An Assessment of Credit Risk Management in Non-Bank Financial Institution: A Case Study of Selected Co-Operative Credit Union in Ghana

Eugene Oware Koranteng¹, Frank Owusu¹, Maxwell Owusu¹, Evans Brako Ntiamoah²

¹ Faculty of Business and Management Studies, Koforidua Polytechnic, Ghana
² School of Management, Sichuan Agricultural University, Wenjiang, Chengdu, China

Abstract
The study sets out to assess the Credit Risk Management in the Non-Bank Financial Institution in Ghana. The case of selected Co-Operative Credit Union in Koforidua municipality. The study adopted both qualitative (case study) and quantitative methods respectively. A number of co-operative credit union was selected to gather data, which was acquired from answers obtained from our administered questionnaires. The population of the survey constituted the management and non-management staff and customers of the selected co-operative credit union. The data gathered for the study were analyzed using correlation and regression. It was discovered in the study that the Non-Bank Financial Institution (Co-Operative Credit Union) has been of much assistance to most businesses through the mobilization and provision of funds to enable them improve and expand their businesses. The researchers, however noted some constraints which, when eliminated, will enhance the development and survival of most businesses which seek financial assistance from these Non-Bank Financial Institutions to improve the Ghanaian economy. Among such constraints were; improper credit risk management, inappropriate approaches used in controlling loan default, to mention few. The researchers have put forward useful recommendation for consideration in order to improve the credit risk management to the greater benefit of management, customers and the entire nation. Non-Bank Financial institution has been of much assistance to most industries and businesses through the provision of finance to enable them improving and expanding their businesses. To also assess the credit policy written down by Non-Bank financial institution.it also ascertains the monitoring of loans granted to customers. Co-operative credit unions should put in facilities in place to educate the public on how customers and members can take advantage and improve upon their existing standard of living.

Keywords: Non-Bank Financial Institution, credit analysis, credit policy and decision, loan policy, monitoring, and loan losses (default and failures).

1.0 Introduction
Non-Bank Financial Institution has been of much assistance to most industries and businesses through the provision of finance to enable them improve and expand their businesses. Most firms take loans and other forms of finance from this Non-Bank Financial Institution. Since banking institutions do not always help them to acquire loans, these firms may need to go through difficult procedures before getting loans to finance their businesses. At times it is difficult to obtain financial support through banks, and it is best for business to pool their resources and raise capital to fall back during difficult financial times. Non-Bank Financial Institution has been recognized as a source of finance for most firms and organizations. The growth and success of a business can improve the economy as a whole. Therefore, this calls for the effective and efficient management of risk, of which a credit risk is the key risk areas to be analyzed. The management of credit risk has been acknowledged as the essence of proper financial management. A consideration of the relationship between credit risk and other risk areas that may occur in the organization must also be taken note of. For the attainment of long term success, the organization needs to manage their risk through the management of credit risk. This is because the institution may have a limited way of firms defaulting on loans. Moreover, Non-Bank Financial Institution performs similar functions to that of other financial institutions and therefore credit risk tends to be a problem for them.

In this research, an assessment of current innovations in credit risk management in the Non-Bank financial Institution will be considered. In the case of our research, we will consider the background of Co-Operative Credit Union.

1.1 The History of Co-Operative Credit Union
Co-Operative Credit Union started in Germany during the middle of the 19th century, started by populist movement aimed at helping factory workers who frequently had problems in acquiring bank loans. Based on the concepts of democratic decision making and self-help, Co-Operative Credit Union quickly spread throughout the European continent and was later introduced to North America. Today, Co-Operative Credit Union appeals to a
wide variety of social classes and income strata as reflected in the survey conducted by Co-operative Credit Union Association (CUA Magazine, 1993). The US Trade industry Association and Opinion Research Corporation together with the CUA observed that members of the Co-Operative Credit union tend to make more use of credit cards, checking account and home mortgage, than the general population. In Ghana, the first Co-Operative Credit Union to be established dates as far back as 1955, which was promoted by Fathers of the Catholic Church and was, started in Jerapa in the Upper West Region. Co-Operative Credit Union was predominantly in the North until 1959 when the Railways and Harbour Employees Co-Operative Credit Union was established in Sekondi Takoradi.

