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An Assessment of Bad Loans and Its Impact on the Profitability of Banks in Ghana: A Case Study of Agricultural Development Bank Limited (ADB LTD.)

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Abstract
This study was conducted to assess bad loans and its impact on the profitability of banks in Ghana using Agricultural Development Bank Limited as a case study. The study is a descriptive survey which made use of semi-structured questionnaire to collect primary data from respondents. Additionally, a retrospective approach was taken to collect secondary data from the published financial reports of the bank (ADB Ltd) for a period of 5 years (2010-2014). Data collected for the study were analysed quantitatively using Microsoft software ‘‘Statistical Package for Social Sciences (SPSS) version 16.0. From the data analysed the study found an undulating trend of bad loans at an average of 6% bad loan ratio to total loan disbursed over the 5-year period understudy. Additionally, the study found customer’s business failure, high loan interest rate, inadequate loan monitoring and wrong timing of loan disbursement as the main factors accounting for bad loans at the bank. The study further observed that bad loans substantially impact negatively on the bank's interest income draining an average of one-fifth of the bank's interest income over the study period (2010-2015). Nearly the same amount of net profit earned by the bank is lost to bad loans. The study then concluded that the incidence of bad loans at the bank was great and requires effective credit management policies and procedures by the board and management of the bank. The study, therefore, recommended that board and management reduce loan interest rate, adequately resource credit officers for effective loan monitoring and ensure timely processing and disbursement of loans. It is also recommended for a future study to assess the credit management practices of the bank.
Keywords: Loans, Bad Loans, and Bank Profitability.

1.0 Introduction

Lending is one of the central activities of banks in Ghana and other parts of the world. This is evidenced by a number of loans that include banks assets and the notable annual increment in the amount of credit granted to borrowers in the private and public sectors of the economy. According to Robert, Amidu and Roberta (2006), the renowned contribution of loans to the financial health of banks through interest income earnings are considered the most valuable assets of banks. A financial report of ADB in 2007, indicated that out of the total interest income of GH¢42,327,367.00 earned in that year, about 66.5% was earned on loans and advances. Thus, the figures point to the fact that loans contribute immensely to the financial performance of banks in Ghana. Regrettably, some of these loans usually do not perform and eventually result in bad debts which affect banks earnings on such loans.

Siaw (2013) argued that these bad loans become a cost to banks concerning their insinuations on the standard of their assets portfolio and profitability. This is because, following banking regulations, banks make provisions for non-performing loans and charge for bad loans which decrease their loan portfolio and income. For example, in February 2009, a Bank of Ghana report revealed that non-performing loans ratio increased from 6.4% in 2007 to 7.7% in 2008.

In the light of the above, the issue of bad loans has raised some concerns among stakeholders of these institutions and researchers. In spite of manifold evidence on the effect of bad loans on banks, it is perceived that the general contribution to an academic debate on the subject is weak owing to the fact that studies on the subject are few, and most of them provided their evidence based on meta-analysis and literature reviews. This paper provides related evidence using secondary data, primary data and empirical analysis, which provides a more valid and verifiable estimation of the impact of bad loans on banks’ profitability.

The study, therefore, seeks to find out how bad loans impact on the profitability of banks in Ghana focusing on Agricultural Development Bank (ADB) as a case study and thereby offer some suggestions to minimize the problem of bad loans. The study report would, therefore, complement the stock of inadequate literature on management of loans in Ghana and as such bridging the literature gap.

2.0 Literature Review

2.1 Conceptual Framework

Recounting some other benefits of financial intermediaries (FIs), Vicary (2007) posited that FIs offer much substantial liquidity on their secondary securities to lenders. FIs can provide enormous liquidity to their creditors

and yet lend on a much longer term to their debtors. Especially, with demand deposits of banks which are perfectly liquid banks as financial intermediaries allow drawings on them without notification. Banks authorised even time deposits to be drawn upon a subject to certain conditions involving only some loss of interest. Asantey and Tengey (2014) remark that the public takes advantage in the bank's specialization in selling deposits with particular features and some other functions such as transferring funds, collecting cheques for their clients, and offering safe-deposit vaults. Most important of all is the dominant lender function which attracts the public to banks and induces it to hold deposits with them.

Empirical studies have shown the contribution of commercial banks to the growth and development of organisations; small, medium and large both locally and internationally (Ahiabor, 2013), as well as private individuals through their lending activities. Consequently, the contribution of commercial banks to the growth of these parties is not limited to one country or jurisdiction.

As postulated by Aballey (2009), bad loans resulting from the inability of debtors to reimburse loans and interests within the specified time cause adverse effects on the financial condition of the creditor (Agu & Okoli, 2013). Per the name and its effects, bad loans logically follow that they are functionally in resistance to the financial circumstances of the bank. By the time these loans will be referred as "bad loans", there is the fright that the debtor cannot fully pay the amounts involved and the interest. In this regard, a financial loss is encountered instead of profit, leading to adverse effects on the banks, the defaulting organisation and in fact other corporations and individuals who would like to borrow from the banks in future.

Available literature gives different descriptions or definitions of bad loans including the submission of Fofack (2005) who consider bad loans as loans which for a relatively long period of time do not generate income. In such situations, the principal and or interest on these loans have been left unpaid for at least ninety days. Bad loan may also refer to one that is not earning income, and complete payment of principal and interest is no longer expected, principal or interest is ninety days or more delinquent, or the maturity date has passed, and payment in full has not been made.

Some researchers noted that certain countries use quantitative criteria for example number of days overdue scheduled payments while other countries rely on qualitative norms like information about the customer's financial status and management judgment about future payments (Bloem & Gorter, 2001). Alton and Hazen (2001) described bad loans as loans that are ninety days or more past due or no longer accruing interest.

A critical assessment of the previous definitions of bad loans steers to the evidence that for loans which principals and interest have not been paid for at least ninety days are deemed bad. A classification of advances of the banking industry in December 2008 showed that out of the total loan portfolio of GH¢5,966,804,133.00, 7.68% was nonperforming. This covered loans recognised within second-rate, indefinite and loss levels. Loans in these categories have exceeded ninety days concerning repayment (Bank of Ghana, 2008).

2.2 Theoretical Framework

Commercial banks and their sustainable maturity are undoubtedly germane to industrial advancement. This is, as a result, the banking sector is among the very few sectors that add to economic development in various aspects. First of all, commercial banks uninterruptedly contribute to economic progress by paying taxes and creating employment. Moreover, commercial banks entail the anchor of the growth of other sectors by granting them access to credit facilities in the form of loans. Moreover, much empirical evidence exists on the contribution of commercial banks to financing particular firms and sectors.

The study is underpinned by the Agency Theory (AT) which supports the opportunistic behaviour of individuals. In relation, Jensen and Payne (2006) explain that customers and investors alike would expect their bankers to respond favourably to their objectives for joining them in business. Banks as agents of their customers and investors try to put in place mechanisms that seek to align the interest of the agent and the principal. All parties in their own self-interest are at the same time motivated to maximize organizational values (Francis, 2009). Mechanisms used to address agency problems as far as banks profitability is concerned to include effective loan portfolio management to minimize the incidence of bad loans and thereby to maximize profitability which in essence safeguards the worth of stakeholders (Jensen & Payne, 2006).

2.2.1 Banks Financial Intermediation (FI)

The easier means for money (funds) to exchange hands is through a direct exchange between the holders of the money and the one in need of it. However in practice such a direct exchange comes with so many challenges that make it very difficult for the exchange to occur. In the face of these challenges another route known as indirect financing attempts to minimize or solve all the challenges associated with direct financing. Indirect financing involves a financial intermediary standing between the lender-savers and the borrower-spenders and helping transfer funds from one hand to the other (Gambrah, 2012).

Financial intermediation can therefore be explained as financial institution serving as mediators between the person or a company who has gotten excess funds and wants to give it out as loan and an individual or firm ready to receive credit from the unit who has excess funds to lend. As described by Gambrah (2012), this indirect

way of lending to the borrowers has some functions including reduction in transaction cost, risk sharing, information asymmetry and huge savings accumulation. This means that banks as the financial intermediaries serve as an agent between the borrower and the lender.

Other things being equal, lenders are interested in minimizing all kinds of risk of capital and interest loss on leans or financial investments they make. These risks (Vicary, 2007) may arise in the form of risk of default or risk of capital loss on stock-market assets, such risks on secondary securities are far less than on primary securities for individual lenders.

