through their credit investments and credit guarantees. Companies are exposed to the risk that trading partners, distributors or suppliers may default- or fail to live up to critical obligations.

Greuning and Bratanovic (2003) examined the current status of risk management in Indian banks and explored the reasons for the adoption or lack of adoption of integrated approach to risk management. It involves identification of potential risk factors, estimation of their consequences, monitoring of activities exposed to the identified risk factors and putting in place control measures to prevent or reduce the undesirable effects. The results indicated that loans that constitute a large proportion of the assets in most of the Indian banks' portfolios were relatively illiquid and exhibit the highest credit risk.

The study also revealed that effective credit risk management involves establishing an appropriate credit risk environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involved monitoring process as well as adequate controls over credit risk. Considerations that form the basis for sound credit risk management system include: policy and strategies that clearly outline the scope and allocation of a bank credit facilities and the manner in which credit portfolio is managed, i.e. how loans are originated, appraised, supervised and collected. The study argues that risk management is primarily about people- how people think and how they interact with one another.

Fatemi and Fooladi (2006) investigated the current practices of credit risk management by the largest US-based financial institutions. Owing to the increasing variety in the types of counterparties and the ever-expanding variety in the forms of obligations, credit risk management had jumped to the forefront of risk management activities carried out by firms in the financial services industry in United State of America. It was found that identifying counterparty default risk is the single most-important purpose served by the credit risk models utilized. Close to half of the responding institutions utilize models that are also capable of dealing with counterparty migration risk.

Surprisingly, only a minority of the banks currently utilize either a proprietary or a vendor-marketed model for the management of their credit risk.

Interestingly, those that utilize their own in-house model also use a vendor-marketed model. Not surprisingly, such models are more widely used for the management of non-traded credit loan portfolios than they are for the management of traded bonds.

Al-Tamimi and Al-Mazrooei (2007) examined the degree to which the United Arab Emirate (UAE) financial institutions use risk management practices and techniques in dealing with different types of risk. The secondary objective is to compare risk management practices between the two sets of financial institutions. The authors developed a modified questionnaire, divided into two parts. The first part covers six aspects: understanding risk and risk management; risk identification; risk assessment and analysis; risk monitoring; risk management practices; and credit risk analysis. This part includes 43 closed-ended questions based on an interval scale. The second part consists of two closed-ended questions based on an ordinal scale dealing with two topics: methods of risk identification, and risks facing the sample banks. This study found that the three most important types of risk facing the UAE commercial banks are foreign exchange risk, followed by credit risk, then operating risk.

It also found that the UAE banks are somewhat efficient in managing risk, and risk identification and risk assessment and analysis are the most influencing variables in risk management practices. Finally, the results indicate that there is a significant difference between the UAE national and foreign banks in the practice of risk assessment and analysis, and in risk monitoring and controlling.

In banking, credit risk is taken for granted as a fundamental feature of the institutions. If an organization refuses to acknowledge the inherent risk, it is not in the lending industry. Wherever risk survives, its enemy, risk management, will also exist and fight against it. Credit risk management is simply the procedures implemented by organizations with the aim of diminishing or avoiding credit risk. Credit risk management has been a hot topic of debate as it is one of the fastest evolving practices and thanks to institutional developments in the credit market, diversification of financial institutions participating in the lending business and modern technologies (Caouette, Altman, Narayanan, Nimmo 2008). As also discussed by Caouette *et al*. (2008), credit risk management lies in an expert analysis system, whose objective is to "look at both the borrower and the lending facility being proposed and to assign a *risk rating*.

Among the evaluated data, financial ratios are perceived to be very important. The philosophy that Caouette *et al*. (2008) presents is that credit risk management is a form of engineering in which "models and structures are created that either prevent financial failure or else provide safeguards against it". The emphasis of these four authors' book, "Managing Credit Risk" shows good credit risk models. However most of the models are for enterprises in general. For financial institutions or banks, perhaps the credit analysis system is of much larger help.

Banking credit risk management in the eyes of Crouhy, Galai & Mark (2006) can be divided into retail and commercial credit risk management. Credit risk management based upon portfolio management is highlighted for both retail and commercial. This means that the customers are categorized into different portfolios, each of which is homogenous in several characteristics. Instead of managing every single client, the bank will usually handle them in groups and saves time, effort and cut cost. For retail banking, the bank introduces credit scoring model that is customized for personal banking. Commercial lending, on the other hand, will utilize the help of internal risk rating system established based on the rating system of professional credit rating agencies such as Moody's, Fitch Ratings or Standard and Poor's. Either the credit scoring or internal rating is both based upon financial and non-financial assessment. Several credit models and credit derivatives are also presented as new approaches to measure and to mitigate credit risk management respectively. (Crouhy, Galai & Mark, 2006).

Ahmad and Ahmad (2004) examined the factors affecting credit risk of Islamic banking system in Malaysia. The findings showed that there are significant differences between credit risk predictors of Islamic and of conventional banks. Results showed that management efficiency, risk-weighted assets and size of total assets have significant influence on credit risk of Islamic banking, while conventional banking credit risk are significantly affected by loan exposure to risky sectors, regulatory capital, loan loss provision and risk-weighted assets. While both observe similar effects of leverage, funding cost and risk-weighted on credit risk, Islamic banking experiences different impact of management efficiency, regulatory capital and loan loss provisions on their credit risk. The findings suggest that credit risk of Islamic banking remains relatively high (which is contrary to the general understanding). It is appropriate that serious attention be given to risk management in Islamic banking especially on those factors identified as having significant impact on its credit risk.

**Credit risk management in non-banking institutions**

Richard, Chijoriga, Kaijage, Peterson & Bohman (2008) developed a conceptual model to be used to understand further credit risk management (CRM) system of non-banks. The study reviewed existing literature that consisted of mostly evidence from the developed countries. A study model is proposed with amendment to fit Tanzania's environment. This was achieved through the use of both secondary (various relevant documents) and primary (interviews) information from a non-bank and key management officials dealing with credit management.

The main finding of this study was that the components of CRM system differ in non-banks operating from those in banks. This implied that the environment within which the bank operates is an important consideration for a CRM system to be successful. The study revealed that the considerations form the basis for sound CRM system include: policy and strategies (guidelines) that clearly outline the scope and allocation of a bank’s credit facilities and the manner in which a credit portfolio is managed, i.e. how loans are originated, appraised, supervised and collected. Screening borrowers is an activity that has widely been recommended for financial institutions. The recommendation of the study has not been widely put into use in the non-banking sector because most loans given out by non-banks are in the form of groups or associations. The assessment of borrowers can be performed through the use of qualitative as well as quantitative techniques.

However, this study revealed that most non-banks relied more on qualitative models in their assessments. The technique increases processing costs and increase subjective judgments and possible biases. It is worth noting that quantitative models make it possible to, among others, numerically establish which factors are important in explaining default risk, evaluate the relative degree of importance of the factors, improve the pricing of default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses.

The study also revealed that monitoring among non-banks involved, among others, frequent contact with borrowers, creating an environment that the organisation can be seen as a solver of problems and trusted adviser; develop the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation; monitoring the cashflows of borrower's business through the bank's account; regular review of the borrower's reports as well as an on-site visit; updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted. The results finally revealed that non-banks were less likely to rely on tools like covenants, collateral, credit rationing, loan securitization as compared to banks in controlling credit losses. Non-banks depended more on loan syndication.

An edition of the Business and Financial Times Journal, Adu-Amoah, explains how non-banking financial institutions manage risk. According to Adu-Amoah (2009), a non-bank is a financial organization licensed to provide financial services such as making commercial loans and taking term deposits from other financial institutions and public. When performing these functions, Non Bank Financial Institutions (NBFIs) face a number of risks including credit, market, liquidity, operational, legal etc. Some of these risks can be eliminated, avoided or transferred to another party in the financial industry or they have to be managed by the bank itself. Non-Bank Financial Institutions avoid risks by establishing policies and procedures to guide contracts and efficient decisions taking at all levels of the organization. Risks can be transferred from one institution to another in the course of exchange of products or services.

