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BANK FAILURES AND THE IMPACT OF REGULATORY REFORMS IN AFRICA

A THESIS

Submitted to

Wits Business School,

Faculty of Commerce, Law and Management,

University of the Witwatersrand,

Johannesburg

In partial fulfillment of the requirements for the

Master of Management Degree in Finance & Investment Management

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Declaration

I, Adeyinka **Adeniran Soile-Balogun**, hereby declare that the research work reported in this thesis is mine and was thoroughly done by me, except where otherwise indicated and acknowledged.

It is submitted in line with requirements for the degree of Master of Management in Finance & Investment at the University of Witwatersrand, Johannesburg. This thesis has not, either in whole or in part, been submitted for a degree or diploma to any other universities.

Signed……Date: 31st March 2016

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ABSTRACT

The fragility of the banking sector and the systemic effects of bank failures coupled with the position banks occupy as the centre of financial and economic activity has called for effective regulatory reforms to ensure greater supervision and monitoring, prudent banking practices, financial stability and restoration of public confidence in the financial system.

Therefore, this study is aimed at examining the spate of bank failures in Africa and the extent to which the introduction of regulatory reforms and prudential measures by regulatory authorities have impacted or helped in reducing the incidence of bank failures in Africa. To this end, the study looks at the various determinants of bank failures and fragility, indicators of financial soundness, the measures adopted so far in curbing bank failures and the resultant effect, the deficiencies in the existing reforms and regulations as well as policy recommendations for future studies.

The study revealed that successful implementation of reforms is not limited to effective prudential approach & guidelines but largely influenced by Macro-economic conditions in the economy. For the purpose of performance evaluation and assessing the impact of regulatory reforms on the banking sector in Africa (Pre reform and Post reform), this study looks at a case study of some selected African countries namely Nigeria, South Africa, Zambia, Uganda, Ghana to enable us have a clear insight on the performance of banks pre-reforms and post reforms.

Keywords: Banking sector reforms, Financial intermediation, Banking crisis, Bank performance, Capital adequacy.

LIST OF ACRONYMS/ABBREVIATIONS

CBN:	Central Bank of Nigeria
SAP:	Structural Adjustment Programme
FINSARP:	Financial Sector Adjustment Programme (Ghana)
NDIC:	Nigeria Deposit Insurance Corporation
NPART:	Non – Performing Asset Recovery Trust (Ghana)
BOG:	Bank of Ghana
BOU:	Bank of Uganda
SARB:	South Africa Reserve Bank
FSB:	Financial Services Board
BOZ:	Bank of Zambia
ROA:	Return on Assets
FI:	Financial Intermediaries
ERP:	Economic Recovery Programme

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The significant role played by banks in the development of an economy cannot be over emphasized. As financial intermediaries, they facilitate the transmission of funds for productive purposes by pooling excess funds from the surplus saving units and making it available to meet the borrowing needs of the deficit saving units which in turn, creates room for investments and engenders growth and wealth creation. This contributes in no small measure towards the development of commerce and industry in addition to providing an efficient clearing and settlement system to facilitate domestic and international transactions (Jennifer Moyo et al 2014).

Given the immense contribution of banks to the economy as stated above, the need to ensure that banking activities are conducted in a prudent manner in line with best practices and high ethical standards aimed at ensuring safety of depositor's fund, protecting the interest of stakeholders and instilling public confidence in the financial system cannot be over emphasized. However, events of the last few decades have revealed a lot of anomalies in the way banking operations are conducted, leading to a rising spate of bank failures which can be attributed to poor ethical standards, unwholesome lending practices, poor governance structure, financial recklessness and lack of sound policy framework, to mention a few (Demirgüç – Kunt & Detragiache 1998).

This financial system state of affairs has necessitated the need to look into the determinants of bank failures within the context of the regulatory reforms that have been put in place to ensure a strong institutional framework, instill ethical standards and achieve stability in the financial sector. In other words, does the desired cause-and-effect expectation hold between regulatory reforms and banking industry stability in African countries?

1.2 MOTIVATION FOR THE STUDY

Given the essential function performed by banks in the transformation of short term deposits into longer term lending, they are exposed to the possibility of illiquidity (i.e. inability to meet their obligations to depositors arising from poor lending practices, mismatch of funds) and as such are prone to fragility. However, the manner in which banking operations are conducted, the governance structure and the regulatory framework within which banks operate do have a direct impact in reducing or increasing the incidence of bank failures (Benhabib & Spiegel 2000). In consideration of the role of interconnectivity that banks play in the financial intermediation process in channeling resources needed for investment, growth and expansion, the effect of a bank failure has a pervasive potential spillover effect on the economy at large; this can constitute a systemic risk with the possibility of evolving into a sovereign debt crisis if not properly managed.

Therefore, this study is prompted by the need to investigate the determinants of bank failures within the context of the regulatory reforms and supervision that have been established to stem the spillover effects on the financial system and the economy at large. Furthermore, the aim is also to evaluate the impact of such reforms on bank performance and to profer solutions to managing bank failures.

1.3 STATEMENT OF THE PROBLEM

Banks exist primarily to provide financial intermediation services in a bid to maximize profit, create value for its shareholders and provide a medium for channeling financial resources needed for economic growth and development. Financial distress occurs whenever financial institutions are unable to meet their obligations to depositors, shareholders and other stakeholders due to illiquidity arising from weaknesses in their financial, operational and managerial capabilities (George G. Kaufman 2004). The signal of an impending bank failure arises when banks have a sizeable proportion of their

liabilities exceed the market value of their assets. The general resulting effect is a run on the financial system and its eventual collapse (Martin Brownbridge 1998).

The fragility of the banking system has called for effective regulatory reforms to ensure greater supervision and monitoring, financial stability and restoration of public confidence in the financial system.

Therefore, this study seeks to examine the main determinants of bank failures in Africa and the impact of regulatory reforms in managing the systemic crisis and spillover effects arising thereof, with a view to providing better oversight functions that will help minimize the spate of banking failures going forward.

1.4 RESEARCH QUESTIONS AND OBJECTIVE

The objective of this study is to look into the main determinants of bank failures within the context of the regulatory reforms that have been put in place to ensure financial stability and strong institutional framework, and to assess the impact of such reforms in reducing the incidence of bank failures in Africa.

In this regard, the study seeks to address the following specific questions:

I) How successful has the introduction of regulatory reforms been in addressing bank failures in Africa.

II) What solutions can be proffered for addressing the spate of bank failures in Africa going forward?

1.5 SIGNIFICANCE OF THE STUDY

This study will provide vital information and insight to academia and the public at large on the underlying causes of bank failure, the deficiencies in the existing reforms and regulatory structure and indicators of financial soundness, all of which will help in assessing the strength and vulnerability of the banking system.

A clear understanding of these issues will help to address the recurring incidence of bank failures in Africa, improve upon existing reforms and provide a level playing ground for

safe and sound banking practices thereby making a valuable contribution to the existing body of knowledge on the research topic.

1.6 LIMITATIONS OF THE STUDY

In the course of the study, there were challenges obtaining data over longer periods for some countries used as case study in this research work. Hence, the coverage period was 1991 – 2014. Data observation and analysis was done based on the state of events within the period specified above.

Despite the limitations, the data available for this research work still provided a good and fair representation of performance indicators required for data analysis and interpretation of study outcome.

1.7 OVERVIEW OF RESEARCH METHODOLOGY

In pursuit of the goals of this study, efforts will be made to provide an analysis of the current state of events with regards to regulatory reforms and assessment of bank performance. As a case study, we shall examine the impact of regulatory reforms on selected countries in Africa: Nigeria, Ghana, Zambia, Uganda and South Africa. The study will rely mainly on secondary sources of data to help analyze and interpret the effect of reforms in managing bank failures in Africa. A lot of information will be sourced through bankscope for bank specific information relating to the selected countries. Our findings will be analyzed, measured and interpreted to evaluate performance and make comparisons of financial performance during the pre-reform and post reform stages to ascertain the impact of reforms on bank performance.

1.8 OUTLINE OF THE RESEARCH REPORT

The research report will be organized into five chapters as outlined below:

- Chapter 1 will focus on introduction and overview of the study. It also looks at the research questions, objective, scope and significance of the study.

- Chapter 2 deals with a theoretical review of literature on the research topic and an overview of the regulatory reform measures undertaken to manage bank failures and the resulting impact on bank performance.
- Chapter 3 describes the research methodology which entails the research design, the population sample, data collection methods as well as data measurement and analysis techniques. A summary of the study objectives is also presented.
- Chapter 4 deals with data presentation, analysis and interpretation of the research results.
- Chapter 5 gives a summary of the study outcomes, conclusions and policy recommendations for future studies.

