Original research papers

CREDIT RISK MANAGEMENT IN AGRICULTURAL DEVELOPMENT BANK IN GHANA: EVIDENCE FROM VOLTA REGION

ABSTRACT

Credit risk has been a key area of interest not only to financial players but also to everyone in the business and economic community around the globe. This is because the risk of a business client or customers not meeting its promises fully and on time can impact negatively on the other party to the trade or agreement. While financial institutions have faced difficulties over the years for various reasons, most of the crucial banking challenges continues to be directly linked to improper investment risk management, relaxed credit standards for customer, or insensitivity to changes in economic or other circumstances that can worsen the credit situation of a bank. This study assesses the effectiveness of credit risk management in Agricultural Development Bank Ghana Limited in the Volta Region. Both primary and secondary sources of data were used in the study. Purposive sampling was used to collect primary data from the staffs of the credit departments and customers of all ADB Ghana Ltd branches in the region. Inferences were drawn using descriptive statistics. The findings revealed that the bank employed mostly the judgmental approach to credit assessment where the assessor's experience and understanding of the case to the decision to extend or refuse credit is most crucial. It was also revealed that the bank's objective of managing credit risk has been mostly achieved due to the mechanisms put in place

by the bank's risk management department. Based on the findings, the study recommended that the staff of the credit department must continually be trained to strengthen them to improve on their performance and a platform created to educate customers on the amount of capital the bank loses and its accompanying consequences when they fail to payback their loans.

Keywords: Credit risk, Agricultural Development Bank, Portfolio, Customers, assessment Judgmental approach, Management, Volta Region, Ghana

1. INTRODUCTION

Financial institutions are companies that provide financial and non-financial services to assist individuals and organizations in their monetary and other non-monetary issues. Financial institutions consist of three primary groups and these are the savers (the surplus unit), borrowers (the deficit units) and the lenders (financial institutions). Financial institutions play major role in the management of any economy. They provide the positive functions of bearing and managing risk on behalf of their clients through the pooling of risk specialists like brokers, financial institutions, intermediaries between savers and borrowers by collecting cash deposits from the surplus unit and lending them out to the deficit unit. They serve as capital and debt markets and responsible for transferring funds from investors to companies in need of those funds. Financial institutions facilitate the flow of money through the economy.

Credit risk has been a key area of interest not only to financial players but also to everyone in the business and economic community around the globe. This is because the risk of a business client

or customers not meeting its promises fully and on time can impact negatively on the other party to the trades fortunes.

Many banks face the risk of credit losses in the selection of their products, which is rising steadily and this risk is regarded as one of the commonest and most wide spread risk in banking. The knowing your customer (KYC) policy is one of the recent strategies introduced by banks as part of their customer relationship management (CRM) strategy and makes it easier for the banks to foster a closer relationship with their customers / clients in order to mitigate against credit losses. While financial institutions have faced difficulties over the years for a host of reasons, the major cause of serious banking problems continues to be directly related to loose credit standards for borrowers and counterparts, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can cause a deterioration in the credit standing of a bank. Trustworthiness and creditworthiness of customers is crucial to the sustenance of all banks. Therefore banks will need to critically analyse the creditworthiness and trustworthiness of clients as in managing credit risk if they want to stay in business perpetually. These institutions are unable to retrieve large loans given to their customers due to lack of appropriate collateral securities by their customers. They are also unable to retrieve small loans given to customers due to the lack of qualified guarantors for such amounts and where the necessary appropriate collateral securities.

The essential objective of financial institutions is to make profit by providing services to its clients therefore if the cost of rendering these services is high, the ability to make profit, as an organizational objective will not be accomplished hence effective credit risk management process is a way to manage portfolio of credit facilities. The objective of this study is to assess credit risk management strategies put in place by the Agricultural Development Bank (ADB)

Ghana Limited in the Volta Region and come out with recommendations to effectively mitigate credit risk.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature. Section 3 presents the methodology of the study. Section 4 presents a pioneering work on the results and discussions, while section 5 draws conclusions and makes appropriate recommendations.