For example, interest risk can be transferred from one financial institution to another through interest rates swap or derivatives. The term borrowing can be altered to change its duration if a financial institution anticipates that the original duration could lead to a loss of earnings. A non-bank financial institution can also diversify or concentrate its financial assets to eliminate risks associated with its product or services. The study concedes that there are some risks that cannot be eliminated due to the fact that they are inherent in the product or service being rendered. He explains that such risks are found in credit, operational, market, liquidity and legal risks. According to him, those risks have to be monitored and managed to the barest minimum as possible to enable the institution achieve its goals.

Although advancing credit has become more and more institutionalized in many countries, non - financial lenders continue to play a vital role in financial intermediation. Some of the reasons for this picture are clearly given by Kealhofer (2003). He observed that the informal lenders in India have several advantages over the formal institutional lenders, including the following:

a. The informal lenders have an intimate knowledge of their debtors and keep them in good stead at the time of loan transactions.

b. The informal lender has different kinds and degrees of hold on those to whom he chooses to lend.

c. Though affected by institutional codes, he can still be as rigid or as elastic as realism dictates when the payments become due.

d. Without having to obtain authorization from anybody else, he is able to promptly hand over the money in order that some expenditure which brooks no delay may be met at once.

With these observations, Kealhofer (2003) concluded that, ‘there are many informal non-banking financial institutions but no informal bankers in them. The above factors clearly place the informal lenders (non banking financial institutions) ahead of their formal counterparts (traditional non-banking financial institutions) and this really calls for a critical look at the formalities and the entire procedures adopted by the informal non-banking financial institutions in their loans granting operations in order to attract and retain prospective customers who hitherto, troop to access the facilities of the informal lenders.

One way of extending credit to the borrowers of the informal non-banking financial institutions without demanding conventional collateral security and with comparatively better coverage is the ‘Group Loan Scheme’ by which farmers, petty traders or craftsmen organize themselves into groups of five or more. Many countries including India, Philippines, Ghana (Opportunity International Loans and Savings Company Ltd.), Nigeria, Latin American countries and the village non-banking financial institutions in Pays Dogon have successfully used this scheme to extend credit to many borrowers from the informal non-banking financial institutions with high recovery rate.

Atta-Bronya (1997) asserts that apart from organizing the borrowers from the informal non-banking financial institutions into purposive viable groups, institutional infrastructure should be created to lend support to the groups. These included institutional input supply groups, institutional output marketing and processing groups, institutional storage and warehousing groups and lastly institutional system for promoting locally based agro-industries using appropriate technology. This assertion clearly shows that credit advancing should not be in cash only but also in kind to assist the borrowers from the informal non-banking financial institutions to have access to some of their inputs without much hustle.

## Credit risk management in banking and non-banking institutions

### *Deductions*

Based on the above literature, it was observed that both banks and non-banks have similar credit risk management practices. The study now breaks down the credit risk assessment into:

- Credit culture
- Credit organization
- Credit policies
- Credit risk management process, i.e. activities in reality

A lending organization's credit risk management framework is designed under an umbrella guideline called credit culture. Credit culture covers the attitudes, perceptions, behaviors, styles, and beliefs that are conducted and practiced throughout the credit organization as a result of management attitudes towards credit risk. It is usually presented in the mission, objectives, and lending strategies to legitimatize the value placed on credit quality and safe sound lending practices (Colquitt, 2007). Credit culture supplies a general framework to guide day-to-day credit decisions. Credit culture plays a role as the foundation upon which credit discipline, policies, systems are established. Colquitt identifies the fundamental elements of its credit culture as:

- Clear policy and guidance: clear and consistent credit principles, policies, procedures and guidance.
- Approval and control: define credit risk management function's responsibilities.
- Credit discipline: the group's attitude towards risk and risk management, requirements from credit risk officers.
- Capital discipline: correct pricing and credit risk management to fulfill economic capital requirements.
- Credit systems and methodologies: standard systems and methodologies, some measurements of risk.
- Risk appetite: the amount or risk that the group is willing to take on, the degree of risk tolerance.

According to Colquitt (2007), an effective credit culture should include: the maximum annual growth rates for loans, the targeted returns, acceptable exposure levels (quantified) of different debt types (based on liquidity and term structures), desired loan portfolio composition, desired portfolio growth and targeted earnings, credit standards used in assessing loan requests for each type of loan, risk appetite, lending authority and approval limits (optional).

Nonetheless, from Strischek's point of view (2002), the key elements of a credit culture are:

- Top management's commitment: The top managers inside the organization, more than anyone, should strictly comply with the culture.
- Credit discipline: Credit discipline is a large thing that comprises of credit policies, risk appetite, internal risk rating system, credit administration, loan review and collection, and lender accountability.
- Priority-based incentives: "Ideally, incentives are tied to priorities and to performance standards for credit quality and portfolio profitability."
- Risk-managed lines of business: a clear distinction among risks of different lines of business and credit risk management approach towards each of them.
- Clear, consistent, and candid communication: "Positive and periodic communication is necessary to reinforce the culture."

While Colquitt has a tendency for quantitative factors, Strischek is more about qualitative determinants. A credit culture is usually effective for a long period so the numerate targets are somehow unrealistic. The targets are constantly changed depending on various business and market conditions. But Colquitt has good points there when he wants a credit culture to have desired loan portfolio composition (similar to lines of business), standards used in assessing loan requests, risk appetite or the lending authority and approval limits. In a nut shell, the credit culture ought to contain Strischek's five points and Colquitt's four mentioned points.

In addition, it is vital that all credit persons – people related to extending business credit – have firm understanding of the credit culture and process. Ultimately, the credit maker's performance expressed by earnings and credit quality is the key determinant of a successful credit culture.

Credit organization and administration refer to the human factor of the credit function in a banking institution. Each lending organization has its self-designed credit process but basically the processes include the same tasks in a cycle:

