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**Developing a Methodology for the Qualitative and
Quantitative Credit Analysis of Banks in Kenya and
Nigeria from a South African Perspective.**

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By

Stephen Raymond Vlok

Supervisor: Dr. Glen Holman

Co-supervisor: Joanne Shev

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Abstract

This study presents research on credit risk assessment in emerging market countries with particular emphasis on the Kenyan and Nigerian markets. Using prior emerging market research, information from credit rating agencies and information gained from a country visit, a revised methodology is devised. Using this methodology, the individual banks scores are in line with the expectations of how they would rank relative to each other in terms of qualitative and quantitative factors.

Key words: Frontier market, Corporate governance, Bank assessment, Asset quality, Liquidity, New methodology

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I declare that this paper is my own work except where indicated otherwise and that all references that were used have been accurately recorded in the paper.

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Glossary

ABCP	Asset backed commercial paper
ADB	African Development Bank
BOB	Bank of Botswana
BRIC	Brazil, Russia, India and China
Capitec	Capitec Bank Limited
CBA	Commercial Bank of Africa
CBK	Central Bank of Kenya
CDOs	Collateralised debt obligations
Diamond Trust	Diamond Trust Bank
EIB	European Investment Bank
FBN	First Bank of Nigeria
Fitch	Fitch Ratings
FMO	Development Bank of Netherlands
GAAP	Generally Accepted Accounting Practice
GTB	Guaranty Trust Bank
GTBF	GTB Finance BV
ICB	Intercontinental Bank
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
K-Rep	K-Rep Bank
Moody's	Moody's Investors Service
NIC	NIC Bank
NPLs	Non-performing loans
NSE	Nairobi Stock Exchange
ODM	Orange Democratic Party
ONB	Oceanic Bank
S&P	Standard & Poor's
SBG	Standard Bank Group Limited
SBK	Stanbic IBTC Bank
VAR	Value at risk

Chapter 1 Introduction

This study aims to provide valuable research into the banking systems of selected African emerging markets. It proposes a methodology on the credit risk assessment of Kenyan and Nigerian banks from a South African perspective.

1.1 Background

Emerging markets have attracted a large amount of interest in recent times from the developed world and also the new economic power houses of the East, namely China and India. The reasons for this new found interest is based on the search for better yielding assets from the developed world and also the requirement for raw materials from China and India.

The resurgence of Africa as an emerging market has lagged that of its emerging market peers given the historically volatile political environment and the largely corrupt nature of doing business in the continent. However as increased political stability is attained and a greater emphasis is being placed on economic reform the interest in Africa as a market has been renewed.

Due to the above development lag a number of researchers, including the Standard Bank Research Division and Noah Research, have started to call the African emerging markets "frontier markets" to differentiate them from the emerging markets of Brazil, Russia, India and China ("BRIC countries"). I believe that the description of frontier markets is more appropriate for the emerging markets within Africa and thus will adopt this description hereafter.

1.2 Frontier Market Bank Analysis

Frontier markets have particular and unique characteristics that impact on the assessment of the bank credit risk. This places an additional responsibility on the assessor of risk to consider and to attempt to mitigate through localised information.

Particular additional risks to be considered are as follows:

Availability and Reliability of Financial Information

The timely availability of financial information is crucial in the ongoing risk assessment of bank credit risk. Thus the availability, quality and accuracy of the financial numbers are an important consideration for an analyst of frontier market banks.

Accounting Standards and Profile of Auditors

The need to comply with accounting standards leads to additional risk resulting in the profile of the auditors of the underlying banks being analysed. Important questions to be addressed are who are the auditors and are there two auditing firms appointed to ensure complete oversight of processes? One would hope that at least one of the auditors is one of the "Big Four" comprising PricewaterhouseCoopers; KPMG; Ernst and Young and Deloitte.

In addition, the credit analyst would have to take a close look at how the financial statements are prepared and if they comply with International Financial Reporting Standards ("IFRS") or the local Generally Accepted Accounting Practice ("GAAP").

Increased Political and Security Risk

The young democracies that exist in sub-Saharan Africa are fragile at best and this is well demonstrated by the political "meltdown" of Kenya since the December 2007 elections. This will impact on the risk assessment of the banks in terms of how these adverse conditions affect the local market and foreign interest in these markets. A good understanding of the government's response is also required.

Limited Corporate Governance

Sub-Saharan African countries have not kept up with the corporate governance of the developed world. Thus the controls are not yet up to global standards however they are addressing this issue and further improvements are expected.

1.3 Status of Banking in Kenya

Fitch's update on the Kenyan Banking System is contained in their Country Report published in July 2006 (de Bie et al, 2006). This report provides a comprehensive description of the Kenyan banking system together with an overview of the banking laws and prudential requirements.

The banking system of Kenya is still small and undeveloped but is deregulated as exchange controls were removed in the late 1990s. The banking industry has a state of limited competition due to the fact that the top ten banks control over 75 percent of the banking sector's assets.

The industry is characterised by relatively poor asset quality with the number of non-performing loans ("NPLs") being high (19,3 percent as at June 2005) due to the large influence by government on the state owned banks, inferior internal procedures, and no detailed and dynamic risk management process (Fitch Ratings, 2006). The government has reduced its ownership of banks and now only has active ownership in four banks. Another negative factor that affects the level of NPLs is the legal environment which does not offer suitable nor sufficient protection to lenders (de Bie et al, 2006).

Corporate governance has in the past been poorly executed in Kenya however the Central Bank of Kenya ("CBK") has been on a quest to improve the efficiency and competitiveness of the sector. The CBK have tightened up on their supervision of the banks and imposed stiffer penalties upon non-compliance (de Bie et al, 2006).

The principal form of payment remains cash in Kenya owing to the fact the informal sector plays a large role in the economy and due to past events the public does not have much confidence in the banking sector. These past events include numerous malpractices of directed lending, fraud and insider abuse (de Bie et al, 2006).

Banks in Kenya conform to IFRS disclosure which is crucial in the analysis of the information provided. Thus an acceptable level of disclosure is present and an analyst would have access to reasonably transparent information.

The minimum capital requirement in terms of statute is 12 percent (Central Bank of Kenya, 2007). de Bie et al (2006) is of the opinion that this level is "relatively thin, given the challenging nature of the Kenyan operating environment and does not provide an adequate buffer for the banks against an adverse shock event in the economy".

The funding of Kenyan banks is predominantly via demand deposits and as a result this leads to a liquidity gap as there is a mismatch between the shorter dated liabilities and the short-term assets held by banks as evidenced by the table below. The result of this is that the banks are dependent on the rolling of these demand deposits in order to fund themselves.

Table 1 – Kenyan Banks Liquidity Gap:

Bank (KES millions as at Dec 2007)	Current Assets	Current Liabilities	Liquidity Gap
African Banking Corporation Limited	3 231	4 451	1 220
Barclays Bank of Kenya Limited	114 946	122 533	7 587
Commercial Bank of Africa Limited	21 212	36 101	14 889
The Co-Operative Bank of Kenya Limited	44 965	56 244	11 279
Diamond Trust Bank Kenya Limited	25 172	29 347	4 175
Imperial Bank Limited	6 358	7 733	1 375
Kenya Commercial Bank Limited	79 504	100 289	20 785
NIC Bank Limited	23 605	25 456	1 851
Prime Bank Limited	8 324	11 143	2 819

Source: Annual Financial Statements of the above banks

Kenya has had its share of bank failures and these were typically due to lack of market trust and insolvency either from mismanagement or fraud. The government has typically responded by only providing assistance to those banks that were considered to provide systemic risk and thus were important

to ensure their survival for the whole banking industry's health (Barako and Tower, 2007).

Barako and Tower (2007) did research on how the issue of corporate governance affects the wellness of the Kenyan banking industry. They looked at prior data on the bank failures that took place in the late 1980s and the early 1990s and deducted that these failures could mainly be related to poor corporate governance.

1.4 Status of Banking in Nigeria

The first banking law was only introduced in 1952 by the then colonial government. The country experienced exponential growth in the number of banks from 15 banks in 1970 to its peak of 120 banks in 1992 and 1993. The increased number of banks was accompanied by an increase in the number of branches from the low level of 273 in 1970 to a high of 3 300 in 2004. In 1998 the number of banks decreased from 115 to 89 due to the liquidation of 26 banks. Bank failures and liquidations have been a feature of the Nigerian industry since 1994 (Central Bank of Nigeria, 2007).

The Central Bank of Nigeria ("CBN") announced that they would be initiating reforms to the banking industry in July 2004. This announcement was formally communicated in the April – June 2005 publication (Central Bank of Nigeria, June 2005). The reforms would be completed in phases and the first phase would be to consolidate the number of banks to ensure a stronger industry. As with most developing countries the overall rationale for the consolidation phase is to ensure that the banking system becomes a catalyst for the development of the Nigerian economy as a whole.

The Nigerian banking industry has in the past being dominated by a large number of banks that were essentially poorly capitalised and the asset and deposit bases were so small that no meaningful contribution was being made to the greater economy. In addition, amongst these numerous banks there was a large degree of fraud and corruption which tarnished the banking

industry's reputation and lead to wide spread mistrust. The CBN wishes to rid the industry of this plight and it is believed that the oversight and monitoring of a smaller number of well capitalised banks would be a much easier and more efficient process.

The industry is concentrated with roughly ten banks accounting for over 50 percent of the total assets and deposits. Private domestic ownership of banks in the industry is 85 percent. Government ownership has been relatively low and from January 2006 the government has not had any shareholding in any of the banks. Notwithstanding this the government has intervened repeatedly in the industry. This is one of the numerous challenges that the industry faces.

Ezeoha (2007) compiled a comparison between the consolidation in the Nigerian industry with the consolidation that took place in the East (Japan, Thailand, India and Philippines). The Japan scenario related to pre-war Japan and also pre-globalisation. The Japanese banking industry was characterized by a large number of small banks and consequently the system was unsteady.

The best fit for comparison was with the consolidation process that occurred in both the Philippines and India. Like Nigeria, here the driver was essentially to create a stronger and more competitive banking industry to bring about economic development (Reyes, 2001 and Talwar, 2001). The first phase of the consolidation process has resulted in the number of banks decreasing from 89 to 25 in 2006. Thus the industry structure changed from numerous fragmented and small banks to one dominated by relatively large publicly listed banks and foreign banks. However the industry remains a small player in the overall international banking market.

Ezeoha (2007) also argues that the benefits usually derived from consolidation in the more developed world might not be able to be replicated due to the structural imbalances that exist within developing markets. He also states that the government would have to look at ways to develop the micro banking market that is currently not represented by the formal banking system.

1.5 Bank Analysis in South Africa

The many various institutional investors have differing methodologies as to the credit assessment of banks.

One of the major asset management companies focuses on two aspects of bank assessment, namely quantitative and qualitative aspects (Sanlam, 2006). Their assessment is largely based on the principles set forward by Moody's Investors Service ("Moody's") in their bank methodology. In the overall assessment quantitative issues account for 70 percent and qualitative issues account for the balance of 30 percent.

The quantitative areas that receive specific attention are asset quality, capital adequacy, efficiency, liquidity and profitability. The focus areas of qualitative assessment are the change in market share and the stability of earnings pattern over time.

Once all these inputs have been collated the information is inserted into an Excel worksheet that covers a rolling 5-year period and an individual bank score is obtained. Thereafter, the peak utilization over the past six months is obtained for each bank and is multiplied by an appropriate growth percentage to obtain the maximum aggregate limit level. Lastly, the maximum aggregate limit is multiplied by the individual bank's score to obtain a limit guideline figure, on which the proposed limit for each bank is based.

1.6 Research Question

The research question is how to develop a qualitative and quantitative methodology for the credit analysis of frontier market banks with specific focus on Kenya and Nigeria.

Emerging markets especially in Africa, have recently received increased attention from the East. The resource rich economies of Africa have the raw materials that the East requires in order to drive their remarkable economic growth.

South Africa plays a vital role as the access point for the East to many of the sub-Saharan countries. In addition, many South African companies are looking to expand their operations into Africa where increased returns can be achieved.

Although there is limited past research sufficient information is available to provide further and much needed research into this potentially valuable area of increased economic benefit.

Chapter 2 Literature Review and Macroeconomic Information

The literature review will first look at the three major credit rating agencies and how they have prepared their methodologies in order to rate banks across the world. Thereafter prior research conducted in other emerging markets that can provide invaluable lessons for the assessment of frontier banks will be examined. The literature review will be concluded with a discussion of corporate governance in emerging and frontier markets.

2.1 Prior Research

The information that follows hereunder is a detailed discussion of the how the three most respected credit rating agencies rate banks across the world and how their methodologies are applied to bank assessment.

As emerging market research and particularly frontier market financial and banking industry research is limited at best, it is prudent that one first looks at how the various credit rating agencies assess banks throughout the globe in order to provide them with ratings that are consistent and also provide value to investors.

2.1.1 Credit Rating Agency Bank Methodology

The three major credit rating agencies identified are Standard & Poor's ("S&P"), Moody's and Fitch Ratings ("Fitch"). These credit rating agencies each have a methodology for rating banks. They do not have separate methodologies for the developed or emerging world to ensure that ratings are consistent over the geographic landscape.

Fitch (Le Bras and Andrews, 2004) and S&P (Standard & Poor's, Financial Institutions Criteria) have not detailed their respective methodologies as comprehensively as Moody's (Moody's Investors Service, 2006), however their methodologies remain important in order to place the ratings of banks in context.

Fitch is the credit rating agency that has rated numerous Kenyan banks and the country itself. They have also published a paper on the Kenyan Banking System (de Bie and Walker, 2007) which is most useful in understanding this particular market.

S&P has recently released a bank sector review paper titled "Bank Industry Risk Analysis: Boosted by Strong Oil Prices, Nigeria's Economy Buoyed Risky Banks" (Pirnie et al, 2008). This paper provides invaluable insights into the banking industry in Nigeria and will be discussed in greater detail later in this paper.

The credit rating agencies' methodologies of bank assessment will be presented below.

2.1.1.1 Fitch's Methodology of Rating Banks

Fitch's methodology (Le Bras and Andrews, 2004) centers on the following core components:

Operating Environment and Economic Assessment

An analysis of the operating environment and the economy in which the bank operates is undertaken. This analysis is important as the economic conditions present would have an impact on the financial performance of the bank. The political risk of the country would also be dealt with in this component.

Questionnaire

A detailed questionnaire is presented to each bank and is modified for each respective country and for different types of the banks. A written response is required from the respective bank prior to any meetings being undertaken. The Fitch questionnaire is a sample questionnaire and should be modified to suit the requirements of each country and the particular bank being rated.

The Fitch questionnaire (Fitch Ratings, 2004) covers the following main topics:

1. Market Environment and Planning

This section deals with the structure of the bank, the bank's main business lines and also the development of new products. The possibility of future acquisitions is also discussed and the bank's competitive position within the industry. The two main drivers of banking are also considered here being the state of the bank's staff relationships and also the state of their technology systems and expenditure on securing the validity of these systems.