In 1968, as a result of a conference in Lesotho, South Africa and sponsored by CUA international, a move was made toward the establishment of a National Co-Operative Credit Union Association in Ghana. It was then followed by a conference held in Tamale in April, 1968, giving birth to the Ghana National Union and Thrift Association (GNACUTA), which is the forerunner of the Ghana Co-Operative Credit Union Association limited (CUA). Gradually, over the past thirty years, changes in the financial market place have allowed many credit unions to evolve into full service retail depository institutions. Today, Co-Operative Credit Union have the ability to offer complex financial products, just like banks. They have been able to extend their membership to virtually everyone. Ghana Co-Operative Credit Union Association Limited was therefore compelled to look for foreign aid. Notably among the sources of finance were the Konrad Adenauer Foundation (KAF) of West Germany, the social Aid Guild of Ghana (known as the catholic Guild of Ghana) and the Raiffeisen Bank in Holland. In October1968, a special land mark in the history of credit union movement took place. The decision to encourage the formation of credit unions at various work places in Ghana was taken by the Executive Board of Trade union congress of Ghana. This has resulted in more Trade union involvement in Co-Operative Credit Union. The Ghana National Association of Teachers (GNAT) did well to be involved by forming the Teachers' Credit Union among various groups throughout Ghana.

The remainder of this paper is structured as follows. Section 2 will present the literature review of this study. Section 3 provides the research methodology of the study. In section 4, the researchers present the statistical results and discussions of finding. Finally, this study in section 5 discusses the conclusion of the study.

2.0 Literature Review

Although most Non-Bank Financial Institution such as Co-Operative Credit Union face problems which are attributable to a lot of reasons, the most prominent causes pertain to the improper portfolio risk management, inadequate credit history of these firms and lack of attention to economic changes and other changes as well, can lead to the collapse of these credit institutions. This chapter aims at bringing out the important principles governing Credit Risk Management systems of Non-Bank Financial Institution.

2.1 An Overview of Portfolio Risk Management

The theory of portfolio risk is a highly attractive tool especially to mutual fund managers. It is most applicable for most financial institutions. According to Sinkey (1992), portfolio risk is the probability that the actual rate of return of an investment differs from its expected rate of return (Journal of Managerial Finance, 1995, Vol. No.5). That is the standard deviation of the expected returns on the portfolio. Risk as described by Gary Smith (1991) is uncertainties that may arise in making rational choices.

Therefore, Risk Management is the process of identifying and evaluating the trade-off between risk and expected rate of return and choosing the best alternative for appropriate course of action. Most often, investors anticipate future returns which cannot be predicted with certainty. Moreover, almost every investment is associated with risk. An asset with a high expected return has greater risk and assets with a low expected return have low risk, therefore there is the need for portfolio management or diversification. In order to manage a Financial Institution properly, Sinkey (1992) propounded three key portfolio risks. These are liquidity, capital and credit. The Bank Managers of financial Institution also acknowledge a fourth one which is the interest rate risk.