Bad loans need to be avoided in view of the fact that their effects are multidimensional; thus they do not only hinder profitability among commercial banks, but they also limit lending to the defaulting SMEs, individuals and other corporations. This assertion is based on evidences in Ghana (Appiah, 2011) and in foreign countries (Karim et al. 2010).

The 2013 Ghana Banking Survey indicates that many commercial banks in Ghana are encountering massive bad loans. The situation is considered serious because the country's major banks such as Ghana Commercial Bank, Ecobank (Ghana) Limited, Stanbic Bank (Ghana) Limited and Standard Chartered Bank (Ghana) Limited are facing the same problem. The report does not reveal the exact repercussions of the situation; but based on other evidences, it is certain that bad loans appalls the financial condition of banks.

At large, the main effect of bad loans on banks is the fact that increasing bad loans limit the financial growth of banks (Karim, Chan & Hassan, 2010; Kuo et al., 2010). This consequence is as a result of the fact that bad loans deprive banks of the needed liquidity and limit their capability to fund other potentially viable businesses and make credit facilities available to individuals. Karim et al. (2010) argues that there are a lot of other viable businesses that the bank cannot explore as a result of the fact that its funds are caught up in bad loans. In the face of these consequences, the bank experiences a shortfall in generated revenues (Ghana Banking Survey, 2013), and this translates into reduced financial performance (Karim et al., 2010; Ghana Banking Survey, 2013).

2.2.2 Loan management

This refers to efficient combination of the major loan policies guidelines identifying some variables to ensure that loans granted to beneficiaries are collected promptly and at the same time sustaining customers' confidence and loyalty to the bank. Van Horne (1995) identified four major variables including quality assessment of customers' accounts, setting up of credit period, enticement to repay loan on time and cost of securing the loan. In the views of Van Home (1995), assessment of the quality of the customer account examines the ability of the customer to repay the loan on time.

Banks are expected to set appropriate credit period giving enough time to allow the customer derive the full benefits of the credit. Asiedu-Mante (2011) concurred with an assertion that banks need to entice loan beneficiaries to repay on such enticement must be motivating enough before the aim can be achieved. Other area of consideration is the expenditure level that could be incurred in the collection exercise. This implies that the bank must not grant credit where the amount to be expended on collecting the debt will likely be greater than the debt itself. To blend these variables into an efficient workable system requires careful planning, controlling and co-ordination of all available human and material resources.

Further, Asiedu-Mante (2011) describes loan management as involving the establishment of formal legitimate policies and procedures that will ensure that the proper authorities grant credit, the loan goes to the right people without any superior influence, the loan is granted for the productive activities or for businesses which are economically and technically viable, the appropriate size of loan is granted, the loan is recoverable and there is adequate flow of management information within the organization to monitor the loan activity.

Undeniably, loan goes with risk seen as the distribution of financial losses due to unexpected changes in the credit quality of counterparty in a financial agreement. He also sees it as the probability of default or any type of failure to honour a financial agreement. Kay (2002) indicated that the probability of default is estimated by specifying a model of investor uncertainty; a model of the available information and its evolution over time; and a model definition of the default event.

Jensen and Payne (2006) admit that banks operate within a sound and well-defined criteria for new credits as well as the expansion of existing credits. Banks make sure that credits extend within the target markets and lending strategy of the institution. Before allowing a credit facility, the bank must carry out an identification exercise through an assessment of risk profile of the customer/transaction. Such identification exercise include, among other things: credit assessment of the borrower's industry, and macro-economic factors, the purpose of credit and source of repayment, track record/repayment history of borrower and assess/evaluate the repayment capacity of the borrower. In his contribution, Rosenberg (2006) advocated that credit customers can also be identified the proposed terms and conditions and covenants, adequacy and enforceability of collaterals and as well ensuring that loan application is accepted by the required authority.

2.2.3 Loan Administration

Loan portfolio administration is an essential part of the credit process which support and control extension and

maintenance of credit. Typically, the bank's back office in its credit administration function takes the responsibility of credit administration to ensure completeness of documentation (loan agreements, guarantees, transfer of title of collaterals etc) in accordance with approved terms and conditions. Outstanding documents should be tracked and followed up to ensure execution and receipt.

Siaw (2013) adds that disbursement of loan should be effected only after completion of covenants, and receipt of collateral holdings having ensured that the loan application has proper approval before entering facility limits into computer systems. In case of exceptions necessary approval should be obtained from competent authorities.

Loan monitoring has also been empirically supported Siaw (2013) as another important administration exercise after the loan is approved and disbursed. The loan should be continuously watched over keeping track of borrowers' compliance with credit terms, identifying early signs of irregularity, conducting periodic valuation of collateral and monitoring timely repayments. As part of loan administration function, obligors should be communicated ahead of time as and when the principal/mark-up instalment becomes due. Any exceptions such as non-payment or late payment should be tagged and communicated to the management. Proper records and updates should also be made after receipt.

To complement with, Appiah (2011) advises institutions to devise procedural guidelines and standards for maintenance of credit files. The credit files include all correspondence with the borrower and also contain sufficient information necessary to assess financial health of the borrower and its repayment performance. Such files must be organize information in such a way as to facilitate review by the external / internal auditors.

Appiah (2011) further reiterates that institutions should ensure that all security and collateral documents are kept in a fireproof safe under dual control. Registers for documents should be maintained to keep track of their movement. Where insurance coverage supports the documents, procedures should also be established to track and review relevant insurance coverage for certain facilities/collateral. Physical checks on security documents should be conducted on a regular basis.

2.2.4 Loan Processing

There is an element of risk in any loan granted because the expected repayment may not occur. Lending involves a lender providing a loan in return for a promise of interest and principal repayment in future (Kay, 2005). Because of this risk of default in loan repayment, lenders need to project into the future and make sound judgment that will ensure that repayment is effected at the agreed date. Available literature places so much importance on the lender's role in ensuring good decisions relating to the granting of loans in order to minimize credit risk. The lender must always aim at assessing the extent of the risk associated with the lending and try to reduce factors that can undermine repayment. The lender should therefore assemble all the relevant information that will assist him/her in arriving at a sound credit decision. In view of the possibility of non payment which leads to loan default, banks have adopted a standard loan request procedures and requirements usually contained in credit policy manual to guide loan officers and customers.

As Rose (1999) advocates, even if the customer cannot repay loan facility in full when due the margin of error must be minimal. In essence Dunkman (1996) suggests that critical assessment of the customer's creditworthiness, otherwise called pre-lending safeguards, must be carried out on character, capacity, cash, collateral, conditions and control. In complement, Thanh (2014) developed mnemonics used as common checklist to review loan application, which include CAMPARI (Character, Ability, Margin, Purpose, Amount, Repayment, Insurance / Security). During loan appraisal banks must ensure due diligence so as to avoid or reduce high rate of loan default thereby minimizing credit risk which in turn seek to maximize shareholders' worth.

The assessment of the creditworthiness therefore involves the gathering, processing and analyzing information on the loan applicant. An important aspect of information is by way of credit references and credit rating. However, the responses provided on applicants by other banks are nothing to write home about and in certain instances no reaction is given. Inadequate provision and evaluation of security against loans might equally cause credit/loan default. Securities for loans and overdrafts are to ensure recovery of the funds lent to the borrower in the event that the borrower becomes unwilling or incapable of meeting his commitments. Dunkman (1996) outlines reasons for security as safeguarding against some doubts about borrowers' repayment ability, basis for increasing amount of loans over and above existing facilities, and as a last resort to recover loan in the face of default. Even though security is necessary to safeguard loans, banks are cautioned not to over rely on them for a reason that realizing loan securities are not always easy due to some complicated processes banks must go through, making such securities counterproductive.

2.2.5 Loan Classification and Provisioning

All licensed financial institutions are required to monitor and review their portfolio of credit and risk assets at least once every quarter on a regular basis. The banking Act of 2004 Section 53(1) specifies prudential norms for banks to reviewed loan defaults once every month and classify them into four grades of risk: (i) standard (ii) sub-standard; (iii) doubtful; and (iv) loss. Assets in risk grades (ii) to (iv) are considered non-performing and

therefore no income may be accrued on them. In view of the above, banks take into account the assets used in securing the facility to determine the level of provision to be made. Bank of Ghana regulations indicate that certain amount of provisions are made on the aggregate outstanding balance of all current advances, and aggregate net unsecured balance of all other categories as shown on the Table One.