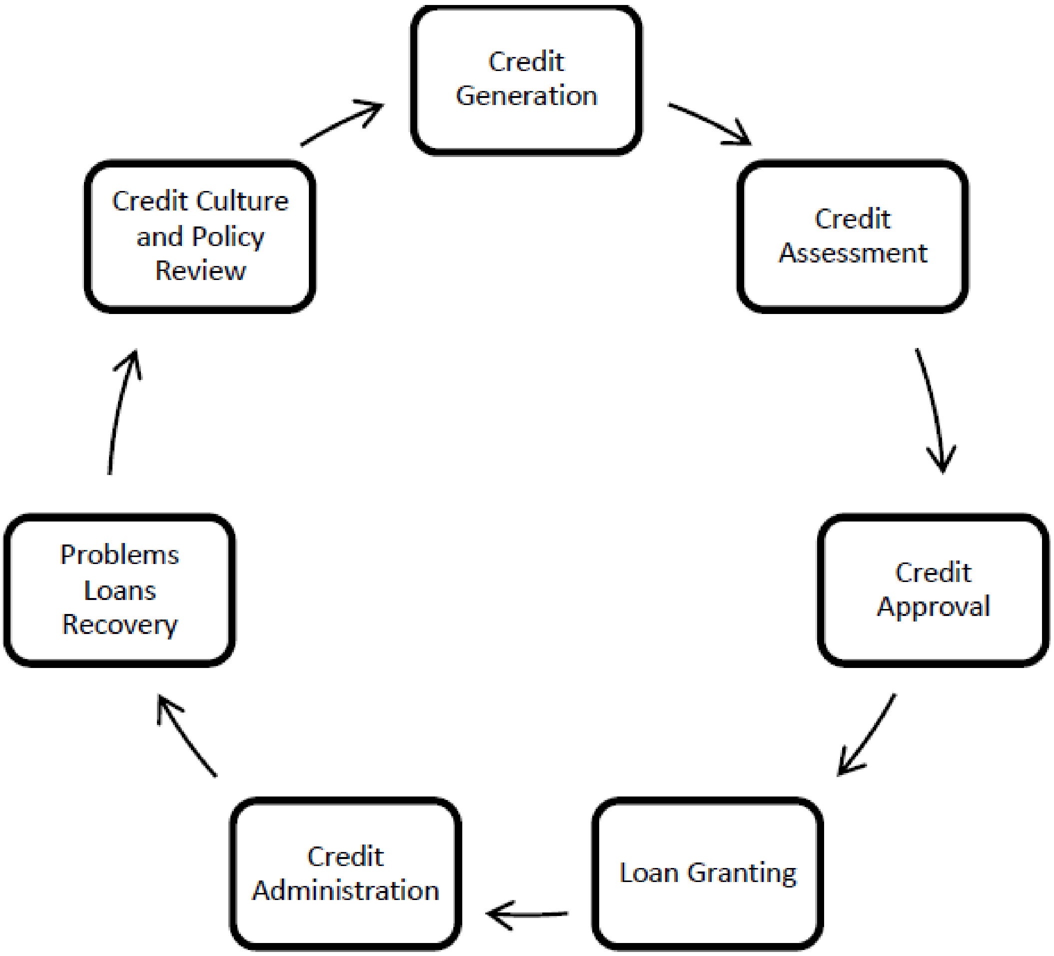


**Figure 1: Credit cycle (Colquitt 2007)**

Credit organization means the hierarchy of the people participating in the above cycle. For some banks, the structure may take geographical areas into account. In large banks, each function in the cycle may be carried out by one separate person. In smaller banks, one person can be in charge of several duties. In the investigated transaction office, for instance, a relationship manager is responsible for: credit generation, credit assessment, loan granting, and credit administration. Very often, credit risk management function will be led by the head of credit risk management. Under him/her will be credit officers and relationship managers. If the bank operates in different regions, the regional manager can be the direct boss to credit officers and relationship managers. In general, the organizational structure varies. Management approaches can be centralized or decentralized.

The former means credit department is in charge of every credit-related activity from credit generation to policy review. The decentralized style, on the other hand, emphasizes mutual contribution of both sales (find borrowers and assess repayment capability) and credit units (other tasks).

Three essential functions in the cycle that directly affect the quality of credit risk management implementation and should get special concern are credit assessment, credit approval, and credit administration. Credit assessment is usually done by the relationship managers or credit officers. This task involves checking the loan applicant's legal position, aim of borrowing, business or industry and any recorded borrowing information in the past. Credit assessment is one basis for credit approval. The person in charge of credit approval will also consider the bank's policy regarding types and amount of collateral, exposure limits of a particular industry, etc. and if possible, gives the borrower some risk ratings to facilitate his decision. In practice, a number of people are responsible for approving loans. The higher position in the credit institution the person stands, the larger value of credit he/she can approve. A Chief Risk Officer certainly has more power than the Branch Manager in authorizing loans.

Credit administration, on the other hand, does the post-approval job of monitoring the loans, credit quality and the borrowers. A credit controller has to check if the borrowers are still adhering to their commitments in the loan application and if the credit quality has been deteriorated due to some reasons. Besides, internal auditors can give a hand in examining documentation procedures. A small mistake in documentation may be utilized by untruthful borrowers and this could go against the bank in an unexpected way.

Any kind of organization must work under certain regulations, or in other words, policies. In credit risk management, formal policies are always of great importance because lending or financing activity is usually routine and structured. Well established policies and procedures will enhance speed and eliminate unnecessary repeated work. In banking business, two main types of policies directly influence the way the banks operate and manage credit risk: Regulatory external policies and the bank's internal policies. By policies here, the author means any kind of written documents issued to guide credit risk management practices. They can be laws, decrees, decisions, strategies, procedures, guidelines or manuals.

Banks fall under strict regulations set by the governments and international organizations. The most famous international legislation worldwide is the Basel Accords. Basel II is currently effective, however, Basel III has been introduced as an improvement to Basel II. Credit risk is extremely concerned by regulators in the Basel Committee on Bank Supervision. The first pillar of the Basel Accords deals with minimum capital requirements which are helpful in facilitating the bank’s dealing with credit risk and 2 other types of risk. (Crouhy *et al.*, 2006) Currently Basel II requires the capital adequacy ratio of 8% but it is subjected to increase to 14% according to Basel III. This results from the recent financial crisis that hit the world hard in 2008 and 2009. (Wall Street Journal, 2010)

Central banks also oversee the implementation of those legislations in each and every member bank. The regulations often include:

- Limitations on single customer: the maximum permitted exposure to a single client, related group, or an economic sector (Greuning &Bratanovic, 2009).

- Provisions for loan losses: the reserves that the bank keeps to deal with potential losses from loan making activity. For the regulatory policies, the banks have no choice but to rigidly follow. Any non-compliance with the laws may lead to severe punishments.

If external policies aim at limiting exposures, the bank’s own policies are designed to reduce credit risk and maximize returns. There can be a wealth of formal written policies related to credit activity but the most important is the lending policy (or procedure). The first and foremost requirement for successful credit risk management is a clear and well-structured lending policy. A lending policy should specify how loans are organized, approved, supervised and collected. It should also contain the following fundamental points:

- Lending authority and limits for each credit approver
- Duties of each credit person or sub-unit
- Assessment process and approval criteria
- Regulation on a complete loan application document
- Loan pricing (risk-based) and maturities
- Post-approval supervision and collections control
- Overdue debts and recovery
- Processing time

Besides lending policies, there can be a number of other policies such as:

- Policies on Collateral: Collateral is a borrower's pledge to secure a loan or other credit products. It acts as a guarantee that the borrower will repay the credit. Mostly the collateral has a bigger value than the credit (at the time of credit application). However, any change in market may lead to a reduction in the collateral value, which means deterioration in the credit quality.

- Internal credit rating system: A powerful credit risk measurement tool used by a lot of banks. This system automatically makes some calculations of the debtor's information (identity, financial data, nature of the industry that the debtor belongs to, the status of the debtor, the potential effect of macroeconomic events on the debtor, etc.) and gives out a result which is called the rates. The bank will identify a certain investment grade which means credit applicants falling within the investment grade will be granted loans.

- Asset Classification Categories: The categorization of debt based on different criteria such as types of customers (individuals, corporate, financial institutions), values of customers (SMEs, big corporate, global organizations), or terms of structure (1 month, 3 months, 9 months, etc.)
- Loan Loss provision: the reserves that the bank sets aside to cover any unexpected default and thus, to prevent the bank from bankruptcy (Greuning &Bratanovic, 2009)

The effectiveness of a credit risk management framework lies partly on the perfection of credit risk management determinants mentioned in the previous sections and partly on how the bank, or the credit officers in the bank, in reality, carry them out. With respect to credit risk management practices in the banks and the non-banks, this study wishes to fill in that gap with a set of benchmarks for assessment. The mentioned tools and benchmarks have been integrated into the list presented below. Several criteria have appeared here and there in the previous text. Others are derived from the literature and for the first time introduced in this section. The criteria provide three major questions:

- Does the bank have its own credit culture, which is clearly defined in written form, thus documented, and recognized by all employees?

- How do the Central Bank's regulatory policies help the bank in credit risk management?
- Is the bank using an internal credit risk rating system? How does it look like? How does it help the employees in their work?

However complete the bank's credit culture and policies can be, the utmost standard for a successful credit risk management framework lies on the bank's actual practices and performance. The non-performing loan statistics are typical demonstration of good or improper credit risk management. Besides, loan loss provision plays the role of a cushion for any potential losses. The prudential ratios also contribute to sound financial and risk management at the banks.

Specifically, these questions should be investigated: How are the credit culture and policies understood and implemented?

To conclude, an investigation of all criteria above may give the audience a broader picture of how credit risk management is implemented inside the subject transaction office of this study and a tool to evaluate the effectiveness of those practices.

According to Asiama (2008), traditional banking approaches to non-banking credit delivery often does not work. According to traditional banking principles, the credit methodology requires documentary evidence, long-standing bank-customer relationship and collateral, which most micro and small businesses do not possess. However, poor infrastructure such as lack of proper identification system and house numbering system needed to carry out proper credit risk analysis are missing in the country. This affects the non-banking institutions as compared to the banks.

# CHAPTER THREE

# METHODOLOGY

## Introduction

This chapter presents the blueprint of how the researcher conducted the study in order to come out with the most valid findings. The most appropriate operations or procedure were performed in order to provide answers to the research objectives. This includes type of research design employed, the measuring instrument, the sampling procedure, data management and data analysis.