According to Sinkey (1992), Liquidity risk’ refers to the probability of Financial Institutions inability to readily meet all legitimate demands for funds withdrawal. Cornett and Saunders (1999), in their book ‘Fundamentals of Financial Institutions Management’ referred to liquidity risk as the risk that sudden surge in liability withdrawals, which may require financial intermediaries to liquidate asset in a very short period of time and at low prices. Peter S. Rose (1999)’ Describes Liquidity Risk as the danger of running out of cash when cash is needed to cover deposit withdrawals and to meet the credit request of good customers. A financial institution is likely to lose many customers and suffer loss in earning for its owners, if it cannot raise cash in a timely fashion. In a financial institution where cash shortage persist, it may lead to serious trouble and even an ultimate collapse in operations, since most customers may turn to withdraw their deposit due to the signal of illiquidity in the system. Sinkey (1992) also referred to capital risk as the probability that the firm will have its capital impaired.
In ‘Money Banking and financial Institution’ by Gary Smith (1991), Capital Risk is defined as an unexpected changes in interest rate which cause unexpected capital gains or losses. This means that in the short-term it creates capital risk and that an unexpected changes in the price of an asset. Besides, Credit Risk as referred by Rose (1999) in his book ‘Commercial Bank Management’, is the probability that some of the assets of a financial institution especially its loan will decline in value and perhaps become worthless. By the definition of Cornett and Saunders (1999), in their book “Fundamentals of Financial Institutions Management”, Credit Risk arises where there is a possibility that promised cash flows on the financial claims held by Financial Institution are not paid in full. Credit Risk would not be a problem if all financial claims held are paid in full on maturity date plus interest payment. Moreover, Interest Rate Risk as the fourth key portfolio risk propounded by Rose (1999) in his book ‘Bank Management; A Financial Theory is the riskiness or danger that revenues from earning assets will decline or that, interest expense will rise significantly, squeezing the spread between revenue and expense, thereby reducing net income. The probability that fluctuating interest rate will result in significant appreciation or depreciation of the value and the return from the assets of the financial institutions depends on the changes in the spread between revenues and expenses of the financial institution. Credit Risk is the prospect that a borrower is unable to pay interest and also repay the principal as agreed. According to Cornett and Saunders (1999), Credit Risk arises because of the promised cash flow on the financial claims held by Financial Institution will be paid in full. Whereby the principal on the financial claims held by the Financial Institutions is paid in full on the maturity date and that of the interest payment is made on agreed promised date, then there will not be credit risk. Therefore, if the borrower should default payment of both the principal and the interest expected to be received, then it will be default or credit risk. Most financial institutions must really consider the amount of credit risk it wishes to assume in drafting its investment policy. In making its credit quality decision, the following factors should be analyzed in detailed.

2.2 Credit Analysis

In analyzing credit, a Financial Institution can make very good use of the Credit Scoring System (CSS). The Credit Scoring System is a mathematical model, which observes loan applicant’s character to calculate a score that represents the applicant’s probability to default. With credit, the Financial Institutions may lose all or part of the principal lent, depending on its ability to assess the borrowers’ asset through bankruptcy and insolvency proceedings. Furthermore, the key role of Financial Institutions involves screening and monitoring loan applicants to ensure that they fund only the most credit worthy loans. Hence, in analyzing credit, a number of factors referred to as the three C’s (Character, Capacity and Collateral) was described by Peter. S. Rose (1993), in his book Financial Institutions. Character refers to the personal traits of the borrower, which is completely a part of financial standing. This is very significant in credit decision. Most often, it is said that the character is the most important of the three C’s of credit. A dishonest borrower can find a way to avoid the restrictions imposed by the lending firm in a loan agreement. For instance, terms used to describe the character of a borrower are honest, ethical and integrity. Character should be one of the factors to be considered by a loan officer before granting a loan to an applicant. The others like capacity and collateral can be explored depending on the acceptable character displayed. Therefore, if the character of an applicant is inadequate, then further analysis is not warranted. The second factor is capacity to generate income that is the ability of the applicant to generate sufficient funds either through liquidation of asset or earning to repay loan. The relevant point is that, if it is a long term commitment, then the lending firm should be inclined to look towards the earning potential of the applicant for the repayment of interest and principal. Therefore, funds from the long-term loan repayment can be invested in permanent asset so that, that of the short term would come from the liquidation of current asset. Collateral as referred to by Rose is the ability of the borrower to pledge specific asset to secure the loan. Normally, the assets are fixed in nature. This third factor (Collateral) is very important in reducing risk, but the fact is that, it is not a substitute for adequate potential earnings. Collateral as it stands should be reviewed as a second line of defense; that is second to the ability of the applicant to generate sufficient cash flows from operations in order to repay the loan and also protect the lending firm. The usefulness of collateral in credit granting process is affected by the nature of the collateral set acceptable to lending firms.