CHAPTER 2

LITERATURE REVIEW

2.1 THEORY OF FINANCIAL INTERMEDIATION & IMPLIED RISKS

The term “Financial intermediation” basically means the process by which funds are pooled from the surplus savings unit of the economy (Lenders) and channeled towards meeting the borrowing needs of the deficit savings unit (Borrowers) for investment and productive purposes (Jennifer Moyo et al 2014). As financial intermediaries, banks engage in deposit transformation by mobilizing funds from lenders or savers (deposits) at a given interest rate and making it available to the borrowers or users (loans) to finance investment plans or projects at a higher interest rate. In pursuit of its intermediation role as stated above, banks are exposed to risks which if not properly managed and controlled will result to fragility and eventual collapse (Benhabib J. et al 2000). The following points are worthy of note:

- In pursuit of their asset transformation function, financial intermediaries largely hold assets that are prone to credit or default risk (i.e. loans). The more banks hold risky assets without having adequate capital, sufficient collateral or back up assets, sound credit risk management amongst others, the more it is exposed to risk of capital loss and insolvency (Anthony Saunders 2006).
- To a larger or lesser extent, there is a tendency to mismatch the maturities of their assets and liabilities given differences in tenor thus exposing banks to interest rate risk. For instance, when banks source deposits on short term basis and lend out for a longer duration, they are exposed to risk of loss in the event of adverse movements in interest rates.
- Banks are also exposed to liquidity risk in the event of not having sufficient cash or liquid assets to meet up with their financial obligations to depositors as they fall due (Martin Brownbridge 1998). Whenever a liquidity crisis is imminent, the affected bank may be forced to borrow or sell off its assets at a price lower than the fair market price to meet up with the surge in liability withdrawals. The sudden rise in liability withdrawals could lead to

a run on other banks and eventually systemic crisis if not properly managed. Hence, liquidity is very essential given that it is the life blood of banking activities and the rallying point for its existence.

- The role of banks in the intermediation chain has become necessary given the huge costs associated with information gathering, liquidity and monitoring costs, price risks as well as the need to reduce the risk of information asymmetry (Ojah and Pillay 2009). Information asymmetry arises due to the superior informational gap between providers (lenders) and users of funds (borrowers). The presence of information asymmetry in financial transactions give rise to the problem of adverse selection and moral hazards which in turn makes it expensive and hard for potential borrowers of funds to access direct financing given that fund providers are not willing to lend out to unknown persons or entities as information about their credit worthiness or profile cannot be readily ascertained.
- Empirical evidence shows that financial intermediaries due to their large pool of deposits, highly diversified investment portfolios and wide range of financial services have been able to manage the costs highlighted above better and cheaper.

Ojah and Pillay 2009, further maintained that banks in their capacity as private lenders are more efficient in credit monitoring and reducing information costs as they have access to information on customers through their various databases and are better informed on a borrower's future projects/prospects.

The points highlighted above explain why the role of financial intermediaries with respect to the re-allocation of financial resources to meet productive purposes required to engender growth cannot be overlooked.

2.1.1 ROLE OF REGULATION IN MANAGING FINANCIAL INTERMEDIATION OUTCOMES IN AFRICA

As pointed out earlier, banks play a significant role in wealth creation and allocation of credit through effective mobilization and channeling of financial resources needed for productive and developmental purposes (Demirguc-Kunt et al 1998). In addition, banks provide an efficient platform through which settlements for financial transactions are made domestically and internationally (e.g. cheque clearing, funds transfer amongst others) failing which there will be a breakdown of the economic system. Equally important is the fact that the deposit

liability holdings of banks account for a significant portion of money supply in the economy thus making banks a channel through which monetary policy actions are transmitted to the rest of the financial sector and economy at large (Benhabib, J. et al 2000).

This crucial role places banks at the center of economic activity and has made it imperative to ensure that banking activities are regulated with a view to managing the contagious and destabilizing effect of banking crises on the economic system at large. To this end, regulatory intervention in managing the outcomes of financial intermediation in Africa has taken the following forms (Anthony Saunders 2006):

- Safety and Soundness regulations aimed at reducing bank exposure and encouraging diversification of assets, specifying minimum ratio of capital to risk assets, setting up of deposit insurance funds/scheme as well as putting in place monitoring, control and oversight functions through off-site and on-site examination.
- Sectoral allocation of credit which takes the form of directives that requires banks to channel a specified ratio of their loanable funds towards the growth and development of certain sectors of the economy e.g. Agriculture, Housing.
- Monetary policy regulations targeted at influencing banks ability to create loans and deposits through imposition of cash reserve requirements and setting of interest rates. This could take an expansionary or contractionary form.
- Regulations relating to the protection of existing financial institutions as well as directly placing a barrier on entry of new firms in the industry and specifying permissible activities in the industry. In the last two decades, banking reforms in Africa has allowed for a relaxation of some of these regulations thus leading to more entry of foreign firms, branch expansion as well as increase financial inclusion.

2.2 THEORETICAL REVIEW OF BANK FAILURES IN AFRICA

In recent times, we have witnessed the spate of banking failures in Africa and its resulting impact on economic activities as well as the systemic crisis arising thereof.

A number of studies have revealed that the soundness of the banking system in a given country is a catalyst for achieving rapid economic growth and financial development (Levine, 2005). However, the experience of the last few decades have shown that bank failures in

Africa are largely attributed to unwholesome practices ranging from poor credit management, excessive risk taking behavior, absence of stringent regulations, poor corporate governance standards, capital inadequacy just to mention a few (Jennifer Moyo et al, 2014).

Bank failures in Africa have been a recurring incident over the last two to three decades and this call for great concern due to the interconnectedness and fragility of banking institutions. Given that the financial service sector in Africa is largely dominated by banking institutions, the failure of one bank creates panic and leads to a run on other banks in the industry thus creating a spillover effect which in turn, engenders a systemic crisis. Past events have shown that a significant number of African banks failed due to high rate of non-performing loans, poor risk management, financial recklessness, poor corporate governance standards as well as poor regulatory oversight and supervision (Brownbridge, 1998). For instance, prior to the banking sector reforms in Nigeria in 2004, the industry witnessed series of systemic distress which led to bank failures & closures and an erosion of public confidence in the sector. It became a matter of urgency to step up regulatory efforts and come up with prudential guidelines aimed at ensuring financial stability and restoring public confidence. In other African countries such as Kenya, Zambia and Ghana, similar reforms have been undertaken in a bid to restructure the banking sector and create a platform that will encourage safe, sound and transparent conduct of banking activities. It is on this note that it becomes necessary to embark upon this study to shed more light on these causal factors and the extent to which regulatory reforms have been able to curb bank failures.

2.3 AN OVERVIEW OF FINANCIAL SECTOR REFORMS IN AFRICA

BACKGROUND

Given the crucial role that banks play in fostering economic growth and development through resource mobilization and allocation for investment and developmental purposes, it has become imperative to ensure that banking activities are well regulated to protect the interest of all stakeholders, create confidence in the financial system, promote efficiency & financial innovation and provide the desired level of activity to promote economic growth and development. Therefore, regulatory reforms are introduced to check excessive risk taking behaviour of banks and to manage the contagious and destabilizing effect of banking crisis on the economy.

Financial sector reforms in Africa have taken the form of deregulation, recapitalization and restructuring of banks, privatization, interest and exchange rate liberalization, restriction of external capital flows as well as quantitative restrictions on credit allocation. The overall motive behind the introduction of such reforms was to achieve stability in the financial system, transparency, encourage healthy competition and ensure that funds are allocated to priority sectors to engender growth and provide the desired level of support for economic development.

In the last three decades or more, studies have revealed that three identifiable phases of reform have been introduced in most African countries. The first phase was aimed at making policy changes to create a more competitive environment and relax tight conditions via liberalization of interest rates, removal of quantitative restrictions, lifting of barriers to entry of foreign banks as well as privatization of state owned banks. The adoption of these measures however did not yield the desired result as structural and institutional issues were still prevalent in the banking sector (Nissanke and Aryeetey, 1998).

Hence, the second phase was introduced with the aim of strengthening the regulatory and institutional frameworks as well as increase supervisory capacities of regulatory bodies such as central banks. Therefore, the autonomy of central banks in regulating the activities of the banking sector was a major focal point.

The third phase placed more emphasis on improving disclosure requirements, enhancing transparency and accountability and the introduction of better accounting and reporting standards in line with international best practices. This is aimed at ensuring improved corporate governance standards in the financial services sector (L. Kasekende et al 2010).

In countries like Ghana and Ethiopia, the reform process was a gradual one as restructuring of banks in the public sector was done first prior to privatization of state owned enterprises (Nissanke and Aryeetey 1998). However, it has been observed that despite several reforms adopted in the past, it has not fully yielded the desired effect for which it was introduced as evident in the performance of a number of banking institutions post-reform. It is also worthy of note that the introduction of reforms has enhanced competition in the banking industry and increased risk taking behaviour on the part of banks as they get more aggressive in their approach to business than they were prior to reforms being implemented (Bolt & Tieman,

2004). Furthermore, if banks were to be left unregulated, they tend to take on high risk investment portfolios in expectation of large returns which create a serious exposure to risk of loss arising thereof. Therefore, it is evident that for banking reforms to be successfully implemented, there is a need for an efficient legal framework with strict enforcement, monitoring & control mechanisms.