## Targeted financial institutions

The targeted financial institutions used for this study were UT Bank and TF Financial Services. The two financial institutions were chosen since UT is newly established bank and TF is newly established financial institutions (www.bog.gov.gh). The reason for using these institutions was that new financial institutions might suffer from various forms of risk because they are new. Since these firms were under various stages of development and were in a position to generate risk management techniques to take care of their non-performing loans, their data would have lots of relevance to the current study. Another reason for selecting these firms for the study was that operating or performing firms provided sufficient information for better assessment of risk assessment due to their likely exposure to risk than firms which have been in business for long, which must have put various schemes to address risks.

**Research design**

There are two main approaches to conducting research, namely quantitative and qualitative approaches (Yates, 2004). A quantitative approach is based on information that can be measured numerically. The quantitative research approach focuses on questions such as "How many?" and/or "How often?", which are easily processed in the form of numbers. It is usually the purpose or objective of the survey that gives direction to the approach that should be used. These questions are presented as information converted into numbers. Techniques used under the quantitative approach are usually questionnaires, surveys, personality tests and standardised research instruments (Burell & Morgan, 1979).

Qualitative approach, on the other hand, is used when you want to get a more profound understanding for a specific situation. Observations, case studies, interviews guides and reviews are often more suitable for a qualitative approach, where subjective elements of the researcher are built into the findings and conclusion (Crotty, 1998). Here, the researcher has an unrestrained right and freedom to air his/her opinion and view and to interpret issues and concepts as he/she deems fit.

Both quantitative and qualitative types of research have their strengths and weaknesses. According to Jick (1979), qualitative and quantitative methods can be considered as complements to each other. The qualitative approach, though expensive and time consuming, can control both the end points and the pace of the research process whilst preventing problems related to rigour and objectivity (Yates, 2004). Also, qualitative approach is helpful not only in giving rich explanations of complex phenomena, but in creating or evolving theories or conceptual bases, and in proposing hypotheses to clarify the phenomena. The major disadvantage of this approach is that a small group of interviewed individuals cannot be taken as representative.

One of the advantage of the quantitative approach, on the other hand, is the ease and speed with which research is conducted and also its wide coverage of a range of situation (Amaratunga, Baldry, Sarshar & Newton, 2002). It is also possible to use the quantitative method in analyzing data with statistical methods since it is easier to generalize the findings. Another advantage is that the final results are based on quantities rather than interpretations, which may simplify potential future development and comparisons with the work. However, this approach tends to be inflexible, artificial and ineffective in gauging the significance people attach to actions, nor are they helpful in generating theories (Crotty, 1998).

It is worth mentioning however that this research, like many other management studies, did fall under one particular research philosophy, qualitative methodology. After reviewing the literature of research methods in social sciences generally and deciding on the research objectives in addition to considering all methodological limitations, criticisms and issues relating to credit risk management in Chapters 1 and 2, the researcher found out that structured interviews is an appropriate and flexible way that will be more convenient to conduct this research. The rationale behind this choice is justified below.

The research is conducted in the context of Ghanaian financial institutions. It is designed to explore credit risk management. Achieving all of these aims requires the use of key informant interviews as the main primary data collection method. Moreover, most of the research questions and objectives are exploratory in nature; the investigation is based on viewpoints and experience (perceptions) in the context of the two organisations. This requires applying many data collection methods and exploring many themes underpinning the research objectives, rather than relying only on one particular method. The adopted approach provides useful qualitative data which generate a rich wealth of data and interpretation:

- Based on the nature of the research questions and objectives, it is obvious that this study includes many subjective variables or factors. These need to be investigated and measured through the qualitative approach.

- This approach enables qualitative methodology, which refers to using interviews as data collection methods within one study, in order to ensure that data are accurate. In other words, it generates more validity and reliability. In this regard, structured interviews (key informants) coupled with analysis based on other relevant documents from the institutions are very valuable ways of performing this study.

- Statistical analysis of data gathered from key informant interviews together with documents will provide a forum for elaboration, explanation and description of events or actions and lead to more meaningful and new ideas from the perspective of the subjects which are being investigated. This will provide a better understanding of the subject under investigation.

**Sources of data**

Data for this research were obtained from primary and secondary sources. The key informant interviews formed the main source of primary data whilst secondary data sources were obtained from officially documented sources. The documented sources were Management Reports from the two institutions and Central Bank Annual Reports on the performance of the non-banking financial institutions and the banking institutions. Again, Credit Reporting Policies and Manuals of TF Financial Services and UT Bank were thoroughly studied and analyzed.

Officials in the credit management departments were also interviewed for the purpose of complimenting the information obtained from the studied documents (Yin, 2003). Furthermore, to obtained clarification on some issues that were either not clear to the researcher while reading and analyzing the documents or were not provided in the documents.

**Population and Sample**

A population is the whole group that the research focuses on. Malhotra, (1996) opines that the group should possess information relevant to the researcher. According to Rubin and Babbie (2001), target population is “the theoretically specified aggregation of study elements”.

For the purpose of this study, the target population consisted of a total of 30 officials. They were officials comprising of management members, credit officers and members of staff associated with the credit departments of the two institutions. Considering the small population size of the officers involved, it was deemed appropriate to use the census technique. That is, to include the entire population in the study. It is believed that these persons are better placed in the operations of the organisations.

**Data collection**

Yin (2003) posit that, for the purpose of case studies, documentation, archival records, interviews, direct observation, participants’ observations and physical artifact can be useful. These sources complement each other. He maintains that each of these sources has its own strengths and weaknesses and no one source has a complete advantage over all the others. As a result, a good case study should use as many sources as possible.

In the context of this study and for the researcher to achieve his purpose, both primary and secondary data were used. Secondary data is the one that has been already collected for the purposes other than the problem at hand. It includes both raw data and published summaries. Secondary data is very often found inside the organisation(s) in the library, or on the Internet, from consumer research organizations who collect data on varied subjects for purchase. (Saunders et al, 2000).

The advantages with secondary data are that it can be collected more quickly and it is an easy and inexpensive way of receiving information. It has also been shown to be useful when performing exploratory studies since it saves the researcher from "reinventing the wheel". Despite these, secondary data can pose a problem of finding relevant materials (Saunders et al 2000).

Primary data is a type of data, which is collected and assembled specifically for the research project at hand (Zikmund, 2000). It can be described as the one collected by the researcher in order to carry out the research. Primary data can be collected from sources such as questionnaire, focus group discussion, personal interviews, and telephone interview. Yin (1994) explained and advocated that the use of more than one source is a good practice as it increases the validity in scientific studies. Interviews are one of the methods of data collection used in qualitative research (Ritchie and Lewis, 2003).

For this study, interviews were the primary data collection method. Interviews are, as mentioned above, one of the most important information source in case studies (Yin, 1994).

The type of interview adopted in this study was face-to-face interviews (also referred to as personal interviews). Face-to-face interviews have several advantages. For example, it allows opportunity for the respondents to freely respond and reveal attitudes and feelings; makes it possible for probing further and has a higher rate of participation. (www2.edu.org/NTP/interviews). Telephone calls and e-mails were used to make appointments and confirm dates and time for pre-interview meetings as well as to discuss the contents of the study (interview guide). When it came to choosing the persons to be interviewed, the researcher applied the purposive sampling. This is because it was very important to get hold of knowledgeable, well informed, involved and well positioned officials within the institutions who could have a good understanding of the companies' credit risk management process.

Therefore the researcher contacted people in management who liaised him to knowledgeable officials in the credit departments and those connected to the departments. The prospective respondents were asked for their consents and interests to participate in the interviews, after which interview guides sent to them to orient the discussions and finally set the date and time for the meetings.

The actual interview (face-to-face) was conducted by the researcher on an average of 30 minutes per interview within 4 working days. The interviews were conducted in English since the respondents were very fluent and could express themselves well in English. In the process of the interviews, a mini disk recording device was used to record the interviews which were in the form of informal conversation. Also, the researcher took personal notes of certain issues of great interest and importance. Even though interview guides were sent to the respondents, at least, a week before the interview, the whole interview took the unstructured form as the respondents were allowed to tell their own stories with intermittent questions and certain clarifications.

