A Comparative Study of Non-Performing Assets of Foreign and Local Banks in Ghana: The Case of GCB Bank Ltd and Standard Chartered Bank in Ghana.

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ABSTRACT

The Ghanaian banking system plays an important role in the development of a country's economy and its financial stability by acting as an intermediary between depositors who have excess funds and borrowers who are in need of funds. In recent times banks have become cautious in extending advances as a result of the rise in non-performing assets. A non-performing asset (NPA) is a debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for a period beyond 90 days thus not yielding any income to the lender in the form of principal and interest payments. The study employed quantitative research design with secondary data for the period 2008-2017. An attempt was made to study the trend of total advances, net profit, Gross Non-Performing Asset and Net Non-Performing Asset of GCB Bank Limited and Standard Chartered Bank Ghana Limited. The results showed a general increasing trend of Total advances, Gross Non-Performing Asset and Net Non-Performing Asset for both banks over the past 10 years. In addition, there was a positive relationship between the Net profit and Non-Performing Asset of GCB Bank Limited whilst a negative relationship existed between the Net profit and Non-Performing Asset of Standard Chartered Bank Ghana Limited.

Keywords: GCB Bank Limited, Gross NPA, Net NPA, Total Advances, Non-Performing Assets (NPA), Standard Chartered Bank Ghana

INTRODUCTION

The banking system plays an important role in the development of a country's economy and its financial stability by acting as an intermediary between depositors who have excess funds and borrowers who are in need of funds. As a result, it is imperative that the banks protect the interest of these depositors (Elliot, 2014). According to the 2016 Ghana banking survey, net loans and advances remained the most significant component of the industry's earning assets, accounting for 47% of total operating assets. There was also a significant decrease in the growth rate of net loans and advances in 2015 juxtaposing the growth rate of 2015 with that of 2014 (PricewaterhouseCoopers, 2016). Non-performing assets (NPAs) constitute an

integral part of banks' operations: a bank gives out money upfront and earns income over a time on the promise of a borrower to repay. When loans are not repaid the bank loses both its income stream as well as its capital (Lalitha, 2013).

One of the key challenges that the Ghanaian banking sector faced in 2015 was a rise in Non-Performing Loans (Bank of Ghana, 2016). The quality of assets is an important parameter or component to gauge the financial strength of banks and the prime factor in measuring the quality of assets is by ascertaining the component of non-Performing Assets (NPA) as a percentage of the total assets (Gadhia, 2015).

This research seeks to compare the Non-Performing Assets of GCB Bank Limited and Standard Chartered Bank Ghana by comparing their Total advances, Net profit, Gross and Net Non-Performing Asset and determine the relationship between their Non-Performing Assets and Net Profit to serve as a source of empirical literature for future studies.

Background of the Study

The concept of Non-Performing Assets (NPA) is based on advances and loans. Advances and loans are considered to be performing when they generate a regular income to the lender (bank) and treated as non-performing when they cease to generate income during the stipulated time to the lender and thus result in the generation of losses to banks (Murugadoss & Murugan, 2015).

Gadhia opined that the quality of assets is an important parameter or component to gauge the financial strength of banks and the prime factor in measuring the quality of assets is by ascertaining the component of Non-Performing Assets (NPA) as a percentage of the total assets.

A large NPA has a negative effect on the performance of the bank's profit in a lot of ways as they result in a reduction of interest income and erode current profit as a result of the constant increase in provisions (Akter & Roy, 2017)

The Credit Default theory helps us understand lending risk in a systematic and dynamic manner and ultimately measures and manages credit risk for financial stability (Sy, 2007). Sy hypothesizes the delinquency and insolvency concept of this theory: a failure to meet a loan payment by a due date and the situation where assets are less than liabilities respectively.

The theory of information asymmetry also tells us that it may be difficult to distinguish between good and bad borrowers and this may result in adverse selection and moral hazard problems (Auronen L. , 2003). Loan applicants almost always have full information about their ability to repay loans. They however fail to make full disclosures to banks in order to access financing beyond their affordability and their dishonesty in disclosing all this information to the banks whilst accessing a facility makes the bank disadvantaged and information asymmetry is said to have occurred (Ebba, 2016).

One of the key challenges that the Ghanaian banking sector faced in 2015 was a rise in Non-Performing Loans (Bank of Ghana, 2016). According to the 2016 Ghana banking survey, net loans and advances remained the most significant component of the industry's earning assets, accounting for 47% of total operating assets. There was also a significant decrease in the growth rate of net loans and advances in 2015 juxtaposing the growth rate of 2015 with that of 2014 (PricewaterhouseCoopers, 2016). The latest (Bank of Ghana) financial stability report indicated a general increase of 70% of Non-Performing loans.

Against this background, GCB Bank limited recorded a 29% decline in profit from GHS 467 million in 2016 to GHS 332 million in 2017. Their total assets recorded a growth of 58.4% from GHS 6,075 million in 2016 to GHS 9,627 million in 2017 making them the biggest bank in Ghana. An increase of 63% in deposits

was also recorded. The decline in profitability in 2017 was as a result of the 30% increment in other operating expenses and impairment charges (GCB Bank Limited, 2017). Standard Chartered Bank Ghana recorded a 22% increment in profit from the year 2016 and an 88% decline in impairment charges. They also recorded a 54% increase in total earning assets. The stride made in the recovery of their non-performing loans resulted in an 18% increase in their profit after tax (Standard Chartered Bank Ghana Limited, 2017).

Statement of the Problem

Non-performing assets is a major problem faced by the banking industry and affects the financial position as well as their interest income and profits (Ojha & Mithila, 2017). One of the key challenges that the Ghanaian banking sector faced in 2015 was a rise in non-performing loans (Bank of Ghana, 2015). The latest Bank of Ghana financial stability report covering operation of banks for the first months of 2016 showed that non-performing loans increased by 70% from GH¢3.6 billion in 2015. The gross loans and advances ratio of Guarantee Trust Bank (GTB), Access Bank Ghana (ABG) and Bank of Africa (BOA) declined by 46%, 35% and 30% respectively indicating an improvement in their asset quality whereas that of National Investment Bank (NIB), Agricultural Development Bank (ADB) and HFC Bank limited increased by almost 100% indicating a decrease in their asset quality.

The quality of assets is an important parameter or component to gauge the financial strength of the bank. (Gadhia, 2015). Grier (2007)also asserts that the loan portfolio is the most important asset category for banks and also poses the greatest risk to them as a result of the high risk of the loans going bad.

Gadhia (2015) however, sought to determine and compare the asset composition of selected public and private banks in India. His findings indicated that all the selected banks under study had unequal compositon of their Net Non-Performing Ratio and Net Advances to their Total Assets: the concentration of Net Non-Performing Asset in the Net Advances was highest for the public banks as was same for their net advances to total asset. Mohnani and Deshmukh (2013) assessed the comparative positon of selected local and foreign banks in India. Their findings indicated that there was a general marginal decrease in the level of Non-Performing Assets for all the selected banks.

Sika-Dapaah (as cited in Antwi-Bosiako, 2013) pointed out that the problems that had most of the state-owned banks in Ghana going bankrupt and being privatised was poor profitability, poor liquidity positions and poor credit quality. Considering the existing competitiveness in the Ghanaian banking industry and with the recent collapse of some indigenous banks like UT Bank, Unibank, Royal Bank, Beige Bank and Capital Bank and with Non-Performing Assets being one of the major causes of their insolvency, it is imperative to compare the Non-Performing Assets of GCB bank Ghana Limited (the oldest local bank) and Standard Chartered Bank Ghana (the oldest foreign bank) and also determine if a relationship exists between their Non-Performing Assets and Net Profit to inform the Ghanaian Banking Industry and all stakeholders.

A number of researches have been conducted to ascertain the general financial performance of foreign and local banks in Ghana (Ntow-Gyamfi & Laryea, 2012; Tetteh, 2014: Alnaa, Adongo, & Juabin, 2016). Although varied researches have been conducted in several countries, no research has been done on comparing non-performing assets of foreign and local banks in Ghana: The importance of Non-Performing Assets as a key indicator of the fragility of a bank and a precondition for the stability of the financial system cannot be over- emphasized (International Monetary Fund, 2011) and that has necessitated this study.

Purpose of the Study

The main purpose of this study was to do a comparative analysis of non-performing assets of foreign and local banks in Ghana.

Objectives of the Study

The study specifically sought to achieve the following objectives.

1. To compare the Total advances, Net profit, Gross and Net Non-Performing Assets of GCB Bank Limited and Standard Chartered Bank Ghana Limited in Ghana.