2.3 Credit Policy

This is the extent to which a Financial Institution has control over the factors that influence credit sales and collection. However, for a successful credit management this credit policy should be considered.

Terms of sale

This is one of the important factors and is the condition on which the firm proposes to sell its goods and service on credit or cash. Thus, the process of determining the probability that customers will or will not pay leads to
2.4 Credit Decision
Credit decision provides insight into credit risk management from the perspective of the credit officer and how he or she evaluates and assesses a loan applicant or whether to approve a loan applicant or refuse. Cornett and Saunders (1999) indicated and suggested two main considerations:
(i) The applicant’s ability and willingness to make interest and principle payment.
(ii) The value of any collateral or guarantors underlying the loan.
These two considerations call for the character of the applicant, the stability of residence, occupation, and the previous history of savings of the applicants could as well be assessed. To determine the applicant’s ability to make payment, an officer can depend on two main ratios such as Gross Debt Service and Total Debt Service Ratios.
Gross Debt Service is equal to Annual Mortgage Payment plus Property Taxes and divided by Annual Gross Income. Total Debt Service is equal to Annual Total Debt Payment divided by Annual Gross Income.
In the case of consumer loans, it is mostly focused on the individuals and hence credit-Scoring model is more applicable to be used. Since the credit scoring model lay emphasis on personal or consumer characteristics such as annual gross income, total debt service among others. Most often, Financial Institutions insist on a personal guarantee from the owner of a small business before granting a loan.

2.5 Loan Policy
The Loan Policy may be a function of size of Financial Institution. Some of the items to be incorporated in the loan policy are as follows:

a. Loan Volume
The policy should provide some general guidelines concerning the desired volume of lending. Financial Institution must allocate funds to meet reserves requirement, as well as, satisfy anticipated liquidity needs caused by deposit withdrawals.
Also, management may wish to hold a substantial amount of long-term securities to achieve assets diversification and the ability to minimize tax payment.

b. Mix of Loan
The loan policy must also contain some reference to the mix of credits that the firm is to emphasize and what might be an appropriate balance of each type of loan portfolio. Such specifications should be made with regard to the demand for credit in the local economy. For instance, if the local economy is based on agriculture, then the loan portfolio will be directed to farmers, ranchers, and businessmen. Where a financial institution prohibits branching, then it will present an important constraint in the lending programmed and thereby reduce the long-term growth of the institution.

c. Compensating Balance
This refers to non-interest bearing deposit that the borrower is required to maintain at the lending institution as a condition of the loan. It is the duty of management to determine the compensating balance required. As part of the decision to participate in this trend, management need to have some estimates of the implications, if lending is restricted to only short-term loans.

2.6 Monitoring
The probability that certain types of loans may generate zero average returns call for an effective credit monitoring which can be done through diversifying in an optimal fashion. For example by choosing a loan portfolio combination. With diversifying loan portfolio, the problem of customers’ inability to pay may not be possible, since this emphasizes on the type of customers to grant the loan either through their credit worthiness or history of savings. Also, through setting up a credit decision process, this involves credit policy and collection procedures. When a credit policy is taken, the decision to grant or refuse credit can either increase or decrease the cost of delivery. Therefore, for proper monitoring, the institutions can decide to grant loans, if the expected returns or profits in doing so, will be more than the expected profit from refusing. In fact, the decision to grant or refuse credit does not result in either profit or loss. Collection procedure in monitoring can be applicable where a customer stretches payment, which will end up with a longer collection period and greater investment in accounts receivables according to Brealey (1995). The collections procedure of a firm must take note of overdue payment by drawing up a schedule for aging receivables; these classify account receivables by the length of time they are outstanding.
Peter S. Rose (1993) in his book “Financial Institutions” also mentions the aging schedule as a compliance of accounts receivables by the age of each account. The credit office can monitor credit by classifying credits by age. The following sequences of procedures for an effective monitoring of customers whose payments are overdue are:
(a) To send out delinquency letters, informing customers of the past-due status on credits.
(b) To make telephone calls to the customers
(c) To employ a collection agent to visit customers at both announced and unannounced period for collection.
(d) To take legal actions against customers who default in the payments. Hence, Non-Bank Financial Institution should avoid granting credit to customers who are not credits worthy.