After the interviews, the recorded conversations were transcribed word-by-word and were compared alongside the notes taken during the interviews by the researcher. He also sought clarification of any part that was unclear and all these took place within 48 hours.

**Method of data analysis**

Data analysis consists of "examining, categorizing, tabulating, testing or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study" (Yin 2003, p.109).

Miles and Huberman (1994) define qualitative data analysis as consisting of three concurrent flows of activity: data reduction, data display and conclusion drawing and verification. Data reduction, data display and conclusion verification were described as interwoven before, during, and after data collection in parallel to make up the general domain called "analysis" (Miles and Huberman, 1994). In this view, the three types of analysis activity and the activity of data collection itself form an interactive cyclical process.

*Pattern matching*: For qualitative data analysis, one of the most desirable strategies is to use a pattern-matching logic (Yin, 1994). Such logic compares an empirically-based with a predicted pattern. In this process, when similar results happen and for predictable reasons, the evidence produced is seen to involve the same phenomena described in the theory, and it is called "literal replication". In contrast, when the qualitative data analysis produces contrasting results, but also for predictable reasons, it is called "theoretical replication".

Other strategies used are the e*xplanation building*, where the goal is to analyze the qualitative data by building an explanation about the situation. (Pacitti, 1998); and the *time series analysis* which logically is the match between a trend of data points compared with a theoretically significant trend specified before the onset of the investigation, versus some rival trend also specified earlier, versus any trend based on some artifact or threat to internal validity.

In this study, the pattern matching technique will be used to compare data from previous studies/theories presented in the theory chapter and later chosen for supporting the research questions formulated. Also, a cross-case synthesis will be used to compare data from the two cases selected. This is done by looking at the similarities, contradictions and new information that each company provides in contrast with the one stipulated in the chosen theories and also in contrast with each other as their experience, results, processes and timing has been different. The first step after the interviews was then to organize the information according to the research questions and then compare it as described above.

# CHAPTER FOUR

# RESULTS AND DISCUSSION

## Introduction

This section is devoted to the presentation and analysis of data collected for the study. The analysis is based on risk profile of the companies, credit administration, credit appraisal, adoption of credit reference bureau and challenges facing the two institutions.

## Criteria employed by TF Financial Services and UT Bank to deliver credit

The credit administration is a part of a financial institution which takes care of the documentation in the loan delivery. It involves processing all the documents associated with the loan (e.g. the loan application, appraisal or review). In other words, the credit administration is the process of confirming the loan documents. In order to get the general picture of the credit risk management practices of both banks, the study first analyzes the current practices of the sample banks, which is particularly important to get an understanding on how the two firms administer and control their credits. The interviews reveal varying opinions between UT and TF in terms of understanding of risk and risk management. Although the level of understanding of risk management is more pronounced in UT, understanding level of risk management in TF is appreciable.

These were expected because it is assumed that the staff of UT have more work experience and could have better understanding of risk and risk management as compared with staff of TF. Based on this finding, TF should give more attention to training and professional development of their staff in the area of risk management. The results confirm the previous findings of Atta-Bronya (1997) that the more the staff understand the risk, the more easily they can identify it.

To understand the types of borrowing source that the firms finance, three years annual reports of UT Bank and TF Financial Services were examined and compared. It was revealed that identified sources of borrowing are high in UT, whiles all the identified sources of borrowing are moderate in TF. In terms of the type of borrowing carried out by the institutions, it was observed that UT provides more of working capital and personal loans as compared to TF. However, TF was found to offer more of inventory and accounts receivable financing. The results confirm the previous findings of Al-Tamimi and Al-Mazrooei (2007) that lending is the major source of banking activities.

Table 1 presents credit riskiness ranking of type of borrowing identified in the study in relation to the annual reports of the two institutions. The table shows that the type of borrowing that presents the highest credit risk to TF is working capital financing, whiles refinancing of existing debt presented the highest risk to UT. Purchase of fixed assets presented the next risk to TF. However, personal loans and working capital financing posed as the second and third highest credit risk to UT. Finally, inventory financing presented the least credit risk to UT. The results confirm the previous findings of Al-Tamimi and Al-Mazrooei (2007) that lending is the major source of banking activities.

**Table 1**

**Riskiness ranking of borrowing type**

| **Borrowing Type** | **TF Ranking** | **UT Ranking** |
|---|---|---|
| Purchase of fixed assets | 2 | 4 |
| Working capital financing | 1 | 3 |
| Inventory financing | 4 | 5 |
| Refinancing of existing debt | 5 | 1 |
| Personal loans | 3 | 2 |

Scale: 1 (High credit risk); 5 (Low credit risk)
Source: *Annual Reports of UT Bank and TF Financial Services*

Table 2 presents percentage of clients repaying their loans within the maturity date in the two institutions as approved by the institutions credit officers. In terms of the percentages of clients repaying their loans within maturity date, 41% - 60% of most TF and UT clients complete their loan repayment. This is followed by 61% - 80% rate of repayment of loan. While 10% of TF officials agree that up to 40% of TF clients complete their loan repayment, 9.1% of officials of UT claim that up to 40% of their clients complete their loan repayment. Close to 27% of officials of UT claim 81% - 100% of their clients complete their loan repayment. The findings indicate that clients of TF do not fully repay their loans within maturity date. The results support the previous findings of Al-Tamimi and Al-Mazrooei (2007) that non-banks institutions are facing repayment risk.

**Table 2**

**Percentage of clients repaying loans within maturity date**

| **Recoupment Rate** | **TF** % of credit officers | **UT** % of credit Officers |
|---|---|---|
| Up to 40% | 10.0% | 9.1% |
| 41-60% | 70.0% | 36.4% |
| 61-80% | 20.0% | 27.3% |
| 81-100% | 0% | 27.3% |

*Source: Annual Reports of UT Bank and TF Financial Services*

Respondents were asked about the determinants of maturity dates of loan facilities. As shown in Table 3, 53.8% of UT officials indicated that primary source of repayment was the main factor determining their loan maturity. In contrast, fixed tenor prescribed by product papers showed that 81.8% formed the main factor determining TF loan maturity. UT considerably depends on borrowers requisition to determine their loan maturity (see Table 3).

**Table 3**

**Determinants of maturity dates of loan facilities**

| | **TF** | **UT** |
|---|---|---|
| Primary source of repayment | 18.2% | 53.8% |
| Fixed tenor prescribed by product papers | 81.8% | 7.7% |
| Borrsowers requisition | 0 | 38.5% |

Source: *Annual Reports of UT Bank and TF Financial Services*

The study further examined the adoption of credit committee system to approve credit application. Further interviews with the Credit Managers of the two institutions revealed that: "*The risk appetite and philosophy, which indicate the strategic directions, plans and limits on controlling risk at TF are set by the Board, and there exist various sub-committees carrying different tasks*'. At TF, the Credit officer revealed that: '*The Credit Committee is responsible for the approval of credit proposals and the delegation of authority to divisional credit committees, and it is supported by Internal Audit and two dedicated functions, one of which is risk management*'. According to him, '*this function deals with all kinds of risks including credit risk and is responsible for setting credit risk management standards, which are a combination of governance structures, credit risk policies, control processes and credit systems which are known as Credit Risk Management Framework (CRMF)*'. At branch level, the management of credit risk is conducted by the branch credit departments, which are in charge of the establishment and maintenance of individual CRMF that complies with the headquarters.

An interview with a Credit Manager of UT revealed that the credit department monitors the risk profile, different responsibilities are held by different levels of officers and the implementation is always carried out by credit department be it district or headquarters. At UT, a Credit Manager revealed that: '*CEO and credit officers at different levels are the ones who are in charge of the risk management duty. In managing credit risk, a five-step risk management process and internal control framework, including direct access, control, report* *and management as well as challenge, is strictly followed within UT, which clarify the responsibilities as well as procedures*'.