In the course of this study, we shall be looking at the effect of these reforms in some selected countries in Africa in a bid to ascertain how it has helped in producing the desired results and identify the constraints against achieving the needed results.

Impact, Challenges and Constraints

Prior to the introduction of reforms in most African countries, the financial system was heavily controlled by the government and state owned banks accounted for a larger percentage of bank ownership. Hence, there was a direct involvement of the government through credit restrictions, placing a limit on branch expansion and foreign banks entry as well as setting deposit and lending rates, which created little room for competition. Hence, the introduction of reforms have helped to liberalize the sector and create room for more competition, expansion and increased foreign entry compared to what obtains during the pre-reform period.

Therefore, the extent to which financial sector reforms in Africa will help in achieving system stability to a large extent depends on the pace, sequencing and scope of the reforms.

IMPACTS

- The introduction of reforms has helped to achieve a more liberalized financial environment in Africa with the removal of credit ceilings, barrier to foreign entry and international capital flows as well as rapid improvements in information technology and expansionary activities by banks. This has also led to more competition and an improvement in financial inclusion.
- It has also brought about an improved banking system with stronger balance sheet size and capital base. For instance, the consolidation of the banking sector in Nigeria in 2004 reduced the number of banks from 89 in July 2004 to 24 in December 2005,

and also led to increase in capitalization thus increasing public confidence. Hence, the spate of bank failures that were imminent during the pre-reform era was drastically reduced.

- The banking sector reforms also brought about standardized accounting system and reporting standards with respect to disclosure requirements, classification of loans and provisioning for non-performing loans amongst others. In addition, offsite supervision became an integral part of regulatory functions.
- It has opened up the industry for more competition and efficiency in financial service delivery. The introduction of reforms allowed for new entry into the banking markets, merger and acquisitions and a reduction in market concentration.
- Improved regulatory and supervisory measures and corporate governance standards in the banking industry.

CHALLENGES AND CONSTRAINTS

Despite the improvements that were witnessed following the introduction of reforms in the banking sector in Africa, it has been observed that some industry related and economic wide challenges and constraints have hampered its successful implementation. These constraints have limited the effect of the said reforms in achieving the desired level of capacity to support economic development, stability and efficient financial intermediation process.

Notable amongst these challenges and constraints are:

- Macro-economic imbalances and huge fiscal deficits undermined financial liberalization measures and led to unstable interest and exchange rates which worsened illiquidity in the banking sector. In Nigeria, recurring fiscal deficits made the CBN's use of indirect monetary tools ineffective and posed a big regulatory challenge.
- Following the liberalization of the financial sector, there has been a surge in risk taking behaviour by banks as they made risky investment undertakings in anticipation of large returns and in a bid to keep up with competition. This further exposed them to credit and market risk thus limiting the effectiveness of regulatory reform measures.

- Despite the introduction of reforms, the banking sector is to a large extent, still oligopolistic and dominated by large banks which leads to limited deposit and lending competition, high interest spreads and inefficient pricing of financial assets.
- The financial market in Africa is characterized by its small size, low intermediation and limited access to credit. Also worthy of note is the fact that banks balance sheet is dominated by short term deposits and few banks engage in long term lending. Besides, there is still an over reliance on public sector deposits.
- Political instability, poor ethical standards, insider abuse, non-compliance with regulatory procedures amongst others has also hampered the successful implementation of banking reforms in Africa.

2.4 AN OVERVIEW OF BANKING SECTOR PERFORMANCE IN AFRICA {PRE REFORM AND POST REFORM}

The performance of the banking sector across African countries over the last three to four decades has not really been encouraging given a wide range of issues from poor ethical standards, inadequate capital and liquidity challenges, to insider credit abuse and poor quality of risk assets, lack of proper surveillance and monitoring measures just to mention a few. The introduction of regulatory reforms in the banking sector in Africa have brought about some improvements in banking practice but is yet to achieve the desired impact for which it was introduced. Hence, this study shall look at the performance of the banking sector in some selected African countries prior to reform being introduced and after its introduction, to give us an insight into the practices that have hindered the performance of banks in achieving the desired level of support for the rest of the financial system and economy at large.

- THE NIGERIA BANKING SECTOR

The performance of the banking industry in Nigeria cannot be fully assessed without a brief insight into the conduct of banking activities during the post independence era and the structural changes that followed up till this present day.

Prior to the enactment of the Banking Ordinance act of 1952 and establishment of the Central Bank of Nigeria (CBN) in 1958 (Also known as the free banking era), banking activities were

marred by unethical practices and lot of irregularities due to the absence of regulation and control which largely accounted for the dwindling performance of the sector during the period. The need to regulate and control banking business in the country led to the enactment of the Central Bank Act of 1958 granting the CBN supervisory and regulatory powers over banks and other financial institutions in the country. In a bid to further strengthen the CBN, widen its powers and make it fully autonomous, subsequent enactments were made such as the Banks and Other Financial Institutions Act 1991 - BOFIA (As amended in 1997, 1998 and 1999) and more recently the CBN Act, 2007 which repealed the CBN Act of 1958 and Banking Act of 1969.

Pre- reform

Prior to the reforms undertaken to sanitize the banking sector in Nigeria in the 1980s, 1990s and 2004 respectively, the financial system was heavily repressed as the monetary authorities directly imposed ceilings on interest rate and credit creation, restricted entry into the industry and also placed high reserve requirements on banks. This hindered the efficient mobilization of funds to support productive investments, slowed down the pace of development of the financial sector and discouraged competition (Sylvanus I. & Abayomi A., 2001).

Also evident during this era was a huge domination of state owned banks and government influence. The constraints and setbacks experienced by banks during this period did not give room for competition, financial innovation and expansionary activities. Hence, private sector lending was still limited and there was so much reliance on deposits from the public sector. This state of events coupled with the general economic downturn in the country in the 1980s called for the introduction of reforms and economic stabilization programmes such as the structural adjustment programme (SAP) in 1986. Part of the agenda of the structural adjustment programme (SAP) was to liberalize the financial sector and relax the controls hitherto imposed by the monetary authorities.

Post reform

Given the financial repression and the attendant issues faced during the pre-reform era, the regulatory authorities adopted a number of structural changes in the financial service industry in Nigeria. One of such reforms was in 1986 through the SAP was aimed at liberalize interest and exchange rates, enhance access into banking business and set up regulatory bodies such as the Nigeria Deposit Insurance Corporation (NDIC) and strengthening existing regulatory and supervisory bodies (e.g. CBN). The banking reforms of the 1990s brought about a massive close down of failing banks, take-over of management and control by Central Bank of Nigeria and Nigeria Deposit Insurance Corporation (NDIC) and increase in minimum capital requirements for commercial banks to ₦50,000,000.00 in 1991. Despite the measures taken by the regulatory authorities during these periods, the banking sector was still weak and not able to provide the required level of financial support towards productive investments that will help engender growth in the economy. This prompted the central bank of Nigeria to come up with the major banking sector reforms in 2004 primarily to promote financial soundness and stability through increase in capital requirements (from ₦2,000,000,000.00 to ₦25, 000,000,000.00), improved regulatory & oversight functions and also reposition the banking industry for greater competition (Locally &Internationally), financial innovation and increased lending to the private sector (Anthonia T. Odeleye 2014). The 2004 reform had a great impact on the performance of the banking industry in terms of structural changes, capital base and increased competition which led to mergers & acquisitions as well as financial innovation.

It further led to the emergence of Twenty Five (25) sound banks out of Eighty Nine (89) that were previously in existence. It also allowed for the entry of more foreign banks and placed more emphasis on a risk based approach to banking regulation & oversight functions in line with the Basel II accord (Kanayo Ogujiuba 2011). However, there is still room for improvement especially in the areas of credit risk management, sound corporate governance and financial deepening.

- THE GHANA BANKING SECTOR

Prior to regulatory reforms being introduced in the Ghanaian banking sector, banking activities in Ghana were seriously laid back and inefficient as regards financial service delivery due to the effects of unfavourable macro-economic policies, high inflation rate (As high as 123% in 1983), balance of payment crisis and general economic downturn in the country during the post-independence period up till the early 1980s (T.O Antwi – Asare et al 2000). The regulatory and oversight responsibilities of the Bank of Ghana (BOG) as the apex regulatory authority were not effectively discharged as it failed to adequately enforce the provisions of prudential guidelines for banking practice.