2. To analyze the trend of Gross and Net Non-Performing Assets of GCB Bank Limited and Standard Chartered Bank Ghana Limited in Ghana.

3. To determine the relationship between the Non-Performing Assets and net profits of GCB Bank Limited and Standard Chartered Bank Ghana Limited in Ghana.

Research Questions

The following research questions were formulated to achieve the objectives stated above.

1. What are the Total advances, Net profit, Gross and Net Non-Performing Assets of GCB Bank Limited and Standard Chartered Bank Ghana?

2. What is the trend of Gross Non-Performing Assets and Net Non-Performing Assets of GCB Bank Limited and Standard Chartered Bank Ghana for the period under study?

3. What is the relationship between non-performing loans and net profits of GCB Bank Limited and Standard Chartered Bank Ghana?

Significance of the Study

This research project will be of great significance in two possible ways:

It can serve as a source of empirical literature for future studies. This will be made possible because the data which will be collected are real financial data from the bank and if another research should come up in the future, this project can serve as a reference point for the researchers.

Even though it is academic research, it reflects the actual situations on the ground in terms of the financial performance of the bank and as such, recommendations provided here can be useful to the industry.

Delimitations of the study

This research compared the non-performing assets of foreign and local banks. The study used GCB Bank Limited and Standard Chartered Bank Ghana Limited as a case in point. A purposive sampling technique was adopted in selecting these two banks for the study after considering the number of years in existence, the number of branches and the market share as the criteria for selection. Again, the annual reports and the yearly banking survey undertaken by PricewaterhouseCoopers were adopted as a secondary source of data for the study.

Limitations of the study

The study was basically based on secondary data on the annual reports of GCB and Standard Chartered Bank Limited. Thus, the findings in this study might not be the true representation of the performance of the banks since the data points of ten years is not sufficient hence in further research in this area more data points should be acquired.

Comparing the performance of multiple banks is key in further research works. The study is confined to only the banking and finance industry, mainly the banking sector of the industry.

The data has a short time and is cross sectional. This study is limited to only two (2) banks and the short dimensions of the data may have some implication for the parameters estimated.

The possible problems estimated include unreliability of result and inconsistent estimates. An effective way to deal with this problem is to increase the sample size; however, this may not be permitted by the short dimension of data as such resolving the problem may be difficult.

Organisation of the Study

This research was organized into five chapters, starting with an introduction that outlined the background, significance, objectives, and research problem. The literature review in Chapter two discussed contributions from theorists and empirical works relevant to the topic. Chapter three described the study's design, which was descriptive in nature, using banks' financial statements as the main instrument. Chapter four analyzed the data from the financial reports using Microsoft Excel and SPSS, software chosen for their relevance and the researcher's familiarity. Finally, Chapter five drew conclusions based on the research findings and made recommendations to the banks studied, providing a comprehensive conclusion to the research.

LITERATURE REVIEW

This chapter focused on the review of literature on Non-Performing Assets that is relevant to the objectives and essence of the study. This section explored the theoretical frame of the study and explored key concepts and theories of Non-Performing Assets, asset classifications and provisioning norms, the types of non-performing assets, the factors that cause non-performing assets and the impact of non-performing assets on the operations and performance of banks. This section also examined and reviewed empirical literature of various researches conducted about Non-Performing Assets, Net Profits and Total advances in the banking industry by different researches.

Theoretical Literature

This section presents review of the relevant theories upon which the study is based. The specific theories covered are the information asymmetric theory, the credit default theory and the agency theory.

Credit Default Theory

According to Ebba (2016), the Credit Default Theory postulated by Sy (2007) is relevant for a situation where there is indirect relation to the effect of default that affects the financial performance. This theory is needed in understanding lending risk in a systematic and dynamic manner and ultimately measures and manages credit risk for financial stability (Sy, 2007). Most existing credit default theories do not link causes directly to the effect of default and are unable to evaluate credit risk in a rapidly changing market environment as experienced in the recent mortgage and credit market (Sy, 2007). Kenan (1999) asserts that a credit default represents the financial failure of a person or a company. The clearest definition of credit default is given by Moody's, where a credit default involves both delinquency and the notion of expected loss to the lender. The term credit default can mean something as minor as a late payment of a debt obligation so that a bank can apply a penalty "default'' interest rate between the due date (Sy, 2007).

Further hypothesizes two concepts of this theory: delinquency and insolvency theory. Delinquency is defined as a failure to meet a loan payment by a due date whilst insolvency refers to the situation where

assets are less than liabilities (Sy, 2007).

Delinquency occurs where a borrower is unable to make a loan payment by the due date as a result of liquidity failure. Liquidity failure tends to occur when there is insufficient income from operating business running at a loss and this triggers a solvency assessment which may lead to a conclusion of negative equity position causing loan termination and an expectation of loss by the lender (Sy, 2007; Ebba, 2016). The concept proposes two cardinal ratios in relation to non-performing loans: Loan Serviceability Ratio (LSR) and the Debt Service Ratio (DSR).

Loan Serviceability Ratio is defined as the maximum loan interest rate an owner-occupier borrower can service a loan amount from net disposable income after living expenses (Ebba, 2016).

Loan Serviceability Ratio Evolution – This risk in loan serviceability stems from the fact that serviceability changes over time due to changes in individual circumstances and changes in the economic environment. Thus, a loan which looked very serviceable may become a struggle for the borrower due to unanticipated adverse developments (Ebba, 2016).

In summary, this theory is seen to be in collaboration with the study as it lends credence to the nature and cause of non-performing assets.

Information Asymmetry Theory

Asymmetric Information occurs where one party to an economic transaction possesses greater material knowledge than the other party (Kagan, 2018). This theory which was first presented by Akerlof (1970) in his paper titled, "The market for Lemons: Quality Uncertainty and the Market Mechanism" is developed with the example case of the automobile market. The core of his argument is based on the fact that buyers in many markets use some market statistics to measure the value of a class of goods: whilst the buyer sees a part of the whole market, the seller has more in-depth knowledge of the specific good and uses this knowledge as an incentive to sell goods of an average market quality to the buyer (Auronen L. , 2003). Thus, the theory asserts how difficult it may be to differentiate between good and bad borrowers which may result in adverse selection and moral hazard problems (Ebba, 2016).

Jensen and Meckling (1976) posits two types of moral hazard problems that incite bank managers to take more risk in lending than the optimal level. One which they referred to as managerial rent-seeking occurs when managers invest in "pet projects" for their own benefit or when they fail to monitor loans efficiently and accurately. The other moral hazard problem arises where a conflict of interest exists between creditors and shareholders. Their theory implicitly suggests that these moral hazards can lead to an increase in the total loans advanced and this inadvertently leads to a significant increase in non-performing assets.

Stiglitz and Weiss (1981) studied contingency contracts: a loan contract where default of payment prevents the individual from accessing a new loan facility in future. They found that the possibility of termination of the contingency contract where one exists, incites an attitude that the bank finds desirable.

Loan applicants almost always have full information about their ability to repay loans. They however fail to make full disclosures to banks in order to access financing beyond their affordability. Their dishonesty in disclosing all this information to the banks in accessing a facility makes the bank disadvantaged and information asymmetry is said to have occurred (Ebba, 2016). The uncertainty of loan repayment by lenders as a result of their inability to accurately observe the traits and actions of low quality borrowers who displace high quality borrowers and consequently cause the deterioration of the overall quality of bank loan portfolio decreases their profitability and erodes their capital (Kingu, 2018).

Asset Structure and Financial Performance of GCB Bank Limited and Standard Chartered Bank, Ghana

The asset structure of Ghanaian banks is mainly made up of loans and advances, assets held in foreign currencies, investment in government securities and other assets (Abdul, Kyereboa-Coleman, & Andoh, 2014)

Net advances constituted 35.8% of banks' assets whilst investment in government securities and other assets, the second largest component of assets, constituted 29.6% as at October 2017. Cash and short-term funds, fixed assets and other assets made up 34.6% (Bank of Ghana, 2017).

Against this background, GCB Bank limited recorded a 29% decline in profit from GHS 467 million in 2016 to GHS 332 million in 2017. Their total assets recorded a growth of 58.4% from GHS 6,075 million in 2016 to GHS 9,627 million in 2017. An increase of 63% in deposits was also recorded. The decline in profitability in 2017 was as a result of the 30% increment in other operating expenses and impairment charges (GCB Bank Limited, 2017).

Standard Chartered Bank Ghana recorded a 22% increment in profit from the year 2016 and an 88% decline in impairment charges. They also recorded a 54% increase in total earning assets. The stride made in the recovery of their non-performing loans resulted in an 18% increase in their profit after tax (Standard Chartered Bank Ghana Limited, 2017).