2.7 Loan Losses (Default and Failures)
Default and delinquency of loan normally occur in other financial institutions like the Banking Industry, but as in the case of Non-Bank Financial Institution such as Co-Operative Credit Union, they do not often experience loan losses.
Co-Operative Credit Union loan losses are the lowest among all other lending firms. This is because of the Insurance Policy they have on their loans and also having a “common bond” among members. Generally, credit unions have a problem of delinquencies and defaults since most staff are volunteers or part time employees who have less expertise in their credit analysis.

3.0 Methodology
Non-bank financial institution is the explained variable in this model, while the explanatory variables are credit analysis, credit policy, loan policy, monitoring, and loan losses (default and failures).

3.1 Method of data collection
The data was obtained from field survey of thirteen (13) co-operative credit unions in the Koforidua municipality.

3.2 Sample size
Thirteen co-operative credit unions were purposively selected for the survey and analysis. The duration of the research was basically from September 2014 to May 2015. This study employs field data on Credit Risk Management in the Non-Bank Financial Institution in Ghana.

4.0 Data Analysis Techniques
Regression analysis technique was used to measure the effect of independent variables on dependent variable. While pearson product moment correlation was used to measure the relationship between the dependent variable and independent variables. Regression models in the following variables:

Y = f(X1, X2, X3, X4, X5, µ)
A regression model relates Y to a function of X and µ
Where:
Y – Dependent variable, i.e. Non-Bank Financial Institution
X1 – X5 – Independent variables i.e. credit analysis, credit policy and decision, loan policy, monitoring, and loan losses (default and failures).
µ – Error term

4.1 Model Specification

\[ r = \frac{n \sum \omega_c \cdot s \cdot f - \sum \omega_c \cdot s f}{\sqrt{(n \sum \omega_c \cdot s^2) - (\sum \omega_c \cdot s f)^2}} \sqrt{(n \sum \omega_s f^2) - (\sum \omega_s f)^2} \]

Where \( r \) = Coefficient of correlation showing the degree of relationship between the dependent variable and independent variable.

\[ \text{NBFI} = a_0 + a_1 \text{CA} + a_2 \text{CPD} + a_3 \text{LP} + a_4 \text{M} + a_5 \text{LL} + \mu \]
Where:
\( \text{NBFI} \) – Non-Bank Financial Institution
\( \text{CA} \) – Credit Analysis
\( \text{CPD} \) – Credit Policy and Decision
\( \text{LP} \) – Loan Policy
\( \text{M} \) – Monitoring
\( \text{LL} \) – Loan Losses (default and failures).

5.0 Presentation And Analysis Of Data
The analysis of Credit Risk Management in the Non-Bank Financial Institution in Ghana using thirteen (13) different co-operative credit union is presented below.
Table-1 Descriptive Analysis of credit risk management in the Non-Bank Financial Institution in Ghana.

<table>
<thead>
<tr>
<th>Credit Union</th>
<th>Observation</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Union</td>
<td>13</td>
<td>10.3</td>
<td>5.91608</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>NBFI</td>
<td>13</td>
<td>5.32e+07</td>
<td>4.30e+07</td>
<td>3102597</td>
<td>1.34e+08</td>
</tr>
<tr>
<td>CA</td>
<td>13</td>
<td>1.04e+07</td>
<td>1.15e+07</td>
<td>3516916</td>
<td>3.47e+07</td>
</tr>
<tr>
<td>CPD</td>
<td>13</td>
<td>6798724</td>
<td>4532298</td>
<td>1000324</td>
<td>1.60e+07</td>
</tr>
<tr>
<td>LP</td>
<td>13</td>
<td>1.82e+07</td>
<td>1.08e+07</td>
<td>781571</td>
<td>3.45e+07</td>
</tr>
<tr>
<td>M</td>
<td>13</td>
<td>8874534</td>
<td>6947649</td>
<td>678882</td>
<td>2.09e+07</td>
</tr>
<tr>
<td>LL</td>
<td>13</td>
<td>9320067</td>
<td>4042935</td>
<td>1333600</td>
<td>1.38e+07</td>
</tr>
</tbody>
</table>