Table 2.1 Categories of Loans and their Provisions

Category	Provision (%)	No. of Days of Delinquency
1. Current	1%	0-less than 30
2. OLEM	10%	30-less than 90
3. Substandard	25%	90-less than 180
4. Doubtful	50%	180-less than 360
5. Loss	100%	360 and above

Source: Section 53(1) of Banking Act 2004

The review of the above literature on classifications and provisioning implies that the higher the non-performing loan category the higher the provisions and charges for such bad loans. For example in December, 2008, the total banking industry loan classification depicted an increase in the non-performing categories which were 85.97%, 78.47% and 63.73% for substandard, doubtful and loss respectively. This led to an increase in the total non-performing loans which increased from 6.37% in 2007 to 7.68% in 2008 (Bank of Ghana, 2008), however Bank of Ghana recommends a non-performing loan (NPL) ratio of 5% (Kay, 2005).

2.2.6 Implication of Bad Loans for Banks

The interest income generated from loans contribute significantly to the profitability performance of financial institutions. However, when loans become delinquent, it has a serious negative effect on the health and operations of the banks. One of the reasons is that, in line with the Bank of Ghana regulations, the lending institution has to make provision and charges for credit losses (bad debt/impairment) which ultimately reduce the profit level. Again, large non-performing loan portfolio tends to undermine the bank's ability to grant more credit. This is because the loanable funds tend to deplete when repayment of loans delays or fail to come.

According to Bloem and Gorter (2001), though issues relating to non-performing loans may affect all sectors, the most serious impact is on financial institutions such as commercial banks and mortgage financing institutions which tend to have large loan portfolios. Another cogent implication of bad loans which is sometimes described as ''toxic asset" is the lack of credence on the part of depositors and investors leading to liquidity challenges.

Again, another implication of bad loans for banks is the that huge amounts written off as bad debt adversely affect the growth of the shareholder's wealth since the profit which is re-invested (ploughed back) into the business to grow the capital base is reduced as a result of provision for credit losses. Bloem and Gorter (2001) observe that the provisions for bad loans reduce total loan portfolio of banks and as such affects interest earnings on such assets. This constitutes huge cost to banks. In 2006, ADB made a total provision for bad and doubtful loans to the tune of GH¢35,080,800.00 which reduced the bank's loan portfolio from GH¢186,004,100.00 to GH¢150,923,300.00. The bank's charge for bad debts also reduced its net interest income by about 25% (ADB, 2006).

In a similar token, dividend payment is equally negatively affected because the provision for credit losses are deducted before dividends are declared. Some foreign records indicate that failing banks have tremendous amount of bad loans prior to failure and that asset quality is a significant predictor of insolvency (Berger & De Young, 1997).

Indeed in Ghana, most Micro-finance institutions, rural and commercial banks have collapsed mainly on account of bad loans. The issues discussed above show the gravity of the implication of bad loans on the operations of banks and this study identifies the factors accounting for the incidence of bad loans, the impact of bad loans on the bank's profitability.

2.2.7 Factors Accounting for Bad Loans

Some research findings and publications indicate that bad loans are caused by poor management. Berger and De Young (1997) argue that managers in most banks and other financial institutions with the problem of bad loans do not practice adequate loan underwriting, monitoring and control. Credit culture is another factor which has been recognized by some research findings as a cause of bad loans. Sometimes borrowers decide to apply for credit without cogitating about tomorrow and what else they need to buy with income. When this happens, a loan culture can develop where borrowers take out huge credit not because it is financially tactful to do so but because they see others do it. This can result in defaulted loans.

According to Fofack (2005), a World Bank policy research working paper on bad loans in Sub-Saharan Africa revealed that bad loans are caused by adverse economic shocks coupled with high cost of capital and low-interest margins. Francis (2009) stated that the accumulation of bad loans is attributable to some factors, including economic downturn, macroeconomic volatility, terms of trade deterioration, high-interest rate, excessive reliance on overly high-priced inter-bank borrowings, insider borrowing and moral hazard.

Another literature (Robert, Amidu & Roberta, 2006) identified sudden market changes as yet another factor which accounts for bad loans. Any unexpected market shift can modify the loan market by affecting how much money people can take as loans and make payments. If the market suddenly changes and prices of items increase due to shortage or increased demand, borrowers will have limited money to pay off their loans which can lead to loan default.

Appiah (2011) indicated in his work that problem loan can emanate from diversion of funds on the part of loan clients and overdrawn account where there is no overdraft limit or overdraft taken on account which has not been actively operated for some time and overdraft taken in excess of the reasonable operational limit. He also identified lack of good skills and judgement on the part of lenders as a possible cause of bad loans.

Bloem and Gorter (2001) asserted that bad loans may be caused by less predictable incidents such as the cost of petroleum products, prices of key exports, foreign exchange rates, or interest rate change abruptly. They also indicated that poor management, poor supervision, overoptimistic assessments of creditworthiness during economic booms and moral hazards resulting from generous government guarantees and delayed loan disbursement could also lead to loan default.

2.2.8 Loans and Bank Profitability

Empirically (Robert et al., 2006), it is noted that the genesis of the problem of loan default is the quality of credit management practices of the banks, which requires scrutiny to find ways of ensuring improvements. Bank performance determinants have drawn the interest of academic research as well as management of banks. Studies deals with internal determinants employ variables such as size, capital, credit risk management and expenses management. The need for credit management in the banking sector is inherent in the nature of the banking business.

The efficient management of credit portfolio of banks is crucially significant in enhancing profitability, maximizing shareholders' wealth as well as deepening financial intermediation to stimulate economic growth and development. Asiedu-Mante (2002) asserts that very low deposits and high default rates have plunged some banks into serious liquidity problems, culminating in the erosion of public confidence in these banks. He further stressed that a combination of poor lending practices and ineffective monitoring of credit facilities to customers have contributed to high credit risk and significant low profit in some banks. This situation has most often plunged some banks into distress as withdrawals, could not be honoured.

Athanasoglou et al. (2005) proposed that bank risk taking (lending/loans) has pervasive effects on bank profits and safety. Jensen and Payne (2006) declare that the profitability of a bank depends on its ability to foresee, avoid and monitor risk relating to loans. Additionally, possible to cover losses brought about by risk arisen and it also has the net effect of raising the ratio of substandard credits in the bank's credit portfolio and decreasing the bank's profitability.

Further, Athanasoglou et al. (2005) observe that the role of bank remains central in financing economic movement and its effectiveness could exert positive influence on an all-embracing economy as a sound, and successful banking sector is better able to resist adverse shocks and contribute to the stability of the financial system. Penurious asset quality and low levels of liquidity are two main causes of bank failures and symbolised as the principal risk sources regarding credit and liquidity risk and attracted great attention from researchers to study their impact on bank profitability. Risk associated with loans is by far the most vital risk encountered by banks, and the success of their business relies on accurate measurement and efficient management of this risk to a greater extent than any other risk (Thanh, 2014). Improvements in credit risk will boost the marginal cost of debt and equity, which in return rises the cost of funds for the bank (Basel Committee on Banking Supervision, 1999). Researchers employed a number of ratios to measure credit risk. The ratio of loan loss provisioning as a share of net interest income (LOSRENI) is one standard of credit quality, which depicts high credit quality by showing low figures.

Robert et al., (2006) describe profitability as the central aim of all business enterprises. Without profitability, the business will not survive in the long-run. So measuring current and past profitability is very relevant. Profitability is measured by income and expenses. Income is generated from the activities of the business. A business that is highly profitable has the ability to reward its owners with a large return on the investment (Asantey & Tengey (2014). A profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial system. Important changes in the operating environment particularly credit/loan is likely to affect bank profitability. Empirical analysis finds that both bank-specific as well as macroeconomic factors are important determinants of the profitability of banks (Asantey and Tengey, 2014).

Brealey and Myers (2003) argued that there are various important measures in determining profitability of an organization. These include net profit margin, return on assets (ROA), and return on equity (ROE). The ratio of net income to equity (ROE) as the accounting return on equity often serves as a target profitability measure at the overall bank level. Market Return on Equity is a price return or the ratio of the price variation between two dates of the banks' shares. Under some specific conditions, for example, when the price-earnings ratio remains constant, it can serve as a profitability benchmark.