The Concept of Non-Performing Assets

Interest in the performance of the financial industry has been increasing since the time of incorporation and many theories have been propounded in this regard. The concept of non-performing assets (NPA) is based on advances and loans. Advances and loans are considered to be performing when they generate a regular income to the lender (bank) and treated as non-performing when they cease to generate income during the stipulated time to the lender and thus result in the generation of losses to banks (Murugadoss & Murugan, 2015). Other effects of NPA include a delay in funds to be recycled to potential borrowers and denial of interest income from such assets (loan and advances) to banks.

Budgeted profits could easily be eroded by way of provisions made for irrecoverable debts (Samir & Kamra, 2013). NPA could increase the tendency of non-performance of loan portfolio which could lead to either low- or no-income recovery to the lender thereby creating a great burden to the industry (Amuakwa-Mensah & Boakye-Adjei, 2015). Banks could perform tremendously well if loan administration and recoveries are well managed in a way that reduces NPA to a risk tolerable level hence reducing the burden faced by the industry.

The financial industry is made up of firms that provide financial services to commercial and retail customers. It encompasses a broad range of organizations that deal with the management of funds. In Ghana, the financial services industry is categorized into three main sectors namely:

- Banking and Finance
- Insurance and
- Financial Markets /Capital Markets

This study focused on the banking and finance sector of the financial industry of Ghana.

As at 31st December 2016, the Ghanaian banking sector comprised of 33 banks. Of this number, seventeen are foreign banks (banks with foreign majority ownership) and sixteen local banks (banks with local

majority ownership). With the exception of rural banks, all banks in Ghana operate as universal banks and this opens endless opportunities to the range of products they can offer.

According to the 2016 Ghana banking survey conducted in collaboration with Ghana Association of Bankers by PricewaterhouseCoopers, net loans and advances remained the most significant component of the industry's earning assets, accounting for 47% of total operating assets. Albeit, there was a significant decrease in the growth rate of net loans and advances in 2015 juxtaposing the growth rate of 2015 with that of 2014. This was as a result of cautious lending practices adopted by the banks due to challenging economic conditions which impacted their loan recoveries.

Non-Performing Assets (NPA)

A non-performing asset refers to a classification for loans on the books of financial institutions that are in default or are in arrears on scheduled payments of principal or interest. Debt is classified as non-performing when loan payments have not been made for a period of 90 days or three months, albeit the standard period for debt to be categorized as non-performing is dependent on the terms and conditions of the loan contract (Kenton, 2018)

The non-performing assets (loans, investments) Recovery Act 1996 (Act 518) section 28 defines Non-performing assets as:

 (a) Loans and advances including:

1. any advances in respect of which the principal or interest or scheduled installment thereof has remained overdue for any period specified by the Bank of Ghana by notice or regulation then in existence (Ghana Legal);
2. any advance to a borrower who has subsequent to the granting of the advance gone into insolvency or whose industrial or commercial operation has remained non-operational for any period specified by the Bank of Ghana by notice or regulations (Ghana Legal);
3. any overdraft in respect of which interest is due and unpaid or the overdraft is outstanding after the expiry of the authorization or is consistently at or exceeding the credit limit for such period as the Bank of Ghana may by notice or regulation specify, or in respect of which the credit limit is regularly increased by the bank (Ghana Legal);
4. or any advance, overdrafts or guarantees for which the borrower is unable or unwilling to discharge his obligation to service the interest or principal repayment (Ghana Legal).

Asset Classification and Provisioning Norms

Assets of banks should be classified into the following groups:

1. Standard Assets

Standard assets for a bank are assets that show no problem in the normal course other than the usual business risk. Thus, they do not carry more than the normal risk attached to the business and are termed to be performing assets (Agarwal, 2017).

2. Sub-Standard Assets

Sub-standard assets are assets that have not performed and have ceased to generate income for the bank and have thus continued to remain as a non-performing assets (NPA) for a period less than or equal to a year. An asset can also be classified as sub-standard where the terms and conditions pertaining to it are re-negotiated or revised and has a well-defined credit weakness that jeopardizes the liquidation of the debt (Agarwal,

2017).

3. Doubtful Assets

An asset will be classified as doubtful if it has remained in the substandard category for a period of more than 12 months (Jose, 2016).

4. Loss Assets

An asset that is an NPA for a period of more than 36 months is treated as a loss asset albeit that it has not been written off wholly. Thus, it is considered uncollectible (Jose, 2016).

The table below summarizes Bank of Ghana guidelines concerning loan classifications:

Table 1: Asset Classification by Bank of Ghana

Category	Loan Classification system	No. of days of delinquency	Provision
Current	Advances in this category are those for which the borrower is up to date with repayments of both principal and interest. Indications that an overdraft is still current would include regular activity on the account with no sign that a hardcre of debt is building up.	0 – less than 30	1%
Other Loans Especially Mentioned (OLEM)	Advances in this category are currently protected by adequate security, both as to principal and interest, but they are potentially weak and constitute an undue credit risk, although not to the point of justifying the classification of substandard.	30 – less than 90	10%
Sub-standard	Substandard advances display well-defined credit weaknesses that jeopardize the liquidation of the debt. These include loans to borrowers whose cash flow is not sufficient to meet currently maturing debt, and loans to borrowers lacking sufficient working capital to meet their operating needs. Non-performing loans and receivables which are at least 90 days overdue but less than 180 days overdue are also classified substandard.	90 – less than 180	25%
Doubtful	Doubtful advances exhibit all the weaknesses inherent in advances classified as substandard with the added characteristics that the advances are not well-secured and the weaknesses make liquidation in full, on the basis of currently existing facts, conditions and values. The possibility of loss is extremely high, but because of certain important specific pending factors, which may work to the advantage and strengthening of the advance, its classification as an estimated loss is deferred until its more exact status may be determined. Non-performing loans and receivables which are at least 180 days overdue but less than 360 days overdue are also classified as doubtful.	180 – less than 360	50%

| Loss | Advances classified as a loss are considered uncollectable and of such little value that their continuation as recoverable advances is not warranted. This classification does not mean that the advance has absolutely no recovery value, but rather it is not practical or desirable to defer writing it off. Advances classified as a loss include bankrupt companies and loans to insolvent firms with negative working capital and cash flow. Non-performing loans and receivables which are 360 days or more overdue are also classified as a loss. | 360 andabove | 100% |

Source: Kone, 2016

Types of Non-Performing Assets

The quality of assets is an important parameter or component to gauge the financial strength of banks and the prime factor in measuring the quality of assets is by ascertaining the component of non-Performing Assets (NPA) as a percentage of the total assets (Gadhia, 2015). This indicates the models of advances which the bank has made to generate interest income. Thus, asset quality shows or indicates the type of debtors the bank is having in its balance sheet. Before measuring the Asset Quality Test, it is essential to study the types of NPA which are as follows:

Gross NPA

Gross NPA is the total value of loans on which interest income has not been received by the bank for more than 90 days, divided by the total loan portfolio of the bank. Thus, it is an advance which is considered irrecoverable and for which the bank has made provisions though it is still held in the books of account. Gross NPA reflects the quality of loans made by banks and consists of all non-standard assets: sub-standard, doubtful and loss assets (Bhardwaj, 2017).

Net NPA

Net NPAs are those in which the provision has been deducted by the bank (Bhardwaj, 2017). The following items deducted to arrive at the net NPA are:

- Interest due but not received
- Provisions made in the books of the bank
- Claims received from credit guarantors and kept in suspense accounts pending final settlement.

Factors that cause NPAs

The factors identified to be the cause of NPA may be grouped into internal and external factors (Samir & Kamra, 2013).

Internal factors

- Inefficient management
- Poor credit appraisals, monitoring and evaluation
- Inappropriate technology
- Willful default
- Fraud

- Inefficient post credit supervision
- Obsolete technology

External factors

- Natural calamities
- Recession
- Price escalation
- Exchange rate fluctuations
- Changes in government policies

Empirical Literature Review

A large number of empirical studies on non-performing assets of commercial banks has been done over the years. However, research works comparing the non-performing assets of foreign and local banks is scanty.

The quality of assets is an important parameter or component to gauge the financial strength of the bank. (Gadhia, 2015). The composition of all commercial banks shows a high concentration of loans and advances in total assets which indicate vulnerability of assets to credit risk mainly due to the significant portion made up by Non-Performing assets (Nimalathasan, 2008). Banks are concerned about loans disbursed because it is among the riskiest of all assets and has the capacity to threaten their liquidity position (Abata & Adeolu, 2014). Grier (2007) also asserts that the loan portfolio is the most important asset category for banks and also poses the greatest risk to them as a result of the high risk of the loans going bad.