Pre-reform era

The performance of the banking sector in Ghana during the pre-reform period was greatly slowed down by the deep economic crisis in the country after independence followed by excessive government interference in setting financial policies and directing the pattern of financial activities in the country. In a bid to achieve rapid industrialization of the Ghanaian economy, the government came up with various measures such as imposition of credit ceilings, interest rate controls, heavy reserve requirements and special directives on lending to priority sectors of the economy (i.e. manufacturing and Agricultural sector). These policies as well as the myriad of economic problems in Ghana during this era limited the ability of banks to channel funds effectively to the productive sectors of the economy and engage in long term lending. Thus, given the high rate of inflation and negative interest rate on deposits, the public lost confidence in the banking sector and preferred to hold on to their cash than place it in banks in form of deposits which led to the emergence of informal financial services such as thrift, credit and savings association (Aryeetey and Gockel 1991). As the financial crisis in Ghana deteriorated, the rate of inflation & non-performing loans soared followed by a further decline in capital base of banks. Hence, the volume of savings, credit creation and investments remained low.

Post-reform era

Following the drawbacks and challenges experienced during the pre-reform era, the government of Ghana felt the urgent need to come up with some regulatory measures to address the economic and financial crisis in an attempt to stabilize the economy. This led to

the introduction of the Economic Recovery Programme (ERP) in 1983 with special focus on encouraging fiscal discipline, reform the trade and exchange system and restore the economy on the path of growth. As part of its economic recovery efforts, the Financial Sector Adjustment Programme (FINSAP) was also introduced in 1987 followed by the enactment of a new banking law in 1989 with the objective of putting in place a sound prudential and regulatory framework for banking operations and restructuring the financial services sector (Through liberalization of interest rates, manage non-performing assets through a new agency known as Non- Performing Asset Recovery Trust – NPART, ensure uniform accounting & auditing standards amongst others).

Martin Brownbridge et al (1996), maintained that the adoption of these regulatory measures brought about an improvement in banking sector performance in the following ways:

- The reforms led to an improvement in the capital base requirements of banks, liberalization of interest rates and gradual decline in inflation rates compared to the pre-reform era.
- The restructuring of distressed banks which has helped reduce the rate of insolvency and the entry of new banks into the industry created room for more competition.
- Provision of standardized accounting system and improved reporting standards to facilitate transparency and disclosure of financial activities by banks. In addition, the criteria for loan classifications and provisioning for non-performing assets were specified.
- Increased banking regulation and oversight functions have helped to improve prudential practices considerably.

- **THE ZAMBIA BANKING SECTOR**

Prior to reforms being introduced, Banking sector activities in Zambia were largely characterized by huge state ownership and government control via interventionist policies in setting financial policies and regulations. The high rate of inflation, macro-economic instabilities coupled with deficiencies in supervisory and regulatory functions accounted greatly for the dwindling performance of the sector post-independence.

Pre reform era

Prior to the introduction of the banking sector reforms in 1994, the industry was subject to massive interventionist policies by the government with the aim of exercising greater control over the financial system and resource allocation. This spanned over a period of two decades (Late 1960s up till the early 1990s) and led to a direct involvement by the government in setting policies, lending patterns as well as interest rate control all of which are geared towards the actualization of the country's overall economic policy objectives.

However, the introduction of the said policies had negative impact on the banking system and the economy at large following issues ranging from macro-economic instability, high rate of inflation and negative interest rates to inefficient credit and resource allocation and consequently poor financial intermediation. There was less emphasis placed on prudential policies & guidelines and bank lending was targeted at achieving broad developmental objectives of the Zambian government thus determining credit allocation patterns. The persistent economic crisis faced during this period up till the early 1990s called for the need to reform the banking sector via interest rate and foreign exchange liberalization, relaxation of the rigidities impeding competition and growth of the sector as well as improving prudential regulations and supervisory functions.

Post reform era

Following the challenges of the pre-reform era, the government introduced a financial sector reform process which entailed financial liberalization of interest rates & foreign exchange rates (1992 – 1993) and reformation of the regulatory & supervisory structure in the banking industry as well as enhance access to banking licenses to enable rapid expansion of domestic banks (1991 – 1994).

In implementing the reform objectives, the government focal point was to reduce inflation and achieve positive real interest rates, ensure that credits are allocated more efficiently and accord greater importance to prudential regulations by strengthening the Bank of Zambia (BOZ) in its supervisory capacities. The financial reforms were hampered by the severe economic challenges experienced by the country at the time and as a result, did not fully yield the desired result for which it was implemented. Furthermore, the liberalization of foreign exchange controls and interest rates created an incentive for

economic agents to hold alternative financial assets such as foreign currency and treasury bills as the rates were determined by market forces and this led to a steep rise in nominal interest rates. Consequently, the yield on treasury bills was higher than bank deposits interest rates and as such there was a disincentive to hold bank deposits (Adam 1995). The risk involved in financial intermediation was high due to rising inflation and lending rates and this impacted negatively on credit allocation.

During the reform process, more emphasis was placed on prudential regulations and a new banking legislation was adopted in 1994 (i.e. The Banking and Financial Services Act) and the Bank of Zambia was given more powers to set out prudential guidelines, issue directives as the need arises and revoke licenses for erring banks who conduct unsafe banking practice and as well require up to date financial data on banks in the country from time to time. The new banking act also provides for special consideration with respect to loan exposure, insider lending and shareholders concentration and strengthens the supervisory capabilities of the Bank of Zambia. Despite the measures taken to address the shortcomings of the pre-reform era, its success has been drawn back mainly by political interference and persistent macroeconomic imbalances.

- **THE UGANDA BANKING SECTOR**

The banking system in Uganda is relatively underdeveloped with a low rate of financial inclusion as banking services are less prominent in the rural areas compared to the urban areas. Deposit taking institutions such as banks, micro finance and credit institutions merely serve about 14% of the rural dwellers with a savings to GDP ratio of about 16%. Foreign ownership of banks was dominant from the attainment of independence in 1962 before state took over ownership in the mid-1960s (Beck et al 2006). However, this did not improve the situation as the problems persisted.

The persistent economic decline coupled with political instability, prolonged war & civil unrest in the country at the time and shortage of skilled personnel accounted for the slow pace of growth in banking and economic activities. There were massive administrative controls over imports, prices of agricultural produce and the financial market at large and a number of repressive policies adopted during that period discouraged the public from holding bank deposits and did not give room for credits to be allocated efficiently. This

further aggravated the situation on ground and had negative effects on bank performance as a whole.

Pre reform

The financial policies adopted by the Ugandan government during this era were targeted at controlling the banking market for developmental purposes and sectoral lending which in turn, constrained commercial banks from utilizing funds for commercial purposes. To this end, the government set up two public sector banks namely Uganda Commercial Bank (UCB) and the Cooperative Bank to provide credit to local businesses and drive its development programme. The lending practices of the public sector banks were poor, politically motivated and a number of loans turned bad with very low recovery efforts. There was little room for competition by banks and prudential regulation at the time was weak and did not allow for effective regulatory oversight. Interest rate levels were set and determined by the central bank (i.e. Bank of Uganda – BOU) and there was a wide disparity between deposits and lending rates. The country's persistent fiscal deficits further worsened inflationary trends in the country and the demonetization exercise embarked upon by the government in 1987 in a bid to reduce liquidity greatly undermined the holding of financial assets by the public. In a bid to address the shortcomings of the pre-reform era, the government started introducing measures aimed at repositioning the sector for financial liberalization, greater competition, enhance the efficient allocation of funds and financial services and improve prudential regulations.

Post reform era

The reforms in the financial sector in Uganda started in the early 1990s and were prompted by the need to address the anomalies experienced during the pre-reform era and reposition the banking sector for greater performance and improved regulatory oversight. It was designed to be implemented in three (3) main phases:

- **Institutional reforms to the Bank of Uganda and public sector banks**
  This includes increasing the supervisory powers and oversight functions of the Bank of Uganda with respect to issuing prudential regulations, revising capital

requirements, applying punitive measures to defaulting or erring banks and conduct onsite and offsite inspections. For public sector banks, the reform was targeted at restoring the Uganda Commercial Bank to viability by setting up of Non-Performing Assets Recovery Trust (NPART) to manage the high rate of non-performing debts, reducing its operating costs, restructuring of lending procedures and control measures and minimize political interference.

- **Legislative changes to the existing Banking laws/enactments**

  The enactment of new legislations (Financial Institutions Statute 1993) for achieving sound prudential framework and to also replace the deficient provisions of previous enactments with the view to strengthening the supervisory capabilities of the Bank of Uganda and putting in place a more stringent procedure for prudent banking practice .

- **Financial liberalization**

  Relaxation of interest rate control, foreign exchange control and removal of restrictions hithertho placed on commercial banks with respect to asset holdings and dealing with foreign exchange. The interest rate liberalization led to improvements in savings mobilization and resource allocation and created a more stable financial environment.