2. LITERATURE REVIEW

2.1 Review of Risk Credit Management

As stated by Sullivan Arthur and Steven M. Sheffin [1], credit is the trust which allows one party to provide resources to another party where that second party does not reimburse the first party immediately (thereby generating a debt), but instead arranges either to repay or return those resources (or other materials of equal value) at a later date. The international Dictionary of Management refers to credit as borrowing up to certain limit by a bank etc. to an individual or a company. According to Hitt, Middlemist and Mathis [2] on management concepts and effective practice, defines management as the effective and efficient integration and coordination of resources in order to achieve desired objectives. Commercial banking plays a leading role in commercial lending (Allen & Gale, [3]). However, he potential sources of risk in the financial services sector are very widespread, most of these includes liquidity risk, interest rate volatility, market and credit risk, foreign exchange risk and political risks (Campbell, [4]). However, credit

risk is the most crucial challenge to banks and all financial intermediaries (Gray, Cassidy, & RBA. [5]).

According to Gande [6], commercial banks provide investment-banking services regularly in many countries by making available new credit facilities to their customers. Bernake [7], thinks that the credit creation process thrives by transferring funds from final savers to borrowers.

Jimenez & Saurina [8], summarized credit the risks indicators of credit risk to include problem loans, the level of non performing credit advances and provision for credit losses. A credit facility, which has been granted by a financial institution and either partially repaid on time or fully where there is a high risk of default is known as credit risk. Experience derived from advancing of loans to customers overtime enabled the banks to craft a clear guideline regarding granting of new credit facilities and extension of the size of the existing credit facilities. To mitigate the risk of connected lending, it is necessary to take steps above to closely monitor, control and manage the risk. (Basel, [9]). The credit granting guidelines are very important to the evaluation process of loan application, which will ensure the total loan portfolio of the bank according to its own integrity (Boyd, [10]). It is important to establish a sound credit granting processes, resilient credit risk environment, appropriate management of credit risk, policies and strategies concerning the allocation of bank credit facilities as well as the manner in which a credit portfolio is managed i.e. the beginning of the loan applications process, appraisal, supervision and collection are basic elements for effective credit risk management (Basel, [9]). Altman, Caouette, & Narayanan [11], believes that some of the important factors involved in credit risk management systems include, evaluation of negative events probabilities, credit rating procedures and the consequent losses given these negative migrations or default events. Campbell [6], observes that most studies have been mainly focused on the challenges of

developing an effective and efficient means of disposing of these bad debts, rather than for the provision of a regulation and legal framework for their prevention and control. Macaulay's [12] concluded that credit risk management is the best practice in financial institutions and observes that above 90% of the banks in USA has adopted the best practice because risk management after the survey conducted in the United States. Insufficient credit policies are still the major source of serious challenges in the banking industry. This has led to efficient and effective credit risk management issues gathering momentum and the needed attention in recent years. Maximizing a bank's risk adjusted rate of return by maintaining credit exposure within acceptable limits is the major role of an effective credit risk management policy. Moreover, banks need to manage credit risk in the entire investment portfolio as well as the risk in individual credits transactions. Private banks are more serious with the implementation of effective credit management practices than state owned banks. Kuo and Enders [13] surveyed the credit risk management policies for state banks in China and found that with the rapid emergence of the financial market, the state owned commercial banks are confronted with the unparalleled challenges and it is therefore very difficult for them to compete with foreign banks unless they make some critical changes. In this critical change, the restructuring of credit risk management is an important step which determines the ability of state owned commercial banks to in China to survive the challenges or not. Research however faults some of the credit risk management (Campbell, [6]). Singh, [14] conducted a survey on credit management practices in Indian Commercial Banks and observed that the Credit Risk Management Policy of a bank determines the Credit Risk Strategy. Singh was also of the view that these policies must be clear on the target markets risk measurement, acceptance/avoidance levels, tolerance limits, preferred levels of diversification and concentration, management mechanisms. Singh then concluded that, the continuously improving

risk management practices in the bank will energise the banks and give them competitive advantage in the market.

In summary, it is becoming quite clear from available literature on credit risk management around the globe that, financial institutions have realised the important role of credit risk management in the sustainability of their institutions and hence making continuous and frantic efforts towards improvement in their credit risk management approaches or policies in line with global trends in order to stay competitive.