Gadhia (2015) however sought to determine and compare the asset composition of selected public and private banks in India. He analyzed their Net Non-Performing Asset to Net Advance Ratio and their Net Non-Performing Asset toTotal Assets Ratio to determine if it was same for both public and private banks. His findings indicated that all the selected banks understudy have unequal compositon of their Net Non-Performing Ratio and Net Advances to their Total Assets: the concentration of Net Non-Performing Asset in the Net Advances was highest for the public banks as was same for their net advances to total asset.

Parmar (2014) studied the trend of Total advances, net profit, gross NPA and net NPA of the State Bank of India (SBI) and the multinational ICICI bank from 2011 to 2013. He sought to determine and compare the relationship between net profit and net NPA by using Pearson's Correlation. His findings revealed that the State Bank of India had a positive relation between net profits and non-performing assets whilst the multinational ICICI bank had a negative relationship between their net profits and non-performing assets. The existing positive relationship between the net profit and non-performing asset of the State Bank of India (SBI) indicates the impact of non-performing assets on their net profit. This however, is not the case for the multinational bank, ICICI bank. His study of the trend of Total Advances, Net Profit, Gross Non-Performing Assets and Net Non-Performing Assets showed a general upward trend for both banks. However, in comparing the individual trend of Non-Performing asset for the State Bank of India and ICICI bank, ICICI bank recorded a downward trend in their non-performing assets, which it was attributed to their effective management of NPA. He asserted that the only reason for a positive relation between the Non-Performing Asset and Net Profit of the State Bank of India was as a result of mismanagement and wrong choice of client. This assertion cannot be the only plausible reason as the rise of Non-Performing Assets in banks is influenced by many reasons depending on the quality of bank's assets (Mishra, 2016)

Mishra (2016) asserts that high Non-Performing Asset as one of the biggest problems created by lending to priority sectors by local banks. He assessed the percentage of loans and advances given by both foreign and

local banks to sectors prioritized and observed that the quantum of loans advanced to this sector was mostly given by local banks. This had impacted greatly on the profitablity of the local banks and their significant contribution to the socio-economic development of the country. Sabi (1996) compared the performance of foreign and local banks in Hungary and concluded that foreign banks are more profitable than local banks because they are not exposed to a greater liquidity or credit risk, provide less money for consumer loans and hesitate in providing long term loans for development purposes and as such have a comparatively low Non-Performing Asset.

The result of Chantapong's (2003) study of the performance of local and foreign banks in Thailand in terms of profitability and other characteristics after the 1997 financial crisis indicated that foreign banks had higher profitability than the average profitability of local banks. Albeitprofitability for all banks improved during the post-crisis period, his study found that the gap between the profitability of foreign and local banks became closer after the financial crises period was over. He opined however that, foreign banks seems to cherry pick the best credits and are inclined to lend more in the good time.

Chalam (2017) asserted that the problem of Non-Performing Assets could mainly be attributed to the general type of lending practices in all Indian banking institutions. (Vibha, 2007) examined the status of Non-Performing Assets in commercial banks in India. His study found a more intense problem of gross and net Non-Performing Assets in the local banks of India than in the foreign banks. His study concluded based on the findings that, the foreign banks equally failed to prevent the problem from occurring.

Solety and Malyadri's (2012) comparison of the Non-Performing Assets of foreign and local banks in India revealed that local banks generally accumulate more Non-Performing Asssets than foreign banks do.

Mohnani and Deshmukh (2013) assessed the comparative positon of selected local and foreign banks in India. Their findings indicated that there was a general marginal decrease in the level of Non-Performing Assets for all the selected banks.

In the case of Ghana, Alnaa *et al* (2016) sought to make a comparative analysis of the profitability of local and foreign banks in Ghana. As part of their findings, the foreign banks had a better return on asset from 2008 to 2012 and the local banks had a better return within the period of 2009, 2013 and 2014, thereby performing marginally better than the foreign banks. They concluded by indicating that the foreign banks outperformed the local banks after measuring their Return on Asset and Return on Equity though the local banks had a more efficient management team.

Ntow-Gyamfi *et al* (2012) made a comparison between the financial performance of foreign and local banks in Ghana. Their findings indicated that local banks were more profitable than foreign banks. However, in assessing the quality of their assets on average, local banks had higher Non-Performing loans than foreign banks.

Whilst it is important to measure the overall financial performance of the Ghanaian banking industry, it is equaly important to segregate all key indicators and measure them based on the specific factors that bring them about and form a more wholistic conclusion on which group of banks is performing better. The researcher thus seeks to add to the literature by making a comparison of the key indicators of Non-Performing Assets of foreign and local banks by using GCB Bank Limited and Standard Chartered Bank Ghana as a case study to form a conclusion for the Ghanaian banking industry in view of the fact of the non-existence of any such research.

RESEARCH METHODS

This chapter of the study presents the processes and procedures used for the study. The chapter talked about

the population, the source of data for the study, the research design, description of the data used for the study and the statistical technique applied in the data analysis stage of the study.

Research Design

According to Bajpai (2011), a research design is defined as a systematic and scientific procedure of data collection, compilation, analysis, interpretation, and implication pertaining to any business problem. The author pointed out that the types of research design methods can be classified into several categories according to the nature and purpose of the study and other attributes. This study was based on the quantitative approach. The study employed quantitative research design with secondary data source which provides a quantitative or numeric description of trends, attitudes, or opinions of the population by studying a sample of that population. This design was used since the data needed for study was purely quantitative and hence quantitative design was ideal for the study. Creswell (1994) promulgated that quantitative research is a type of research where the researcher seeks to explain a phenomenon with the aid of numerical data which is analyzed mathematically.

Study Setting

The study was conducted in Ghana with the focus on GCB Bank Limited and Standard Chartered Bank Ghana Limited.

Population

Reynolds, (2003) asserts that sampling method is undertaken by selecting research respondents from a population of interest. In this study, the population refers to Ghanaian banking industry. However, it was difficult to get access to all banks' data and other resources. On these grounds, taking a sample was justifiable. A local bank and a foreign bank were taken to represent each group: GCB Bank Limited and Standard Chartered Bank Ghana Limited. The sample size is believed to be small in size and it is a fact that, this dissertation would have presented a more holistic result if a larger sample had been used. It is required to access the annual report in order to arrive at a more informed conclusion. This was however not available: financial statements without the notes were mostly what was available. Banks were also reluctant to give out any data about their performance whether local or foreign. This eventually delayed the study and forced me to use the only available banks who met the selection criteria and whose data were available

Sampling Procedure

A sample size comprised one local bank and one foreign bank making a total of two banks under study out of 29 banks in the banking sector. The research paper would have been representative if most banks were selected to compare their performances.

The criteria for qualification for the selection of the sample for the study were based on their years of existence, years of experience and market size. This was necessary as a result of the conduction of trend analysis which was one of the analyses performed to be a good representative of the performance being measured of these two categories of banks in the country. However, all efforts to get access to the financial reports with disclosures for most banks proved futile and this hindered the researcher and informed the decision to settle on two banks with each being a representative of the two classifications of banks. GCB Bank Ltd and Standard Chartered Bank being the oldest local and foreign banks respectively were selected to be used as a case in point. The justification for the selection of these two banks is as a result of the vast years of experience they have in the industry considering their number of years in existence and their market share.

This, the researcher believes makes them a suitable choice in using the result generated from the analyses to arrive at a generalized conclusion for all the banks. The researcher basically employed the purposive sampling technique in the determination of her samples, specifically homogeneous sampling: a purposive sampling technique that aims to achieve a homogeneous sample; that is, a sample whose units share the same or have very similar **characteristics.** The reason for this choice stems from the fact that those who are unsuitable for the sampling study or who do not fit the bill have already been eliminated, so only the most suitable candidates remain and since the most appropriate people for the study have been selected, this process becomes a lot less time consuming. With fewer time constraints and a more accurate subject, the costs for carrying out the sampling project are greatly reduced (Palys, 2008). Finally, the results of purposeful sampling are usually expected to be more accurate than those achieved with an alternative form of sampling.

Source of Data

This study used a secondary data that is already observed data from the annual financial reports for the banks used for the study. The data extracted had 10 years' life span: from 2008 to 2017. In addition, the data was observed yearly and hence, getting the data in quarters, weeks, months or days was not readily available.