2. Ownership

The potential for a change of ownership would be explored and also the extent of support that the bank would receive from the current shareholders would be noted.

3. Audit/Control by National Banking Supervisory Authority and Accounts

A request is made in this section to obtain the latest report by the National Bank Supervisor. An understanding is then also requested of the accounting convention that is used to draw up and present the annual financial statements.

4. Corporate Governance

This is a most significant section to be considered and a clear and concise approach is necessary to understand the corporate governance and how the progression of such will take place. The sub-sections considered hereunder are not an all inclusive nor an exhaustive list:

- (a) Current corporate governance policies
- (b) Board of directors' analysis
- (c) Related party transactions
- (d) Financial statement audit process
- (e) The compensation of senior management
- (f) Share ownership of the directors
- (g) Defensive strategies against takeovers
- (h) Analysis of the complexity of any holding company structures
- (i) The ownership profile and how this impacts on management

5. Performance

This section deals with the detailed analysis of the income and expenses of the said bank. The considerations of recurring income and the assessment of the capital structure are also based on this analysis. The budget for the forthcoming financial year is also requested.

6. Risk

For obvious reasons risk is a vital section to be analysed and such the questions under this section would be most detailed. The following sub-sections are covered:

- (a) Management of risk.
- (b) Assessment of the lending and non-lending counterparties.
- (c) Analysis of the contingent and off-balance sheet risks.
- (d) Consideration of the impact of credit derivatives.
- (e) Impact of securitization structures, collateralised debt obligations (“CDOs”) and asset backed commercial paper (“ABCP”).
- (f) Assessment of market risk.
- (g) Management of operational risk.
- (h) Any other risks that need to be considered which are unique to the bank.

7. Funding and Liquidity

This section deals with how funding is managed and also the sustainability and thus volatility of such funding. The liquidity mismatch is analysed in detail in order to obtain a sense of the size of the mismatch and then how this would be funded into the future.

8. Capital and Loan Loss Reserves

The section deals with assessing the capital adequacy of the said bank and the questions revolve around the issues of core, quasi and hybrid capital allocation and reporting. The issue of valuation reserves and details of any intangible assets are also analysed.

9. Insurance Activities

The questions in this section are only relevant for those banks that engage in bancassurance activities.

Bank Meeting

Fitch uses this opportunity to discuss the information provided and also to evaluate the information. The number of meetings is determined by the complexity of the bank's operations.

Bank Analysis

Two Fitch analysts will evaluate the bank according to:

- Risk management – included here is the assessment of the bank's risk appetite and the systems in place to control the inherent risks.
- Credit risk – focus is on the loan book and concentrations with specific focus on large exposures and industry concentration.
- Market risk – this covers the structural and trading risks taken on by banks and the relevant asset and liability strategies are assessed.
- Operational risk – prior to Basel II the definition was wide however this has since been narrowed down to “the risk of loss resulting from inadequate or failed internal processes, people and systems or external events” (Basel II, 2004, Bank for International Settlements.)
- Other risk – this primarily relates to the reputation risk and the maintenance of a sound brand.
- Funding and liquidity – the focus is on the structure of the bank's funding base and the existence of any concentration risk.
- Capitalization – in times of distress the capital of a bank will play an important role in it's ability to absorb losses and thus remain a going concern.
- Securitisation – this funding tool has provided the banks with numerous advantages however the structures raise some liquidity issues for action.
- Earnings – the historical trend and the consistency of earnings through the different cycles is important to understand.
- Market environment – this area of analysis includes looking at the operating environment, the economy in general and also the position of the bank relative to its peers.
- Diversification of business and franchise – the analysis would look at the relative value of the franchise and the inherent ability to protect its existing businesses and also to gain new business through its franchise strengths.

- Management and strategy – management need to be seen as being independent from the major shareholders and their strategy is measured against past financial performance.
- Corporate governance – Fitch views this as an important aspect of the analysis as corporate governance can have a material effect on the credit quality of a bank.
- Ownership and control – an assessment is made of the ownership and their readiness and capacity to support the bank in a time of need.

2.1.1.2 S&P's Methodology of Rating Banks

S&P (Standard & Poor's, Financial Institutions Criteria) sets out that their credit analysis of banks covers an extensive collection of qualitative and quantitative issues. They do not have a standard scoring method and bank ratings would take into consideration the respective country's economic situation, legal system, accounting principles, industry competition and the regulatory environment.

The following are the major issues that S&P address in their rating procedure:

- Economic and industry risk
- Corporate structure
- Management and strategy
- Accounting and financial reporting
- Management of credit risk
- Management of market risk
- Funding/Liquidity
- Capital
- Earnings

2.1.1.3 Moody's Methodology of Rating Banks

Moody's methodology is well explained and comprehensive and is explained in greater detail below (Moody's Investors Service, 2006). Moody's detailed methodology indicates that a bank's credit risk is derived from essentially three elements, namely intrinsic financial strength, the possibility of receiving external support from either the owners or government and sovereign risk

In order to fully consider and understand a bank's credit risk a number of fundamental factors should be considered such as brand value, risk positioning (business and asset diversification), operating environment (strength and prospective performance of the economy), regulatory environment (quality and independence of the regulator) and financial fundamentals.

The external factors that have an impact on a bank's financial strength are the government's ability to support troubled banks and the risk of a local currency deposit freeze and the risk of a foreign currency debt moratorium.

The fundamental factors are now discussed in greater detail below:

(a) Brand value

Historically, Moody's has found that the banks with a strong brand value are better positioned to withstand prolonged and difficult market conditions.

Brand values can be divided into five sub sectors:

- i. Market share and sustainability
- ii. Geographical diversification
- iii. Earnings stability
- iv. Earnings diversification
- v. Vulnerability to event risk

(b) Risk positioning

Most of a bank's revenue is derived from rewards for taking calculated risks, and thus management's approach to risk taking is crucial and also the standard application of this approach across the whole bank is of importance.

Risk management should have two essential aims of reducing and controlling the risks faced and ultimately to take advantage of the risks faced when it will be to the benefit of the bank.

Risk positioning needs to be considered in terms of six sub sectors:

- i. Corporate governance
- ii. Operational risk controls
- iii. Transparent financial reporting
- iv. Credit risk concentration
- v. Liquidity management
- vi. Market risk appetite

(c) Operating environment

A bank's performance can be adversely affected by its operating environment. For instance violent economic cycles, "business unfriendly political decisions" and weak legal systems can affect a bank's creditworthiness. The key operating environment measures are economic stability, integrity and corruption and the legal system.

(d) Regulatory environment

Regulators are required to be independent and credible in their supervision and regulation of the banking industry.

(e) Financial fundamentals

Research from Moody's indicating that the following financial aspects of the banks should be considered:

- i. Sustainable profitability
- ii. Liquidity considerations
- iii. Acceptable level of capital adequacy
- iv. Efficiency
- v. Asset quality

Moody's (Moody's Investors Service, 2006) highlights the following limitations that should be borne in mind when making financial assessments:

- Where banks are active in the securitisation market, the off-balance sheet assets are much higher and as such their profit and capital ratios may be overstated. Once securitised, these assets do not pose further on-balance sheet risk to the banks as opposed to off-balance sheet derivative exposure.
- Ratios are static and historical, and thus when calculating bad debts as a percentage of the loan portfolio it is dangerous to assume that the new loans will perform better. It is only once the portfolio is "seasoned" that losses or non-performing loans begin to show. Thus banks with swift loan growth could reflect a stronger level of asset quality than is actually true in reality.
- Statistics can be misleading as they do not consider the links that exist between various aspects of the business. For instance, when one sees that the net interest margin increasing one would assume that this is a positive improvement but it could also reflect a management change to a higher risk appetite (which would reflect in the asset mix/quality but only at a later stage).

2.1.2 Consolidation and Market Structure in Emerging Market Banking Systems

The International Monetary Fund ("IMF") published a working paper in November 2002 that dealt with the consolidation and structure of emerging market banking systems. The paper was written by Gelos and Roldos and focused on emerging markets in Asia, Latin America and Central Europe (Gelos and Roldos, 2002). This research paper has significant implications for Frontier Africa which has lagged the rest of its emerging market peers due to the large scale political instability and wars that have been fought on the continent. Frontier Africa relates to all sub investment grade African countries that are now engaging with credit rating agencies to obtain country ratings and are creating economic climates that are conducive to foreign investment.

The study covers the 1990s and reflects that during this time a large amount of consolidation took place within the banking industry in these regions. The concern was that the consolidation would lead to decreased competitiveness due to fewer banks operating in the regions. The study finds that no decrease in competitiveness occurred and this was due to the lower barriers to entry by allowing foreign banks to enter these markets.

Emerging market consolidation does have certain distinguishing characteristics that differ from developed markets. Cross-border mergers and acquisitions account for a large percentage of emerging market consolidations and the consolidation is usually as a result of some kind of financial predicament. Unlike in developed markets where market forces play an overriding role, it is usual for the authorities in emerging markets to play the dominant role.

2.1.3 Financial Credit Methodology in the Developing World

A most informative paper was written in 2007 by Das and Ghosh. The paper dealt with examining the causes of credit risk in the state owned banks in India. Das and Ghosh (2007) pointed out that past literature has not adequately addressed the question of credit risks in emerging economies. Their paper provides a number of key areas that should be considered when analyzing credit risks in emerging markets. Even though the paper focuses on state-owned Indian banks the outcomes are regarded as having application to banks in the rest of the developing world, and especially in Africa.

The maintenance of the strength of the financial markets in developing countries is a major consideration for the authorities as any failures can dislocate any development progress being made by these countries.

Lindgren et al, (1996) and Caprio and Klingebiel, (2003) explained that the Asian banking crisis in the late 1990's resulted from many years of inadequate lending processes and poor regulatory supervision which ultimately lead to

brisk lending growth and extreme risk been taken on. Their research clearly provided evidence of the important role that credit risk plays in the economy in general.

Das and Ghosh's (2007) review of the literature revealed that there were a few theoretical explanations as to the reasons for the difference in various banks' credit policies. From these explanations the following pertinent points were raised:

- Executive Compensation – this relates to the age old dilemma of the “principal-agent” problem where executives with limited liability support high-risk strategies to maximize short-term benefits.
- Strong competition – this aspect places increased pressure on profits and the growth of loan books might be pushed too hard to compensate for the decline in profits. The end result would probably lead to increased NPLs at a future date.
- “Herd behaviour” in which bank executives consider clients as creditworthy just because other banks are lending to them. This form of “discretionary” lending is made without any form of quantitative or informed analysis. However to be wrong when everyone is wrong also does not carry the same consequences as if you were wrong in isolation.
- Collateral values can also be a contributing factor to increased NPLs as during sound economic times the values of collateral would increase and lending activity would also increase based on the higher asset values.
When the economy takes a turn for the worse the impact on NPLs could be magnified as the underlying asset values begin to deteriorate.

The above theoretical explanations do make sense however there is unfortunately inadequate practical research to corroborate them. Available research focuses mainly on the US banking industry and no emerging market research is available. Berger and DeYoung (1997) looked at US bank data from 1985 to 1994 and concluded that increases in NPLs are positively correlated to a decrease in cost efficiency (Berger AN and DeYoung R, 1997). This would infer that banks with high levels of NPLs have to spend larger

amounts on monitoring and ongoing risk management and these activities are typically value destroyers.

Kwan and Eisenbis (1997) concluded from their study of US banks from 1986 to 1995 that banks that were more inefficient took more credit risk.

A study done on the Mexican banking sector by Gonzalez-Hermosillo et al (1997) concluded that the probability of banking failure in Mexico was more pronounced in the banks that had a higher proportion of NPLs to total loans.

The research in India (Das et al, 2007) is particularly relevant as it is an important developing world country and it has a long history of banking controls. These controls have been loosened since economic reforms were introduced in the 1990's allowing market forces to come to the fore. Pertinent aspects of the Indian research that could be applied to other developing countries were identified to be the following:

- There is a positive overlap between the GDP growth variable and percentage of NPLs and this suggests that problem loans are cyclical yet with a lag.
- Ownership structures also impact on the risk appetite that a bank would have. State-owned or family owned banks typically have higher risk appetites.
- Hasty advances growth is a crucial determinant for future NPL growth especially when competition is fierce during good economic times and loans are made to people with lower repayment ability than normal in order to maintain market share.
- Inefficient banks normally have poor screening techniques and monitoring of loans will also be inadequate leading to a substandard book quality.
- The quandary of NPLs within the Indian state-banks has a long history steeped in the weaknesses in the existing debt recovery processes, poor legal processes especially with regards to foreclosures and execution of court orders. This would result in the quantum of NPLs remaining "sticky" from one year to the next as they cannot be written down and are carried forward in the respective balance sheets.

Das and Ghosh (2007) methodology is centred on the following variables:

- Real GDP growth – they use the current figure plus the previous year's figure in order to assess the timing.
- Real advances growth – the time period this variable is tracked over varies from one to four years.
- Number of branch increases – this variable is included to measure how well management controls the growth rate of branches in new geographical areas.
- Operating expenses to total assets ratio – this gives an indication of the efficiency or inefficiency of the bank. If the ratio is high then management would not be able to extract additional benefits out of a larger branch and staff compliment.
- Bank size – this is taken into account via a natural logarithm of total assets. The rationale is that large banks could be in a position to have improved management of NPLs through diversification benefits applicable to their loan portfolios.
- Executive incentives – these are addressed through the ratio of interest income less interest expense divided by total assets. The period that this ratio is lagged is between two and three years due to the fact that if the net interest margin is reduced that might change the credit risk policy of the bank and thus make it take on more risk.
- Capital adequacy – this is monitored and lagged between two and three years. The ratio used is Tier I and Tier II capital divided by risk weighted assets. This variable does not have a definite outcome as the higher capital adequacy ratio could be both a disincentive to take additional risk and an incentive to chase increased profits from a high risk – high return strategy.
- Risk premium – this is defined as income from loans divided by total loans less the call money rate. This variable is considered to take into account the higher interest rate charged for the higher risk taken. Intuition would expect this variable to be positive however if large scale cross-subsidisation occurs within the bank then this variable could possibly be negative.

Some of the results obtained from the Indian model are interesting and could have an insightful view on possible results to be obtained from the Kenyan and Nigerian markets. Quickening growth in GDP will initially bring about declining NPL's but once this growth slows or a recession occurs the quantum of NPLs increases quite rapidly. Thus the old adage that most problem loans are written in good times would seem to hold true. The results indicate the over extension of credit has an implicit and quick impact on increasing the number of NPLs, usually within the first year of credit extension. Strangely enough the composition of the loan portfolio also influenced NPLs negatively and defaults for the corporate market were an issue. The large banks also suffered from a portfolio quality standpoint having more NPLs than their smaller peers. The variables of branch expansion, operating expenses and interest margins did not have a material impact on NPLs (Das et al, 2007). The ownership consideration of banks was also an issue that was taken into consideration when looking at the credit risk appetite and approach to the management of this appetite.