- **THE SOUTH AFRICA BANKING SECTOR**

South Africa's banking system is the most sophisticated in Sub- Saharan Africa with a relatively large market capitalization and contributes in no small measure to the country's overall gross domestic product (GDP) in addition to key contributions from sectors such as mining, manufacturing, agriculture and other financial services. The banking industry is dominated by four big banks namely First National Bank, Standard Bank, Nedbank and ABSA with over 95% of domestic banking assets. The sector provides a range of financial services to small, medium and large scale individuals/entities with core specialization in retail, commercial and investment banking.

The regulatory oversight and prudential functions are carried out by the South African Reserve Bank (SARB) while the Financial Services Board is responsible for regulating

market conduct of financial service providers. Both bodies work hand in hand to instill an effective framework for prudential banking practice in South Africa.

Pre reform

Despite the global economic crisis of 2008 which led to the collapse of a large number of financial institutions across the globe, South African banks remained stable in the face of the crisis due to limited foreign credit exposure and the fact that low investments were made in complex and high risk financial instruments. In line with global trends and in compliance with the Basel Capital Accord III, the need arose for regulators to beef up capital adequacy requirements, sound risk management policies and reposition the industry for financial stability and robust regulatory framework.

However, the South African banking sector witnessed a myriad of issues prior to the introduction of reform measures by the regulatory authorities. Some of the issues faced by the banking sector that prompted the need for continuous reforms in the industry are:

- The surge in unsecured lending leading to bad and unserviceable debts brought about by excessive and reckless lending.
- The need to protect consumers of financial services against abuse and sharp practices by practitioners in the banking industry with the aim of creating a level playing ground and transparency in bank dealings.
- The need to address systemic risk and vulnerabilities by putting in place macro prudential guidelines for sound banking practice.
- The need to instill improved corporate governance standards and widen access to financial services in the country.

Post reform

Regulatory reforms in South Africa have taken different forms over the last two decades with broad objectives targeted at managing credit exposure, ensuring consumer protection, satisfaction & financial inclusion, achieving financial stability and putting in place strong institutional framework for prudent banking practice. The process of

reforming the banking and financial services sector led to the enactment of legislations and drafting of measures as detailed below:

- The National Credit Act (35 of 2005), which was aimed at reforming the credit system in the country and creating a fair and transparent atmosphere for accessing credit. The act also aimed at according protective rights to consumers of credits, discouraging reckless & excessive lending as well as regulating the conduct of credit bureaus in the country. The introduction of the national credit act allowed for prudent credit practices and informed credit decisions.
- The Financial Advisory and Intermediary Services Act (37 of 2002), came on board with the objective of regulating the affairs and conduct of financial institutions involved in providing certain advisory and intermediary services and spells out the required code of conduct for practitioners as well as enforcement measures. The act requires that license be obtained before any financial service provider can act in an advisory or intermediary capacity and places an obligation on them to be open, fair and honest in their dealings with potential clients and also guide them in making informed financial decisions.

The need for reform of the financial service industry became expedient following the global economic crisis of 2008 and the attendant global consequences across all sphere of economic activity. In 2011, a policy document titled "*A safer financial sector to serve South Africa better*" was drafted with the primary objectives of creating an effective institutional structure to support financial regulation and deal with systemic risks, regulate market conduct and achieving better financial standards. A "Twin peak model approach" of financial regulation was adopted separating prudential functions as regards achieving safety and soundness of financial institutions from oversight functions relating to the regulation of market conducts. The South African Reserve Bank (SARB) was charged with the responsibility of handling the former (i.e. Prudential functions) while responsibility for handling the latter (i.e. Regulation of market conduct) rests squarely on the Financial Service Board (FSB). The twin peak model approach was designed to achieve financial stability, enhanced financial inclusion, consumer protection and well regulated market conduct and fighting financial crimes.

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CHAPTER 3

RESEARCH METHODOLOGY

3.1 STATEMENT OF RESEARCH PROBLEM

The significant role of banks as financial intermediaries and providing the desired level of support to engender economic growth & stability coupled with the spillover effects of bank failures on the larger economy has placed them in a fragile position which calls for effective supervision, monitoring and control through regulatory reforms . As observed in the course of this study, one key contributor to the growing incidence of bank failures is poor regulatory and oversight functions which has allowed for unwholesome practices and poor bank performance overtime.

In recognition of the salient points stated above, this research work seeks to examine the impact of regulatory reforms in curbing bank failures and profer recommendations for improved bank performance and regulatory oversight.

3.1.1 RESEARCH QUESTIONS

This study seeks to address the following research questions:

I) How successful has regulatory reforms been in addressing bank failures and enhancing bank performance in Africa.

II) What solutions or recommendations can be proffered for addressing the spate of bank failures in Africa going forward?

To this end, the following hypotheses are put forward in a bid to ascertain the impact of regulatory reforms in managing bank failures in Africa:

Null Hypothesis

H0: Regulatory reforms do not have any significant impact on bank performance

Alternate Hypothesis

H1: Regulatory reforms do have a significant impact on bank performance

Subsequently, our study outcome after analyzing and presenting our data will help validate or invalidate our hypothesis as stated above.

3.2 RESEARCH DESIGN AND POPULATION SAMPLE

This study employed the use of descriptive statistical design and data was analyzed using gretl software package due to its flexibility, reliability and large number of features. Regression analysis was done in order to test for significance between the variables under observation. The population sample entails a subset of the entire subject of study which will be used as a representative sample and for drawing inferences based on our study observations. The population sample of this research work consists of three (3) banks in each of the five African countries used as case study.

The performance evaluation variables on these banks were collected and analyzed to enable us make inferences about the state of events during the period of study covered (i.e. Pre reform and Post reform era).

3.3 METHODS OF DATA COLLECTION

The data used for this study was obtained mainly from secondary sources. A lot of bank specific information was sourced through Bankscope (i.e. a reliable and updated database of banks financial information and audited reports), bank websites and economic journals. The information gathered on the selected banks via the sources above formed the basis of our data analysis, interpretation, inferences and policy recommendations.

This method of data collection was adopted in order to give us reliable, accurate and timely information on the subject of study which will assist in proper analysis & interpretation of data and drawing valid inferences on study observations.

3.4 DATA ANALYSIS AND MEASUREMENT TECHNIQUES

In analyzing and measuring data for this research work, the descriptive statistical approach was adopted. Performance indicators of the selected banks were obtained for the purpose of making comparison and evaluating banks performance during the pre-reform and post-reform period and ascertain the extent to which the introduction of reforms have helped in curbing the incidence of bank failures in Africa.

Regression analysis was employed to enable us analyze the relationship and ascertain the extent of correlation between the banking reform variables (i.e. Independent variable) represented by (Capital to assets ratio, Loan to deposit ratio, Liquidity ratio, Loan loss reserves to Gross loans ratio and Cost to Income ratio) and the bank performance measurement variables (i.e. Dependent variable) represented by return on assets, net income margin and return on capital employed.

This analytical tools employed will help to measure the impact of regulatory reforms in curbing bank failures and improving bank performance. It is worthy of note that the period covered by this study spans between 1992 – 2014 inclusive of the pre-reform and post reform era.

A summary of the expected relationship between the variables under observation is shown in table below:

DEPENDENT VARIABLES	EXPECTED RELATIONSHIP	INDEPENDENT VARIABLES
RETURN ON ASSETS (ROA)	POSITIVE (+)	LIQUIDITY RATIO
	POSITIVE (+)	CAPITAL TO ASSET RATIO
	NEGATIVE (-)	LOAN LOSS RESERVES /GROSS LOANS
	POSITIVE (+)	LOAN TO DEPOSIT RATIO
	NEGATIVE (-)	COST TO INCOME RATIO
RETURN ON CAPITAL EMPLOYED (ROCE)	POSITIVE (+)	LIQUIDITY RATIO
	POSITIVE (+)	CAPITAL TO ASSET RATIO

	NEGATIVE (-)	LOAN LOSS RESERVES/GROSS LOANS
	NEGATIVE (-)	LOAN TO DEPOSIT RATIO
	NEGATIVE (-)	COST TO INCOME RATIO
NET INTEREST MARGIN (NIM)	POSITIVE (+)	LIQUIDITY RATIO
	POSITIVE (+)	CAPITAL TO ASSET RATIO
	NEGATIVE (-)	LOAN LOSS RESERVES/GROSS LOANS
	POSITIVE (+)	LOAN TO DEPOSIT RATIO
	NEGATIVE (-)	COST TO INCOME RATIO

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 DATA PRESENTATION

In this section, the various performance indicators that have been employed for the purpose of research will be analyzed by running a panel data regression analysis on the gretl software package to test for significance in the relationship between the banking reform variables and the bank performance variables. The sample entails three (3) banks from each of the five (5) African countries selected as case study for this research work. The data presentation and analysis of our results will be done per country followed by an overall assessment of the entire countries under observation.