Table 2: Description of Banks in terms of experience and Size, Nature of Business

Banks	No. of years of existence	Size (Branches)
GCB	1953 – 2018	214
STANDARD CHARTERED	1896- 2018	25

Source of Data: GCB Bank Ltd and Standard Chartered Bank Ghana website

With the exception of rural banks, all other banks in Ghana operated with universal banking licenses. It's on this premise that these banks were selected to generalize for the other banks since the findings on these banks will reflect the same in the banking industry.

Instrumentation

In order to get the required data for the financial performance analysis, secondary data such as the financial statements which were available in the annual reports were obtained. Yearly industry survey conducted by PricewaterhouseCoopers (PWC) was also used. These financial statements of the banks integrate the performance of all the various branches of the respective banks under study. The financial statements from 2008 to 2016 were used.

Procedure and Time Frame

The research work took a period of seven months starting from the date of research proposal approval. The justification for such duration was to cater for delays which were likely to be encountered in getting the right information for the work. The duration also gave the researcher enough room to pay attention to the project in order to prevent errors that were likely to be encountered due to short timescale.

Statistical Models

Descriptive statistics was used in analyzing the data obtained. To conduct a trend analysis for the Non-Performing Assets, the independent t-test statistical technique was used to determine the significance of difference in averages between GCB Bank Limited and Standard Chartered Bank Ghana Limited. The

relationship between Non-Performing Assets and the Net profits of the banks was also assessed using the correlation coefficient values (r). The period understudy was from 2008 to 2017.

Correlation Analysis

Correlation analysis can be defined as a statistical method used to determine whether there is a linear association or relationship between the two variables. In other words, it is the method of statistical evaluation used to measure or determine the strength of relationship or association between two numeric continuous variables, for instance, to determine the relationship between income and expenditure. In correlation analysis, researchers use numerical measure or statistic to determine whether two or more variables are linearly related and hence determine the strength of the relationship between or among the variables. This numerical value or statistic used is called correlation co-efficient. Correlation coef-cient as used in this study is a statistic or parameter that measures the strength and direction of a linear relationship between two variables. It is donated by *r* (Bluman, 2012).

Assumption underlying the use of Correlation Analysis

- The correlation coefficient *r* assumed that the two variables of interest were measure from a bivariate normal distribution population.
- Linearity assumption between the two variables of interest
- No outliers
- Homoscedasticity assumptions

However, when the above assumptions are not met, the non-parametric techniques such as spearman rank and Kendall Tau correlation analysis can be used to achieve the same results.

Statistically; *r* is given by

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}} \qquad (1)$$

Testing for the significance of correlation

This test is performed to decide whether the relationship established between the two variables of interest is strong or not. To be able to determine the significance of the relationship, the test approach below is used.

Hypothesis

H_0: $\rho = 0$ (no correlation)

H_1: $\rho \neq 0$ (there is correlation)

Test Statistic

$$T = \frac{r}{\sqrt{\frac{1 - r^2}{n - 2}}} \sim t \text{ distribution with } n - 2 \text{ degree of freedom where n is the sample size}$$

The value of *T* is compared to the value of the critical value read from the *t* distribution table at a given alpha level (α) or level of significance.

If the significant probability value (p-value) of the test is less than or equal to the level of significance, H_0

rejected else, we fail to reject H_0. When H_0 is rejected, it implies that the correlation is significant. Otherwise, the correlation is not significant. Since correlation measures just association and direction between two variables and not causal effects, regression analysis is performed to measure the causal effects.

Independent t-test

This is a statistical test used to compare the means of two samples whose means are not dependent on one another from a normal distributed population (Banda, 2018). Here, given two independent populations, this test can be applied to check if the means of the populations are equal or not.

Hypothesis

$H_0: \mu_1 - \mu_2 = 0$ (means for both samples are the same)

$H_1: \mu_1 - \mu_2 \neq 0$ (means for both samples are not the same)

Assumptions

- Samples are independent
- Samples are normally distributed
- Unknown population mean and Variance for both samples
- Variances assumed to be unequal

Test Statistic

$$T = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_1)}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}} \sim N(0,1) \qquad (2)$$

when n_1 and n_2 are the sample sizes for the groups

When the samples sizes are small i.e. both n_1 and n_2 are less than 30, equation 3 holds.

$$T = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_1)}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}} \sim t \text{ distribution with } n_1 + n_2$$

$$- 2 \text{ d.f} \qquad (3)$$

The value of T is compared to the value of the critical value read from the Z distribution table at a given alpha level (α).

The critical region for 3.3 test is given by $|T| \leq Z_{\alpha/2}.$ When the value of the test statistic T falls within the rejection region $|T| \leq Z_{\alpha/2},$ we reject the H_0 otherwise we fail to reject H_0. When H_0 is rejected, it implies that, the means are significant different. Otherwise the means are not significant different.

However, when 3.4 holds, the value of T is compared to the value of the critical value read from the t distribution table at a given alpha level (α). Then the critical region of the test is given by $|T| \leq t_{\frac{\alpha}{2}}, n_1 + n_2 - 2$ When the value of the test statistic T falls within the rejection region $|T| \leq t_{\frac{\alpha}{2}}, n_1 + n_2 - 2$ we reject the H_0 otherwise we fail to reject H_0. When H_0 is rejected, it implies that, the means are significant different. Otherwise the means are not significant different.

Decision Rule

When the t-value calculated or obtained from spss output falls in the critical or rejection region, the null

hypothesis will be rejected, otherwise it will fail to reject the null hypothesis if the t-value calculated falls outside the critical or rejection region. With the chosen significant level of 0.05, if the test significance (p-value) is greater than 0.05, it signifies that there is sufficient evidence to support the null hypothesis. On the other hand, a smaller test-significance value (p- value) than 0.05 means that the null hypothesis must be rejected.

RESULTS AND DISCUSSION

Under this chapter, the results obtained from the data analysis were presented in tables and figures where necessary as well as discussed based on the findings. The study used 10 years' data point (2008-2017) from two banks namely: Ghana Commercial Bank Limited (GCB) and Standard Chartered Bank, all in Ghana. The chapter was further divided into four main headings: Descriptive Analysis, Trend Analysis, Independent t-test and Correlation Analysis.

Descriptive Analysis

Here, the study described the two banks used in the study based on their total advances, net profit margins, impairment, Gross NPA and Net NPA. Taking into consideration the total advances of the banks on average, GCB Bank recorded higher advances comparatively to Standard Chartered Bank with an average of GH¢1,051 million as against Standard Chartered Bank which had an average of GH¢1,306 million. In terms of Net Profit margins of the banks, GCB Bank was able to generate GH¢155 million on average over the past 10 years as compared to the profit margin of Standard Chartered Bank which was GH¢ 136.80 million. In addition, impairment level on average for Ghana Commercial Bank was relatively smaller to Standard Chartered Bank. Furthermore, describing the banks using their Net NPA, Standard Chartered Bank on average had a higher Net NPA than GCB Bank. Details on the other key variables used to describe the two banks were summarized in Table 3.

Table 3 Descriptive Statistics Summaries

Variable	Bank	N	Mean	SD	Min	Max
Total Advances	Ghana Commercial	10	1306	421	611	2090
	Standard Chartered	10	1051	527	435	1838
Net Profit	Ghana Commercial	10	155	111.7	16.7	299
	Standard Chartered	10	136.7	87.6	33.2	283.6
Impairment	Ghana Commercial	10	102.5	77.5	0.3	204.5
	Standard Chartered	10	136.8	213	3.8	575.8
Gross NPA	Ghana Commercial	10	175.1	67.3	22.1	250.6
	Standard Chartered	10	293	333	24	824
Net NPA	Ghana Commercial	10	72.6	88.9	11	234.4
	Standard Chartered	10	155.7	200.5	9.5	670.7

NB: Amount is in Millions of Ghana Cedis (GHS)

Source: Ghana Commercial Bank and Standard Chartered Bank annual reports

Standard deviation is a basis of measure of risk used to quantify the variations of dispersion of a variable. The standard deviation of GHS 421 million for the total advances of GCB Bank limited indicates the deviation from its mean of GHS 1,306 million whilst the standard deviation of GHS 527 million for the total

advances of Standard Chartered Bank Ghana limited indicates the deviation from its mean of GHS 1,051 million. A comparison of the standard deviation of GCB Bank Limited and Standard Chartered Bank Ghana limited indicates that Standard Chartered Bank Ghana Limited's total advances are more exposed to risk than GCB Bank Limited.

The standard deviation of GHS 111.7 million for the net profit of GCB Bank limited indicates the deviation from its mean of GHS 155 million whilst the standard deviation of GHS 87.6 million for the net profit of Standard Chartered Bank Ghana limited indicates the deviation from its mean of GHS 136.7 million. A Comparison of the standard deviation of GCB Bank Limited and Standard Chartered Bank Ghana limited indicates that Standard Chartered Bank Ghana Limited's net profit are more exposed to risk than GCB Bank Limited.