Himmelberg, et al (1999) did their research in the United States and found evidence that diverse ownership structures and corporate governance policies lead to different risk profiles amongst banks.

2.1.4 Corporate Governance in the Developing World

Corporate governance is the intricate relationship between the various parties in the banking industry and includes shareholders, board of directors, management, the depositors and government. The vast amount of consolidation amongst banks both within individual countries and across country borders has made the issue of corporate governance even more important.

It is a generally accepted fact that corporate governance in many developing countries is weak. This weakness is influenced by the lack of readily available and comparable information, limited experience from market participants and regulations that are not strictly enforced. The lack of efficient enforcement is

largely due to political corruption and the inherent weakness in a less than impartial judiciary. Compounding the above problem is that the accounting disclosure in some frontier countries is not yet at international standards and the disclosure is not as transparent as is required.

Corporate governance is even more crucial within the banking industry given that banks typically have a large and diverse number of shareholders and the systemic risk is higher. Hassan et al (2004) stated that "corporate governance is about authority, transparency, accountability, stewardship, leadership, direction and control."

Fitch published a Special Report in August 2006 titled Corporate Governance in Emerging Market Banks, in which it looks at the improvements made in emerging market bank corporate governance (Gandy et al, 2006). The report indicates that corporate governance does exist in emerging markets however the strength of the new and improved processes will only be tested in a downturn. In order for corporate governance in the banking system to be effective the following key elements are required:

- An independent and well working judiciary system.
- The bank regulators need to be independent and well qualified.
- The regulators must be able to reprimand and fine banks that are non-compliant. Enforcement of penalties is crucial to ensure that the regulator is not seen as a "toothless dog" and thus retain the credibility of the regulator (Gandy et al, 2006).

Fitch (Gandy et al, 2006) identifies that there are three levels of governance that need to be considered and these are political (government), the banking system and ultimately the individual banks. Given the peculiarities of emerging markets the main pitfalls of corporate governance are the number of related party transactions and a lack of experience and proficiency of regulators to challenge and sanction offending banks. Another consideration is the level of state ownership or political influence that is exerted over the banking industry and this could lead to widespread abuse of power.

According to Fitch's research there is sufficient data to indicate that poor corporate governance is directly related to a number of emerging market banking systems that have either come close to failing or have failed.

However for the period 2000 to 2005 the data has indicated that there has been a vast improvement of corporate governance and is regarded as being a direct response to countries that are developing their economies to be more market orientated (Gandy et al, 2006). Although the improvements have been welcomed there is still a distance to go to reach developed world standards and corporate governance constrains many of the banks that Fitch rates in emerging markets.

The major stumbling block for emerging market countries is that whilst they adopt sound corporate governance measures it is the implementation of these that still remains a huge challenge. This stems directly from a lack of skills and experience within the banking system. Emerging markets face a problem of ensuring that the board of directors is independent and as such face the prospect that boards are controlled either by government or a controlling, "elite" family.

Fitch highlighted the problem of "crony capitalism" during the Asian financial debacle in 1997 in which relationship-based corporate governance rules were adhered to instead of rules-based corporate governance. An important aspect that serves to reduce the amount of related party transactions is the emergence of a well organized and functioning capital market industry as related parties are usually able to borrow at more beneficial rates from the capital markets (Gandy et al, 2006).

Financial reporting and audit oversight are also important corporate governance issues that are of relevance in emerging markets. Most emerging markets where the banks are listed have adopted IFRS. Despite this adoption Fitch has found that local interpretation can differ from country to country and thus the outcomes may not be directly comparable to accepted global standards.

The "Big Four" accounting firms are present in most emerging markets however they themselves face a huge obstacle of either:

- Training the local staff up to the required international standard of skills sets and after that in retaining them; or
- If they have to use foreign staff that these staff are well versed in the local language and have an understanding of the various loopholes that may exist in the local market.

In the smaller emerging countries it is normal for one audit firm to audit all the banks in the said country. Given these circumstances the requirement that the auditing and advisory duties remain as far as possible independent would apply, however problems are likely to occur.

Arun and Turner (2004) point out in their paper that there are some stumbling blocks to the preference of prudential guidelines over economic regulations. They also argue that the increased competition that foreign banks bring to emerging markets could be a crucial way to rapidly bring emerging market banks' corporate governance up to world class standards. The reasons for the limited application of prudential supervision are due to:

- The cost of raising capital being punitive in developing countries and their capital requirements being higher due to the increased risk
- There not being enough skilled supervisors to carry out their roles effectively
- Regulators not generally being independent from political influence.
- The lack of timely and accurate financial information, which is required.

Allowing foreign banks to operate in emerging markets could lead to an overall more stable industry. An empirical study compiled by Levine (1999) provides evidence that foreign banks reduce the occurrence of banking crises and assist in the local banks achieving greater prudential wellness. The counter argument from emerging market governments is that the large scale infiltration of foreign banks will weaken their ability to use the banking system for social purposes.

Adelegan (2006) did some research into the Nigerian banking industry and his empirical findings were that the percentage of non-executive directors exceeded the percentage of executive directors. With regards to the chairman and chief executive officer positions these were occupied by different individuals and the segregation of duties was intact.

The auditing firms in Nigeria also provide advisory services to their clients and thus the establishment of audit committees since 1991 has ensured the independence of the audit process. In addition, eighty percent of the audit committees had non-executive chairmen. The quality of the financial information provided by the auditors is also an important consideration. The auditors generally have long term relationships with the banks and the average audit term is 12.5 years. This may adversely affect the auditor's independence.

The factors negatively affecting the performance of banks are a relatively underdeveloped capital market, the small number of banks listed on the stock exchange and a lack of a lively market encouraging corporate controls. The ownership of banks plays a crucial role in assessing the credit risks as those banks that have either government or board members as owners display poorer financial performance. The reason is that the managers of the banks do not have the ability to manage without substantial influences from owners relating to operational decisions.

2.2 Macroeconomic Information

The following section will deal with the macroeconomic position in Kenya and Nigeria. The factors to be considered include a description of the economy, monetary policy, government finances, external debt, credit ratings and then finally the political arena.

2.2.1 Kenya

The following table provides an overview of selected economic data for Kenya and a discussion on the data will follow thereafter.

Table 2 – Selected Kenyan Economic Data:

Kenya	2003	2004	2005	2006	2007 F¹
Real GDP percent	2,9%	5,1%	5,7%	6,1%	7,1%
Debt/GDP percent	61,5%	61,2%	53,8%	49,6%	43,6%
Debt/Revenue	293%	259%	238%	231%	203%
Inflation (Average)	9,8%	11,6%	10,3%	14,5%	9,8%
Interest Rates	13,47%	12,25%	13,16%	13,74%	13,32%
Exchange Rate/ZAR	0,09	0,07	0,09	0,10	0,11
Current Account (US\$ bn)	0,1	(0,1)	(0,3)	(0,5)	(1)
External Debt (US\$ bn)	6,1	6,3	6	6,6	7,2
Forex Reserves (US\$ bn)	1,4	1,5	1,8	2,4	2,9
Credit Ratings – Foreign Currency Long-term					
Moody's					Not rated
S&P	Not rated			B	B
Fitch	Not rated				B+

¹ Forecasted figures except for the Credit Ratings.

Source: Stanbic Bank and IMF.

Economy

Kenya is a relatively diversified, open economy even though agriculture plays a large role. After South Africa, Kenya has second lowest export concentration in sub Saharan Africa. Prior to the post election chaos tourism also played a key role in the economy (Mhango, 2008).

Economic growth has been strong and averaged close to six percent for the period 2004 to 2006. The fastest growing sector was the services sector which includes tourism, transport and communication and retail.

Monetary Policy

The principal objective of monetary policy in Kenya is the achievement of sustainable low inflation and the CBK's use of interest rates as its principal weapon. The CBK has a target objective for monetary policy of inflation below five percent. However the inflation rate that the CBK uses is one that excludes related seasonal food cycles and fuel costs and is referred to as underlying inflation. This underlying inflation figure increased from five percent to seven percent. In the CBK's April 2008 Press Release they concluded as follows: "The Central Bank is confident that the inflation rate will be back to its long run target level of five percent due to the fact that inflation

is currently being driven by transitory supply shocks rather than monetary overhang problems in the economy.”

The average inflation numbers in Table 2 have not netted off the related food seasonal cycles and fuel costs and thus are the gross numbers.

Government Finances

Government funding has been steadily decreasing from the prior high levels in the mid 1990s largely due to the lower budget deficits and the recent faster growth in the economy (Mhango, 2008). The percentage of debt to GDP has fallen to 43.6 percent and this is close to the median of BB rated credits and B rated credits that did not receive any benefit from debt reduction.

External Debt

External debt has remained relatively stable and is in the middle range of its peers. The IMF/World Bank Joint Debt Sustainability Analysis judged Kenya to be at a low risk of debt distress. Prior to the election and ensuing violence, a debut Eurobond was planned for the first quarter of 2008 (this is highly unlikely to happen and has not occurred to date).

Credit Ratings

S&P's has rated Kenya as a B flat which places it as a speculative grade country. Fitch only rated the Republic of Kenya on the 12th December 2007 and assigned the country a rating of B+. On the 30th January 2008 Fitch changed Kenya's outlook to negative due to the continued unrest in the country which brings with it an economic cost. Peers in this rating band include Cape Verde, Ghana, Jamaica and Mongolia.

Political Arena

Nine weeks of political wrangling over the disputed December 2007 elections eventually lead to a power sharing agreement being signed by President Kibaki and the leader of the Orange Democratic Party (“ODM”), Ralia Odinga.

The salient features of the power sharing agreement (known as the National Accord and Reconciliation Act 2008) that came into being on the 28th February 2008 are as follows:

- Creation of an Executive Prime Minister position. The position is to be held by Ralia Odinga.
- The Prime Minister will be an elected member of legislature and parliamentary leader of the largest party in the legislature.
- Each member of the coalition must elect one Member of Parliament for one of the two Deputy Prime Minister positions.
- The cabinet will consist of the President, Vice-President, Prime Minister, two Deputy Prime Ministers and other Ministers.
- The make up of the coalition government must always take into account the principle of portfolio balance and reflect the coalition partners' representation in parliament.
- The coalition will be dissolved if the current parliament is dissolved, if the parties agree in writing or if one party withdraws from the coalition.
- The National Accord and Reconciliation Act will be promulgated in law.

Only time, will tell if the well crafted written agreement can be in fact be honoured in practice. All early indications are that the leadership of both parties is choosing to reconcile and commit to the power sharing agreement.

2.2.2 Nigeria

The following table provides an overview of selected economic data for Nigeria and a discussion on the data will follow thereafter.

Table 3 – Selected Nigerian Economic Data:

Nigeria	2003	2004	2005	2006	2007
Real GDP percent	10,3%	10,6%	5,4%	6,2%	6,4%
Debt/GDP percent	45,7%	38,8%	16,4%	2,1%	2%
Inflation (Average)	14%	15%	17,8%	8,3%	5,5%
Interest Rates					9,5%
Exchange Rate/ZAR	0,05	0,04	0,05	0,06	0,06
Current Account (US\$ bn)		4,3	8	13,8	1,3
External Debt (US\$ bn)	30,9	35,9	20,5	3,5	3,3
Forex Reserves (US\$ bn)	7,5	17	28,3	41,8	52,1

Nigeria	2003	2004	2005	2006	2007
<i>Credit Ratings – Foreign Currency Long-term</i>					
Moody's	Not rated				
S&P					BB
Fitch					BB-

¹ Forecasted figures except for the Credit Ratings.

Source: Stanbic Bank and IMF.

Economy

The Nigerian economy is the fourth largest economy in Africa behind South Africa, Egypt and Algeria. Nigeria's nominal GDP increased by 27 percent from Nigerian Naira ("N") 14 735 in 2005 to N18 710 in 2006. Nigeria is Africa's largest producer of oil and the eleventh largest global producer. Oil and gas account for roughly 22 percent of the Nigeria's 2006 GDP. The Nigerian GDP is constrained by the unrest that frequently occurs in Niger Delta, an important oil producing region (Munyama, 2008).

The non-energy sectors have also been growing well and these sectors recorded real growth of nine and a half percent in 2007. Standard Bank Research expects growth of nine percent in 2008 (Munyama, 2008). The sectors driving the majority of the growth are transport, telecommunications, construction and general industrial equipment.

The abovementioned sectors are benefiting from the government's infrastructure spend in order to alleviate the massive need of improving the country's poor infrastructure. The poor infrastructure relates predominantly to the roads and power situation. Thus although the real GDP grew by five percent in 2007, this figure was disappointing as the true potential of the economy and country as a whole is to deliver growth of a much greater multiple. Nigeria remains a poor country with over seventy percent of the population living in poverty. In addition the decrepit infrastructure, security and corruption concerns and fragile public institutions also retard the potential growth that the economy could achieve.

Monetary Policy

Stanbic Bank Research in their Blueprint for Nigeria in January 2008 forecast that inflation would “remain in single digits throughout 2008” (Munyama, 2008). Towards the end of 2007 the inflation figure started to increase and in the last half of 2007 the Central Bank of Nigeria increased their monetary policy rate by 150 basis points.

The Nigerian Government has decided to distribute excess oil income to the country's states in local currency rather than in United States dollars. It is anticipated that this will place upward pressure on interest rates, together with the increased food inflation.

Stanbic Bank anticipates that the monetary policy rate will increase by one percentage point to 10.5 percent in 2008 and then by a further one percent to 11.5 percent in 2009 (Munyama, 2008).

Government Finances

The Nigerian Government has committed itself to follow a sensible fiscal program and the President has endorsed the Fiscal Responsibility Bill. This bill forms the foundation of the financial program of the Government. The above bill also ensures that the annual budget is presented with a three year medium term financial strategy. The 2008 budget is focused on building physical and human infrastructure to rapidly reduce poverty in the country. The economy of Nigeria remains heavily weighted towards oil revenue, and this revenue source accounts for 80 percent of all revenue. The Nigerian Government is acutely aware that it needs to foster a suitable climate so that the reliance on oil can be decreased to a lower level. The budget deficit is expected to be N560 billion which accounts for two and a half percent of gross domestic product.

External Debt

External debt as a percentage of gross domestic product has reduced rapidly from close to 50 percent in 2003 to less than five percent in 2006 and 2007.

In October 2005 the Paris Club and the Nigerian Government reached an agreement whereby Nigeria repurchased its debt owed to the Paris Club at a discount of 60 percent. In April 2006, Nigeria became the first African country to fully redeem its debt with the Paris Club. This was achieved by using their substantial oil profits to repay an estimated total sum of US\$30 billion. External debt as a percentage of gross domestic product is forecasted to remain at low levels of below three percent into the future as oil revenues remain strong and external debt is not excessive.