3. METHODOLOGY

3.1 Methodology

The population of this study comprises, the officers of the credit management department and customers of the seven branches of the Agricultural Development Bank (ADB) Ghana Limited in the Volta Region of Ghana. The Agricultural Development Bank Ltd was chosen because it was set up primarily to help promote Agri – business in Ghana. The customers are mostly salaried workers and subsistent farmers and extending credit facilities to these categories of customers comes with very high rate of credit risk. The study considered the credit risk management practices of the ADB Ghana Ltd. branches in the Volta Region for the period of 2010 to 2015.

Data for the study was obtained from primary and secondary sources. Primary data was obtained through administering of questionnaires to the purposively selected staff and customers of ADB Ghana Ltd. in the Volta Region. Secondary data was obtained from records of pre-existing data

on the credit management information of the bank in the region, published data, journals, books and other archives

The study purposively sampled and interviewed all the seven (7) credit managers of the seven branches. The study further stratified the region into three strata namely Central, Southern and Northern zones and purposively sampled one (1) credit officer each from the three strata making a sample total of 10 officers from the credit management department of the bank in the region. On the part of the customers, the study purposively sampled 5 branches and purposively sampled and interviewed 10 customers each from a branch, making it a total sample size of 50 customers.

The study gathered data from the staffs on the following variables below;

i. Availability of risk management department.
ii. Category of credits and nature of beneficiaries,
iii. Collateral requirements for credits,
iv. Risk considerations before granting credits,
v. Interest rate considerations before granting credits
vi. Credit worthiness of customer assessment
vii. Credit risk reduction measures
viii. Procedure for evaluating securities presented by customers.

The data from the staffs were collected by local agents from 12th to 16th of August and September 2015. The data collection was designed in this manner because the bank staffs are always busy at the end of the month when salaries are being paid.

Local data collection agents were also used in the collection of the data from customers of the bank where the agents conducted interviews and administered questionnaires on the following variables below;

i. Type of accounts operated by customers
ii. Credit accessibility

iii. Customers knowledge of interest rates charged on loans

iv. Risk assessment of loans by customers

This was done in the beginning of the month from 1st to 5th of August and September 2015. The beginning of the month was chosen because that is the time salaries are paid and the bank has long queues hence customers will have some ample time to respond to the questions whilst they wait to be paid.

The data collected was analyzed using SPSS and the results were organized into tables, charts and percentages. The information obtained from the staffs of the credit department was mostly analyzed in narrative form (qualitative) and partly in the quantitative form.

4. RESULTS AND DISCUSSION

4.1 Management of Credit Risks

The main objective of the study was to find out how credit risk is managed in financial institutions. Credit management is an accounting practice that includes assessing a customer's credit worthiness and monitoring payments. A good credit management system would help you to reduce the amount of capital tied up with debtors. From the responses received from the management of Agricultural Development Bank, the various techniques and methods used in managing credit risk include strict evaluation of loan requests before granting approval, effective monitoring, effective collection check and credit watch list activities.

4.2 Risk Management Department and Mechanism of Enhancing Risk Management

From the data gathered all ten (10) the respondents (staff) who were asked whether the banks Risk Management Department scrutinizes loan application documents and procedures before they are approved responded in the affirmative.

According to them, the Risk Department normally assesses the credit worthiness of the customers (loan applicants) through their financial statements. This guides them as to determine the credit worthiness of the loan applicants.

Another control mechanism used by the department is the assessment of credit reports or customers' payment history and if possible, with other firms, in order to know the frequency at which the customers pay their debts, before deciding on whether or not to extend the loans to them.

The Department also assesses the profitability of the venture/transactions to be undertaken by the customers, with the loan. This is done to determine whether their customers (the bank) may be able to use their loans to do a profitable business in order for them to be able to pay back their loans.

However, the most obvious way of obtaining an estimate of a customer's profitability of non-payment is whether he/she has paid his/her previous debts.

4.3 Category of Credit and Beneficiaries

The responses from the management of the bank revealed the following categories of credit are available to customers of ADB Ho.

I. Short-term facilities such as overdraft and revolving short term loan,
II. Medium term loan for project financing and
III. Long term loans

The respondents' answers relating to the category of beneficiaries revealed these two categories of loan beneficiaries. That is business customers and individual salaried workers. The type of credit granted will help the bank to know the policy to be established in order to manage credit risk efficiently and effectively.

4.4 The Demand For Collateral Securities

From management and workers on collateral requirements, it was gathered that collateral in the form fixed assets such as land and buildings (mostly for commercial purposes), treasury bills or fixed deposits, savings and current accounts are normally demanded by the bank for business loan category applicants. These collaterals help the bank to recoup its money faster when the customer defaults in the repayment of the loan.