The standard deviation of GHS 67.3 million for the Gross Non-Performing Assets of GCB Bank limited indicates the deviation from its mean of GHS 175.1 million whilst the standard deviation of GHS 333 million for the net profit of Standard Chartered Bank Ghana limited indicates the deviation from its mean of GHS 293 million. A Comparison of the standard deviation of GCB Bank Limited and Standard Chartered Bank Ghana limited indicates that Standard Chartered Bank Ghana Limited's Gross Non-Performing Assets are more exposed to risk than GCB Bank Limited.

The standard deviation of GHS 88.9 million for the Net Non-Performing Assets of GCB Bank limited indicates the deviation from its mean of GHS 72.6 million whilst the standard deviation of GHS 200.5 million for the net profit of Standard Chartered Bank Ghana limited indicates the deviation from its mean of GHS 155.7 million. A Comparison of the standard deviation of GCB Bank Limited and Standard Chartered Bank Ghana limited indicates that Standard Chartered Bank Ghana Limited's Net Non-Performing Assets are more exposed to risk than GCB Bank Limited.

Independent t-test Analysis

The independent t test was used to compare the performance of the two banks. In the preliminary stages of the analysis, the test equality of variance assumptions was verified and identified to be unequal for all the selected variables. Hence unequal variance assumption was assumed throughout this section of the study.

GCB Bank versus Standard Chartered Bank on Total Advances

The independent t-test was employed to know if there is any significant difference between the banks when it comes to advances. At 5% level of confidence with unequal variance assumption from the Levene's variance test, there was no significant difference in the performance of the banks when it comes to advances. This was so since the recorded probability value (p-value) 0.249 was greater than 0.05. This means that there might be a marginal difference in the performance of the banks using their advance but this difference is not significant. However, using their averages from Table 4, we can deduce that, GCB Bank had higher total advances than Standard Chartered Bank.

According to Mishra (2016), local banks advance a higher quantum of their loans to prioritize sectors which contribute to the socio-economic development of their country. In line with this assertion, the Chairman of GCB Bank Limited Jude Kofi Arthur, in their 2017 annual report stated one of the reasons that influenced GCB Bank's decision to participate in the bid to purchase and assume UT Bank and Capital Bank as their recognition of the destabilization that could ensue and thus have adverse effect on the banking sector after Bank of Ghana found these two local banks to be insolvent (GCB Bank Limited, 2017). Sabi (1996) asserted that foreign banks are less exposed to credit risk as they provide less money for consumer loans and hesitate in providing long term loans for development purposes.

GCB Bank versus Standard Chartered Bank on Net Profit

Comparing the performance of the banks by their net profit margins was the focus.

The study performed the independent t-test to further know if there is any significant difference between the banks from Net Profit perspectives. At 5% level of confidence with unequal variance assumption from the Levene's variance test, there was no significant difference in the performance of the banks when it comes to Net Profit. This was so since the recorded probability value (p-value) 0.688 was greater than 0.05. This means that there might be a marginal difference in the performance of the banks using their Net Profit but this difference is not significant. However, using their averages from Table 4 on profit, we can deduce that, GCB Bank had higher Net Profit margins than Standard Chartered Bank.

This does not conform to the findings of the literature reviewed which sought to determine and compare the profitability of foreign and local banks by considering Non-Performing Assets as a key indicator (Alnaa et al 2016; Chantapong 2003; Chalam 2017; Solety et al 2012 & Parmar 2014). The findings of all these researchers indicated that foreign banks were more profitable than local banks. However, Ntow-Gyamfi et al (2012) found out after comparing the financial performance of foreign and local banks in Ghana that the local banks were more profitable than foreign banks. However, other performance indicators were involved in his research.

GCB Bank versus Standard Chartered Bank on Impairment

Comparing the performance of the banks by their impairment values was the focus. The independent t-test was employed to further know if there is any significant difference between the banks in terms of impairment causing reduction in the value of an asset because the asset no longer generates the benefits expected earlier as determined by the bank through periodic assessments. At 5% level of significance with unequal variance assumption from the Levene's variance test, there was no significant difference in the performance of the banks when it comes to impairment. This was so since the recorded probability value (p-value) 0.641 was greater than 0.05. This means that there might be a slight difference in the performance of the banks using their impairment values but this difference was not significant.

The survey undertaken by Price water house Coopers in 2016 indicated that one key challenge that plagued the Ghanaian banking sector was Non-Performing Loans (PricewaterhouseCoopers, 2016). Chalam (2017) attributed this to the general lending practices and concluded that the foreign banks equally failed to prevent this from occurring. However, using their averages from Table 4 on impairment, I deduced that, GCB Bank had a higher impairment value than Standard Chartered Bank. Reduction in the value of an asset of Ghana Commercial Bank may be that their asset no longer generates income to the bank. Two significant reasons why GCB Bank had a higher impairment value was as a result of the huge loans advanced to Ghana's oil sector especially Tema Oil Refinery and the result of the assumption of UT and Capital Bank (GCB Bank Limited 2009; GCB Bank Limited, 2017).

Ghana Commercial Bank versus Standard Chartered Bank on Gross and Net NPA

Similarly, the study used the independent sample t-test on Gross NPA and Net NPA which also proved that there is no statistical difference in the values of both Gross NPA and Net NPA for the two banks. This means that non-performing asset (NPA) which refers to classification of loans or advances that are in default or are in arrears on scheduled payments of principal or interest, for both banks were the same in terms of their Net NPA and their Gross NPA. The survey undertaken by PricewaterhouseCoopers in 2016 indicated that one key challenge that plagued the Ghanaian banking sector was Non-Performing Loans (PricewaterhouseCoopers, 2016). In summary, on the independent t-test, I discovered that there was no

statistical significance in the means of the selected variables on the performance of the banks. However, the summaries on the t-test were displayed in Table 4. In addition to Table 4, Figure 1 depicts the graphical representation of the banks per the variables selected for the study.

Table 4 Independent t-test summaries

Variable	Bank	N	Mean	DF	t statistic value	P-Value
Total Advances	Ghana Commercial	10	1306	17	1.19	0.249
	Standard Chartered	10	1051			
Net Profit	Ghana Commercial	10	155	17	0.41	0.688
	Standard Chartered	10	136.7			
Impairment	Ghana Commercial	10	102.5	11	-0.48	0.641
	Standard Chartered	10	136.8			
Gross NPA	Ghana Commercial	10	175.1	9	-1.09	0.303
	Standard Chartered	10	293			
Net NPA	Ghana Commercial	10	72.6	12	-1.2	0.25
	Standard Chartered	10	155.7			

NB: Amount is in Millions of Ghana Cedis (GH ₵) * 5% level of significance was

usedSource: Researcher, Boadi, (2018)

Trend Analysis

In responding to the objective: "*analyse the trend of Gross and Net Non-Performing Asset of Ghana Commercial Bank and Standard Chartered Bank*", trend analysis was performed on these variables of interest by the two banks involved.

Trend on Gross Non-Performing Asset

Under this section of the chapter, the study examined the behaviour of Gross Non-Performing Asset which describes the classification for loans or advances that are in default or are in arrears on scheduled payments of principal or interest. With reference to Figure 1, Gross Non-Performing Asset for Standard Chartered kept increasing from 2008 to 2013. In 2013 to 2014 Gross Non-Performing Asset for Standard Chartered Bank remained constant but later picked up in 2015 and kept increasing from 2015 to 2017. On the other hand, Ghana Commercial Bank in 2008 experienced an increase in terms of Gross NPA from 2008 to 2009 but decreased after 2009 to 2010. The main cause for the increase was as a result of the global financial crunch that affected the profitability of every business venture (Mwinlaaru, Ofori, Adiyiah, & Adu-Asare Idun, 2016). The movement remained constant from 2010 to 2014 till it rose again from 2015 to 2017. This