Both ROE and the market return on equity should be in line with shareholders expectations for a given level of risk of the banks' shares. Return on assets (ROA) is another measure of profitability for banking transactions. The most common calculation of ROA is the ratio of the current periodical income, interest income and current fees, divided by asset balance. ROA can be decomposed into four constituent's parts by an accounting identity: Profitability = ROA = NI/TA + NII/TA – OV/TA – LLP/TA where NI is net interest income, NII is non-interest income, OV is non-interest overhead expenses, and LLP is loan loss provisioning (Asantey & Tengey, 2014). The net interest margin (NI/TA) creates a wedge between returns to savers and investors and reflects the cost of bank intermediation services and the efficiency of the banking sector. In general, the higher the net interest margin, the higher are banks' profit margins and more stable is the banking sector. However, a higher net interest margin could reflect riskier lending practices associated with substantial loan loss provisions and could be an indication of inefficiency in the banking sector (Asantey & Tengey, 2014).

The drawback of accounting ROE and ROA measures, and of the P&L (profit and loss) of the trading portfolio, is that they do not include any risk adjustment. Hence, they are not comparable from one borrower to another, because their credit risk differs, from one trading transaction to another, and because the market risk varies across products. This drawback is the origin of the concept of risk-adjusted performance measures. This is an incentive for moving, at least in internal reports of risks and performances to economic values, mark to market or mark to model values, because these are both risk and revenue adjusted.

ROE measures how much the firm is earning after tax for each dollar invested in the firm. In other words, ROE is net earnings per dollar equity capital (Samad & Hassan, 2000). It is also an indicator of measuring managerial efficiency. By and large, higher ROE means better managerial performance; however, a higher return on equity may be due to debt (financial leverage) or higher return on assets. Financial leverage creates an important difference between ROA and ROE in that financial leverage always magnifies ROE. This will always be the case as long as the ROA (gross) is greater the interest rate on debt (Asantey& Tengey, 2014). ROE is calculated as ROE = Net profit after tax / Shareholders' Equity.

Equally appropriate is the use of Net Interest Margin (NIM) to evaluate the financial performance of banks. Net interest income is the difference between interest income and interest expense. It is the gross margin on a bank's lending and investment activities. The higher the ratio, the cheaper the funding or, the higher the margin the bank is obtaining. A bank's net interest margin is a key performance measure that drives ROA (Peters, Raad & Sinkey, 2004).

Net Interest margin (NIM) is another profitability measure usually employed banks. NIM is calculated as NIM= (Interest Income – Interest Expense)/Total Asset. To most financial analysts, Return on Deposit (ROD) is one of the best measures of bank profitability performance. This ratio reflects the bank management's ability to utilize the customers' deposits in order to generate profits. Research (Tarawneh, 2006) has proven this ratio suitable for profitability measurement. ROD is calculated as ROD = Net Profit after Tax / Total Deposit.

3.0 Methodology

This research was quantitative adopting the survey approach in collecting data. The population was made up of all the bank officials of Agricultural Development Bank (ADB) branches in Kumasi-Ghana numbering one hundred and fifteen (115). The study adopted convenience sampling technique on the branches of the bank (ADB) in Kumasi Metropolis for easy access to information, and thus five (5) branches (Kejetia, Suame, Adum, Tech, Alabar) were used for data collection. Purposive sampling is used in collecting information from branch management, credit section, audit and operations. Subsequently, a sample size 40 permanent staff with requisite knowledge in the area of study was used.

To come out with a sample size, the study adopted Guilford and Fruchter's formula developed in 1973 which has been supported by academic researchers (Gravetter & Forzano, 2006): $N / 1 + \delta^2 N$. Where: N is the size of the target population and δ is the alpha. In the current study, N=45, δ=0.05. Thus, $45 / (1 + 0.05^2 \times 45) = 40.44$. To round up to the nearest whole number, a sample size of 40 respondents was therefore used for the study. A structured questionnaire was used to collect demographic data of respondents and loan related issues from the bank staff. The fifteen (15) item questionnaires were mainly the closed type to allow for flexibility and save time without yielding on the quality of data sourced. An interview guide was employed for the management of the selected banks. The result was presented using standard descriptive statistics in frequencies, percentages, ratios, bar charts and tables. The study further estimates the trend of bad loans using regression graphs appropriate to explain facts.

4.0 Empirical Review

4.1 Data Presentation and Analysis

This section starts with the demographic characteristics of respondents through the trend of bad loans, causes and effects of bad loans. The demographic characteristics of respondents covered gender, age, years of service at the current bank and their educational attainments are as presented in Figure 4.1.

Table 4.1 Demographic Characteristics of Respondents

Features	Frequency	Percentage (%)
Gender: Male	19	48.0
Female	21	52.0
Age Group:18 – 25	6	15.0
26 – 35	18	45.0
36 – 45	8	20.0
46 – 55	6	15.0
56 +	2	5.0
Years Served at ADB:		
< 5 years	8	20.0
5 – 9 years	14	35.0
10 – 14 years	10	25.0
15 – 20 years	6	15.0
21 +	2	5.0
Highest Education:		
Diploma	6	15.0
Bachelors Degree	22	55.0
Masters Degree	9	22.5
Other Professional	3	7.5

It could be noted from Table 4.1 that majority of respondents representing 52% are females as against 48% males. The females, therefore, outnumber their male counterparts but with a narrow margin of 4%. Gender representation on the study is fairly distributed without being bias. Again, on demographic characteristics of respondents the age category 18 – 25 years recorded 15% while category 26 – 35 years also recorded 55% with 30% of them falling into age category 36 – 45 years. About one-tenth (15%) of the respondents were found within the age category 46 – 55 years, but 5% of them were aged 56 and above. Majority of the respondents could be described as the youth with 35 years or below while 5% were close to retirement in the next 5 years. The youth dominating staff of the bank is expected to work tirelessly towards the maximization of organizational goals which include low level of bad loans.

On respondents' number of years worked with the bank, it was recorded that 20% had worked with the bank for less than 5 years. About one-third (35%) of the respondents had worked at the bank between 5 – 9 years while 25% had worked with the bank for 10 – 14 years. Fifteen percent of the respondents were also found to have worked with the bank for 15 – 20 years with 5% also having 21 years of working experience with the bank. It could, therefore, be stated that about 80% of the respondents have had a substantial number of years stay at the bank for more than 5 years. Looking at the substantial number of years working experience at the bank, it is perceived that they are well knowledgeable in issues relating to loans facilities the bank grants to its customers and the associated bad loans.

Touching on the educational qualifications of the respondents, Table 4.1 recorded 15% of them holding diploma certificates. A half (55%) of the respondents held Bachelors degree while about a quarter (22.5%) also held Masters degree. Other categories of professional qualifications included Institute of Chartered Accountants (ICA) and Institute of Commercial Management (ICM-UK) certificates, representing 7.5% of the respondents. The study was therefore dominated by first degree holders and can be summarised that over 85% of the respondents held certificates equivalent to first degree or higher. The calibre of staff responsible for management, credit, operations and audit departments, as selected for the study, were appreciable.

4.2.1 Trend of Bad Loans

In analysing the trend of bad loans at ADB limited for the 5 year period under review, (2010-2014), secondary data on the total loan amount disbursed and the amount charged as bad loans/impairment loss were obtained from the published financial statements of the bank. Ratios of bad loans were determined for the respective years by expressing the amount charged as impairment as a percentage of total loans disbursed. The results of data retrieved from financial reports of the bank and the calculated ratios were captured in Table 4.1.

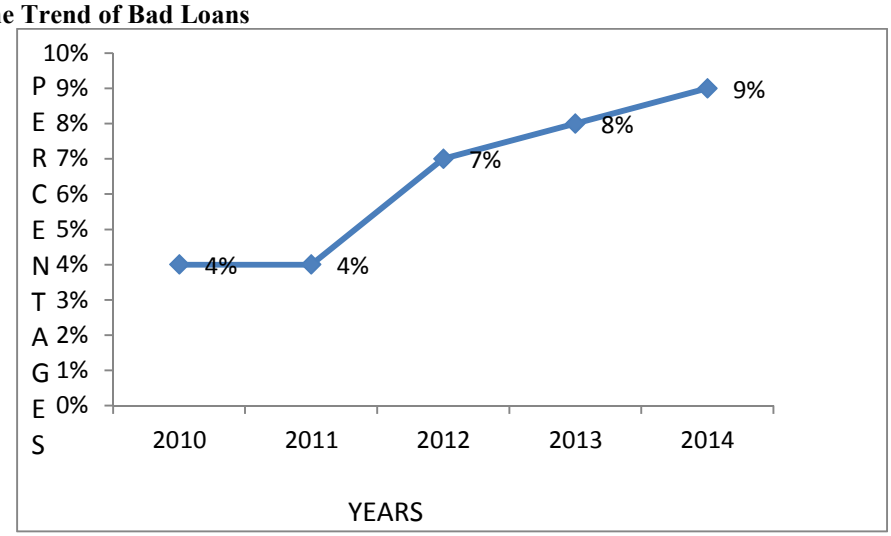
Table 4.1 Schedule of Ratio of Bad Loans

	Charges				
Items /Years	2010	2011	2012	2013	2014
Total loan Disbursed	601452	695601	812651	971506	1217686
Bad loans / Impairment	24465	29424	56861	77688	109576
Ratio of Bad loans to Loans disbursed	4%	4%	7%	8%	9%

Source: Published financial report of ADB Limited (2010-2014)

Except for year 2010 and 2011 which recorded constant ratios of bad loans to aggregate loans disbursed, ADB Limited has experienced increasing bad loan ratios for the past four years. The increasing trend in ratios of bad loans to total credit portfolios has the tendency of negatively affecting the bank's financial performance over the period. The trend of bad loans has been presented on Figure 4.1 as a line graph.