Prior to the approval of the credit exposures, an assessment of the customer credit risk and credit facilities is undertaken at both UT and TF, which include a review of the purpose of the credit and sources of repayment. All the interviewees indicated that the firms' credit risk appraisal processes are used for risk identification and risk evaluation.

In the case of UT, a Credit Manager indicated that affordability tests are carried out, and the repayment capacity, sensitivity to economic and market developments as well as the risk-adjusted return are all examined. The interview with the Credit Managers of the two institutions revealed that the techniques applied in credit risk assessment vary at both institutions due to different features associated with different types of customers. For instance, the assessments of corporate borrowers at UT, transaction risk and financial markets counterparties are carried out by using credit risk models, while the bank combines management judgment in its evaluation of consumer lending and personal businesses.

At TF, it was also revealed that the responsibility for credit risk management lies with the Board of Directors, which is responsible for ensuring that an appropriate and conducive environment is created for managing credit risk. The board does this by setting comprehensive credit risk management policies and procedures as contained in the institution's credit policy manual. The manual contains an outline of the scope and allocation of the institution's credit facilities and the manner in which the credit portfolio is managed, that is, how loans are originated, appraised, supervised and collected at both the individual credit and portfolio levels. It also outlines the governance structure with clearly defined responsibilities and credit approval authority. The Board also periodically reviews and approves the firm's credit risk strategy in addition to reviewing and approving all credits in excess of the policy limit.

Regarding the main channel employed in obtaining information about personal loan in the appraisal process, the interview revealed that the two firms depend more on bank statement and pay slips, but it is more pronounced in TF than UT. The interview also revealed that UT looks more into existing credit history as compared to TF. Thus, the two institutions rely on bank statements, pay slips and credit history of the potential loan takers.

With respect to the main channel employed in obtaining information about business loan in the appraisal process, the results (Table 4) indicate that both TF and UT rely more on sales records followed by bank statement. However, UT depends more on existing credit records of the potential borrower compared to TF. Moreover, UT depends more on other information of the potential borrower compared to TF. The findings confirm Al-Tamimi‘s (2002) finding that the main techniques used by banks in risk management is previous credit records to establish credit worthiness.

**Table 4**

**Main channels used to obtain client information for business loans**

| | **TF** | **UT** |
|---|---|---|
| Bank statement | 29.2% | 27.6% |
| Sale records | 41.7% | 27.6% |
| Existing credit history | 12.5% | 20.7% |
| Other | 16.6% | 24.1% |

Source: *Annual Reports of UT Bank and TF Financial Services*

**Risk Assessment**

The interview revealed that UT assesses and analyses risk more efficiently as compared to TF, although there is no big difference between the two organisations, which means that interviewees viewed fairly and equally the questions of risk assessment, such as the analysis of the likelihood of risks, the use of quantitative analysis methods and the prioritizing of risks. The study contrasts Al-Tamimi (2002) that there is a significant difference between banks and non-banks in the practice of risk assessment and analysis, and in risk monitoring and controlling. It was expected that banks would be more knowledgeable in risk assessment and analysis, and apply more techniques in risk management. However, according to this study, the two firms were equally on the level field in terms of establishing standards, credit score, credit worthiness analysis, risk rating and collateral.

## Risk management practices employed by TF Financial Services and UT Bank

### Risk identification

Risk identification is very important step in risk management. Interviews with managers of the two firms show no significant difference between UT and TF in the practices of risk identification. This suggests that the two institutions are clearly identifying the potential risks relating to each of their declared aims and objectives. This also indicates that UT carries out a comprehensive and systematic identification of their risks compared to TF. Furthermore, UT develops and applies procedures for the systematic identification of investment opportunities as compared to TF. The results confirm the findings of Boateng's (2004) finding that risk identification, risk assessment and analysis are the most important variables or the most influencing variables in risk management practices. This means that TF needs to give more attention to risk identification and risk assessment and analysis.

Regarding risk identification methods, it was gathered during the interview that the most important four methods, chosen by most interviewees are:

1. inspection by the firms risk managers;
2. audits or physical inspection;
3. financial statement analysis and
4. Others

This result is also consistent with the conclusion regarding risk understanding, as more staff understand the risk, the more easily they can identify risk. Furthermore, this result on risk identification is consistent with the result of Al-Tamimi and Al-Mazrooei (2007).

Interview with the Credit Managers of the two institutions revealed that they have effective systems in place to enable them acquire adequate information on borrowers. An interview with a UT Credit Manager indicated that, *'Their system enables the bank to properly identify risks associated with individual borrowers and credit portfolio. The bank's risk analysts work in partnership with the sales function in the various business units (Wholesale Banking, Retail Banking, Treasury Department, and Investment Banking) to identify risks associated with the individual transactions from the onset'.*

The UT Credit Manager further revealed that after an in-depth review of the borrowers and the actual transactions being proposed to identify the inherent risks, risk ratings developed internally by the bank are assigned to both the borrowers and the facility being sought for. The rating system is based on a range of 10% – 100% to rate commercial and industrial borrowers, as well as SMEs. A rating of 100% identifies borrowers of the highest quality. A risk rating of 10% is assigned to borrowers of lowest quality or highest risk. The ratings which are based on the identified inherent risks, inform the risk analysts as to whether the borrower and credit facility should be accommodated having in mind the limits set in the bank's credit policy manual and other industry and regulatory standards.

In the case of TF, a Credit Manager revealed that the review of the proposed credit transactions includes a thorough examination of the borrower's business financials activities, analysis of it and sometimes solicit opinion of other bank in a bid to have a good assessment of the possible inherent risks. This system of involving both risk analysts and the sales function in the business units in the identification of potential inherent risks ensures that risk considerations are factored into the process right from the beginning. It also enables the two functions with diverse interests to work together at addressing any concerns surrounding the credit request so that a timely decision can be taken and a response given to customers without undue delays.

As observed during the interview, the use of the risk ratings system assists in the proper classification of borrowers and facilities in the firm's credit portfolio. The classification assists in measuring credit exposures across different borrower groups, product types, geographies, industry segments and other relevant risk factors using the same standards. The risks in the firm's credit portfolio are therefore identified as unhealthy portfolio structures (over-concentrations) and highlights deteriorating credit quality in certain classified groups.

Interview with the Credit Manager in UT revealed that market risks in UT are identified through daily monitoring of levels, and profit and loss balances of trading and non trading positions. This is made possible because the trading units maintain blotters for recording movements and balance sheet positions of trading instruments. Market risks are spotted by the Risk Management Officers of the internal control department when daily trading activities do not conform to approved strategies and when resulting risk exposures from such activities exceed approved price limits and the overall risk tolerance level set by the board. Risks that may arise from changes in market risk factors which may affect the value of trading and non-trading positions as well as income streams on non-trading portfolios are also monitored and identified by local investment firms on a daily basis.

In line with Basel II operational risk framework, both UT and TF categorize their operational risks into seven loss event categories based on their primary causes; internal fraud, external fraud, employment practices and workplace safety, dispute with clients, damage to physical assets, business disruptions and systems failure, and execution, delivery and process management. These categories formed the foundation of the design and construction of the firms' operational risk management software and therefore capture information along those lines. The process of operational risk identification is mostly based on self assessment exercises by all staff in the various units and departments in a form responding to a set of questions or checklist relating to their individual work schedules. In addition to the regular assessments of business activities to identify potential inherent risks, risk indicators such as thefts, failed trades, errors in funds transfer or loan disbursements are immediately highlighted and brought to the attention of management in order to initiate steps to reduce the impact of potential losses.

There is a difference between UT and TF in the practice of risk assessment and analysis. The most important answers were on questions about undertaking credit worthiness analysis; undertaking a specific analysis including the client's character, capacity, collateral capital and conditions; and requiring sufficient collateral. These results were expected because it is assumed that UT has more qualified staff, and accordingly they will be more efficient in risk assessment and analysis. The results confirm the findings of Al-Tamimi and Al-Mazrooei (2007) that there is a significant difference between banks and non-banks in the practice of risk assessment and analysis.