Also the bank mostly does not demand collateral securities from salaried workers since the amount due are deducted from their salaries at source. The Bank reckons that such loans are less risky compared to the business loans and the amounts are relatively smaller.

4.5 Types of Risk Considered in the Approval of Loans

The response to this question revealed that the bank does not consider only one type of risk but rather considers all the types of risk. They also added that the types of risks applicable depend on the kind of request being made by a particular customer.

4.6 Consideration of Interest Rates by the Bank

From the data collected, it has been realized that the bank uses the floating rates of interest in charging the interest on the commercial purpose/business loans and uses fixed rate of interest in charging interest on agricultural loans. Also, they added that for commercial or business loans on short-term basis are charged at fixed rate whiles medium to long term loans attracts floating rate. This implies that the bank applies both rates in charging the loans based on the status of the loan being given out.

4.7 Assessment of Credit Worthiness of Customers

It was evident from the responses gathered that the management of Agricultural Development Bank, groups the assessment of credit worthiness of customers into qualitative and quantitative.

According to the bank, qualitative assessment involves using attributes such as management expertise, business environment, character of customers, customers' willingness to meet credit obligation whiles quantitative assessments involves the use of audited financial statements, account operations and cash flow projections.

The study revealed that ABD Ghana Ltd uses mainly follows judgmental approach which part of qualitative evaluation and this is in agreement with a an approach coined by Ken Brown and Peter Moles [15], and coined as ***CAMPARI***, which represents and explains the risk mitigation

associated with credit issuance performance. Below is the brief insight in to the judgmental approach by Brown and Moles.

C – Depicts the character of a firm and its managers

A – Represents the ability of managers/directors

M – Means (of repayment based on financial resources of the credit)

P – Stand for the purpose for which the credit was being sought after.

A – Represents amount in absolute and relative terms)

R – Repayment (how, when, likelihood)

I – Denotes insurance and explains what will ensure the bank gets its loan repayment in case of any unforeseen circumstances.

ADB's Loan amount to customers depends on several factors and includes considerations on the above qualitative methods and also depends on subjective, objective, external and internal information. All ADB Ghana Ltd loans are always insured against risk.

4.8 Credit Risk Reduction Measures

The bank confirmed that there are always measures put in place to reduce credit risk.

Some of these measures include;

Regular monitoring of the performance of the businesses being undertaken by the customers. This move according to the bank makes loan beneficiaries conscious of their efforts to put the loans to the best and effective use to generate profit in order to pay back their loans.

The bank officials also pay regular visits to the customers to encourage them and advise them on how to run their businesses to yield profit.

The bank also established a credit period for customers within which customers are expected to pay back their loans.

ADB Ghana Ltd has also been insured against credit risk by the Central Bank of Ghana as a means of mitigating credit risk since there may be a default on the part of the customers.

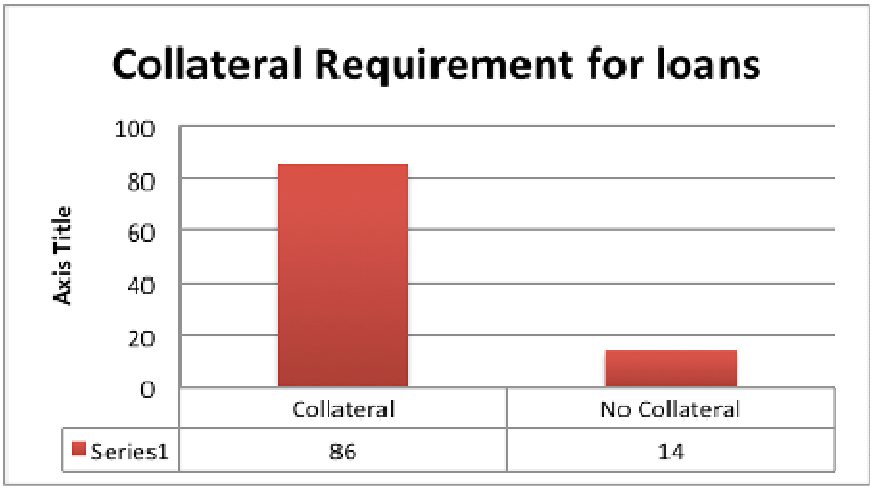
Furthermore, the bank deducts the loan and the interest on loan monthly from the customers' bank accounts, used to secure the loans. As a result, a customer whose account is negative or falls short of the monthly amount deductions will be made to pay a penalty. This is to ensure that customers always maintain some minimum cash balance in their accounts in order for the bank to make monthly loan deductions.