Figure 4.1 The Trend of Bad Loans

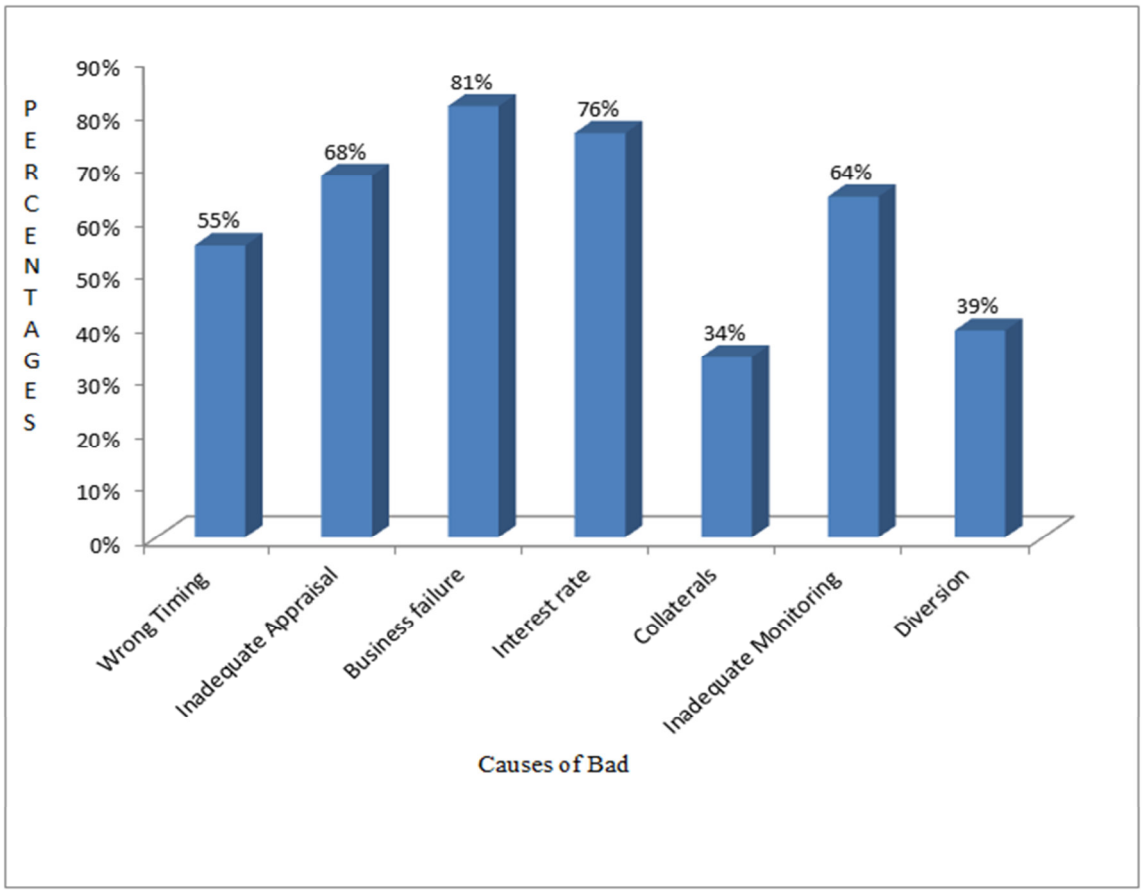


Over the period, year 2014 had the highest bad loan ratio implying high credit risk as against 2010 and 2011 financial year which recorded minimal 4% bad loan ratio indicating high management efficiency and low credit risk. Observed from the absolute figures on Table 4.1, bad loans recorded a growth rate of 20% from 2010 to 2011, 93% from 2011 to 2012, 37% from 2012 2013 and 41% from 2013 to 2014 resulting in an average growth rate of approximately 48% over the 5-year period under study.

4.2.2 Factors Accounting for the incidence of Bad Loans

Data were collected from respondents to find out the causes of bad loans at the bank. In this respect, respondents were made to select from some factors perceived to account for bad loans which included business failure, inadequate credit appraisal, high loan interest rate, inadequate monitoring, diversion of funds, wilful default and wrong time of loan delivery. Respondents held the option to select more than one option and could even add others not specified on the list of options. Data gathered from respondents was presented on Figure 4.2.

Figure 4.1 Factors Accounting for Bad Loans



From Figure 4.2, popular acclamation was given to business failure as a factor accounting for bad loans at the bank representing 81% of the respondents. This was followed by 76% of them who stated that the interest rate on loans is high and might contribute to borrowers' inability to pay back loans in full at the stipulated time. Equally opined by respondents as accounting for bad loans were wrong timing of loan delivery, represented by 64% of respondents, and 55% of respondents respectively. Rather on the lower side, (less than 50%) diversion of funds by borrowers was upheld by 33% of respondents, while over-reliance on collateral represented by 34% of respondents with 32% also giving non-compliance with loan policies. In effect, customers' business failure had the highest support by respondents whereas the least number of respondents reported non-compliance with loan policies by credit officers.

It is believed that non-compliance with loan policies has the tendency to cause loan default. Therefore, in assessing the causes of bad loans at the bank, the study touched on factors that might hinder full compliance with the bank's credit policies. Figure 4.2 displays the data gathered from respondents.

Figure 4.3 Factors Hindering Full Compliance with Loan Policies

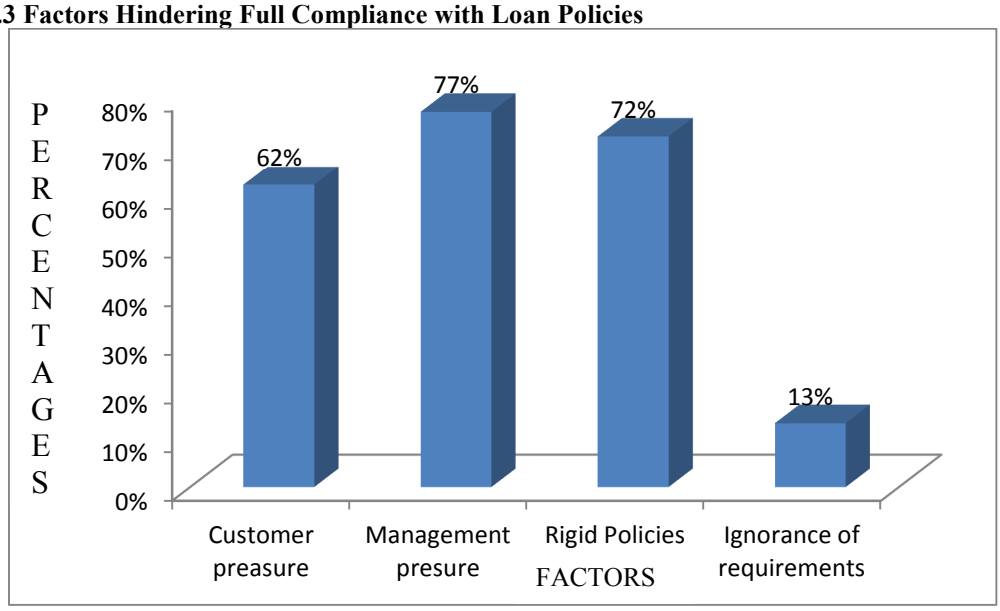
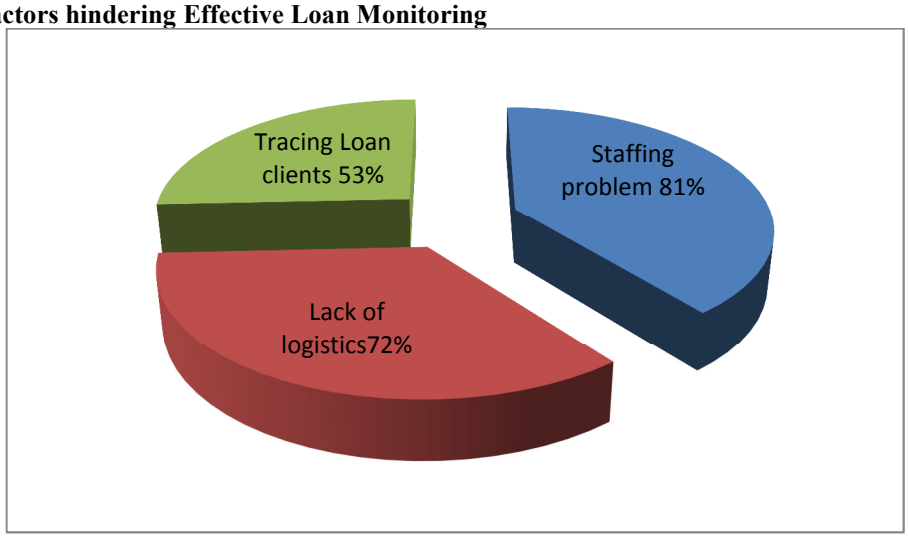