This will be followed by interpretation of the test results and discussions on study outcome.

4.2 DATA ANALYSIS AND INTERPRETATION

In establishing the relationship between our dependent and independent variable in order to test for significance, the model specification is expressed as:

$$ROA_{it} = \alpha + \beta_1 LIQ_{1it+} \beta_2 CTA_{2\,it} + \beta_3 LRG_{3\,it+} \beta_4 LTD_{4\,it} + \beta_5 CIR_{5\,it+} \ldots\ldots £it$$

$$ROCE_{it} = \alpha + \beta_1 LIQ_{1it+} \beta_2 CTA_{2\,it} + \beta_3 LRG_{3\,it+} \beta_4 LTD_{4\,it} + \beta_5 CIR_{5\,it+} \ldots\ldots £it$$

$$NIM_{it} = \alpha + \beta_1 LIQ_{1it+} \beta_2 CTA_{2\,it} + \beta_3 LRG_{3\,it+} \beta_4 LTD_{4\,it} + \beta_5 CIR_{5\,it+} \ldots\ldots £\,it$$

Where:

α = *Constant*

$\beta_{1\ldots..}\ \beta_5$ = *Coefficient of the parameters*

£it = *Error term*

ROAit = *Return on Assets at time t*

ROCEit= *Return on Capital Employed at time t*

NIMit = *Net Interest Margin at time t*

LIQ_{1it} = *Liquidity ratio at time t*

CTA_{it} = *Capital to Asset ratio at time t*

LRG_{it} = *Loan loss reserve to Gross loans ratio at time t*

LTD_{it} = *Loan to deposit ratio at time t*

CIR_{it} = *Cost to Income ratio at time t (Independent Variable)*

EMPIRICAL RESULTS

Below is an analysis of the panel data regression results on the different samples that were employed for this study. The independent variables are represented by Liquidity ratio (LIQ), Capital to Asset ratio (CTA), Loan loss reserves/Gross loans ratio (LRG), Loan to Deposit ratio (LTD) and Cost to Income ratio (CIR) and were tested against each of the dependent variables namely Return on assets (ROA), Return on Capital Employed (ROCE) and Net Interest Margin (NIM). The data used for analysis covered the period of 1992 to 2014.

Case Study 1: GHANA

Table 4.1 *Dependent Variable:* **RETURN ON ASSETS (ROA**)

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	19.7364	1.71253	11.5247	<0.00001	***
LIQ	-0.00647931	0.0212689	-0.3046	0.76171	

CTA	-0.1264	0.0559735	-2.2582	**0.02764**	**
LRG	-0.0934963	0.0323863	-2.8869	**0.00543**	***
LTD	-0.0148899	0.0160221	-0.9293	0.3565	
CIR	-0.202544	0.0101531	-19.9489	**<0.00001**	***
Dummy	0.266288	0.278805	0.9551	0.34342	
		Adjusted R-squared	0.62177		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

In the above analysis, it can be observed that the loan loss reserve/Gross loans ratio (LRG) is statistically significant at a 1% level as expected. Thus, changes in the loan loss reserve/Gross loans ratio had a significant impact on return on assets (ROA) during the study period. The cost to income ratio (CIR) was equally significant at the 1% level indicating a strong impact on bank's return on asset in Ghana. This reflects that regulatory reform variables had a big impact on the two performance variables highlighted above as evidenced in the results.

Table 4.2 *Dependent Variable:* **RETURN ON CAPITAL EMPLOYED (ROCE**)

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	15.7246	1.71949	9.1449	<0.00001	***
LIQ	-0.0120643	0.0195881	-0.6159	0.54033	
CTA	-0.0564179	0.053209	-1.0603	0.29333	
LRG	-0.0279527	0.0147199	-1.899	0.06246	*
LTD	-0.00922687	0.0142885	-0.6458	0.52094	
CIR	-0.162688	0.0121148	-13.4289	<0.00001	***
Dummy	0.234878	0.194643	1.2067	0.23236	

	Adjusted R-squared		0.57575		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

Here, the cost to income ratio (CIR) and loan loss reserve/gross loans ratio (LRG) are statistically significant at the 1% and 10% level respectively. This indicates that the return on capital employed was significantly influenced by changes in the cost to income ratio and loan loss reserve/gross loans ratio accordingly.

Table 4.3 *Dependent Variable:* **NET INTEREST MARGIN (NIM**)

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	21.1496	3.42859	6.1686	<0.00001	***
LIQ	-0.00260283	0.00746473	-0.3487	0.72857	
CTA	-0.290474	0.104497	-2.7797	0.00729	***
LRG	-0.0845984	0.0651827	-1.2979	0.19938	
LTD	0.0325868	0.0226176	1.4408	0.15494	
CIR	-0.161598	0.0392214	-4.1202	0.00012	***
Dummy	2.44037	1.59914	1.5261	0.13234	
	Adjusted R-squared		0.494093		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign(*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

As seen in table 4.3, the cost to income ratio (CIR) is statistically significant at the 1% level of reflecting a strong but negative relationship with the net interest margin as expected. Therefore, an increase in the ratio brings about a corresponding fall in the net interest margin. The capital to asset ratio (CTA) though significant at the same 1% level appears to have a negative correlation with the net interest margin which is contrary to study expectations.

Case Study 2: SOUTH AFRICA

Table 4.4 *Dependent Variable:* **RETURN ON ASSETS (ROA)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	7.44984	0.397542	18.7398	<0.00001	***
LIQ	0.00119623	0.00720878	0.1659	0.8689	
CTA	-0.0752404	0.0238126	-3.1597	**0.00273**	***
LRG	-0.0830178	0.0301982	-2.7491	**0.0084**	***
LTD	-0.00106091	0.00446387	-0.2377	0.81315	
CIR	-0.0733641	0.0103442	-7.0923	**<0.00001**	***
Dummy	-0.321076	0.18062	-1.7776	0.0818	*
		Adjusted R-squared	0.637856		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The results of our analysis as displayed above indicates that Loan loss reserve to gross loans ratio (LRG) and Cost to income ratio (CIR) were statistically significant at the 1% level and also indicates a positive relationship with return on assets (ROA) as expected. However, the Capital to Assets ratio (CTA) though significant at the 1% level, appears to have a negative relationship with the return on assets (ROA) contrary to the study expectations.

Table 4.5 *Dependent Variable:* **RETURN ON CAPITAL EMPLOYED (ROCE)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	6.33141	0.499636	12.672	<0.00001	***
LTD	-0.000191488	0.00573432	-0.0334	0.9735	
CTA	-0.0440697	0.0187636	-2.3487	**0.02301**	**

LIQ	2.73E-06	0.00646002	0.0004	0.99967	
LRG	-0.0779619	0.036266	-2.1497	**0.03665**	**
CIR	-0.0639803	0.0100159	-6.3879	**<0.00001**	***
Dummy	-0.284609	0.166788	-1.7064	0.09439	*
		Adjusted R-squared	0.612319		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The outcome of our analysis as shown in table 4.5 signifies that the Capital to Asset ratio (CTA) and Loan loss reserve/Gross loans ratio (LRG) are statistically significant at the 5% level respectively while the Cost to income ratio (CIR) remains significant at the 1% level while other variables remain insignificant. The expected relationship between the Loan loss reserve/Gross loans ratio (LRG), Cost to Income ratio (CIR) and the return on asset (ROA) holds, suggesting a negative correlation between the variables. However, the Capital to Assets ratio indicates a position contrary to study expectation as it appears to be negatively correlated to the return on asset (ROA).

Table 4.6 *Dependent Variable:* **NET INTEREST MARGIN (NIM)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	5.30517	1.89612	2.7979	0.00738	***
LTD	0.0090846	0.0157221	0.5778	0.56608	
CTA	-0.17441	0.0477976	-3.6489	**0.00065**	***
LIQ	-0.0338761	0.0179471	-1.8876	**0.06514**	*
LRG	0.0553122	0.0469361	1.1785	0.24442	
CIR	-0.00923925	0.0112974	-0.8178	0.4175	
Dummy	-0.0954154	0.227267	-0.4198	0.67648	
		Adjusted R-squared	0.538476		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

Here, the Capital to assets ratio (CTA) and Liquidity ratio (LIQ) are statistically significant at the 1% and 10% level respectively and both variables appear to be negatively correlated with the Net Interest Margin (NIM). This implies a contrary position to study expectation which suggests a positive correlation between the variables observed.