trend was mainly influenced by the stabilization and significant growth of the Ghanaian economy (Mwinlaaru et al 2016). It can thus be deduced that; the Gross Non-Performing Asset for Standard Chartered Bank has experienced increasing movement from 2008 to 2017 in the classification of loans or advances that are in default or are in arrears on scheduled payments of principal or interest. The sharp upward trend for Standard Chartered Bank means that the bank is experiencing a number of customers becoming defaulters of loans or advances.
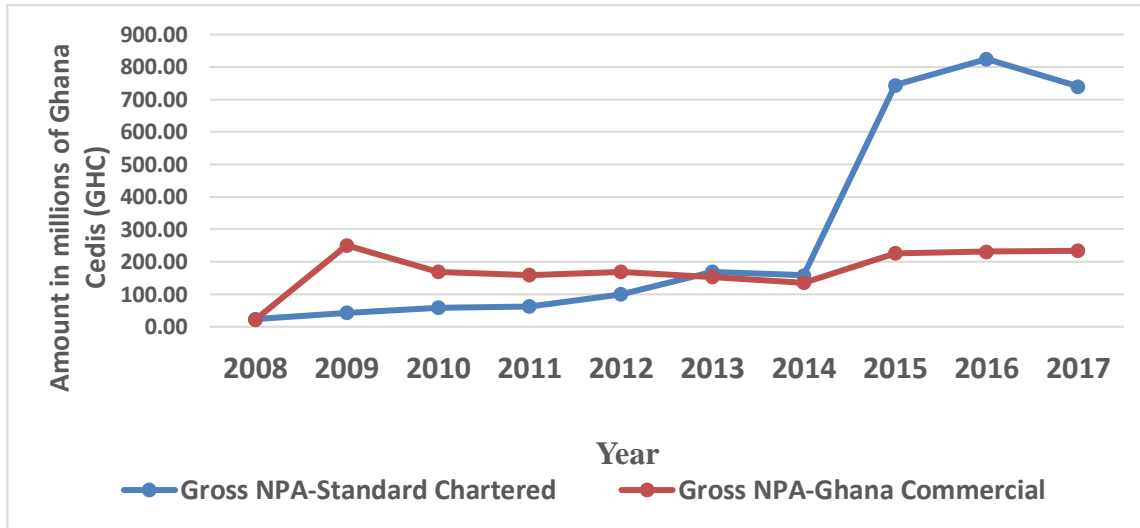

Figure 1: Trend analysis for Gross NPA

Source of Data: GCB Bank and Standard Chartered Bank annual reports

Trend on Net NPA

Under this stage of the study, Net Non-Performing Assets (Net NPA) as seen in the banking sector refers to the sum of non-performing loans less provision for bad and doubtful debts. In other words, the amount of unpaid loans left after a precautionary amount to cover the unpaid debts from loans outstanding. Therefore, if the bank deducts provision for unpaid debts from the unpaid debts, the resulting amount refers to the net non-performing assets. On this computation, I sought to examine the performance of the two banks for the past 10 years. Figure 2 shows the trend for the two banks in terms of their Net Non-Performing Assets (Net NPA). Taking Standard Chartered Bank for instance, for the past 10 years, the bank has still dominated in maintaining an upward trend in their Net Non-Performing Assets as compared to GCB Bank Limited (Net NPA). This upward increase in their Net Non-Performing Asset was attributed mainly to the exposure of some customers of theirs to payment delays from the government as well as general lengthening of assets conversion cycles.

They argue that the dire nature of the trend is as a result of lack of consideration for value of security held against these defunct loans and estimated future cash flows as a result of the procedure for classifying non-performing loans under Bank of Ghana Prudential Guidelines which is a material departure from the International Financial Reporting Standards (Standard Chartered Bank Ghana, 2014). However, Ghana Commercial Bank initially had a sharp increase in trend but became constant from 2012 to 2016 with just an increase in 2017. The sharp increase in trend was as a result of loans and advances to companies in the downstream oil sector: abnormal increase in the international prices of crude oil sector and refined petroleum products in 2009 resulted in this challenge for GCB which was the main financier to the country's oil sector especially Tema Oil Refinery (TOR) Limited (GCB Bank Limited, 2009). The result for the plateau in the trend of their Net Non-Performing Asset was mainly due to the payment of GHS 445 million by the Government of Ghana to reduce TOR's indebtedness (GCB Bank Limited, 2010). The increase in

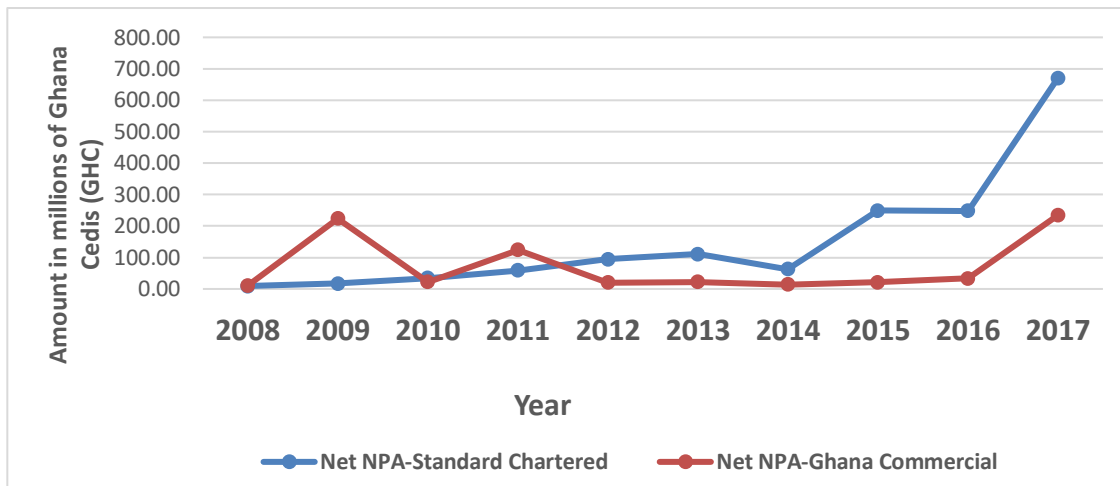2017 was mainly due to the assumption of UT and Capital Banks (GCB Bank Limited, 2017).

Figure 2: Trend analysis for Gross NPA

Source of Data: GCB Bank and Standard Chartered Bank annual reports

In summary on the Gross and Net NPA of the banks, it is clear that unpaid loans for Standard Chartered Bank were higher as compared to Ghana Commercial Bank. This departs from the findings by other researchers as reviewed who sought to determine and compare the profitability of foreign and local banks by considering Non-Performing Assets as a key indicator (Alnaa et al 2016; Chantapong 2003; Chalam 2017; Solety et al 2012 & Parmar 2014). Local banks are more exposed to Non-Performing loans than foreign banks who are noted for being more vigilant and prudent in their credit appraisal, risk management and loan recovery. This trend is not exhibited among foreign banks in Ghana as they also exhibit high Non-Performing Loans: Standard Chartered Bank Ghana Limited had the highest Non-Performing Loan at the end of the second quarter in 2017 (Akrong, 2017).

Graphical summaries on the performance of the banks by these variables: Total Advances, Net Profit, Impairment, Gross and Net NPA was necessary as shown in Figure 3.
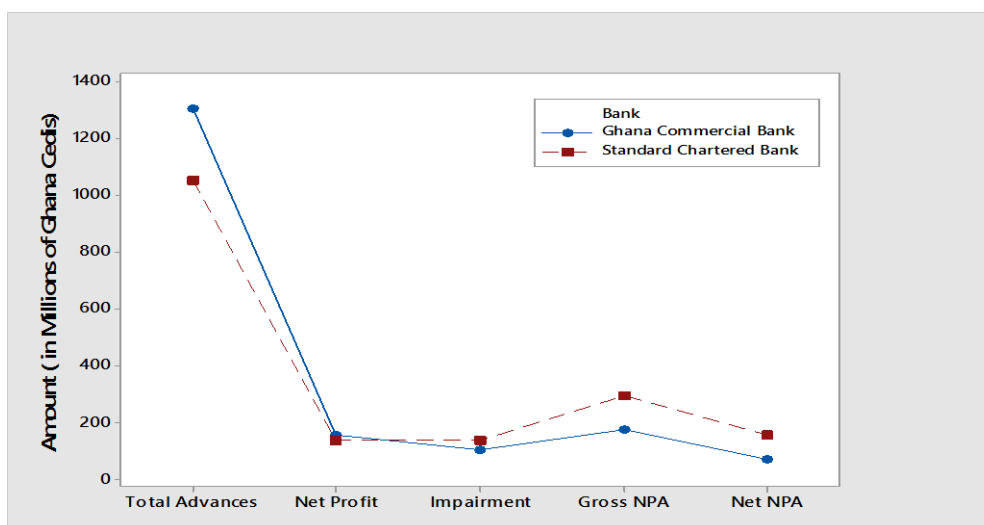

Figure 3: Comparisons of bank performance by Total Advances, Net Profit, Impairment, Gross and Net Non-Performing Asset

Source of Data: GCB Bank and Standard Chartered Bank annual reports

Correlation Analysis

At this stage, the study measured the degree of association or relationship between some selected variables. In achieving or responding to this objective of the study, the Pearson correlation was used to measure the association or relationship that exists among the selected variable used for the study.