**Risk measurement**

Interviews with the Credit Managers of the two firms revealed that UT has credit risk management framework whiles TF does not have one of such frameworks. According to a Credit Manager at UT, '*Credit risk management framework includes a methodology to measure the average amount of expected credit loss inherent in its credit portfolio over a period of time. This enables the bank to decide on how best to manage the credit risk in its activities and portfolio, such as by setting aside the appropriate loan loss reserves or by selling loans to reduce risk*'. The approach is designed to be consistent with the internal rating based approaches in Basel II and it embraces estimates of the amount of exposure at default, probability of default and the severity of loss in the event of default (loss given default). In arriving at the credit risk measure at a particular point in time, the bank determines the level of the statistical expected economic loss in the event of default, that is, the bank's exposure at default. This figure measures the net present value of credit costs that the bank would face from the time of default until the end of the recovery process. Credit costs include all provisions taken against bad debts, write-offs, fully reserved interest earned that not collected and possible attorney fees incurred in the process of enforcing the bank's claims in court.

The bank then proceeds by assigning risk ratings to credit facilities of the borrowers in the credit portfolio. Their internal risk rating gives an indication of the severity of likely loss on the exposure which is referred to as the loss given default. The specific rating assigned to a credit facility is influenced by key transaction characteristics such as the presence of collateral and the degree of subordination. The facility risk rating also has corresponding loss norm which reflects the probability of default. The weighted average loss norm provides a measure of the portfolio risk profile and portfolio risk rating. The amount of credit exposure with a given facility risk rating is then multiplied by the corresponding loss norms to arrive at a measure of loss in the event of default on the exposure involved. On a portfolio level, the aggregate credit exposure with the portfolio risk rating is multiplied by the weighted average of loss norm.

*Liquidity risk*

Interviews with the Credit Managers of the two instutions revealed again that there is a difference between application of liquidity risk by UT and TF. UT uses the liquidity gap schedule (maturity ladder) to identify and measure the potential future funding shortfalls which are an indication of liquidity risk. In its methodology, the bank matches cash flows payable under non-derivative financial liabilities and assets held for managing liquidity risk by remaining contractual maturities. This exercise results in either positive or negative mismatches over various time horizons. The resulting gaps from this model may just be seen as a starting point for quantifying the bank's liquidity risk. With a comprehensive system of assessing future cash flows from all material assets, liabilities, off balance sheet items as well as other business activities of the bank, it however serves as useful tool for managing liquid risk in the bank. In order to provide a more in-depth indication of the liquidity situation, the bank also checks the degree of diversification of the sources of funds. This is to ensure that they correspond with the bank's risk profile, in line with the bank's liquidity risk management strategy and also meet prudential requirements. Since liquidity risk arises during short unexpected periods of time, the bank constructs maturity ladders on very short (weekly) intervals which are then consolidated into monthly and quarterly time horizons. This ensures that the liquidity gap schedule remains an effective instrument for risk identification and measurement. However, TF faces liquidity risk because 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.

*Interests rate risk*

With respect to determinants of interest rates or pricing in the two organisations, it was observed that both UT and TF depend more on perceived risk in determining their interest rates. The second and third rated determinants of interest rates in the two institutions are cost of funds and mode of repayment. The least mentioned determinant of interest rate among the two institutions is loan tenor. The study is consistent with Richard *et al*.'s (2008) finding that the two most important factors that financial institutions consider in interest rate determinant are perceived risk and cost of lending.

Interviews with the Credit Managers of UT and TF revealed that UT uses gap analysis to measure its exposure to interest rate risk where it compares the values of interest rate sensitive assets and interest rate sensitive liabilities that mature or reprice at various time periods in the future. However, TF uses market interest rate movements to determine its exposure to interest rate risk.

Interviewees were asked about the extent to which pricing of interest rate help in mitigating credit risk. Officials of TF indicated that usage of interest to mitigate credit risk has been effective. Officials of UT also perceived their application of interest rate to reduce credit risk has been effective. The findings confirm the study of Hassan (2009) that interest rate is effective in mitigating risk in bank.

*Foreign currency risk*

Foreign currency risk is taken on by the financial institutions when there are fluctuations in the prevailing foreign currency exchange rates on its financial positions and cash flows. The actual impacts of such mismatches are measured through the income statement as foreign exchange gains or losses. For instance, an interview with Credit Manager of UT revealed that the bank's foreign exchange risk management is based on mismatch analysis which helps it to determine imbalances between maturing foreign assets and liabilities. These imbalances are then evaluated in the light of current and expected exchange rates, domestic and international market interest rates and acceptable risk return profiles.

With the help of scorecards, the Operational Risk Manager is able to translate the qualitative assessments from the various units to quantitative metrics to give a clearer picture of the different types of operational risk exposures. Loss events are also recorded and the amount of potential or actual inherent losses are stated and reported to the appropriate management level by the heads of units and departments. Internal loss events are categorized into actual loss (an incident that has resulted in a financial loss), potential loss (an incident that has been discovered, that may or may not ultimately result in a financial loss) and the near - miss - events. A near miss event is an incident that was discovered through means other than normal operating practices and that, through good fortune or focused management action, resulted in no loss or a gain.

*Monitoring of credit risk*

Monitoring of particular credit is done in order to ensure the persistent control on the capability of the client to meet its credit obligations. Credit officer thus, considers the degree of a risk associated with the loan, and whether the loan is sufficiently secured. The result of this procedure is to assess whether in the final effect, the client is capable of repaying the principal and the interest. Risk monitoring can be used to make sure that risk management practices are in line with desired practices. Proper risk monitoring also helps bank management to discover mistakes early. Interviews revealed that there is a significant difference between UT and TF in risk monitoring and controlling. This result is consistent with the result of the study of Al-Tamimi and Al-Mazrooei (2007), who found significant difference between banks and non-banks in risk monitoring and controlling. As observed in this study, the banking firm was somewhat efficient in monitoring risks as compared to non-banking firm. In this regard, TF needs to review the methods and techniques they use in monitoring and controlling risk activities.

*Risk monitoring and control*

The firms' credit risk management policy also provides for an effective administration of their credit portfolio. For instance, the Credit Administration Unit of UT monitors the performance of individual exposures on a daily basis to identify any signs of deterioration and ensure that adequate provision has been made for such. In addition to this, the units ensure regularity or credit approvals and line utilizations, authorize disbursements of credit facilities when approval conditions are met and perform periodical reviews of collateral. These are to ensure that new credit risk exposures do not negatively affect the total credit portfolio of the bank whiles existing credit facilities remain in good conditions and that the bank is well protected from losses. Accounts showing distressed signals are isolated and reported. These then receive the attention of the Remedial Management Unit which is well resourced and have the specialized focus of managing problem credits. The unit helps develop effective strategies and work out programmes to rehabilitate the troubled credits and advices management on appropriate provisions to be made for them.

In addition to the Credit Administration Unit monitoring of the performance of the credit portfolio, the bank's Internal Control Unit also conducts periodic checks on credit granting activities to ensure that they comply with prudential standards and the bank's credit policies and procedures. Such audits also help to identify areas of weaknesses in the credit administration process, policies and procedures as well as any exceptions to policies, procedures and limits.

*Risk reporting*

Various internal risk management reports are regularly sent to management and the board from the Risk Management functions. These provide detailed information on the bank's credit exposure (portfolio) and help management and the board to ensure that the portfolio performs in accordance with approved concentration limits and overall risk profile. The reports also serve as early warning systems designed to monitor troubled exposure and credit process problems. With an elaborate information management system embedded in its IT platform, the managements of UT and TF are provided with timely information on market risk exposures. Scheduled reports on the banks position are also provided by the treasury departments to assist in decision making.

## Challenges facing TF Financial Services and UT Bank

The study examined the challenges faced by the two firms. Credit officials of TF rated infrastructure as their major problem while some credit officials of UT also rated it as their worst problem. The study supports the findings of Asiama (2008) that Ghana is characterized by poor address system, which makes lending very difficult. It is pertinent to note that lack of infrastructure significantly increases the cost of borrowing. Another rated problem facing financial institutions is high cost of funds, with higher proportion of TF officials rating it as a challenge, whiles few of the UT officials ranked it as their third worst problems. The study contradicts Asiama's (2008) findings that operating costs of banks are higher as compared to the non-banks. A little over a third of UT officials identified inefficiency in the court system as complementing the gravity of credit risk problems.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Introduction

This chapter provides concluding remarks of the adequacy of the two institutions risk management framework in handling the risks confronting them. The conclusions are supported by a summary of the results from the analysis on the both institutions credit control and administration, risk management techniques and how they monitor risks. The chapter also contains a couple of recommendations aimed at improving the two institutions risk management system.