Case Study 3: NIGERIA

Table 4.7 *Dependent Variable:* **RETURN ON ASSETS (ROA)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	9.39879	0.76078	12.3542	<0.00001	***
LIQ	0.0045345	0.00813761	0.5572	0.57986	
CTA	-0.0527584	0.0528399	-0.9985	0.32286	
LRG	-0.0404152	0.0365983	-1.1043	0.27475	
LTD	-0.00965799	0.00701234	-1.3773	0.17456	
CIR	-0.0711258	0.021659	-3.2839	**0.00187**	***
Dummy	-0.946291	0.398194	-2.3765	0.02135	**
		Adjusted R-squared	0.521789		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The results above shows that the Cost to Income ratio (CIR) was significant at the 1% level of significance and appear to have a negative relationship with the return on assets (ROA) as expected. It therefore follows that a significant change in cost to income ratio will impact strongly on the return to assets.

Table 4.8 *Dependent Variable:* **RETURN ON CAPITAL EMPLOYED (ROCE)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	8.30051	0.960638	8.6406	<0.00001	***
LIQ	-0.00504782	0.00732	-0.6896	0.4937	
CTA	0.0209506	0.0354701	0.5907	0.55747	
LRG	-0.0112667	0.0150232	-0.75	0.45687	
LTD	-0.00475104	0.00588029	-0.808	0.42302	
CIR	-0.0677366	0.020444	-3.3133	**0.00174**	***
Dummy	-1.52369	0.411445	-3.7033	0.00054	***
		Adjusted R-squared	0.527748		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The Cost to Income ratio (CIR) was significant at the 1% level of significance and appears to be negatively correlated with the return on capital employed (ROCE) in line with expectation. However, the results show no statistical significance between the other independent variables and the return on capital employed (ROCE).

Table 4.9 *Dependent Variable:* **NET INTEREST MARGIN (NIM)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	13.4357	2.67946	5.0143	<0.00001	***
LIQ	-0.0284102	0.0052063	-5.4569	**<0.00001**	***
CTA	0.0205758	0.0550276	0.3739	0.71015	
LRG	0.0259306	0.00187051	13.8629	**<0.00001**	***
LTD	0.041821	0.013885	3.0119	**0.00417**	***
CIR	-0.101777	0.0416875	-2.4414	**0.01845**	**
Dummy	-1.56239	0.513892	-3.0403	0.00386	***

	Adjusted R-squared		0.22029		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The test results in table 4.9 above indicates that liquidity ratio (LIQ), Loan loss reserve/Gross loans ratio (LRG) and Loan to deposit ratio (LTD) were all statistically significant at the 1% level respectively while the Cost to Income ratio was significant at the 5% level. The dummy variable shows a statistical significance at 1% level which implies a post reform effect on the variables observed.

In line with study expectations, the expected relationship of the independent variables to the Net Interest Margin holds with the exception of liquidity and loan loss reserve/Gross loans ratio.

Case Study 4: UGANDA

Table 4.10 *Dependent Variable:* **RETURN ON ASSETS (ROA)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	6.45038	1.91261	3.3726	0.0015	***
LIQ	0.0276464	0.00796836	3.4695	**0.00113**	***
CTA	-0.0493963	0.0250913	-1.9687	**0.0549**	*
LRG	-0.237699	0.0642968	-3.6969	**0.00057**	***
LTD	-0.00105854	0.00490322	-0.2159	0.83001	
CIR	-0.0486133	0.00660232	-7.3631	**<0.00001**	***
Dummy	1.43895	1.50466	0.9563	0.3438	

	Adjusted R-squared		0.70415		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

Here, it can be seen from the results above that the Liquidity, Loan loss reserve/Gross loans and Cost to Income ratio were all statistically significant at the 1% level indicating a strong relationship between the variables and return on assets (ROA) which is in line with study expectations.

The Capital to asset ratio was significant at 10% level but appears negatively correlated to return on assets as opposed to the expected relationship between both variables.

Table 4.11 *Dependent Variable:* **RETURN ON CAPITAL EMPLOYED (ROCE)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	5.23606	2.20367	2.3761	0.02163	**
LIQ	0.0289185	0.00613187	4.7161	**0.00002**	***
CTA	-0.0231617	0.0381779	-0.6067	0.54698	
LRG	-0.181702	0.0727456	-2.4978	**0.01606**	**
LTD	-0.00163116	0.00517265	-0.3153	0.7539	
CIR	-0.0466985	0.0083997	-5.5596	**<0.00001**	***
Dummy	1.51926	1.55463	0.9772	0.33345	
		Adjusted R-squared	0.667255		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The liquidity ratio (LIQ), Loan loss reserve to Gross loans (LRG) and Cost to Income ratio (CIR) were all statistically significant at the 1%, 5% and 1% levels respectively. The expected relationship between the observed variables and study outcome holds, which suggests that there is evidence of a strong relationship between the variables stated above and the return on capital employed (ROCE).

Table 4.12 *Dependent Variable:* **NET INTEREST MARGIN (NIM)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	11.2007	2.57405	4.3514	0.00008	***
LIQ	0.0753381	0.0309435	2.4347	**0.01893**	**
CTA	0.00299297	0.0594442	0.0503	0.96007	
LRG	-0.159606	0.124945	-1.2774	0.20801	
LTD	-0.0082446	0.00423992	-1.9445	**0.0581**	*
CIR	-0.0281219	0.0107452	-2.6172	**0.01203**	**
Dummy	0.458049	0.798865	0.5734	0.56925	
		Adjusted R-squared	0.350457		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

The liquidity ratio (LIQ) and Cost to Income ratio (CIR) were statistically significant at the 5% level respectively indicating evidence of a strong relationship with the net interest margin as expected. The Loan to deposit ratio was significant at the 10% level but shows a negative correlation to the net interest margin contrary to study expectations.

Case Study 5: ZAMBIA

Table 4.13 *Dependent Variable:* **RETURN ON ASSETS (ROA)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	5.48141	1.8436	2.9732	0.00417	***
LIQ	-0.111256	0.0216809	-5.1315	**<0.00001**	***
CTA	0.205195	0.0446172	4.599	**0.00002**	***
LRG	-0.0564429	0.0354509	-1.5921	0.11636	
LTD	-0.0177822	0.0288176	-0.6171	0.53942	
CIR	0.000207231	0.0204067	0.0102	0.99193	
Dummy	1.89443	1.08438	1.747	**0.08551**	*

		Adjusted R-squared		0.31828	

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

In the results shown in Table 4.13 above, the liquidity ratio and Capital to asset ratio shows a 1% level of statistical significance. In line with study expectation, the relationship between the independent variable and dependent variable holds for the latter while the liquidity ratio appears to have a negative correlation with the return on asset. The dummy variable (At 10% significance level) indicates a marginally significant pre reform effect on the observed variables.

Table 4.14 *Dependent Variable:* **RETURN ON CAPITAL EMPLOYED (ROCE)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	4.14959	1.82495	2.2738	0.02639	**
LIQ	-0.0756904	0.0128827	-5.8753	**<0.00001**	***
CTA	0.267409	0.045211	5.9147	**<0.00001**	***
LRG	0.0241936	0.0157965	1.5316	0.13063	
LTD	-0.0129955	0.0277443	-0.4684	0.64111	
CIR	-0.0227163	0.0154592	-1.4694	0.14669	
Dummy	1.6831	1.03475	1.6266	0.10882	
		Adjusted R-squared		0.40352	

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

Here, the liquidity ratio (LIQ) and Capital to asset ratio (CTA) are statistically significant at the 1% level. As expected, the result shows a positive correlation between the

Capital to asset ratio and return on capital employed while the liquidity ratio shows a negatively significant relationship as opposed to study expectations.

Table 4.15 *Dependent Variable:* **NET INTEREST MARGIN (ROCE)**

	Coefficient	***Std. Error***	***t-ratio***	***p-value***	
const	7.66232	1.97218	3.8852	0.00025	***
LIQ	-0.173953	0.0157599	-11.0377	**<0.00001**	***
CTA	0.556538	0.204984	2.715	**0.00854**	***
LRG	0.152632	0.164092	0.9302	0.35584	
LTD	-0.0096936	0.0435907	-0.2224	0.82474	
CIR	0.042012	0.0250665	1.676	**0.09869**	*
Dummy	0.438504	1.82048	0.2409	0.81044	
		Adjusted R-squared	0.369965		

Note: The coefficient values are at 10%, 5% and 1% level of significance respectively. The levels of significance are denoted by the sign (*). One * represents 10% significance level, ** represents 5% and *** represents 1% significance level.

In Table 4.15, the result shows that the Capital to asset ratio was statistically significant at the 1% level and has a strong positive correlation with the net interest margin as expected. Although Liquidity ratio and Cost to Income ratio appear significant at 1% and 10% respectively, they do not support our study expectation concerning their relationship with the net interest margin.