All these measures being effectively used by Agricultural Development Bank Limited have contributed to and are still contributing to the reduction in credit risk.

4.9 Evaluation of Securities Presented by the Customers

The response to this question demonstrated that 86% of customers of ADB accesses loans from the bank using collateral. 14% however did not present any collateral before assessing the loans and these 14% were mostly salaried workers. This is illustrated in 4.1 below. According to the responses gathered, most of the customers used their bank accounts to secure the loan whereas those who do not have accounts with the bank used their employers as guarantors to secure the loans, others also used their pension payments that they receive through the bank as collateral whiles others also presented fixed assets to secure their loans (in the form of pledges).

Fig. 4.1 Collateral Requirements for Loans

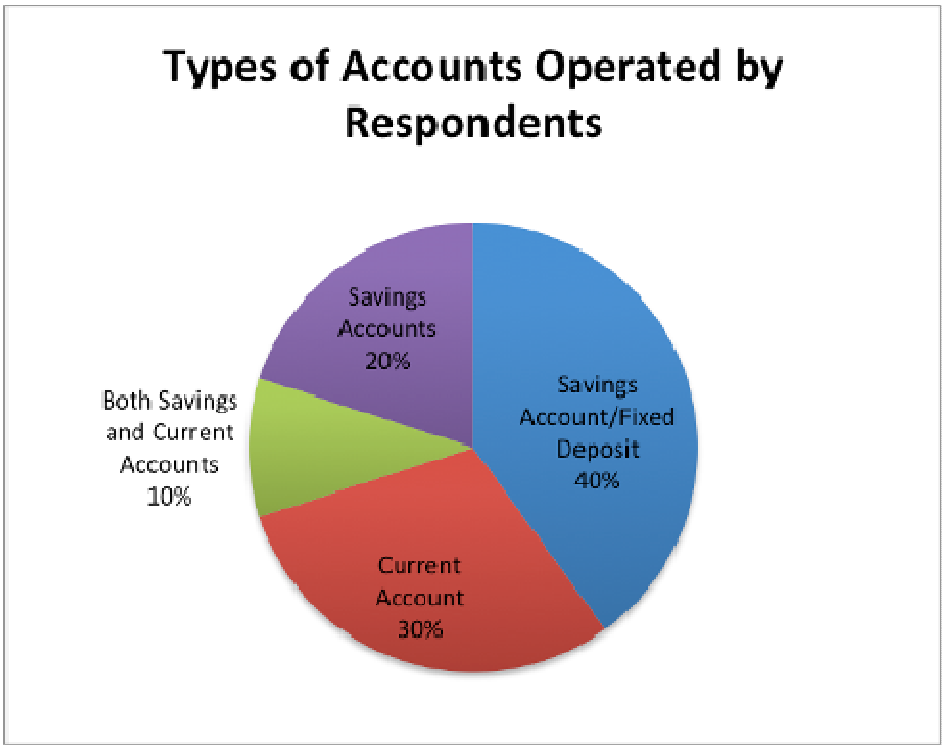


4.10 Types of Accounts Operated By Customers

According to the data gathered, the customers operate savings account, current account, both current and savings account, both the fixed deposit and savings account.

It can be deduced from the fig. 4.1 below that, twenty (20) customers operate savings account and fixed deposit account representing 40%, whiles fifteen (15) operates the current account representing 30%, five (5) operates the current and savings account representing 10% and ten (10) savings accounts with the bank also representing 20%.