Figure 4.2 records 77% of respondents who held the view that management pressure during loan appraisal hinders full compliance with credit policies of the bank. This was followed by 72% of them who frown upon the rigid nature of loan policies of the bank. Equally important to note was 62% of respondents' view that customers also mount undue pressure on loan officials during the loan processing stage. Rather on the low side is bank officers' ignorance of loan requirements from customers. This was upheld by only 13 % of the respondents. In all the greatest concern for inadequate compliance with loan policies of the bank was blame on management pressure but ignorance of loan requirements by loan officials were least considered. Therefore, management of the bank must stop undue pressure put on credit officers approving loans which hitherto would not have been considered.

Ineffective monitoring of loans was perceived to be one of the causes of bad loans, and thus factors that hinder effective loan monitoring were studied. Data was collected on staffing problems, lack of logistics and difficulty locating loan clients as perceived factors hindering effective loan monitoring. Figure 4.3 presented the results of data collected in that respect.

Figure 4.4 Factors hindering Effective Loan Monitoring



The highest among the factors as reported by respondents was inadequate staffing which was confirmed by 81% of respondents. This was followed by an impressive number (72%) who also found lack of logistics as a factor militating against effective monitoring of loans. Difficulty locating loan clients was also found as a factor with 53% of the respondents claiming it as a monitoring problem. Apparently, a little over half (53%) of the respondents recorded all the three factors as problems hindering effective monitoring of loans.

Delayed loan approval perceived as causing bad loans, the study further probed into what causes the delay. Respondents were made to give their options from rigid procedures, customers' inability to meet requirements, insufficient loanable funds and comprehensive evaluation of collaterals. Table 4.3 presented data obtained from

the survey.

Table 4.3 Causes of Delayed Loan Approval

Causes	Number of respondents	Frequency	Percentages (%)
Evaluation of collaterals	40	33	83
Rigid procedures	40	27	67
Customer inability to meet loan requirements	40	28	71
Insufficient loanable funds	40	4	10

It could be observed from Table 4.3 that evaluation of collaterals was the major factor causing delay in loan delivery as reported by 83% of the respondents. This was followed by customers' inability to meet loan requirements reported by 71% of the respondents. Nearly three-quarters (67%) of the respondents were also of the view that delay in loan delivery is also caused by rigid nature of the bank's procedures for granting loans. However, just about one-tenth (11%) of the respondents claimed insufficient loanable funds sometimes cause the delay. The implication here is that none of the perceived causes of delay in loan delivery was refuted outright by the respondents, but rather all of them were upheld though at varying levels of acceptance.

The identification of factors accounting for bad loans captured diversion of funds by loan clients. It was therefore seen as relevant to further ascertain which factors account for diversion of funds. Table 4.4 gives vivid statistic.

Table 4.4 Factors accounting for Customers Diversion of Funds

Factors	Number of respondents	Frequency	Percentages (%)
Inadequate monitoring	40	23	58
Under-financing	40	32	79
Anticipated windfall profits	40	22	56
Untimely delivery	40	15	37
Ignorance of lending terms & conditions	40	10	25

As portrayed on Table 4.4, 58% of the respondents attributed diversion of funds to inadequate monitoring by the bank. Nearly four-fifth (79%) of the respondents also recorded under-financing as a major factor responsible for fund diversion rather than to make loan repayments. Customers' anticipation of windfall profit from sources other than their main course of business was seen by nearly three-fifth (56%) of the respondents as contributing to diversion of loan repayment funds. However, nearly two-fifth (37%) and about a quarter (25%) of respondents respectively attributed untimely loan delivery and ignorance of lending terms to diversion of loan repayment funds.

The study further inquired about respondents' understanding of inadequate credit appraisal as reported to have a relation to the incidence of bad loans. Respondents' view of what amounts to inadequate credit appraisal was as gathered on Table 4.5.

Table 4.5 What amounts to Inadequate Credit Appraisal

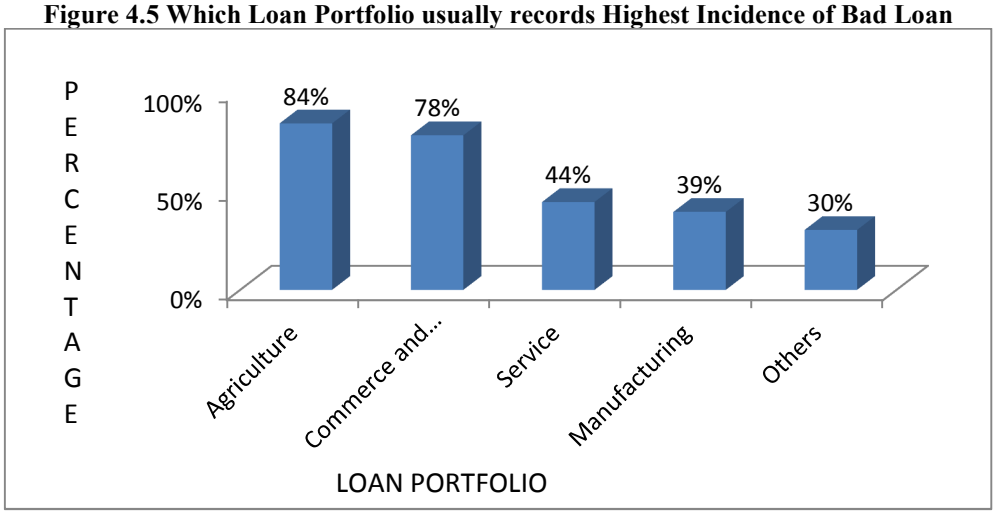
Causes	Number of respondents	Percentages (%)
Inadequate information about loan clients	33	83
Inaccurate evaluation of collaterals	30	76
Disregard for credit rating	2	6

Viewed from Table 4.5, as much as 83% of the respondents believe that inadequate information gathered on loan clients amounts to inadequate credit appraisal. To about 76% of the respondents, inaccurate evaluation of loan collaterals equally amount to inadequate credit appraisal and could result in bad loans. A good number of respondents also added that inadequate credit appraisal is seen from inadequate assessment of the credit worthiness of loan clients. In all, only disregard for credit rating was on the lowest side with 6% of the respondents claiming that it amounts to inadequate credit appraisal.

4.2.2.1 Which Loan Portfolio gives high incidents of Bad Loan

Having studied the possible causes of bad loans at Agricultural Development Bank Limited (ADB Ghana Limited), the study probed further to establish which of the loan portfolios usually records the highest incidence of bad loan. Responses gathered on this issue were displayed on Figure 4.5.