Credit Ratings

S&P has rated Nigeria as a BB- on a foreign currency basis and a BB flat on a local currency basis which places it as a speculative grade country. Fitch rated Nigeria as a BB- country on both a foreign and local currency basis. The outlook for both rating agencies is stable. Peers in this rating band include Armenia, Indonesia, Lesotho, Sri Lanka, Turkey, Ukraine, Venezuela and Vietnam.

Political Arena

Nigeria's new President, Umaru Yar'Adua, took office in April 2007. The opposition parties disputed the election victory, however the courts upheld the election results. Since assuming office President Yar'Adua has been intent on ensuring the "rule of law" and is also the driving force behind the process of stamping out corruption in the public service sectors.

Nigeria is a country with high poverty and also a large number of religious and ethnic groups which pose significant social problems that the current administration will have to face.

2.3 Country Visit Information

A country visit was undertaken in October 2008 to Kenya. On this visit meetings were held with the Central Bank of Kenya to deal specifically with the issue of corporate governance and bank supervision. In addition, meetings were also held with four domestic Kenyan banks to engage them

with regards to the bank questionnaire and to obtain general information from the respective banks.

2.3.1 Kenya

On a recent country visit to Kenya additional and valuable information was obtained through meeting with the Central Bank and also various commercial banks. The meeting with the CBK focused solely on obtaining information on corporate governance and bank supervision. The commercial banks had been e-mailed the bank questionnaire prior to the meetings and the focus of the meeting was to extract as much information as possible from these meeting with reference to the questionnaire.

Central Bank of Kenya Meeting:

The meeting was held with the Assistant Director of Bank Supervision and two Bank Supervision Managers. The frankness and openness of the interaction was surprising as resistance was expected due to a previous experience with a meeting held with the Bank of Botswana ("BOB") earlier in the year. At this meeting with BOB, great resistance was encountered in obtaining answers to questions posed which were similar to the Kenyan questions and also covered the same issues regarding corporate governance and bank supervision.

The meeting was most fruitful and the level of corporate governance imposed on the banking in Kenya was surprising. The following are the key points gained from the meeting:

- Corporate governance is of prime importance to the CBK.
- The supervision of banks starts from the initial phase of licensing the banks which are subject to strict rules. In addition, the CBK vets the shareholders and directors.
- Maximum shareholding allowed is 25 percent after approval has been gained from CBK. Executive individual shareholding of banks cannot exceed five percent.

- Any non-compliance of rules and regulations are subject to a penalty of KES1 million, after the offending bank has been given an opportunity to rectify such a breach within 30 days.
- Annual visits are conducted at the banks by the CBK where audits are carried out. In addition, CBK does an annual review of the banking licence.
- Consolidation of banks to a smaller number would be the preferred option for the industry, however this would not be a forced situation but rather encouraged in a natural and controlled manner.
- CBK wishes to raise the minimum capital requirement to KES1 billion. Thus one might see some consolidation / mergers amongst the weaker tier three banks to meet these requirements. The number of banks could reduce by at least three or four.
- Family owned banks from CBK's experience generally have sound financials but are weak in terms of corporate governance.
- Banks have to publicly publish their financial results every quarter after agreement with CBK and the auditors.
- Audit firm performance is monitored closely with certain restrictions in place. The appointment of an audit partner in charge of a bank audit is limited to a five year period with that respective bank. In addition, business declarations are obtained from the audit firm relating to their dealings with the bank that they are auditing.
- Once a CBK audit of a bank has been completed, then a special board meeting of the audited bank is called. At this meeting the CBK presents its findings to the board of directors and each board member has to sign that they have read and understood the findings and accept any CBK recommendations.
- Directors and senior management of banks are only allowed to have a house and car loan from the bank. These loans also have to be fully secured. All such loans have to be approved by the full board and submitted to the CBK within seven days of granting such loans.
- The judicial system remains a problem in the frustration of recovery of securities. The bulk of this problem stems from the perfection of securities which was not properly carried out and certain legal documentation which was incorrect.

- CBK encourages banks to move to a cash flow approach to lending, whereby security is not the sole reason in granting the loan. When non-performing loans are identified provisions are immediately raised. Should these loans have any security it is taken into account however the security value is discounted over a five year period, thus for each year the value of the security declines by 20 percent.
- The Minister of Finance has ceded certain duties to the CBK. Thus they are now considered to be operationally independent from Government but they are still the force together with National Treasury that drives the Kenyan economy.
- Banks are Basel I compliant. CBK has to change their banking legislation to ensure that Basel II compliance can be implemented. This relates to establishing a framework for calculating a capital charge for market risk.
- A Credit Reference Bureau is also being set up within the country which will provide valuable information.
- CBK has debtor insurance in place for all deposits up to KES100 000.

Commercial Bank Meetings:

Meetings were held with the following Kenyan commercial banks:

- Commercial Bank of Africa ["CBA"] (Tier 1 bank)
- Diamond Trust Bank ["Diamond Trust"] (Tier 2 bank)
- NIC Bank ["NIC"] (Tier 1 bank)
- K-Rep Bank [K-Rep"] (Tier 3 bank)

The above two tier 1 banks each have their own distinctive niche markets on which they concentrate. CBA is a privately owned bank that concentrates on the corporate sector and this sector accounts for 60 percent of profits. NIC has the main focus on asset finance and comprises 35 percent of their business. NIC was the only bank that completed our questionnaire prior to our meeting.

Diamond Trust is a bank that focuses on the retail segment of the economy and their main business lines are asset finance and also small and medium enterprise financing.

K-Rep started as a non governmental organization in 1984 and became a commercial bank in 1999. K-Rep's business was dominated by micro finance, which accounted for 75 percent of their business. Their mission is to reduce poverty. Their business model is based on a group lending basis. The loans are mainly "character loans" as the group's members provide guarantees for each other. The group's size is typically thirty individuals with six subsets of five people.

2.3.2 Nigeria

A country visit to Nigeria was unfortunately not possible due to the worsening global credit markets in the latter half of 2008. The result of which demanded more attention to the international banks and also the local banks to a lesser degree. A country visit will still likely be undertaken but only after the submission of this paper.

Chapter 3 Research Methodology

The first step in this chapter will be to devise a questionnaire for the commercial banks operating in Kenya and Nigeria. The Fitch Ratings questionnaire used for bank meetings will be used as the base for a new questionnaire developed specifically for the above two frontier markets.

Speculative rated frontier countries like Kenya and Nigeria will require that the questionnaire is more focused on issues of corporate governance, financial integrity and controls which would limit the occurrences of fraud or corruption. The other issues of inherent financial strength and risk management will also receive due attention.

3.1 Questionnaire for Commercial Banks

The questionnaire will have both qualitative and quantitative questions:

Ownership:

1. Who are the top five shareholders of the bank and what are their respective percentage holdings? (Provide an organogram of the bank's ownership structure.)
2. If privately owned, please provide detailed information of other business interests that these individuals or families have?
3. What percentage of the bank is state owned?

Market Background:

1. In which business segments does the bank hold a dominant market share?
2. Which are the main markets that the bank operates in?
3. List the bank's five most profitable business lines over the past three years.
4. The current global credit crunch will have a negative impact on the bank's profitability.

1	2	3	4	5
Strongly Agree	Agree	Strongly Disagree	Disagree	Not Applicable

Corporate Governance:

1. What is the bank's corporate governance policy?
2. What definition does the bank use in referring to independent directors?
3. Provide details of the governance structure, including:
 - (a) The names of the directors;
 - (b) The roles of the directors (e.g. Chairman, CEO, Finance Director, etc);
 - (c) Executive or non-executive status;
 - (d) Whether the directors are independent;
 - (e) Details of any sub-committees and their members and
 - (f) Curriculum Vitae of all directors.
4. Provide details of any commercial relationships between the bank and any of its directors.
5. Give details of any directorship's in the bank's clients held by the bank's directors.
6. If the bank has an audit committee,
 - (a) For how many years has the audit committee been in place?
 - (b) How many members of the audit committee are independent?
 - (c) To whom does the audit committee report?
7. Does the bank have a policy on related party transactions? If yes, then:
 - (a) Provide a copy of this policy.
 - (b) What percentage of total capital is attributable to related party loans?
 - (c) What level of authority approves these loans?
 - (d) Give details of any related party transactions that are not at arm's length?
8. If the bank has a compensation/remuneration committee,
 - (a) How many members of the compensation committee are independent?
 - (b) How many members of the committee are non-executive?
 - (c) What factors are the bank's executive remuneration performance based on?
 - (d) Provide details of any share options granted to senior executives and staff?

- (e) Does the bank have closed periods / transactional lock-outs prior to the release of interim and annual financial statements? If yes, then:
- i. How long is the closed period?
 - ii. Which department monitors compliance with the regulation?
9. Provide details of any fraudulent activity during the last three years and the related losses suffered by the bank.

Risk Management:

1. The bank's risk assessment methods and strategies are in line with the risk appetite of the bank.

1	2	3	4	5
Strongly Agree	Agree	Strongly Disagree	Disagree	Not Applicable

2. When the bank takes security, what classes does the bank find acceptable?
3. What recovery margins are applied to each class of security?
4. What is the definition that the bank uses to describe its non-performing loans?
5. On what basis is the loan loss provision calculated?
6. How does the bank treat restructured loans? Please provide details of any restructured loans?
7. The ongoing risk management function is a separate function from the credit origination function.

1	2	3	4	5
Strongly Agree	Agree	Strongly Disagree	Disagree	Not Applicable

8. What is the bank's success rate for collections and recoveries from non-performing loans over a three year period?
9. The bank has issued hybrid capital instruments, such as hybrid tier 1 and tier 2 capital instruments.

1	2	3	4	5
Strongly Agree	Agree	Strongly Disagree	Disagree	Not Applicable

Credit Derivatives:

1. Does your bank operate in the credit derivative business? If yes, then:
 - (a) For what period has the bank been active in this market?
 - (b) What was the annual growth rate of the credit derivative business for the last three years?
 - (c) Quantify any operational losses arising from the credit derivative business over the last three years?

Securitisation Structures:

1. Has the bank securitised any of its assets? If yes, then:
 - (a) What is the strategy behind the bank securitising the assets?
 - (b) What amount of funding would the bank require should these assets have to be brought back onto the bank's balance sheet?
2. Does the bank invest in other entities' securitisation programs? If yes, then:
 - (a) Does the bank have a preference for the lower risk and highly rated tranches or for the higher risk and lower rated tranches?

Conduit Structures:

1. Does the bank have any conduits? If yes, then:
 - (a) What is the current total value of the paper issued to the market through this vehicle?
 - (b) What has been the annual growth rate in the conduit's size for the last three years?
 - (c) Give details of any liquidity facility provided by the bank to its own conduit or any other conduit
 - (d) What amount of funding would the bank require should these assets have to be brought back onto the bank's balance sheet?

Market Risk:

1. How does the bank measure its market risk? Does it use the concept of Value at Risk ("VAR") or a similar concept?
2. Does the bank use fair value accounting to measure the value of market risk transactions?

3. Does the bank apply stress testing to the valuations?
4. Which of the following market risks poses the greatest risk to the bank, and why?
 - Interest Rate Risk
 - Currency Risk
 - Equity Risk

Operational Risk:

1. Define operational risk for the bank's purposes?
2. Please provide details of any operational losses recorded by the bank over the past three years.

Bancassurance Activities:

1. Does the bank have a dedicated insurance business? If yes, then:
 - (a) How is this business accounted for in the bank's AFS?
 - (b) How much profit does the insurance business contribute?
 - (c) What is the market share of the insurance business?

Borrowing disclosure between the Commercial banks:

1. To what extent does the bank borrow from other Commercial banks?
2. To what extent does the bank lend to other Commercial banks?
3. How are these exposures accounted for?
4. Does the Central Bank regulate these exposures?
5. Are these exposures reported monthly to the Central Bank?

3.2 Proposed Methodology

The proposed methodology is based on both qualitative and quantitative factors and uses the Moody's methodology as a base. This base has been adapted to cater for the requirements of frontier African countries. See Table 4 below for a tabular representation of the proposed methodology. The weightings for frontier market banks would be 40 percent towards qualitative factors and 60 percent for the quantitative factors.

Table 4 – Frontier Country Bank Methodology:

		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight			
Frontier Country Bank Assessment	Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%	
						Non-Executive > Executive	25.00%	4.00%	
						Audit Committees	25.00%	4.00%	
						Related Party Transactions	25.00%	4.00%	
	Quantitative Factors	80%		Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%
							Per Total Deposits	50.00%	8.00%
							Financial Reporting	10.00%	4.00%
							Financial Information Timeliness	100.00%	4.00%
							Regulatory Environment	10.00%	4.00%
							Support from Central Bank	100.00%	4.00%
Quantitative Factors	80%		Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	
						Net Income before tax/total income	50.00%	4.50%	
						Liquidity	22.50%	13.50%	
						Total Deposits / Total Loans	100.00%	13.50%	
						Capital Adequacy	22.50%	13.50%	
						Tier 1 Ratio (%)	50.00%	6.75%	
						Efficiency	10.00%	6.00%	
						Shareholders Equity/Total Assets	50.00%	6.75%	
Asset Quality	30.00%	18.00%				Cost/Income Ratio	100.00%	6.00%	
						NPLs/Gross Loans	70.00%	12.60%	
						% Change in Loan Growth	30.00%	5.40%	

3.2.1 Qualitative Factors

The qualitative factors would be divided into four broad categories. Under each broad category there will be specific focus areas that will require detailed analysis.

The four broad categories are as follows:

- (a) Corporate governance
- (b) Market share
- (c) Financial reporting
- (d) Regulatory environment

The corporate governance and market share categories will each attract a weighting of 40 percent and their overall weighting will be 16 percent. The 16 percent weighting is the total of the 40 percent category weighting multiplied by the 40 percent weighting for qualitative factors. The financial reporting and regulatory environment categories will each have a category weight of ten percent and their overall weighting will be four percent (ten percent multiplied by the 40 percent weight for qualitative factors).

Corporate governance and market share have been attributed significantly higher weightings as they are considered to be of much higher importance than financial reporting and the regulatory environment. The assessment of the regulatory environment is also a highly subjective category and thus its weighting should be limited to avoid clouding the other categories.

Within the above four broad categories there will be further detailed sub-sets that will have to be considered. In order to calculate individual bank ratings these sub-sets will be allocated points according to various scales that will be discussed in greater detail below.

Each category and respective sub-set will be discussed in greater depth and the significance of the category will be explained in determining the bank rating.

3.2.1.1 Corporate governance

This is potentially the most important of the qualitative factors that needs to be carefully considered and analysed. The reason for this is that all other factors are reliant on sound corporate governance in order for them to have any relevance and credibility.

Corporate governance in frontier markets has lagged other developing markets and also the developed markets. In recent years however the frontier markets have been attempting to raise their compliance levels for corporate governance and the implementation thereof up to global standards.

Corporate governance is split into four further sub-sets:

i. *Nature of ownership*

The issue of ownership in frontier markets is vitally important as a proxy for the risk profile of a particular bank.