Fig. 4.2 Type of Accounts Operated by Customers



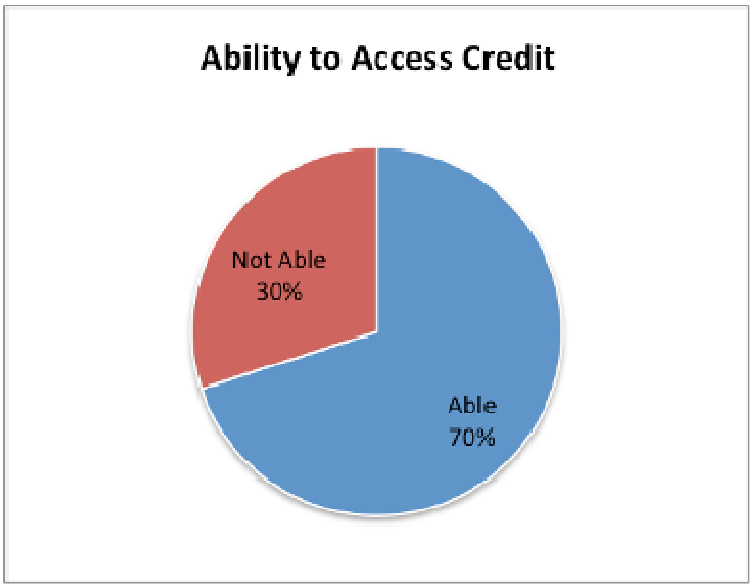
4.11 Credit Accessibility By Customers

From the data gathered, it was realized that thirty five (35) out of the fifty (50) customers had access to loans. The remaining fifteen (15) could not get access to the loans.

Fig. 4.3 clearly shows that 70% of the total customers who applied for loans, had access to the loans and 30% were not granted the loan.

This means that a greater proportion of customers that requested for loans had access to it whereas smaller proportion of the customers who applied for the loans were not granted. According to the responses, the customers who did not get access to the loan could not meet the credit requirements of the Bank whilst those who were granted met the requirements by the bank.

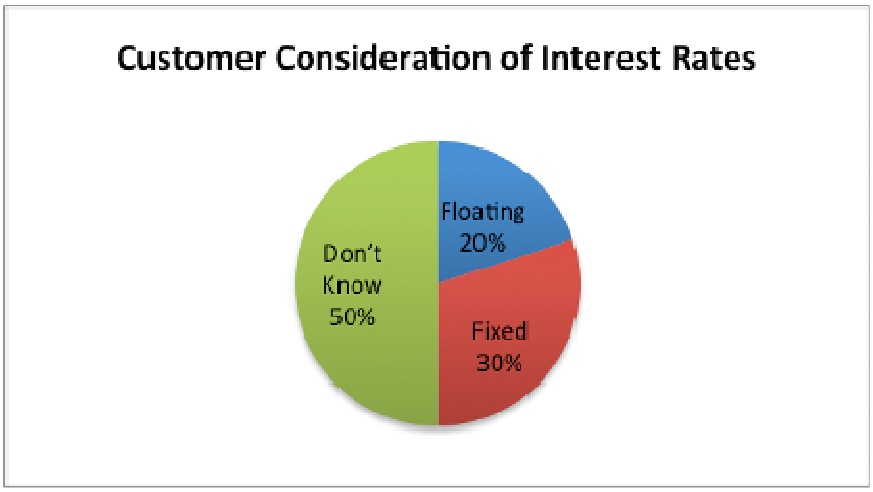
Fig. 4.3 Ability to Access Credit By Customers



4. 12 Customers Knowledge of Interest Rates

The Fig. 4.4 below illustrates that 50% of the customers who applied for loans do not know or care to know whether the bank charges interest on their loans using the fixed rate or the floating rate. 20% of them were aware that the bank uses floating rate and 30% were also aware that the bank uses the fixed rate. Most of the customers do not know how the interest on their loan is calculated.

Fig. 4.4 Customer Knowledge of Interest Rates



4. 13 Risk Assessment of Loans By Customers

After assessing the results from different customers as to whether they assess risk before taking loans, the study came to a conclusion that many of the respondents do not consider and assess risk before making application for loans. Customers rather think that loan risk assessment is a sole responsibility of the bank and hence the bank must put in place measures to ensure that customers payback their debt.

From fig. 4.5 below, it is clear that majority of these customers do not assess any risk associated with the loans before making the applications. Basically, their motive was to get the loan as quick as possible to finance their business.