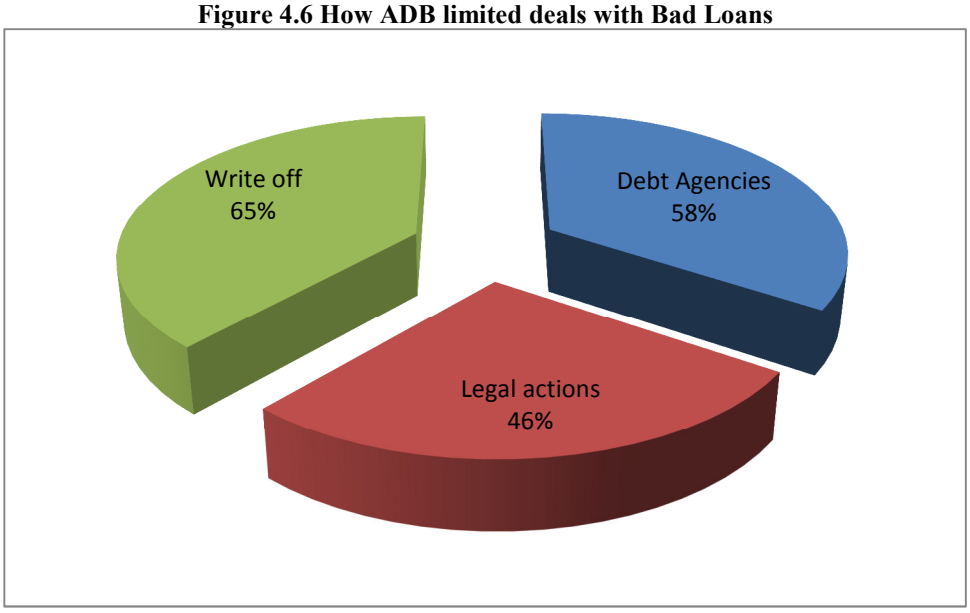
Figure 4.5 Which Loan Portfolio usually records Highest Incidence of Bad Loan



As portrayed on Figure 4.5, the agricultural sector usually recorded the highest incidence of bad loans as confirmed by 84% of the respondents. Similarly, on high levels, 78% of respondents cited loans for commerce and finance as usually recording bad loans. On the lower side of it, 44% and 39% of respondents respectively cited the service sector, manufacturing sector and other categories of loan portfolios representing 30% as recording bad loans. The categories of loans classified as others included salary loans, transport and communication, mining and quarrying as well as building and construction.

In the event of bad loans occurring, ADB Ghana Limited adopts some measures to retrieve them or write them off as bad debt after exhausting all possible avenues. How the bank deals with bad loans as gathered from respondents was presented on Figure 4.6.

Figure 4.6 How ADB limited deals with Bad Loans



(Source: Survey data, 2016)

It was confirmed by 58% of respondents that the bank employs the services of external debt collection agencies. About 46% of the respondents also reported that the bank sometimes resorts to legal actions as a last resort as a means of retrieving debts. However, over three-fifth (65%) of respondents marked that bad loans may eventually be written off as bad debt.

When respondents were made to suggest measures management and board of directors could consider to reduce the incidence of bad loans, intensive monitoring was brought on board as very necessary. Other suggestions included partnership with credit reference bureaux to ascertain loan applicants' credit status with other banks before considering such applications.

Respondents additionally suggested that loan processing and approval must be free from undue influence from management and board of directors to ensure fair and adequate assessment of applicants' credibility and qualification for loan facility.

4.2.3 Effects of Bad Loan on Profitability

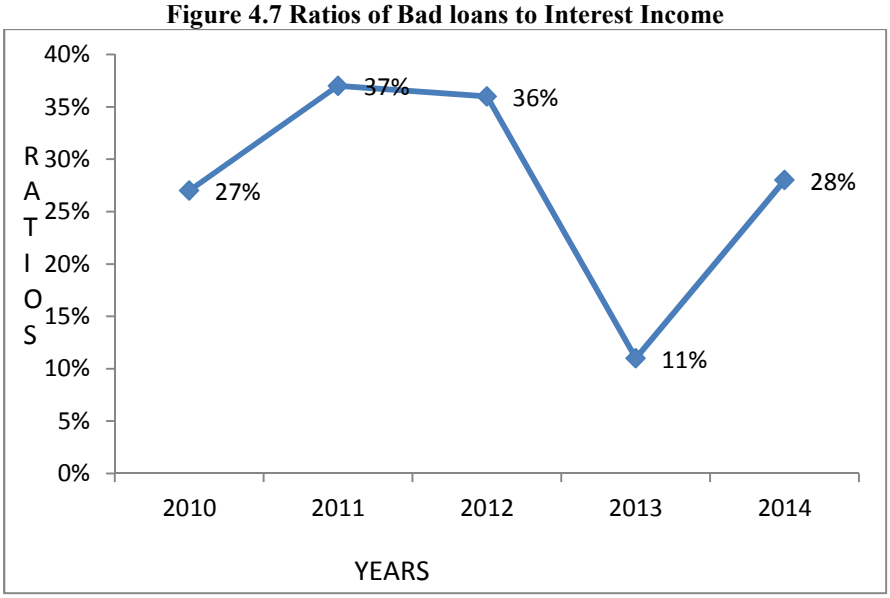
The bank of Ghana recommends a threshold of a maximum of 5% provisioning of bad loans or impairment charge as ideal for banks to reflect efficient credit risk management ensuring high-profit margins (Kay, 2005). An assessment of the effects of bad loans on profitability from the 5-year financial records of ADB Ghana limited as displayed on the schedule of ratio of bad loans, year 2010 and 2011 fell within the acceptable rate and would not have much adverse effect on the bank's profitability. However, with the increasing ratios of bad loans (7%, 8% and 9%) respectively for 2012, 2013 and 2014 are likely to reduce the quantum of loanable funds and thus would have multiple effects on interest income, operating profit and subsequently the net profit for the bank. The study of effects of bad loans was made using the bank's interest income, operating profit and net profit as financial performance indicators against impairment charges for the 5-year period under review. Data extracted from the audited financial reports of the bank was summarised on Table 4.6.

Table 4.6 Effects of Bad Loans on Profitability

			Charges		
Financial Item / Years	2010	2011	2012	2013	2014
Interest Income	89504	80298	158290	174961	207732
Bad loan	24465	29424	56861	19860	59080
Ratio of Bad loan to Interest income	27%	37%	36%	11%	28%

Observed from Table 4.6, the bank recorded ratio of bad loan to interest income of 27%, 37%, 36%, 11% and 28% respectively for 2010, 2011, 2012, 2013 and 2014 accounting years. The undulating nature of ratios recorded as line graph on Figure 4.7.

Figure 4.7 Ratios of Bad loans to Interest Income



The least of a bad loans ratio as recorded in 2013 indicates a minimal drain on interest income on loans and advances while 2011 recorded the highest bad loan ratio impacting adversely on the interest income and consequently the bank's profitability.

Similarly, the operating profit of the bank suffered substantial loan impairment ratios over the period as shown in Table 4.7.

Table 4.7 Effect of Bad Loans on Operating Profit

			Charges		
Financial Item / Years	2010	2011	2012	2013	2014
Interest Income	10689	35703	26714	83928	34771
Bad loan	24465	29424	56861	19860	59080
Ratio of Bad loan to Interest income	229%	84%	213%	24%	170%

It is obvious from Table 4.7 that the bank records the highest ratio of 229% in 2010. this implies that the impairment losses suffered in 2010 outweigh the operating profit more than twice, similar to 2012 recording an impairment ratio of 213%. However, a ratio of 24% recorded in 2013 had a minimal impact on the bank's operating profit. The ratio of bad loan to net profit has also not been favourable at all as displayed on Table 4.8.

Table 4.8 Effect of Bad Loans on Net Profit

			Charges		
Financial Item / Years	2010	2011	2012	2013	2014
Net profit	11652	43608	26696	80629	47865
Bad loan	24465	29424	56861	19860	59080
Ratio of Bad loan to Net profit	210%	67%	213%	25%	123%

As observed from Table 4.8, the bank recorded over two hundred of bad loan against net profit for year 2010 (210%), and 2012 (213%). the year 2014 also recorded over one hundred percent (123%) bad loan ratio to net profit. for the three years (2010, 2012 and 2014) the amount of loss to loans and advances disbursed greatly reduce the expected profit to drain stakeholders' returns. However, the years 2011 and 2013 with respective ratios of bad loans of 67% and 25% had a minimal impact on net profit as bad loans (impairment losses) are charged as expense to profit.