Source: Researcher’s Computation using STATA 10

The descriptive statistics of the analysis is presented in Table 1 above shows that Non-Bank Financial Institution as the dependent variable. Credit union had a mean value of 10.3 with a standard deviation of 5.91608, it had a maximum value of 1.34e+08 and a minimum value of 3102597. Non-Bank Financial Institution (NBFI) had a mean of 5.32e+07 and standard deviation of 4.30e+07 with positive minimum and maximum value of 3102597 and 1.34e+08 respectively, which signifies that for every 1% increase in the credit union activities, their performance increases by up to 5.3%, this implies that there is a positive relationship between Non-Bank Financial Institution (NBFI) and selected credit unions of Ghana. The following can also be deduced from Table 1, credit analysis, credit policy and decision, loan policy, monitoring, and loan losses (default and failures) with mean values of 1.04e+07, 6798724, 1.82e+07, 8874534, 9320067 respectively and standard deviations of 1.15e+07, 4532298, 1.08e+07, 6947649 and 4042935 having positive maximum values of 3.47e+07, 1.60e+07, 3.45e+07, 2.09e+07, and 1.38e+07 and positive minimum values of 3516916, 1000324, 781571, 678882, 1333600. This implies that 1% increase in credit unions activities triggers a rise in their performance of up to 5.35.

Table-2. The relationship between credit risk management activities and Non-Bank Financial Institution in Ghana.

<table>
<thead>
<tr>
<th>NBFI</th>
<th>CA</th>
<th>CPD</th>
<th>LP</th>
<th>M</th>
<th>LL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0000</td>
<td>0.8710**</td>
<td>0.1118**</td>
<td>0.9408**</td>
<td>0.8992**</td>
<td>1.0000</td>
</tr>
<tr>
<td>CA</td>
<td>0.8710**</td>
<td>1.0000</td>
<td>-0.1282</td>
<td>1.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>CPD</td>
<td>0.1118**</td>
<td>-0.1282</td>
<td>1.0000</td>
<td>0.2180</td>
<td>1.0000</td>
</tr>
<tr>
<td>LP</td>
<td>0.9408**</td>
<td>0.9620*</td>
<td>0.0852*</td>
<td>0.9529*</td>
<td>1.0000</td>
</tr>
<tr>
<td>M</td>
<td>0.8992**</td>
<td>0.8541*</td>
<td>0.2461*</td>
<td>0.9809*</td>
<td>0.9343*</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher’s computation using STATA Version 10

The table 2 shows the relationship between credit risk management activities in the Non-Bank Financial Institution in Ghana. The result in table 4.2 shows that Non-Bank Financial Institution (NBFI) has positive relationship with credit analysis (CA), coefficient 0.8710. This result implies that an increase in credit analysis contributes to increase in Non-Bank Financial Institution performance. Credit policy and decision has positive relationship with NBFI with coefficient of 0.1118. This result implies that an increase in the policies and decisions leads to increase in credit union performance. In the same vein, loan policy also has positive correlation with NBFI performance, coefficient 0.9408. This result implies that the increase in proper loan policies increases NBFI performance. Monitoring also has positive significant relationship with NBFI performance with coefficient of 0.9254. This result implies that the increase in credit risk management activities has positive correlation with NBFI performance. Monitoring also has positive significant relationship with NBFI performance with coefficient of 0.9408. Furthermore, the result also shows that loan losses (default and failures) also has positive correlation with NBFI performance, coefficient 0.8992. This result implies that when clients default it affects the union’s performance. The table also revealed that all the predictor variables have a positive relationship with NBFI activities hence return on performance.