Fig. 4.5 Risk Assessment by Customers

5. CONCLUSIONS AND RECOMMENDATION

5.1 Conclusion

From the results and analysis on the management of credit risk in Agricultural Development Bank Limited Volta Region, several issues came to light. This study from the response of the credit management department summarizes the various approaches to credit scrutiny employed by the ADB Ghana Ltd. into the following according to Brown and Moles [];

I. Judgmental methods; this applies to the evaluators or credit managers experience and understanding of the individual circumstance of the borrower and helps him to decide whether to extend or refuse credit
II. Expert systems; this is where lending committees or jury of experts use their expert or executive opinion to make decisions according to the lending guidelines.

III. Analytic models; this where a set of quantitative historical data are analysed to arrive at a decision.

IV. Statistical models; this makes use of credit rating and performance by using statistical tools to derive the needed relationship for managerial decision making

V. Behavioural models; this model observes the behaviour of customers over time and forms and expert opinion of the customer before decisions are made. The knowing your customer policy by the ABD Ghana Ltd is helping tremendously in this regard.It has been observed that the bank's objectives of managing credit risk have been mostly achieved. This is due to the mechanisms put in place by the bank's risk management department in enhancing the management of credit risk.

It was again found out that, the categories of customers that benefit from the credit include business customers, individual salaried workers and those in the agricultural sector.

It also came to light that interest rate risk affects the banks most especially in granting commercial loans on which the bank uses the floating rate in charging interest. This means that anytime there is a change (fall) in interest rate caused by government's policies it affects the loans given to the customers greatly but in the case of Agricultural loans where interest rate is fixed, the interest rate risk does not affect the loans greatly (Agricultural) when there is a change (fall) in government interest rates.

In addition, it has been realized that most of the customers who applied for loans do not know how the interest calculation frequency is applied, whether daily/weekly/monthly/quarterly/semi-annually or yearly.

Moreover, it has been gathered that Agricultural Development Bank Limited customers' rate of loan repayment is encouraging and effective. This is based on the fact that, the measures adopted by the management of Agricultural Development Bank Limited in reducing credit risk, makes it possible for the bank to retrieve its loans from its customers.

Finally, we found out from the study that there is no risk associated with the taking of securities by the bank before granting loans. This is because securities such as savings account, treasury bills, current accounts, deposits accounts and others, used as a collateral by the customers to obtain the loans, makes it possible for the bank to retrieve its monies from the customers should there be a default.

It was ascertained that failure to pay back loans advanced to customers is the major problem confronting financial institutions (Agricultural Development Bank). The study has generally observed that Agricultural Development Bank has the capacity in all respect to administer credit risk management very efficiently. The bank therefore has a future ahead for the improvement on its credit facilities. The Bank in its monitoring activities has help businesses to improve through their technical support services.

The main conclusion drawn from the study was based on the perception of the bank officials concerning credit, interest and loan repayment. Although customers pay their loans on schedule irrespective of the amount of interest, this should not be taken for granted but controls and consistent monitoring should continue since future changes in economic factors could lead to non-repayment of credit.

The research was basically undertaken on the management of credit risk in financial institutions and it has been revealed by the bank's risk department (Agricultural Development Bank) that the management of credit risk has been beneficial to the bank.

It must however be emphasized that in spite of the advantages associated with the management of credit risk, it still has setbacks/shortfalls.

5.2 Recommendations

There should be a platform where customers of the bank will be educated on the amount of capital the company loses when they fail to payback their loans. No financial institution can survive without adequate financial surplus, as such interest payment and principal repayments will help boost the bank's financial position.

In addition, the staff of the credit department must continually be trained to strengthen them to improve on their performance.

Also, as to whether the interest is calculated using simple interest or compound interest should be communicated clearly to the customers. This creates awareness and reduces doubt on the amount accrued on the loans to the customers, so that they will not feel reluctant in paying back their loans on the grounds that they do not know how the interest is accrued on the loans.

Furthermore, the study recommends that customers, who acquire loans with their pension payments as securities without having an account with the bank, should be made to open accounts with the bank. This (Bank Account) should be used as the basic securities and the pension payment used as supplementary security to obtain the loans. This will facilitate the

retrieval of the loans from these customers quickly, since the loan will be deducted from two sources.

Finally, the study recommends that the bank should put in place measures that will facilitate the processing of loans in time for customers who applied for loans. This is because some customers may need the loans to run some seasonal businesses and should the loans be given to them at the time the season is almost over, they may not yield their expected profit and may even incur losses. This will make it impossible for them to pay back their loans as expected in time or default completely.

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