The issues to be considered are the percentage of government ownership and whether the bank is largely controlled by a family unit. The loan quality from government owned banks has been much worse than independent banks and thus the risks of default of these government controlled banks would be that much more pronounced. Likewise family controlled banks have taken on additional credit risk by lending funds to friends and associates and not strictly on an economically viable basis.

The allocation of points within this sub-set will be determined as follows:

- 100 points if the largest shareholder holds less than ten percent of the shares.
- 75 points if the percentage ownership of the largest shareholder is within the range of ten percent and 25 percent.
- 50 points if the percentage ownership of the largest shareholder is within the range of 26 percent and 50 percent.
- 25 points if the percentage ownership of the largest shareholder is within the range of 51 percent and 75 percent.
- 0 points if the percentage ownership of the largest shareholder is 76 percent or greater.

The use of the allocation of points in a range as above is considered to be the best use to extract the maximum amount of information from the inputs. The absolute percentage of shares owned by either government or a family unit has an inverse relationship with the allocated points in that the objective is to penalise the bank that has a high percentage of government or family involvement and likewise favour a bank that has a low percentage.

ii. *Number of non-executive directors versus the number of executive directors*

It is crucial that the number of non-executive directors on the board of directors is greater than the number of executive directors. This is to ensure the independence of the board and their resultant decisions. The larger the proportion of non-executive directors on the board the better the corporate governance and the resulting decisions should be based on sound economic and financial considerations. However the issue in frontier markets will be quantum of individuals who qualify and have the required skills set to serve as non-executive directors and one might find that several

individuals are on a number of boards which could lead to their independence being called into question.

The allocation of points within this sub-set will be determined as the actual percentage that non-executive directors comprise of the board of directors. The use of the discrete value is that a positive relationship exists between this sub-set and the points allocated. Banks that have the highest percentage of non-executive directors should score the highest scores and those with the lowest percentage of non-executive directors will score lower and thus be penalised.

iii. *Structure of audit committees?*

The oversight of the audit committee has played an increasingly important role in ensuring that the company complies with the corporate governance requirements in all respects. The audit committee should also be chaired by a non-executive director to ensure that the oversight process and decisions taken are within the most sound mandate given to the said committee.

The allocation of points within this sub-set will be determined as the actual percentage of the audit committee members that are non-executive multiplied by two if the chairman is also a non-executive director or by one if the chairman is an executive director. The use of the discrete value is that a positive relationship exists between this sub-set and the points allocated. Banks that have the highest percentage should score the highest scores and those with the lowest percentage will score lower and thus be penalised.

iv. *Related party transactions*

Related party transactions should be concluded on an arms length basis and on normal commercial terms that would apply to independent parties. Within the frontier markets there is likely to be a large overlap of ownership of companies as a large part of the

personal wealth in these countries is concentrated amongst a few families and a couple of individuals. Thus the weighting of related party transactions is made by relating the amount of related party transactions to the capital amount of the bank. The lower the percentage of related party loans to capital the lower the risk, as the bank has greater capital resources in order to absorb any potential losses from these related party loans.

The allocation of points within this sub-set will be determined as follows:

- 100 Points if total related party loans are less than ten percent of the bank's capital.
- 75 Points if total related party loans is within the range of ten percent and 20 percent of the bank's capital.
- 50 Points if total related party loans is within the range of 21 percent and 30 percent of the bank's capital.
- 25 Points if total related party loans is within the range of 31 percent and 40 percent of the bank's capital.
- 0 Points if total related party loans are greater than 40 percent of the bank's capital or no detailed disclosure of related party transactions is provided in the annual financial statements.

The use of the allocation of points in a range as above is considered to be the best use to extract the maximum amount of information from the inputs. The absolute percentage of the related party loans to capital has an inverse relationship with the allocated points in that the objective is to penalise the bank that has a high percentage of related party loans and likewise favour a bank that has a low percentage.

The corporate governance category will attract a category weight of 40 percent and an overall weight of 16 percent (40 percent category weight multiplied by 40 percent for the qualitative factors). The four sub-sectors will

each have an equal weighting of 25 percent and an overall weighting of four percent (16 percent multiplied by 25 percent).

3.2.1.2 Market share

Market share is an important component of overall brand value and thus market share is an important qualitative measure as to the strength of the particular bank's franchise. The strength of the bank's market share enables it to retain and attract clients through tough times. This retention and attraction of clients will be at the detriment of other banking operations that do not have such strong market shares and where confidence is lacking in the weaker franchise.

A vital consideration is if the required information will be available from the frontier markets and how reliable this information would be. Ideally the information required under the sub-sets would be provided by the Central Banks and as such one should take some comfort from the numbers that they present.

Market share is split into two further sub-sets:

- i. Market share as measured by the individual bank's total assets as a percentage of total banking assets in the industry.
- ii. Market share as measured by the individual bank's total deposits as a percentage of total banking deposits in the industry.

The market share would relate to the overall market share of the bank to the whole banking industry. This information would be gathered from the banking reports that are required to be submitted to the Central Bank.

The allocation of points within the first sub-set will be determined as the actual percentage of the respective bank's total assets relative to the value of total assets of the banking industry as released in the publications of the relevant Central Bank. Likewise the second sub-

set will be the actual percentage of the respective bank's total deposits relative to the value of the total deposits of the banking industry within that country. The use of the discrete value is that a positive relationship exists between the above sub-sets and the points allocated. Banks that have the highest market shares should score the highest scores and those with the lowest market shares will score lower and thus be penalised.

The market share category will attract a category weight of 40 percent and an overall weight of 16 percent (40 percent category weight multiplied by 40 percent for qualitative factors). The two sub-sectors will have equal weightings of 50 percent and each sub sector's overall weighting will be eight percent (50 percent multiplied by 16 percent).

3.2.1.3 Financial reporting

It is probably unexpected that financial reporting is considered to be a qualitative factor as the quantitative factors deal with various financial issues. However the importance of the reporting of the financial information needs to be critically assessed in order to be able to place reliance on the correctness and consistency of the numbers that are presented to stakeholders.

The issue to be considered under the qualitative assessment is the timeliness of financial information.

i. Financial information timeliness

Not only are the financial reporting standards vitally important to an analyst, but also the provision of the financial statements within a timely period. The timely provision of financial information ensures that the information is still relevant and pertinent to enable a complete value added assessment to be performed.

The allocation of points within this sub-set will be determined as follows:

- 100 Points if the bank publishes its signed audited financial statements within three months of the respective financial year end.
- 75 Points if the bank publishes its signed audited financial statements within four months (but not within three months) of the respective financial year end.
- 50 Points if the bank publishes its signed audited financial statements within five months (but not within four months) of the respective financial year end.
- 25 Points if the bank publishes its signed audited financial statements within six months (but not within five months) of the respective financial year end.
- No points if the bank publishes its signed audited financial statements more than six months after the respective financial year end.

The use of the allocation of points in a range as above is considered to be the best process to extract the maximum amount of information from the inputs. The absolute number of months to provide financial information has an inverse relationship with the allocated points in that the objective is to penalise a bank that takes longer to provide its financial information and likewise favour a bank that provides its financial information in a relatively quick timeframe.

The financial reporting category will attract a category weight of ten percent and an overall weight of four percent (ten percent category weight multiplied by 40 percent for the qualitative factors).

This sub-sector will have a weight of 100 percent and thus the sub sector's overall weighting will be four percent (100 percent multiplied by four percent).

3.2.1.4 Regulatory environment

The regulatory environment that exists in frontier markets places unique stresses on banks that operate in these markets. The past level of political interference in frontier banks has been high and this has led to loans that

were made on non-economic terms and thus the level of non-performing loans has been historically high. In addition, the challenge that exists in frontier markets is the manner and impact of Central Bank regulation. In the past the level of skills within the Central Banks of frontier markets was limited and as such the due and proper regulation of banking entities was poor. In addition, the inability of the Central Banks to enforce compliance and impose penalties for non-compliance historically led to them to be viewed as a "toothless watchdog".

The regulatory environment category is based on the implied support that is anticipated to be received from the Central Bank in times of financial difficulty.

i. Support from the Central Bank

This is a highly subjective sub-set and would be gauged predominantly from interaction with the Central Bank and also the importance of the bank within the country's banking system. In the individual bank questionnaire this question would also be posed to the bank.

The allocation of points within this sub-set will be determined as the actual percentage of support from the respective Central Bank that is likely to be forthcoming and also taking into account the ability of the said Central Bank to provide such support. The use of the discrete value is that a positive relationship exists between this sub-set and the points allocated. Banks that have the highest likelihood of central bank support should score the highest scores and those with the lowest likelihood of Central Bank support will score lower and thus be penalised.

The regulatory environment category will attract a category weight of ten percent and an overall weight of four percent (ten percent category weight multiplied by 40 percent for the qualitative factors). The sub-sector will have a weight of 100 percent and thus the sub-sector's overall weighting will be four percent (100 percent multiplied by four percent).

3.2.2 Quantitative Factors

The quantitative factors will be given a weighting of 60 percent and would be divided into five broad categories. The five broad categories would then be specific focus areas and will be analysed in detail in order to obtain the relative value to be used in the overall credit assessment.

The methodology would ideally have information for a rolling five year period and thus an average financial score would be taken over this period. However initially a three year period would suffice and then work towards an ongoing five year rolling average period.

The five broad categories are as follows:

- (a) Profitability
- (b) Liquidity
- (c) Capital adequacy
- (d) Efficiency
- (e) Asset quality

Within the broad categories there will be a number of further sub-sets that will be analysed. A detailed discussion of the categories and sub-sets follows hereunder.

3.2.2.1 Profitability

Bank profitability is crucial for the bank's financial strength as with the profits generated it is able to finance its ongoing operations and build equity through the retained income line item.

Profitability has been further split into two further sub-sets:

- i. *Operating profit prior to impairments as a percentage of total assets*

This ratio is used to gauge how the bank's operating profit without the impairment charge relates to the total asset base. The ratio is relevant to monitor the trend in how the profits are generated with a changing asset base. Thus banks that have a higher ratio of operating profit

prior to impairments as a percentage of assets will score higher in this particular sub-set.

ii. *Net income before tax as a percentage total income*

The net income before tax margin is also an important ratio to be monitored for its trends and provides invaluable data as to the sustainable health of the bank. The higher the bank's net income before tax margin is relative to its peers, the higher the points scored for this sub-set.

The allocation of points within the sub-sets will be determined as the actual percentages recorded for each sub-set from the financial statements obtained for analysis. Discrete values are used as a positive relationship exists between the sub-sets and the points allocated. Banks that have the highest operating profit prior to impairments as a percentage of total assets and net income before tax margins will score the highest scores and those with the lowest percentages will score lower and thus be penalised.

The profitability category will attract a category weight of 15 percent and an overall weight of nine percent (15 percent category weight multiplied by 60 percent for quantitative factors). The two sub-sectors will have an equal weighting of 50 percent and each sub-sector's overall weighting will be four and a half percent (50 percent multiplied by the nine percent).

3.2.2.2 Liquidity

The ability of the bank to be able to meet its liabilities from its assets is crucial for the future sustainability of the bank, especially in times of turbulence and market disruptions. The question is whether in uncertain times the bank will have the resources to be able to withstand such troubled times. The ratio to be considered here is total deposits as a percentage of total loans. The higher this ratio the better the bank would be able to withstand any troubled times and thus would have the potential to score higher relative to its peers.

The allocation of points within this sub-set will be determined as the actual percentage of total deposits to total loans obtained from the financial statements. Discrete values are used as a positive relationship exists between this sub-set and the points allocated. Banks that have the highest percentage of total deposits to total loans will score the highest scores and those with the lowest percentages will score lower and thus be penalised.

The liquidity category will attract a category weight of 22.5 percent and an overall weight of 13.5 percent (22.5 percent category weight multiplied by 60 percent for quantitative factors).

The sole sub-sector will have a weight of 100 percent and the sub-sector's overall weighting will be 13.5 percent (100 percent multiplied by the 13.5 percent).

3.2.2.3 Capital Adequacy

Capital is the buffer that the bank has to use in troubled times in order to absorb losses and to continue to operate. This issue has come under increasing scrutiny given the turbulent times experienced since August 2007 when the sub prime debacle first emerged. The issue of sufficient capital is most relevant in frontier markets given that the asset quality has in the past not been of global standards. Thus with poorer asset quality and profitability the rational expectation is that the capital adequacy ratios in these frontier markets would be higher than in the more developed world. The higher capital adequacy ratios would provide additional comfort to investors who would see this large buffer as a mitigant of the higher risk asset portfolio.

Capital adequacy has been further split into two further sub-sets:

- i. Tier 1 ratio
- ii. Shareholders equity as a percentage of total assets

The tier 1 ratio is defined as the share capital and share premium plus disclosed reserves divided by risk weighted assets.

A combination of the tier 1 ratio as defined in the Basel II accord and then also a simplistic ratio of shareholders equity to total assets is utilised in this category. Shareholders equity is defined as share capital and share premium plus retained income and distributable and non-distributable reserves. The reason for the combination is that it is a more accurate reflection of the true capital structure and adequacy of a bank. Today the issue of capital has been polluted by hybrid instruments of tier 1 and tier 2 origins that cloud the true protection position of real capital. Thus the higher the above two ratios are the better the bank will fare relative to its peers.

The allocation of points within the sub-sets will be determined as the actual percentages recorded for each sub-set from the financial statements obtained for analysis. Discrete values are used as a positive relationship exists between the sub-sets and the points allocated. Banks that have the highest capital adequacy will score the highest scores and those with the lowest capital adequacy will score lower and thus be penalised.

The capital adequacy category will attract a category weight of 22.5 percent and an overall weight of 13.5 percent (22.5 percent category weight multiplied by 60 percent for quantitative factors). The two sub-sectors will have equal weightings of 50 percent and each sub-sector's overall weighting will be six and three quarters percent (50 percent multiplied by the 13.5 percent).

3.2.2.4 Efficiency

Efficiency will be measured by using the cost to income ratio that is well known and widely calculated by banks globally. The ratio is important as banks that are more cost efficient are more able to respond to changing circumstances much faster and if the cost structure is lean then they will be able to weather troubled times that much more nimbly. In addition more cost efficient banks tend to have better asset quality as evidenced from past research.

The allocation of points within this sub-set will be determined as the actual cost to income ratio as obtained from the financial statements. The cost to

income ratio will have a negative added to it so as to penalize those banks that have a higher cost to income ratio. Thus their overall score will be decreased by their respective cost to income ratio.

The efficiency category will attract a category weight of ten percent and an overall weight of six percent (ten percent category weight multiplied by 60 percent for quantitative factors). The sub-sector will have a weight of 100 percent and the sub sector's overall weighting will be six percent (100 percent multiplied by the six percent).

3.2.2.5 Asset Quality

Asset quality plays an important role in the assessment of banks globally as the incurrence of substantial bad loans can place a bank in a precarious financial position. This has been well documented of late with reference to the sub prime crisis which has seen large international banks taking substantial write downs and having to raise additional capital at punitive rates. It is not unlikely that we will see that the business models of these large international banks will be changed by this grave crisis that has hit the global credit markets.