4.3 FINDINGS

The study outcome as presented and analyzed in the previous sections of this chapter points out a number of observations with respect to the relationship between the banking reform variables (i.e. Dependent) and the performance measurement variables (i.e. Independent variables). These are discussed below:

- **GHANA**

It was observed that the loan loss reserve/gross loan ratio and Cost to Income ratio was statistically significant for the banks in Ghana during the period of study and had a strong negative impact on the return on assets in line with study expectations. As pointed out in the literature review, the effect of the loan loss reserve to gross loans is attributable to large amount of non-performing and doubtful loans which necessitated an increase in loan loss reserve relative to gross loans. The high cost to income ratio shows that overhead & running costs which accounted for a large part of bank's cost component were not managed effectively relative to income and this impacted greatly on the return on assets. The same effect expressed for the two independent variables above holds for return on capital employed and net interest margin respectively.

However, capital to assets ratio showed a significant negative impact on the net interest margin contrary to the expected outcome. This implies that an increase in the ratio causes a decline in net interest margin which is an indication of resources not being utilized effectively to generate sufficient income to cover expenses. Therefore, there is need for banks in Ghana to improve on their operational efficiency, asset quality and earnings power.

- **SOUTH AFRICA**

The outcome of the data analysis shows that the cost to income ratio and loan loss reserve to gross loans ratio had a great negative impact on both return on assets and return on capital employed. The impact of the loan loss reserve ratio as seen from the results can be traced to the surge in unsecured lending and rising profile of bad debts in the country over the study period. This was pointed out in our review of literature thus confirming our study expectation.

In addition, the effect of the cost to income ratio (CIR) on return on asset implies that the overhead cost costs was not effectively managed. Thus, it rises at a higher rate than income thereby lowering bank earnings. This can be attributed to the increased

running costs by banks in a bid to drive more business to keep up with competition and regulatory requirements.

The capital to asset ratio had a significantly negative effect on the return on capital employed, net interest margin and return while the liquidity ratio impacted negatively on the net interest margin.

- **NIGERIA**

The results obtained from the data analysis shows that cost to income ratio has a significant negative effect on all the reform variables (Return on assets, Return on capital employed and Net Interest Margin). This is in line with our study expectation and buttresses the fact that continuous increase in administrative and operational expenses relative to income pose a serious and potential threat to banks' ability to be profitable. The loan loss reserve ratio impacts positively on the net interest margin of banks within the review period thus indicating that the quality of risk assets is an important determinant of banks' earnings power and reduces the amount of impaired loans. Hence, this position further affirms the need for banks to maintain a good credit screening, monitoring and recovery system.

However, liquidity appears to have a negative relationship with net interest margin contrary to our expectation on study outcome. Therefore, the result implies that given an increase in banks liquidity, there will be a corresponding decline in net interest margin and vice versa. The implication of this result is that bank funds are not effectively deployed to generate income and secondly, there is a need for banks in Nigeria to attract more cheap sources of funds in the overall deposit mix so as to improve their net income and reduce the cost of funds.

- **UGANDA**

A review of our findings on the observed variables indicate that there is a strongly significant relationship between liquidity, loan loss reserve ratio, Cost to Income ratio and the return on assets as well as return on capital employed. This is in line with the expectation of the study and further throws light on the performance of the banking industry in Uganda during the period under review as discussed in the literature review.

The capital to asset ratio was negatively related to asset returns contrary to the expectation of this study and this could be as a result of ineffective management of banks' financial resources and poor investment decisions.

The liquidity and Cost to income ratio do have a significant positive and negative effect on net interest margin respectively. This is in line with study expectation as any major change in any of these measurement variables will induce a remarkable change on the net interest margin accordingly. Our findings thus reveal that for high performance standard to be sustained, it is imperative for banks in Uganda to ensure that available short term funds are deployed to profitable use, operational expenses are cut down relative to income and the loan quality is significantly improved upon amidst other control measures.

However, the loan to deposit ratio shows a negative disposition towards the net interest margin as against study expectation, implying that for every increase (decrease) in the ratio, there is a corresponding decrease (increase) in the net interest margin of banks. Thus, we can infer from the relationship that banks are not generating sufficient income on loans & advances, due to poor credit administration and/or the interest expense on depositors' funds far exceeds the income earned on risks assets in its portfolio.

- **ZAMBIA**

The results of our data analysis on banks in Zambia within the period of study shows that the capital to asset ratio was positively significant to the return on assets, return on capital employed and net interest margin thus implying that a significant improvement (decline) in the ratio brings about a corresponding significant increase (decline) in the other dependent variables respectively (i.e. ROA, ROCE and NIM) which is in line with the expectation of the study. Thus, it follows that with improvements in the capital funds of Zambian banks relative to their assets (Holding other variables constant), there will be remarkable positive changes in the returns earned on asset and capital employed as well as interest margins.

However, the result of our data analysis further shows that the liquidity ratio had significant negative impact on returns on assets, capital employed and interest margins as opposed to the expected positive relationship between liquidity and the aforementioned variables. Therefore, our findings imply that with an improvement (decline) in liquidity position, the returns on assets, capital and net interest margin drops (increases), all other things being equal. This is attributable to low return on funds relative to other assets, unfavourable market conditions and poor investment decisions.

This clearly underscores the importance of liquidity as a key determinant of bank profitability as prudent and profitable use of liquid resources helps to achieve low financing cost, operational efficiency and sound investment decisions & improved earning power.

CHAPTER 5

SUMMARY OF STUDY OUTCOME, CONCLUSIONS AND RECOMMENDATIONS

This section gives a summary of our study outcomes, conclusions as well as recommendations for future studies.

5.1 SUMMARY OF STUDY OUTCOME

The outcome of our results as seen from the data observation, analysis and presentation points out to some salient facts that need to be addressed to allow for successful implementation of regulatory reforms in Africa going forward. These are:

- For banking reforms to be successfully implemented across African countries, there is need to put in place sound macro-economic policies & measures to achieve stability in the financial sector and the economy at large. The study outcome shows that regulatory measures alone are not sufficient to achieve the desired results and engender the positive change for which reforms were introduced.
- Our study outcome further reveals that due to the effect of regulatory reforms, the cost component of bank operations significantly soared due to increased competition and risk taking behaviour of banks in a bid to meet regulatory demands. Hence, this reflects significantly on the relationship between the cost to income ratio and other reform variables.
- It was observed that banks need to intensify efforts towards ensuring that the net interest margin is improved upon as well as overall earnings. The study outcome shows that for most banks in the observation, resources at their disposal were not judiciously used to improve their earnings power, return on assets and capital employed.

- There is need to enhance financial inclusion to widen the reach and accessibility of financial services. This will help to defray cost inefficiencies, stimulate growth and encourage innovation.

5.2 CONCLUSIONS

The study outcome reveals that regulatory measures adopted so far across African countries have not been significant in achieving the desired impact on overall bank performance with respect to compliance with prudential guidelines and requirements, efficient re-allocation of financial resources, profitability and providing support for economic growth and stability. In addition, the effect of persistent macro-economic instabilities and political factors in most African countries rendered reforms less effective and as a result, the potential benefits that could have resulted from its implementation were not fully achieved.

5.3 RECOMMENDATIONS

Banking reform measures should not only be targeted at addressing bank specific factors and more consideration should be given to the effect of broader macro-economic variables on banking activities (e.g. Inflation, interest rate, exchange rate e.t.c). Greater emphasis should also be placed on profitability, risk weighted component of bank assets and capital adequacy requirement as key reform parameters to achieving stability in the sector. To this end, it is recommended that regulatory authorities improve upon their risk based prudential approach to banking reforms by developing capacities for early detection and management of bankwide and systemic risks.

The legal framework for banking practice should be strengthened to allow for enforcement of provisions contained in legislations/enactments as the need arises. The process should be devoid of any form external or political interference.

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APPENDICES

Appendix A: Countries used as Samples for the Study

Country	Region
Ghana	West Africa
South Africa	Southern Africa
Nigeria	West Africa
Uganda	East Africa
Zambia	Southern Africa

Appendix B: Data description and Sources

Bank Specific Variables	Description	Source
CAR	Capital Adequacy Ratio	Bankscope
ROA	Return on Assets	Bankscope
ROCE	Return on Capital Employed	Bankscope
NIM	Net Interest Margin	Bankscope
LTD	Loan to Deposit Ratio	Bankscope
LIQ	Liquidity Ratio	Bankscope
CIR	Cost to Income Ratio	Bankscope
LRG	Loan Loss Reserve to Gross Loans Ratio	Bankscope
CTA	Capital to Assets Ratio	Bankscope

Appendix C: Institutional variables

Institutional Variables	Description
FSAP	Financial Sector Adjustment Programme
NPART	Non-Performing Asset Recovery Trust
SAP	Structural Adjustment programme
FSB	Financial Services Board

FI	Financial Intermediaries
BOFIA	Banks and Other Financial Institutions Act
FAISA	Financial Advisory and Intermediary Services Act
ERP	Economic Recovery Programme
BFSA	Banking and Financial Services Act