Correlation on GCB Bank's Net Profit against Net Non-Performing Asset

The Pearson correlation coefficient was used to measure the degree of association between GCB's Net Profit and Net Non-Performing Asset. Table 5 gives the summary on the correlation analysis on GCB Bank's Net Profit against Net Non-Performing Asset. From Table 5, there was a positive relationship between GCB Bank's Net Profit and Net Non-Performing Asset. This positive association signifies the Net Profit of GCB Bank and their Net Non-Performing Asset move in the same direction. The relationship was tested at 5% level of significance.

After testing the strength of the relationship between GCB Bank's Net Profit and Net Non-Performing Asset, it was discovered that, there is a strong association between their Net Profit and Net Non-Performing Asset, since the p-value was less than 0.05. It can be deduced that as the profit margin of Ghana Commercial Bank increases, their Net NPA also increases.

Table 5: Correlation Analysis on Net Profit against Net Non-Performing Assets (NPA)

Bank	Variable	Correlation Coefficient	P-Value
GCB	Net Profit & Net NPA	0.676	0.032*
Standard Chartered	Net Profit & Net NPA	-0.26	0.469

Source: GCB Bank and Standard Chartered Bank annual reports

*Significance of relationship flagged at 5% level of significance.

Correlation on Standard Chartered Bank's Net Profit against Net Non-Performing Asset (NPA)

The Pearson correlation coefficient was used to measure the degree of association between Standard Chartered Bank's Net Profit and Net Non-Performing Asset. Table 3 gives the summary on the correlation analysis on Standard Chartered Bank's Net Profit against Net Non-Performing Asset. From Table 3, there was a negative relationship between Standard Chartered Bank's Net Profit and their Net Non-Performing Asset. Negative association signifies that the Net Profit of Standard Chartered Bank and their Net Non-Performing Asset move in opposite directions. The relationship was tested at 5% level of significance. Rajeshwari (2014) on his comparison of Net Profit and Net Non-Performing Asset of the State Bank of India (SBI) and ICICI Bank found a positive relationship between the Net Profit and Net Non-Performing Asset for the State Bank of India and a negative relatonship between the Net Profit and Net Non-Performing Asset of ICICI Bank.

After testing the strength of the relationship between Standard Chartered Bank's Net Profit and Net Non-Performing Asset, it was discovered that, there is a weak negative association between their Net Profit and Net Non-Performing Asset. It can be deduced that as the profit margin of Standard Chartered Bank increases

their Net Non-Performing Asset also decreases. The weak nature of the relationship means that Standard Chartered Bank's Net Profit is not necessarily influenced by their Net Non-Performing Asset.

From the results so far, the bank determines the pace of development of the economy. Hence, the stability of banking sector is pivotal for the development of an economy. The main function of any bank is to lend funds as loans to various sectors such as agriculture, industry, personal and housing and other to meet the productive use of these funds. In Ghana, the banking system has received shocks from the Central Bank of Ghana for not meeting the minimum capital requirements expected of them. This issue has reflected in the performance of the banks by having high NPA values which every bank wants to control. This issue of the Standard Chartered Bank struggling with managing its NPAs is not different from a study by Parmar (2014), who believes that recently the banks have become very cautious in extending advances, the reason being increase in non-performing assets. With the introduction of international norms for income recognition, asset classification and provisioning in the banking sector, managing NPAs has emerged as one of the major challenges facing Indian banks. Non-Performing Asset means an asset on which the interest or principal has not been paid by the borrower for the specified period in accordance with the directions issued.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Under this section of the chapter, we presented the summaries on the key findings from the study in the form of conclusions and recommendations

The purpose of the study was to analyze and compare the performance of two banks: Standard Chartered Bank and GCB Bank in Ghana on total advances, net profit, Gross and Net Non-Performing Asset.

In achieving the aim of the study these specific objectives were specified: compare the Total advances, Net profit, Gross and Net Non-Performing Asset of Standard Chartered Bank and GCB Bank; analyse the trend of Gross and Net Non-Performing Asset of Standard Chartered Bank and GCB Bank; and study the relationship between Net Non-Performing Asset and Net profits of Standard Chartered Bank and GCB Bank for the period of 2008 to 2017. The study used secondary data extracted from the annual reports of the two banks as published online.

The study revealed that there is no significant difference in the effect of Net Non-Performing Asset on the net profit of foreign and local banks in Ghana. This means that the mean difference in the effect of Net Non-Performing Asset on the Net profit for foreign and local banks in Ghana varies insignificantly.

Summary

Taking into consideration the total advances of the banks, on average, Standard Chartered Bank recorded lower advances compared to GCB Bank. In terms of Net Profit margins of the banks, GCB Bank was able to generate a higher average net profit over the past 10 years as compared to the profit margin of Standard Chartered Bank. In addition, impairment level on average for GCB Bank was relatively smaller than Standard Chartered Bank. Furthermore, describing the banks using their Net Non-Performing Asset, Standard Chartered Bank on average had a higher Net Non-Performing Asset than GCB.

At 5% level of confidence with unequal variance assumption from the Levene's variance test, there was no significant difference in the performance of the banks when it comes to advances. In addition, there was no significant difference in the performance of the banks when it comes to Net Profit. However, using their averages on Net Profit, we deduced that, GCB had higher Net Profit than Standard Chartered Bank. There was no statistical significance in the differences between the two banks.

There was increasing trend for both banks over the past 10 years in terms of Total Advances. In 2008 the

profit margin for GCB Bank was higher than Standard Chartered Bank. Later in 2009, Standard Chartered Bank profit margin went up and was slightly higher than GCB Bank. From 2009 to 2010, Standard Chartered Bank recorded higher values of net profit than GCB Bank during the period of 2009 to 2012. In addition, the profit margin for both GCB Bank and Standard Chartered Bank fell in 2015. However, the profit margin for GCB Bank was greater than Standard Chartered Bank from 2013 to 2017.

Reduction in the value of assets for Standard Chartered Bank was smaller than that of GCB before 2014. After 2014, the reduction of the assets of was higher for Standard Chartered Bank than GCB Bank.

Finally, there was a positive relationship between GCB Bank's Net Profit and Net Non-Performing Asset whilst there was a negative relationship between Standard Chartered Bank's Net Profit and Net Non-Performing Asset although it was a weak one.

Conclusions

From the findings of my study, there was no significant difference in the performance of the two banks used for the study: GCB Bank and Standard Chartered Bank when it comes to Total Advances, Net Profit, Impairment, Gross and Net NPA. However, the performance of GCB Bank on Profit was slightly higher than Standard Chartered Bank. In addition, Standard Chartered Bank had high values of Gross and Net NPA which is not so positive for the bank.

It was unexpected though, to discover from the result based on the data obtained, that the local banks seem to be holding their fort in competing with the foreign banks. This raises a lot of mind-boggling questions in view of the recent turn of events in the country where the collapse of some local banks has created the perception that our local banks are failing. However, due to the limitation of the unavailability of annual report for a longer duration, it is possible that an analysis over a longer time period may prove otherwise.

Recommendations

After undergoing an intense field work, the researcher suggests the following recommendations and hopes that it will go a long way to boost the financial performance of foreign and local banks in Ghana. The researcher strongly recommends:

Whilst effective recovery measures are being put in place, banks should be equipped with necessary risk appraisal systems to minimize credit defaults. This will help minimize, if not prevent the exposure of various global risks associated with the banking industry.

A lot of resources must be invested in the management of credit to ensure an improvement of appraisal of credit proposals, preparation of credit planning schedules and the timely application of all stipulated sanctions to defaulters.

Corporate governance practices should also be improved and the regulator must see to its enforcement by attaching consequences harsh enough to cause all key players to desist from deviating from the rules.

Suggestion for Future Research

First, this study focuses on comparing the Non-Performing Asset of foreign and local banks in Ghana using GCB Bank Limited and Standard Chartered Bank Ghana Limited as a case study. This means that it is limited to a Ghanaian context; and therefore, it is not applicable to any other region outside Ghana. Therefore, further analysis can be done by comparing the Ghanaian Banking Industry to that of different countries.

Furthermore, macroeconomic factors and general global conditions also influence the state of asset quality for banks. Future studies can therefore consider these macroeconomic factors' effects on the profitability of foreign banks.

Further studies can also be carried out to determine other assets which form a part of the total assets of foreign banks, which yield a lot of profit and thus make their Net profit more resilient to the effects of impaired loans and advances

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