Asset quality is split into two further sub-sets:

i. *Non-performing loans as a percentage of gross loans*

This is a commonly calculated ratio by banks globally and attempts to indicate how the quality of the gross loan book looks. The absolute percentage is important but also the trend that is reflected by this percentage over time.

This sub-set will also have a negative imposed on the percentage as those banks that have a high level of non-performing loans will thus be penalized and their overall score will be reduced by this ratio.

ii. *The percentage change in loan growth*

In frontier markets the above ratio is considered to be important in that banks might be willing just to chase increased market share through the rapid advancement of new loans, whether the loan quality is bad or good. Thus where loan growth is exceptionally high this could result in current non-performing loans being reflected at much lower levels than they actually are.

Thus the above ratio is a conservative ratio and attempts to smooth out the impact of rapid loan growth from the outset. This ratio will also have a negative assigned to it in order to establish an accurate reflection of the asset quality of frontier banks.

The allocation of points within the sub-sets will be determined as the actual percentages for each sub-set as obtained from the financial statements. The sub-sets will have a negative added to it so as to penalize those banks that have higher levels of non-performing loans and also higher loan growth. Thus their overall score will be decreased by their respective asset quality scores.

The asset quality category will attract a category weight of 30 percent and an overall weight of 18 percent (30 percent category weight multiplied by 60 percent for the quantitative factors). The non-performing loans as a percentage of gross loans sub-sector will have a sub-sector weighting of 70 percent and thus an overall weighting of 12.6 percent (70 percent multiplied by the 18 percent). The percentage change in loan growth will have a sub-sector weighting of 30 percent and thus an overall weighting of five and two fifths percent (30 percent multiplied by the 18 percent). The latter has a different sub-sector weight as it is not deemed as important as the actual non-performing loan percentage but it is also a crucial forecasting tool in order to potentially estimate any growth in future non-performing loans due to rapid and uncontrolled loan growth.

Chapter 4 Methodology Results

4.1 Bank Questionnaire

The response from the banks in Kenya and Nigeria was hugely disappointing as only one bank out of the 11 bank completed and returned the questionnaire, namely NIC Bank from Kenya.

However some insight was gained from this lone response and was useful to a most limited degree. From the response it would appear that banking remains a simple operation of taking deposits and then granting loans in the frontier markets. Thus NIC Bank responded that the issues of credit derivatives, securitisation structures and conduits are not a feature of the Kenyan banking industry. Bancassurance has only recently started in Kenya and most Kenyan banks have links with an insurance company with whom they are working closely to derive mutual bottom line benefits.

From reading the Fitch rating reports on various Nigerian banks it would appear that the banking industry in this country is also not specialised and the products of credit derivatives, securitisation and conduit structures have not penetrated that market, either.

This poor response is a severe indictment on the banks and how they view and consider potential offshore investment in their respective businesses and also the country in general. This aversion to answer a simple questionnaire would call into question as to how they would consider diversifying their funding and also their approach to corporate governance. The latter would have particular reference to the manner in which the banks engage with potential investors and also the openness with which they deal with investors.

When the frontier banks ignore potential interest in their markets by a large South African investor it provides evidence that the said banks are behind the curve to engaging other investors and is a most poor reflection on them.

The proposed methodology had as its first point of assessment and interaction the completion of the bank questionnaire. However in view of the extremely poor response the bank questionnaire will no longer play a part in the methodology. Thus the methodology and assessment that follows is based solely on the qualitative and quantitative information that could be derived from the individual banks annual reports and then also information gleaned from the Central Bank annual reports.

4.2 Methodology Process

The relevant qualitative and quantitative information has been populated into the respective spreadsheets and the sections that follow will provide the outcomes of the information input into the model.

Firstly the assessment of the Kenyan banks will be discussed and then a comparison will be made with a South African tier 2 bank, namely Capitec Bank Limited ("Capitec"). Capitec was chosen as it has a similar target market to the frontier banks and operates in a similar manner. Thereafter the assessment of the Nigerian banks will be discussed and a comparison made with Capitec. To conclude this chapter a summary of all the banks relative scores will be provided and then a spread comparison will also be discussed in order to derive relative value.

4.3 Kenyan Bank Assessment

The banks included in the methodology for Kenya are as follows:

- (a) Commercial Bank of Africa ("CBA")
- (b) Diamond Trust Bank
- (c) Equity Bank
- (d) K-Rep Bank
- (e) NIC Bank
- (f) Stanbic Bank

An analysis of the component parts of the methodology will follow and then conclude with the bank's relative scores that will enable the bank's to be ranked in descending order.

The methodology calls for the financial information to be collected over a rolling five year period. For the Kenyan assessment the financial information available allowed a rolling three period to be used. Thus over the next few years the model will be populated with five years of data as the financial data is released and input into the model.

4.3.1 Qualitative Factors

4.3.1.1 Corporate Governance

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
Corporate Governance	Ownership	-	2.00	2.67	3.00	3.00	1.00
	Non-Executive > Executive	2.67	2.80	3.56	3.68	3.20	2.52
	Audit Committees	8.00	8.00	8.00	8.00	8.00	8.00
	Related Party Transactions	3.33	4.00	3.67	4.00	3.33	-

i. *Nature of ownership*

- CBA did not score any points for ownership as the bank is privately owned and a leading Kenyan family (Kenyatta) has a majority ownership.
- Diamond Trust Bank scored 2.00 points for ownership as the Aga Khan Fund for Economic Development has maintained a 17.32 percent direct ownership of the bank and then also has an indirect ownership of 18.49 percent through the Habib Bank Limited and The Jubilee Insurance Company Limited.
- Equity Bank scored 2.67 points as in 2006 the bank listed on the Nairobi Stock Exchange and thus its spread of shareholders increased rapidly over time.
- K-Rep Bank and NIC Bank both scored 3.00 points as their largest shareholder was consistently below 25 percent for the three year period under review.
- Stanbic Bank scored 1.00 points as the bank is majority owned by Standard Bank of South Africa (64 percent).

ii. *Number of non-executive directors is greater than the number of executive directors*

- CBA scored 2.67 points as 67 percent of their board has been made up of non-executive directors consistently over the three year period under review.
- Diamond Trust Bank scored 2.80 points as 70 percent of their board has been made up of non-executive directors consistently over the three year period under review.
- Equity Bank scored 3.56 points as 89 percent of their board has been made up of non-executive directors consistently over the three year period under review.
- K-Rep Bank scored 3.68 points as 92 percent of their board has been made up of non-executive directors consistently over the three year period under review.
- NIC Bank scored 3.20 points as 80 percent of their board has been made up of non-executive directors consistently over the three year period under review.
- Stanbic Bank scored 2.52 points as 63 percent of their board has been made up of non-executive directors consistently over the three year period under review.

iii. *Are audit committees in place?*

- All the banks scored 8.00 points as the audit committees consist solely of non-executive directors and the chairmen are all non-executive directors.

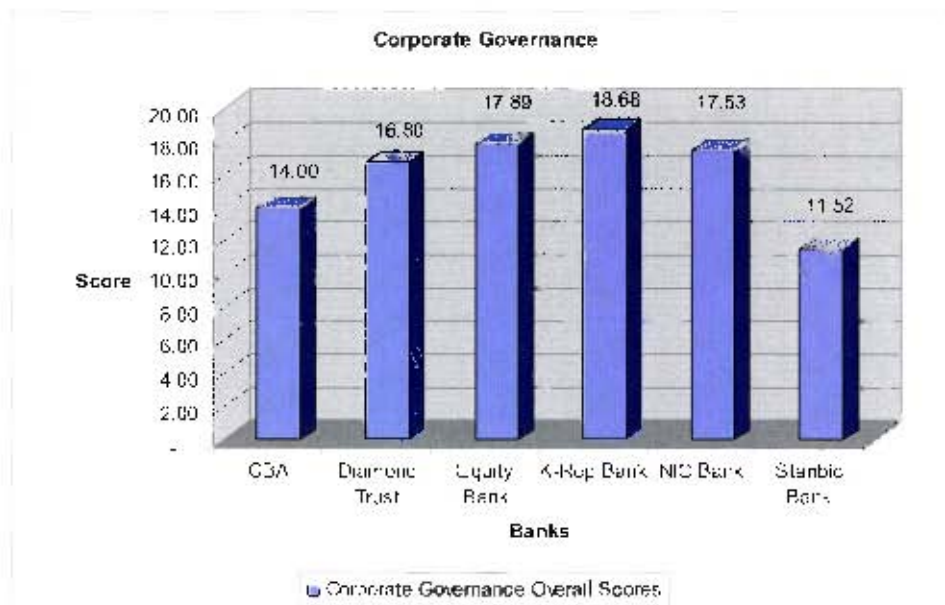
The banks in Kenya all had audit committees where the voting members are non-executive directors. The chairman of the said committee was also a non-executive director in all instances.

iv. *The scope of related party transactions*

- CBA scored 3.33 points as they scored 75 points in 2005 when total related party loans was between 11 percent and 20 percent of capital. In 2006 this percentage improved to below ten percent and

they scored 100 points however in 2007 this once again moved out to between 11 and 20 percent and thus they scored 75 points.

- Diamond Trust Bank scored 4.00 points as the bank scored the maximum of 100 points consistently over the three year period as related party loans remained below ten percent throughout.
- Equity Bank scored 3.67 points as they scored 75 points in 2005 when total related party loans was between 11 percent and 20 percent of capital. In 2006 and 2007 they scored 100 points as the percentage of total related party loans was below ten percent of capital.
- K-Rep Bank scored 4.00 points as the bank scored the maximum of 100 points consistently over the three year period as related party loans remained below ten percent throughout.
- NIC Bank scored 3.33 points as in 2005 and 2006 they scored 75 points as the total related party loans were between ten percent and 20 percent of capital. In 2007 this percentage improved to below ten percent of capital and thus they scored 100 points.
- Stanbic Bank did not score any points as they do not provide any disclosure of related party transactions in their annual report.



K-Rep Bank scores the highest overall corporate governance score, followed closely by Equity Bank, NIC Bank and Diamond Trust Bank. CBA was the fifth best bank according to the corporate governance

criteria and Stanbic Bank had the worst overall corporate governance score.

4.3.1.2 Market share

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Market Share	Per Total Assets	0.42	0.28	0.31	0.06	0.30	0.28
	Per Total Deposits	0.54	0.33	0.31	0.05	0.36	0.36

i. *Market share based on percentage of total assets*

- CBA had a consistent five percent of the banking industry's assets for the three year period.
- Diamond Trust Bank had a market share of three percent of total banking assets in 2005 and 2006. They increased this percentage to five percent in 2007.
- Equity Bank only had a two percent market share of total assets in 2005, and increased this to three percent in 2006. In 2007 they managed to capture seven percent of the banking industry's total assets.
- K-Rep Bank is the smallest bank amongst its peers listed above with a consistent market share of only one percent of total assets.
- NIC Bank had a three percent market share of total assets in 2005 and increased this to four percent in both 2006 and 2007.
- Stanbic Bank had a three percent market share of total assets in 2005 and increased this to four percent in 2006 and 2007.

ii. *Market share based on percentage of total deposits*

- CBA had a seven percent market share of the banking industry's total deposits for 2005 and 2006. In 2007 this decreased slightly to six percent.
- Diamond Trust Bank had a market share of four percent of total banking deposits in 2005 and 2006. They increased this percentage to five percent in 2007.
- Equity Bank only had a two percent market share by total deposits in 2005, and increased this to four percent in 2006. In 2007 they

managed to capture six percent of the banking industry's total deposits.

- K-Rep Bank maintained a market share of deposits of one percent consistently over the three year period.
- NIC Bank had a market share of four percent of total deposits in 2005 and increased this to five percent in 2006. However in 2007 this reduced again to the four percent level.
- Stanbic Bank increased their market share of total deposits from three percent in 2005 to five percent in 2006 and 2007.



CBA scores the highest overall market share score, followed closely by NIC Bank and Stanbic Bank. Equity Bank and Diamond Trust Bank are fourth and fifth best, whilst K-Rep Bank has the worst overall market share score.

4.3.1.3 Financial Reporting

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Financial Reporting	Financial Information Timeliness	4.00	4.00	4.00	4.00	4.00	4.00

- All the banks scored four points here as they are regulated to produce their results on a quarterly basis and their annual report has to be published within three months of the December year end in terms of

statute. All the banks complied with statute and published their results within the three month period.

4.3.1.4 Regulatory Environment

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Regulatory Environment	Support from Central Bank	1.00	1.33	1.33	2.00	1.00	-

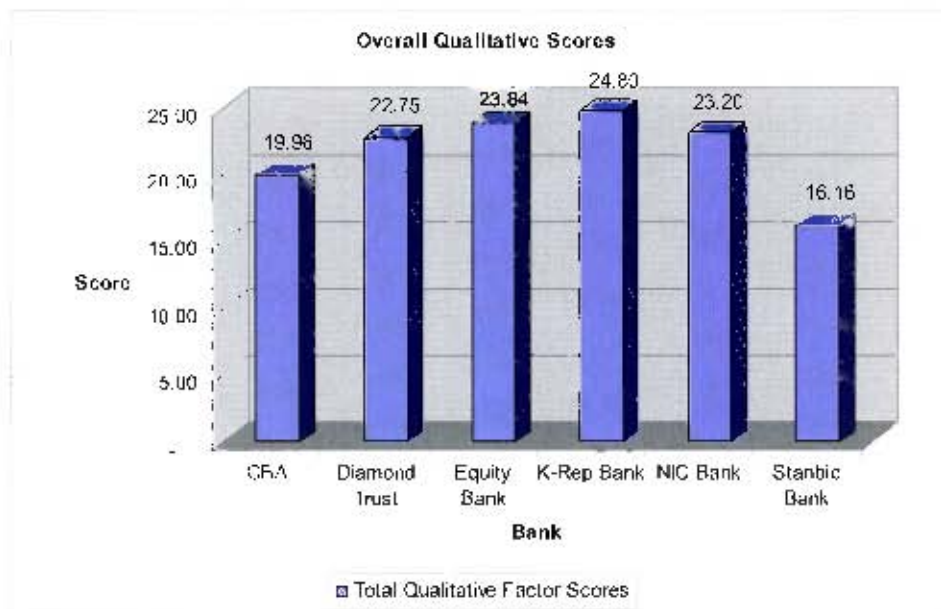
This aspect is highly subjective and was considered after taking into account the role that the respective bank plays in the economy and from interactions that were held with the respective banks and the central bank.