Table -3. The effect of Credit Risk Management activities on Non-Bank Financial Institution.

| NBFI | Coefficient | Std. Err. | t | P>|t| | 95% Conf. Inter. |
|------|-------------|-----------|---|---|-----------------|
| CA   | -1.06132    | 1.51416   | -0.70 | 0.056 | -4.332465 2.209824 |
| CPD  | -.4405003   | 927785    | -0.047 | 0.043 | -2.444858 2.209824 |
| LP   | 5.345736    | 2.023779  | 2.64 | 0.020 | 0.9736268 9.717845 |
| M    | 28.40708    | 4.048585  | 0.07 | 0.045 | -8.462365 9.030507 |
| LL   | -6.680998   | 3.688471  | -1.81 | 0.093 | -14.64944 1.287478 |
| constant | 1.64E+07 | 8809607 | 1.86  | 0.085 | -2616294 3.54E +07 |
| Prob= 0.0000 | | R^2=0.9611 | Adj R^2=0.9432 | F (3, 26) = 38.32 | Root MSE = 36815 |

Source: Researcher’s computation using STATA Version 10
The table 3 above shows the effect of Credit Risk Management activities on Non-Bank Financial Institution. A unit increase in credit analysis (CA) reduces NBFI by 1.1 units. This shows the negative effect of CA on NBFI and from the respondents most credit unions either gets it wrong or fails to conduct researches and do analysis. Also a unit increase of credit policy and decision reduces NBFI by 0.4 unit. This also suggests that an inverse effect of credit policy and decision on NBFI. Conversely, there is a positive relationship between loan policies and NBFI because a unit increases in loan policies increases NBFI by 5.3 units. The result is significant. A unit increases in Monitoring increases NBFI by 2.8 units. This indicates that Monitoring has positive effect on NBFI. Conversely, a unit increases in loan losses reduces NBFI by 6.6 units. This also suggests the inverse effect of loan losses on NBFI. Given the coefficient of determination (R2) as 0.9611 which is 96% supported by high value of adjusted R^2 as 94%, it presumes that the independent variables incorporated into this model have been able to explain the variation of NBFI to 94%. That is, there is a significant relationship between dependent variable (NBFI) and the independent variables (credit analysis, credit policy and decision, loan policy, monitoring, and loan losses (default and failures). The F Probability statistic also confirms the significance of this model.

5.1 Summary and Conclusion
The effect of Credit Risk Management activities on Non-Bank Financial Institution of sampled Ghanaian credit unions was examined. Results show that Credit Risk management has significant positive relationship to the NBFI performance of the sampled credit union which implies that for every increase in NBFI performance through years resulted from an increase of 5.35% of credit analysis, 1.14% in credit policy and decision, 7.79% in loan policy, 8.06% in monitoring, and 6.07% in loan losses (default and failures). There is also positive correlation between NBFI and credit risk management, when it was analyzed independently while it gave a positive relationship when analyzed together with other performance indicators. Loan policy also has positive significant relationship with NBFI performance. Similarly, credit analysis and credit policy and decision also exert negative effects on NBFI performance indicating that the usage and not ownership has effect on NBFI performance. In the same vein, loan losses (default and failures) also has positive correlation with return on NBFI. This result implies that the increase in loan losses also leads to increase in return on NBFI performance. Monitoring also has positive significant relationship with NBFI performance with the value of 0.9408. The higher the level of investment in credit risk management, the higher the NBFI performance. In conclusion, investments in credit risk management have strong and statistical positive impact on the NBFI performance of business sector in Ghana. In order to improve the performance of Non-Bank Financial Institution (NBFI) there should be efficient management of credit risk management. Ghanaian Non-Bank Financial Institution (NBFI) should improve the level of credit risk management investments in terms of credit policies and decisions in order to boost their performance for their shareholders’ satisfaction.

Reference