4.3 Discussion of Research Findings

The study of incidence of bad loan over the period under review depicts that the bank does not make progressive performance in minimizing bad loans. The bank regards loans and advance as impaired when there is objective evidence that a loss event has occurred since initial recognition and the loss event has an impact on future estimated cash flows from the asset (ADB, 2014). The amount of impairment charges (bad loans) kept increasing for the first three years starting from 2010 to 2012 with a down turn in 2013 but rose again in 2014. The bank of Ghana requirement and standards for loan impairment is set at 5% of aggregate of all loan portfolios (Kay, 2005), but the current trend depicts that ADB Ghana Limited only satisfied requirements for 2010 and 2011. The recent three years (2012-2014) recorded higher rates of bad loans over and above set standards. Research has identified that higher levels of bad loans signals management inefficiencies and threatens banks profitability while depleting future loanable funds of the institution (Bloem & Gorter, 2001).

As the ratio of bad loans to total loan showcase increasing trends, one would expect deteriorating profit margins. Therefore, advocacy for an overhauling management strategy posited by (Bloem & Gorter, 2001) is upheld in such rising incidence of bad loans.

From the data presented and analyzed, business failure on the part of loan clients has been found to be a factor contributing to bad loans of the bank. This establishment is in consonance with empirical evidence (Smook, 1997) who identified sudden adverse market changes as causing business failure. Consequently, borrowers might lose business as a result of sudden price hikes deteriorating business and thus make loans beneficiaries to have less money to pay off their loans. This in effect can lead to loan default. Similar to Fofack (2005), high-interest rate was also found causing bad loans because borrowers struggle to receive high returns enough to make loan repayments.

Equally identified from the survey to account for bad loans was non-compliance of loan policies. The study noted that banks had established credit policies which are made loose by undue customer and management/ board pressures as posited by Asiedu-Mante (2011). The study has also associated ineffective monitoring as causing bad loans. It has been observed that inadequate staffing, lack of logistics and difficulty locating loan client hinder effective monitoring. In support, Arko (2012) found ineffective monitoring of loans as a major factor accounting for the incidence of bad loans.

Other factor found responsible for bad loans included delayed loan approval. Research (Bloem & Gorter, 2001) has established that delayed or untimely disbursement of loans betrays the good intentions for which loans were sought and thus could bring repayment problems. Findings of the current study attributed delayed approval of loans to rigid loan assessment procedures, customers inability to meet requirements and comprehensive evaluation of collaterals.

Respondents in the study recounted diversion of fund meant for loan repayment by loan beneficiaries as contributing to the incidence of bad loans. Accounting for diversion of funds, the study noted lack of monitoring, under-financing and anticipating windfall profit as contributory factors. At variance with (Takyi, 2011) anticipated profit from source other than the main course of business was found non-correlated with the evidence of bad loan. However, the current study conforms with Appiah (2011). Research (Francis, 2009) has associated inadequate credit appraisal with the incidence of bad loan and thus advocates for lenders to undertake accurate evaluation of collaterals, adequate information about loan clients, due regard for credit rating and adequate assessment of credit worthiness. The findings in the current study, therefore, affirm existing literature that inadequate credit appraisal emanates from the factors just mentioned and thus result in the incidence of bad loans.

Investigating into loans portfolios/categories that usually record high bad loans, the Agric sector loan and commerce and finance categories were found eminent. As a follow-up, the study sought to find how bad loans are dealt with by the bank. Findings included external debt recovery strategy and legal actions as a last resort.

As confirmed by respondents the chunk of bad loans comes from the agricultural sector loans possibly heightened by unfavourable weather and lack of market avenues for agricultural produce as well as occasions of

natural disasters that befall on them. Earlier in the study of (Francis, 2009) ADB limited had recorded huge incidence of bad loan from the Agric sector loan principally fuelled from the cocoa maintenance loans.

Regarding the evaluation of the effects of bad loans on the bank's profitability. Loans constitute the banks' assets and generate greater percentage of banks profit margin. Therefore the assertion from Athanasoglou et al. (2005) that banks' lending has pervasive effect on their profit and safety is a boarder for researchers. An investigation into the effect of bad loans on the profitability of ADB limited made use Interest income, Operating profit and Net profit as profitability indicators. In essence, ratios of bad loans to this performance (profit) indicators are pertinent for evaluating the effect of bad loans on the banks' profitability. Studies (Takyi, 2011) have established that high rate of bad loans to interest income indicate a serious drain on the banks' financial status since the bulk of bank income is obtained from loans granted to customers from which interest charges are enormous. From the analysis of impairment losses on loans and advances observed over the 5 years under review, significant amounts of interest income is put into the drain as loans go bad. None of the 5 years recorded below 10% bad loans in relation to net income obtained for the years. As high as over one-third of the interest income for 2011 got lost, and an average of 28% (nearly one-third) also got lost within the 5-year period. Such a substantial amount of bad according to (Takyi, 2011) weakens bank profitability and shareholders' worth.

The ratio of impairment loss to operating profit was significantly corrosive as years 2010 and 2012 recorded over a double of the bank's operating profit. Apparently, Fofack (2005) view that high rates of impairment losses for 2011 and 2014 in relation to operating profit has not been healthy, except for the year 2013 which recorded a minimal ratio of 24%. Over the period of 5 years under study, an average of 144% bad loan in relation to the bank's operating profit was recorded. Such a high ratio in the view of Takyi (2011) is detrimental to the financial health of the bank.

Net profit earned over the period was also related to impairment losses to study the ratio of bad loans and evaluate possible effects on the bank's profitability. High ratios of bad loans to net profit 210%, 213% and 123% respectively for 2010, 2012 and 2014 indicate serious amount of loss which hitherto could have swollen up profit margins. Significantly, such losses would adversely affect investors' earning (Asantey, 2011). Records for 2011 and 2013 only showed comparatively lower ratios of bad loans to net profit of 67% and 25% respectively. On average, bad loans to net profit for the 5-year period stands at 128%, seen as high amount of monetary loss (Asantey (2011) yielding negative effects on the bank's net profit.

4.4 Conclusion and Recommendations

The increasing trend of bad loans and their ratio to total loan portfolio have not been impressive. More to that, the average ratio of 6% over the 5-year period is above the recommended portfolio at risk (PAR) ratio of 5% required by bank of Ghana.

The interest rate on loans is too high for loan customers to bear and that contribute to their inability to pay back loans they collect. Also, loan processing and disbursement are not timely. Late disbursement could lead to misappropriation and cause bad loans at times.

Equally worthy of mentioning is loan monitoring which has not been encouraging and hence its adverse effects on loan recovery being felt over the study period. Low level of loan recovery representing high rate of bad loans links the responsibility to inaccurate evaluation and monitoring of collaterals. Customers' diversion of loan repayment funds could be attributed to under-financing, inability of credit officers to locate clients as a result of wrong and inadequate appraisal procedures. Board and management of the bank unduly influence loan processing and disbursement. The act erodes the independence of the credit officers as it mounts undue pressure on them to execute wrong loans leading to bad loans. Bad loans recorded over the 5-year period under review have had adverse impact on the bank's operating profit, interest income and net profit. Much of the bank's profit margin is eroded by the incidents of bad loans.

To conclude, the incidence of bad loan at ADB Limited is great and requires effective credit management policies and procedures. High incidence of bad loan is attributed to effective monitoring, undue management and board influence during loan processing as well as high loan interest rates. Board of directors are as a matter of urgency supposed to step up monitoring and supervisory functions to ensure credit officers' total compliance with loan policies and structures.

Based on the findings and the conclusion made, the following recommendations are made in respect of the objectives of the study.

Board and management of Agricultural Development Bank Limited (ADB Limited) need to revise the loan interest rate and charge lower than the current rate (example, 29% for commercial loans) to customers to reduce the rate of loan default.

Again, management should revise the loan appraisal procedures to avoid unnecessary delay of loan disbursement which sometimes leads to customers missing business opportunities and thus causing bad loans. Loan appraisal should be completed within 3 working days for disbursement.

Credits officers must also improve the quality of their loans appraisal procedures to fully gather information

about loans customers, monitor clients business to avoid the difficulty of locating clients after loan disbursement. Credits officers must as much as possible avoid under-financing of loans requested by customers and ensure timely disbursement of loans to enhance loan recovery rate.

Loan monitoring must be seriously looked at, and procedures must be stepped up by ensuring that credit officers are well trained and resourced. Rewards schemes could also be considered for high performance to encourage staffs.

Undue influence by board and management on credit officers during loan appraisal must stop.

Credit officers must see to proper evaluation, monitoring and registration of collaterals as recommended by Bank of Ghana. The credit reference bureau system should be strictly adopted to reduce credit risk right from the beginning of loan processing.

It is also recommended that a further study is conducted to assess the credit management practices of the bank.

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