- CBA was anticipated to only have a chance of receiving support from the Central Bank of 25 percent. The reasoning is that the bank is a private bank and these private shareholders would be expected to support the bank through difficult times.
- Diamond Trust Bank was also anticipated to have a relatively small chance of Central Bank support (25 percent) in 2005 and 2006 as the bank had a strong majority shareholder. However the bank increased its market share through to 2007 and with their focus on the retail sector and specifically the small and medium enterprises that play a major role in the business the possibility of Central Bank support has most likely increased to 50 percent. The bank is also listed on the Nairobi Stock Exchange ("NSE") and thus the direct impact of a failure will be felt through the economy.
- Equity Bank is anticipated to have a relatively small chance of Central Bank support (25 percent) in 2005 and 2006. Equity Bank has shown sound growth and increases in market share and thus in 2007 this level of anticipated support from the central bank increased to 50 percent. As with the Diamond Trust Bank above, the bank's main focus is on the retail market and this plays a major role in the Kenyan economy.
- K-Rep Bank is the smallest bank but it has an upliftment focus of the people of Kenya. This falls well within the aspirations of the central bank and government itself. Therefore K-Rep Bank would in all likelihood receive the most support from the government to ensure that

the goals of upliftment are achieved and the bank is also small enough for the Central Bank to be able to assist it in a meaningful way.

- NIC Bank is classified the same as CBA largely due to their focus on the corporate market. The bank is also listed on the NSE. It is anticipated that the bank could only expect to receive support from the central bank of 25 percent consistently over the three year period.
- Stanbic Bank would not receive any Central Bank support as its parent is the South African bank, Standard Bank. Therefore the CBK would not provide any support and Stanbic Bank would rely on support from its South African parent. Standard Bank is a large South African banking group and would be expected to provide any support if the bank encountered any difficult times.

4.3.1.5 Overall Qualitative Scores



- K-Rep Bank scored the highest in terms of the qualitative factors given that it scored the highest in the corporate governance sector and also has a greater chance of Central Bank support.
- Equity Bank was the second strongest bank based on the qualitative factors and was tied with NIC Bank with the second highest scores for corporate governance. NIC Bank thus ranked third in terms of qualitative factors.

- Diamond Trust Bank was fourth followed by CBA and Stanbic Bank respectively. Stanbic Bank was adversely affected in the corporate governance sector where it scored lowly in the ownership sub-set and no points in the related party sub-set.

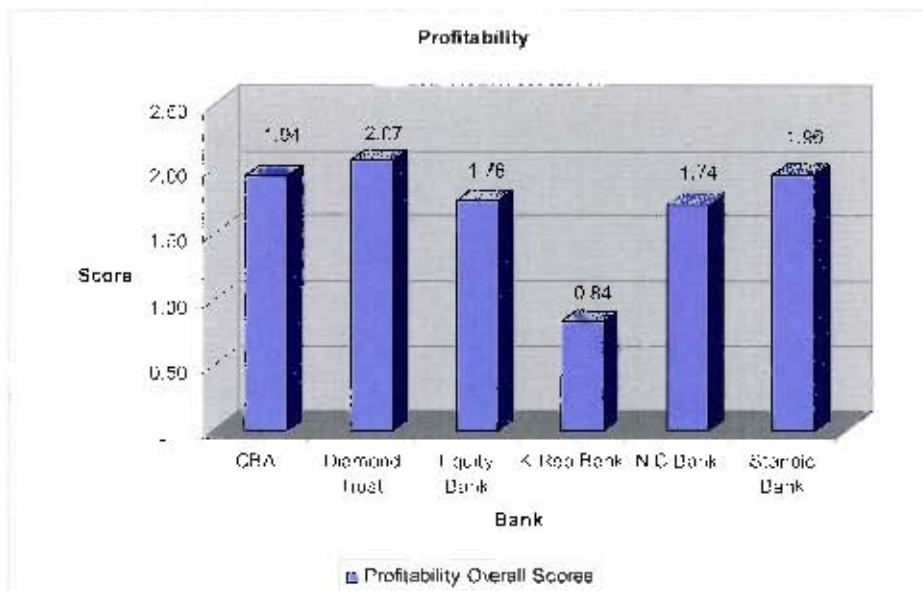
4.3.2 Quantitative Factors

4.3.2.1 Profitability

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Profitability	Operating profit prior to impairments/total assets	0.12	0.14	0.24	0.13	0.15	0.17
	Net income before tax/total income	1.82	1.93	1.52	0.71	1.59	1.79

- Operating profit prior to impairments divided by total assets*
 - CBA has shown a consistent improvement in the ratio of operating profit prior to impairments to total assets from two percent in 2005 to four percent in 2007.
 - Diamond Trust Bank reflected the identical ratio of three percent throughout the three year period.
 - Equity Bank's ratios were a mixed bag with the ratio at five percent in 2005 and then increasing to six percent in 2006 but then falling back to four percent in 2007.
 - K-Rep Bank reflected an increasing trend of the ratio from two percent in 2005 to four percent in 2007.
 - NIC Bank had a stable ratio of three percent in 2005 and 2006 and this increased to four percent in 2007.
 - Stanbic Bank had a ratio of three percent in 2005 and then this increased to four percent in 2006 and remained constant at this level in 2007.
- Net income before tax margin*
 - CBA's net income margin has been volatile and in 2005 the ratio was a low of 20 percent. This then increased to a sound 54 percent in 2006 before declining to 47 percent in 2007.
 - Diamond Trust Bank recorded a net income margin of 37 percent in 2005 and subsequently increased this to 47 percent in 2006. In 2007 this ratio declined slightly to 45 percent.

- Equity Bank has shown an increasing trend in their net income margin, starting with a low of 28 percent in 2005, increasing to 33 percent in 2006 and 41 percent in 2007.
- K-Rep Bank has the lowest net income margins amongst its peers and reflected a ratio of only 11 percent in 2005. They managed to increase this to 19 percent in 2006 and then a slight decline occurred to take the ratio back to 17 percent.
- NIC Bank has been successfully in increasing its net income margin substantially over the period. In 2005 the ratio was only 28 percent which then increased to 34 percent and 44 percent in 2006 and 2007 respectively.
- Stanbic Bank has managed to increase its net income margin over the period too. The ratio was 32 percent in 2005 and then increased to 42 percent in 2006 and then to 45 percent in 2007.



On an overall basis for profitability, Diamond Trust Bank was the top ranked bank, followed by Stanbic Bank and CBA.

The fourth ranked bank was Equity Bank and then NIC Bank was ranked in fifth place. K-Rep Bank was the last ranked bank and this demonstrates its weaker financial position when compared to its peers.

4.3.2.2 Liquidity

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Liquidity	Total Deposits / Total Liabilities	18.81	15.10	15.97	10.29	14.30	15.23

- CBA's ratio of total deposits to total loans reflects a declining trend from 1.50 cover in 2005 to 1.40 times in 2006 and then to 1.29 times cover in 2007. This is a result of the faster growth in total loans versus the growth in total deposits.
- Diamond Trust Bank ratio of total deposits to total loans has remained relatively constant over the period, with ratios of 1.13 times cover in 2005, 1.1 cover in 2006 and 1.12 times cover in 2007.
- Equity Bank's ratios have been quite volatile with the ratio being 1.19 times cover in 2005 and then increasing to 1.26 times cover in 2006. The ratio then declined rapidly to 1.1 times cover in 2007. This is a result of the rapid growth in both loans and deposits however in 2007 the growth in loans was 220 percent while deposits increased by 192 percent.
- K-Rep Bank is the only bank amongst its peers that has substantially more loans than deposits. Consequently their ratios are thus only 0.67 times cover in 2005 and 0.87 times cover in both 2006 and 2007.
- NIC Bank's ratio of total deposits to total loans was 1.09 times cover in 2005 and 2006. This ratio fell to 1 times cover in 2007 as total loans marginally exceeded the level of total deposits.
- Stanbic Bank's ratio has remained relatively stable at 1.11 times cover in both 2005 and 2006. In 2007 this ratio increased to 1.17 times cover as total deposits increased by 33 percent and total loans only increased by 26 percent.

The ranking for liquidity was then as follows – first is CBA, second is Equity Bank, third is Stanbic Bank, fourth is Diamond Trust Bank, fifth is NIC Bank and in last place is K-Rep Bank.

4.3.2.3 Capital Adequacy

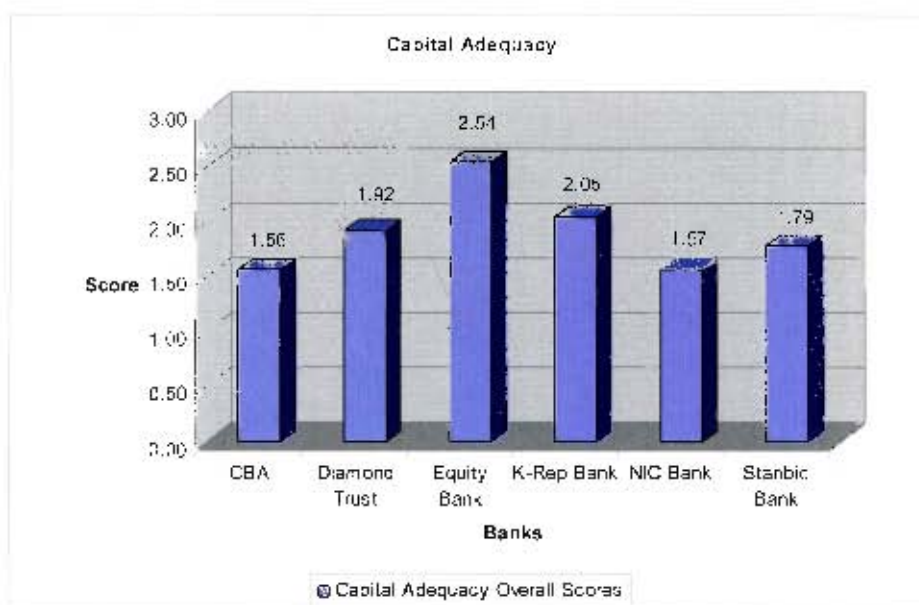
Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
Capital Adequacy	Tier 1 Ratio (%)	0.91	1.05	1.35	0.86	0.66	1.03
	Shareholders Equity/Total As	0.65	0.87	1.19	1.19	0.91	0.76

i. Tier 1 ratio

The Central Bank of Kenya minimum requirement for the tier 1 ratio is eight percent.

- CBA's tier 1 ratio has been consistently above the required regulatory minimum. In 2005 the ratio was a 12.20 percent and 14.84 percent and 13.47 percent in 2006 and 2007 respectively.
- Diamond Trust Bank has consistently increased its tier 1 ratio from a low of 11.1 percent in 2005. They increased this to 16.5 percent in 2006 and then to a high level of 19.1 percent. This amount of capital provides a sound buffer to investors.
- Equity Bank did not disclose a tier 1 ratio in their 2005 annual report. The disclosure also did not include any report on risk weighted assets and thus the manual calculation of the ratio was not possible. The 2006 annual report reflected a tier 1 ratio of 14 percent and this was then substantially increased to 46% in 2007. This is an extremely high ratio and it is expected to decrease in the years ahead as the bank raised additional capital to ensure that their expansion program would be well funded. In the model an average of two years where the ratio is disclosed will be used. The 2006 and 2007 ratios will still be averaged over the three year period so as to penalise Equity Bank for not disclosing this valuable financial variable.
- K-Rep Bank also did not disclose a tier 1 ratio for 2005 and the manual calculation of the ratio was not possible due to a lack of information. K-Rep Bank's tier 1 ratio in 2006 was a sound 20.53 percent but then decreased to 17.5 percent in 2007. The 2006 and 2007 ratios will still be averaged over the three year period so as to penalise K-Rep Bank for not disclosing this valuable financial variable.

- NIC Bank did not disclose a tier 1 ratio for 2005 but reflected an improving trend in the ratio from 13.3 percent in 2006 to 15.84 percent in 2007. The 2006 and 2007 ratios will still be averaged over the three year period so as to penalise NIC Bank for not disclosing this valuable financial variable.
 - Stanbic Bank reflected a tier 1 ratio of 15.62 percent in 2005, which they increased to 16.69 percent in 2006. The ratio then showed a decline to 13.28 percent in 2007.
- ii. Shareholders equity divided by total assets
- CBA has shown an increasing trend in the ratio of shareholders equity to total assets over the three year period. The ratio in 2005 was eight percent and increased to ten percent in 2006. The 2007 ratio was 11 percent.
 - Diamond Trust Bank also reflected an increasing trend in their ratio. The ratios were ten percent in 2005, 13 percent in 2006 and 15 percent in 2007.
 - Equity Bank recorded a shareholder equity to total assets ratio of 14 percent in 2005 and this then declined to 11 percent in 2006. However this increased substantially in 2007 to a strong ratio of 28 percent.
 - K-Rep Bank has shown a decreasing trend in their ratio of shareholders equity to total assets. The ratio in 2005 was a sound 21 percent and then in 2006 this decreased to 17 percent. The 2007 ratio was a low of 14 percent.
 - NIC Bank has a ratio of shareholders equity to total assets of 13 percent in 2005. This ratio declined to 12 percent in 2006 and then increased to 15 percent at the end of 2007.
 - Stanbic Bank's ratio of shareholders equity to total assets reflected a declining trend from 14 percent in 2005 to 11 percent and ten percent in 2006 and 2007 respectively.



Overall the ranking for capital adequacy was headed by perhaps the two most risky banks amongst this peer group, namely Equity Bank and K-Rep Bank. Equity Bank is a rapidly growing institution and thus requires substantial capital to fund this growth. K-Rep Bank is more of a development bank that takes higher risks on the poorer communities for upliftment and thus they are required to hold additional capital to compensate for the increased risks taken.

4.3.2.4 Efficiency

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Efficiency	Cost/Income Ratio	-3.44	-3.23	-3.76	-4.53	-3.42	-3.31

- CBA has been successful in reducing its cost to income ratio in each year of the period under review. In 2005 the ratio was 65 percent and this reduced to 54 percent in 2006. The ratio further declined to 52 percent in 2007.
- Diamond Trust Bank decreased its cost to income ratio from 59 percent in 2005 to 51 percent in 2006. This ratio has then stabilised at this level for the year ended 2007.
- Equity Bank has been successful to decrease their cost to income ratio on a consistent basis despite their large expansion program. The ratio was recorded as 65 percent in 2005, decreasing to 63 percent and 59 percent in 2006 and 2007 respectively.

- K-Rep Bank's cost to income ratio is the highest amongst its selected peer group but they have managed to reduce the ratio each subsequent year. In 2005 it was at a high level of 87 percent, declining to 78 percent in 2006 and then ultimately to 77 percent in 2007. This ratio still remains stubbornly high.
- NIC Bank has placed an emphasis to reduce its cost to income ratio from a high of 60 percent in 2005. The ratio declined modestly to 59 percent in 2006 but then declined 52 percent in 2007.
- Stanbic Bank has been most successful in decreasing their cost to income ratio from 66 percent in 2005 to 51 percent and 50 percent in 2006 and 2007 respectively.