## Summary of findings

This chapter looked at the risk management framework employed by UT and TF to enable them achieve appropriate balances between risk and reward. The framework is basically structured to handle credit risk, market risk and operational risk which the banks consider to be the major risks inherent in their business activities.

The four most important methods of risk identification, used mostly by the institutions included inspection by the banks risk managers, audits or physical inspections, financial statements analysis and risk survey. UT is somewhat efficient in assessing and analyzing risks, risk management practices, risk monitoring and risk identification.

The results also provide some amount of evidence about efficient credit risk management in UT compared to TF. The interviews revealed that UT and TF have different ways in practicing of risk assessment and analysis and in risk monitoring and controlling, whereas there is no difference between UT and TF in the aspects of risk identification, risk management practices and the practice of credit risk analysis. TF rely more on qualitative analysis, whiles UT carry on both qualitative and quantitative analysis. However, UT pays more attention to the use of quantitative analysis (i.e. use of historic data and forecast means) to analyze credit risk.

Again, the interviews revealed some challenges faced by the two institutions. These challenges included poor addressing system, poor infrastructure and high cost of funding.

**Conclusions**

The study revealed that UT had adequate risk management structures compared to TF to ensure sound management of credit, liquidity, interest rate, currency and operational risks. This is premised on the fact that an appropriate environment has been established for managing risk. This included a solid governance structure with clear obligations and lines of authority and policy documents approved by the board containing procedures, processes and techniques for handling various risks. Moreover, relevant tools and management information systems have been provided to ensure adequate and consistent identification, measurement, monitoring and controlling as well as reporting on the various risks the banks are exposed to. Effective controls have also been put in place in UT as compared to TF to ensure compliance to the tenet of the institutions' risk management framework by linking portions of the institutions' reward and punishment system to the extent of adherence to risk issues. There are strong risk cultures in UT as all staff are conscious about the risks inherent in their activities. They are always on the lookout to avoid or minimize the incidence of risk.

The findings suggest several policy implications: First, considering that credit risk of TF (a non banking institution) remains low, it is appropriate that serious attention be given to risk management in non banking institutions especially on those factors identified as having significant impact on its credit risk. Second, although non banking institutions have to comply with the same regulatory framework as in conventional banking. There should be greater and adequate disclosure of information on concentrations of financing assets and risks as in conventional banking reporting. This would help the public to understand better of the extent of the risks involved. Third, since credit risk of non banking institutions is influenced by different set of factors compared to its conventional counterpart, managing credit risk in non banking institutions such as TF requires a different approach that caters for its unique financial operations. The establishment of fund management techniques by BoG is timely to address risk management problems. In addition, as inferred by the findings of this study, the efficiency in managing the risky assets is crucial to reduce credit risk. Since hedging is not possible against the operations of non banking institutions, reducing adverse selections and strengthening internal controls are suggested as measures to increase efficiency in mitigating credit risk in TF.

The study tried to cover most of the aspects of risk management. However, this study did not address in detail credit risk management. This type of risk can be addressed in future studies as credit risk represents the most challenging type of risk. Further research may also consider analyzing liquidity risk management as liquidity position affects the continuity of commercial banks and a weak liquidity position might lead to the liquidation of commercial banks. Further research may also focus on Basel II and risk management, one of the hottest topics in the banking industry.

**Recommendations**

The study provides the following recommendations to reduce, if not to eliminate credit risks among TF and UT operations:

1. TF needs to review the methods and techniques they use in risk assessment and analysis. In that respect, TF should choose techniques that are best and tailor most to the nature of their credit exposure.

2. TF should pay more attention to monitoring credits exposure and quality.

3. TF should revise its dependence on traditional techniques of credit risk mitigation and blend traditional and conventional approaches in managing credit risk.

4. Based on the findings, UT will be in a better position to recoup almost all the loans given to their clients if the existing credit risk management structures are improved.

5. UT should step up its training and professional development for the staff to augment the already existing understanding of risk and risk management.

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# APPENDICES

## APPENDIX 1

## INTRODUCTORY LETTER

**UNIVERSITY OF CAPE COAST**

**SCHOOL OF BUSINESS**

**DEPARTMENT OF ACCOUNTING AND FINANCE**

Dear Sir/Madam,

**INTRODUCTORY LETTER**

The bearer of this letter, Mr. Ben Owusu Eyifah, is an MBA (Finance) student of the School of Business. He is writing his dissertation on credit risk management of non-bank and banking institutions: a comparative study of TF financial services and UT bank.

We would be grateful if you could assist him by granting him interviews and any other information that he may need to complete his work.

We appreciate your co-operation.

Yours faithfully,

***Signed***

Stephen Asante (Mr.)

**HEAD, DEPT.OF ACCOUNTING AND FINANCE**

## APPENDIX 2

### Interview Guide

### CREDIT RISK MANAGEMENT OF NON-BANK AND BANKING INSTITUTIONS: A COMPARATIVE STUDY OF TF FINANCIAL SERVICES AND UT BANK

### INTRODUCTION

The objective of this study is to solicit information from respondents on how credit risk is managed in non banking and banking institutions in Ghana. This is purely for academic purpose and all information given will be treated as such. Your candid opinion in answering the questions would be very much appreciated. Please note that all responses will be treated with the confidentiality it deserves.

### SECTION A – COMPANY RISK PROFILE

1. Is commercial lending a key source of earnings to your company?
2. What type of borrowing source does your institution normally finance?
3. What type of the borrowing cause in your opinion presents the highest credit risk to your company?
4. Are your firm’s borrowers classified according to a risk factor?
5. What percentages of clients repay their loans within maturity date?

**SECTION B – CREDIT ADMINISTRATION**

6. What are the determinants of maturity dates of loan facilities?

7. Does your company have credit management policies and procedures?

8. If yes, why does your company deem it important to have credit management policies and procedures?

9. To what extent are you familiar with the credit policy manual of your company?

10. Does your company uses credit committee system to approve credit application?

11. Does your company uses different methodology in the management of personal loan portfolio and business loan portfolio?

12. Does your company use the same mode of loan repayment for both personal and business loan?

13. What are the determinants of interest rates or pricing in your company?

14. To what extent does pricing or interest rate help in mitigating credit risk?

**SECTION C – CREDIT APPRAISAL**

15. What are the main channel use to obtain client credit information for Personal loan?

16. What are the main channel use to obtain client credit information for Business loan?

17. What are the main credit assessment use for Personal loan?

18. What are the main credit assessment use for Business loan?

**SECTION D – CREDIT MANAGEMENT**

19. Is responsibility for risk management clearly set out and understood throughout in your organisation?

20. Is managing risk important to the performance and success of your firm?

21. Do applications of risk management techniques reduce costs or expected losses?

22. What risk identification method does your firm use?

23. Does your firm undertake a credit worthiness analysis before granting loans?

24. Before granting loans, does your firm undertake a specific analysis including the client's characters, capacity, collateral capital and conditions?

25. Does your firm's policy require collateral for all granting loans?

26. What are the underlying reasons for the type of financing provided by your institution?

27. Why does your institution find Working Capital most attractive?

28. Briefly describe your credit administration structure.

29. What in your view explains the seemingly poor loan recovery rate by your institution, if any?

30. Does your institution use individual approving system to approve credit application?

31. Does your institution use different methodologies in the management of personal and business loan portfolios?

32. Does your institution use different methodologies in mitigating personal and business loan portfolios?

33. Does your institution use sales records for credit assessment?

34. Why are sales records use to assess credit worthiness of business loan clients?

**SECTION E – CREDIT REFERENCE BUREAU**

35. How do you see the introduction of credit reference bureau into the financial market?

**SECTION F - CHALLENGES**

36. Can you explain the challenges facing your institution? If any.