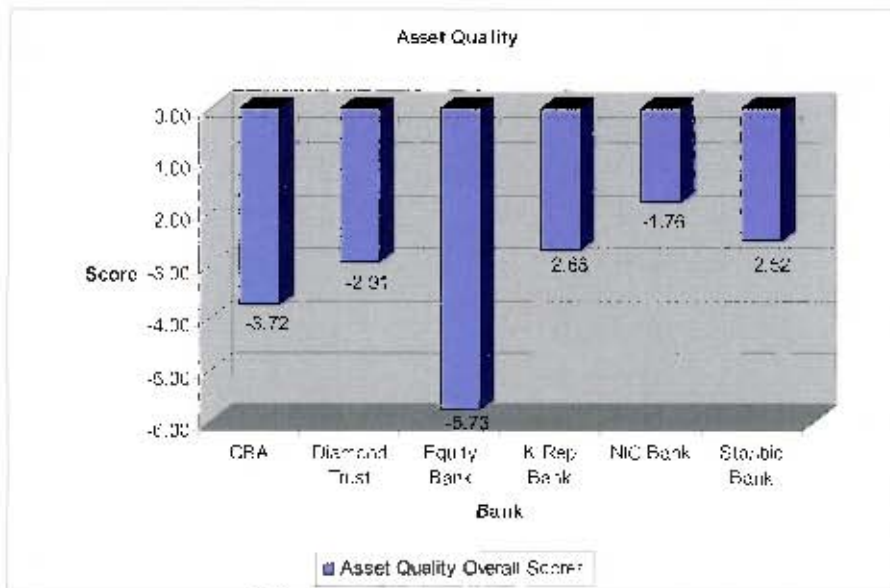
Overall the ranking of the banks relative to the cost to income ratio indicated that Diamond Trust Bank was ranked number one, followed by Stanbic Bank, NIC Bank, CBA, Equity Bank and lastly K-Rep Bank.

4.3.2.5 Asset Quality

Frontier Country Bank Assessment - Kenya		CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
		Score	Score	Score	Score	Score	Score
Asset Quality	NPLs/Gross Loans	-0.75	-0.28	-0.77	-0.72	-0.43	-0.21
	% Change in Loan Growth	-2.96	-2.63	-4.97	-1.97	-1.33	-2.31

- Non-performing loans to gross loans
 - CBA's ratio NPLs to gross loans was reflected at a high of eight percent in 2005. It then reduced this to the level of five percent and held this level steady for 2007 as well.
 - Diamond Trust Bank reflected a NPL to gross loans ratio of three percent in 2005 and subsequently reduced this to a consistent level of two percent for both 2006 and 2007.
 - Equity Bank showed a high ratio of NPLs to gross loans in 2005 at nine percent. This has since been reduced to five percent in 2006 and then four percent in 2007. However this reduction has predominantly being as a result of the rapid growth in loans and thus there is a chance that this ratio would increase into the future.
 - K-Rep Bank has shown a consistent four percent in both 2005 and 2006. This doubled to a high level of eight percent in 2007.

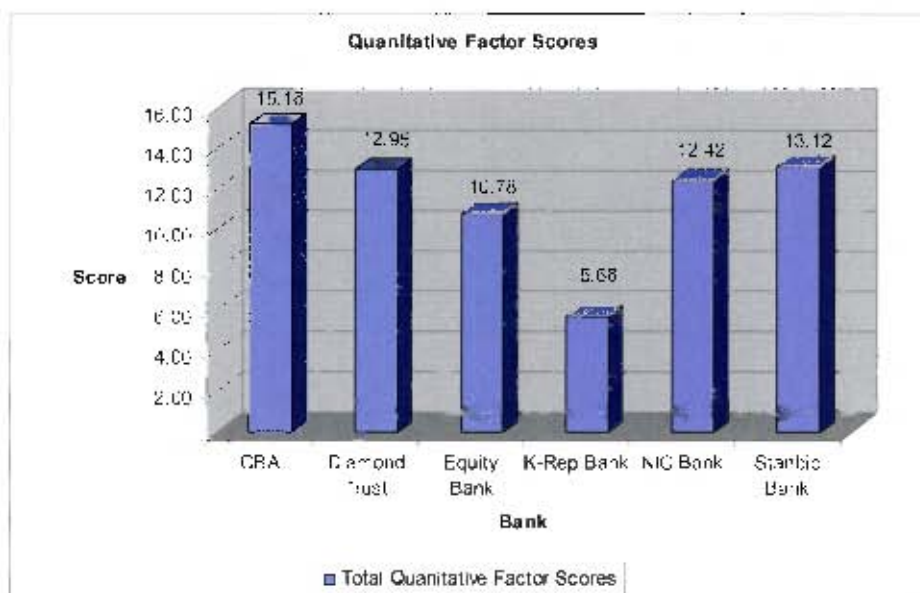
- NIC Bank reflected four percent of NPLs to gross loans in both 2005 and 2006. This reduced to a level of two percent in 2007.
 - Stanbic Bank reports low levels of bad debts as their ratio in 2005 was only one percent, which then increased to two percent in 2006. The level in 2007 then reduced back down to one percent.
- ii. Percentage change in the growth of loans
- CBA's percentage change in the growth of their loans was influenced greatly by the massive increase in 2005 of 117 percent. Thereafter the growth moderated to a level of 23 percent in 2006 and 24 percent in 2007.
 - Diamond Trust Bank has experienced consistent strong growth in their loan book. In 2005 the loan book grew by 45 percent, followed by lower growth of 34 percent in 2006 and then increased again to 68 percent in 2007.
 - Equity Bank has shown the most rapid growth in loans amongst its selected peer group. The growth has truly been phenomenal with growth rates of 78 percent, 98 percent and 100 percent in 2005, 2006 and 2007 respectively.
 - K-Rep Bank reflected a subdued growth rate in loans in 2005 of 20 percent. This then increased to 53 percent in 2006 and then declined to 36 percent in 2007.
 - NIC Bank has shown relatively moderate growth in their loan book when compared to its peers. NIC Bank's focus was more on asset quality than purely just chasing market share. Thus the level of growth in the loan book was 24 percent in 2005 and this decreased to 16 percent in 2006. The growth then increased to 34 percent in 2007.
 - Stanbic Bank showed relatively low growth of 22 percent in 2005. This increased substantially in the following two years with the growth rate in 2006 being 34 percent and 2007 showed rapid growth of 73 percent.



The rankings for asset quality reflect that NIC Bank has the best asset quality based on the criteria. Stanbic Bank is placed second in the rankings but quite a distance off the first placed NIC Bank.

Thereafter the third placed bank is K-Rep Bank which is a bit of a surprise but it was aided by the lower growth multiple relative to its selected peer base excluding NIC Bank. Fourth ranked bank according to asset quality is Diamond Trust Bank and then CRA follows in sixth place. Equity Bank is the worst ranked bank according to asset quality.

4.3.2.6 Overall Quantitative Scores



- CBA scored the highest points for the quantitative factors as it scored the best in the liquidity factor and also scored relatively well in the profitability factor.
- Stanbic Bank then followed as the second best quantitatively ranked bank due to scoring in the top two for efficiency and asset quality.
- Diamond Trust Bank was the third best ranked quantitative bank and was ranked the best in profitability and also efficiency. These two categories have the lowest percentage weightings of all the categories.
- NIC Bank was the fourth best ranked quantitative bank and performed the best in the asset quality factor.
- Equity Bank was the fifth quantitatively ranked bank and performed the best in capital adequacy amongst its selected peer group.
- K-Rep Bank was the worst bank based on quantitative factors and was in the top two banks for capital adequacy and in the top three for asset quality.

4.3.3 Kenyan Bank Rankings

After inputting all the variables, the banks relative scores and ranking is as follows:

Bank Rankings	Score	Ranking
Diamond Trust Bank	35.69	1
NIC Bank	35.61	2
Commercial Bank of Africa	35.12	3
Equity Bank	34.62	4
K-Rep Bank	30.45	5
Stanbic Bank	29.28	6

The results from the qualitative factors indicated that K-Rep Bank and Equity Bank scored the highest scores. These two banks were closely followed by Diamond Trust Bank and NIC Bank. K-Rep Bank scored well in the qualitative factors due to scoring the highest in the corporate governance and regulatory sectors. Equity Bank was tied in second place for the corporate governance sector and performed relatively well in the market share sector.

The results from the quantitative factors indicated that CBA was the best performing bank followed by tight group of banks with similar scores in

descending order of Stanbic Bank, Diamond Trust Bank and NIC Bank. K-Rep Bank was the laggard by a long distance in terms of the quantitative factors whilst Equity Bank scored the second lowest quantitative score, although it was only two points behind NIC Bank.

Therefore on an overall basis Diamond Trust Bank was the best ranked bank in Kenya and was followed closely by NIC Bank. The difference between the two only amounted to 0.08 and is marginal. CBA was the third best ranked bank and was not too far from Diamond Trust Bank's score. The difference in the scores of Diamond Trust Bank and CBA only amounted to 0.57. The top four ranked banks reflected close scores and the differential between these banks was a marginal score of 1.07. K-Rep Bank and Stanbic Bank were the fifth and sixth ranked banks respectively and their scores were much lower than their peers. K-Rep Bank's overall score was adversely affected by the very low quantitative factor score achieved whilst Stanbic Bank's overall score was negatively impacted by having the lowest qualitative score.

4.3.4 Comparison of Kenyan Banks to Capitec Bank Limited

A comparison was completed where a South African bank, Capitec was input into the quantitative factors only to ascertain the validity of the quantitative factor outcome.

Capitec has been rated A2.za by Moody's on a local currency basis and thus one would have expected that Capitec would perform better in the quantitative factors than the lower rated Kenyan banks.

This was confirmed by the outputs of the model and the following table represents the points scored under the quantitative factors:

Bank Quantitative Rankings	Fin Score	Ranking
Capitec Bank	18.95	1
Commercial Bank of Africa	15.16	2
Stanbic Bank	13.12	3
Diamond Trust Bank	12.95	4
NIC Bank	12.42	5
Equity Bank	10.78	6
K-Rep Bank	5.66	7

4.4 Nigerian Bank Assessment

The banks included in the methodology for Nigeria are as follows:

- (a) First Bank of Nigeria ("FBN")
- (b) Guaranty Trust Bank ("GTB")
- (c) Intercontinental Bank ("ICB")
- (d) Oceanic Bank ("ONB")
- (e) Stanbic IBTC Bank ("SBK")

An analysis of the component parts of the methodology will follow and then conclude with the bank's relative scores that will enable the banks to be ranked in descending order.

The methodology calls for the financial information to be collected over a rolling five year period. For the Kenyan assessment the financial information available allowed a rolling three period to be used. To obtain financial information for Nigeria proved to be more difficult and thus only a two year period is input into the methodology. Thus over the next few years the model will be populated with five years of data as the financial data is released and input into the model. The different year ends of the Nigerian banks also made the assessment more complex as the availability of the financial information is at different periods within the calendar year and then at different years as well.

4.4.1 Qualitative Factors

4.4.1.1 Corporate Governance

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Corporate Governance	Ownership	4.00	4.00	4.00	2.50	0.50
	Non-Executive > Executive	1.87	2.18	2.53	2.12	2.67
	Audit Committees	8.00	8.00	8.00	8.00	8.00
	Related Party Transactions	-	4.00	4.00	3.50	4.00

i. Nature of ownership

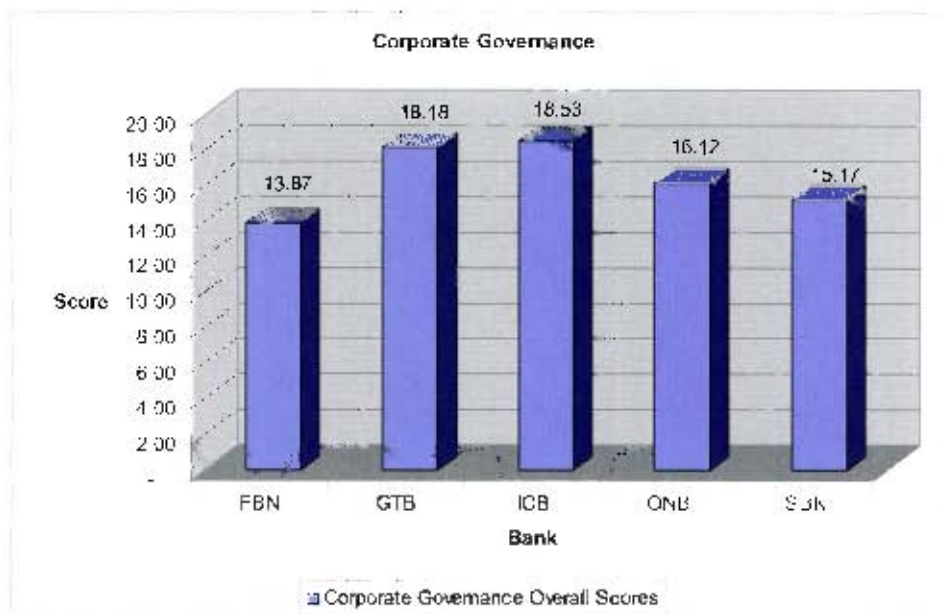
- FBN, GTB and ICB scored the highest with ownership being widespread. Not one shareholder accounted for more than a ten percent shareholding in any of these banks.

- ONB scored an overall score of 2.5 due to the fact that the bank ownership was concentrated with the largest shareholder controlling more than 25 percent in the first year and then just below 25 percent in the following year.
 - SBK performed the worst on this sub-set as it had a large majority owner, Standard Bank Group Limited (“SBG”). SBG initially had in excess of 75 percent of Stanbic Bank (Nigeria) Limited and after they merged the bank with IBTC in September 2007, SBG maintained 50.1 percent of the new SBK.
- ii. *Number of non-executive directors is greater than the number of executive directors*
- FBN performed the worst amongst its selected peer group here as the number of executive directors exceeded the number of non-executive directors. FBN percentage of non-executive directors was maintained only at 47 percent of the board.
 - GTB was the third best bank for the criteria with 55 percent of the board comprising non-executive directors.
 - ICB was the second best bank with a good level of 63 percent of the board being non-executive directors.
 - OCB only managed to maintain a 53 percent level of non-executive directors on the board.
 - SBK was the best bank in the criteria with 67 percent of their board being non-executive directors.
- iii. *Are Audit Committees in place?*
- All the banks scored eight points as the audit committees are made up of only non-executive directors and the chairman also is a non-executive director.

The banks in Nigeria all had audit committees where the voting members are non-executive directors. The chairman of the said committee was also a non-executive director in all instances.

iv. *The Scope of Related Party Transactions*

- FBN did not disclose any detailed figures regarding their third party transactions and the note to the annual report was brief and just stated that all transactions were carried out on an arms length basis. Therefore FBN's score is negatively affected as they have not scored any points in this sub-set.
- GTB, ICB and SBK both scored maximum points as their related party loans amounted to well below the ten percent of capital level.
- ONB scored the lowest as in 2007 its related party loans increased to between 11 percent and 20 percent of capital. In 2006 its related party loans to capital was below 10 percent.



ICB scores the highest overall corporate governance score, followed closely by GTB. ONB and SBK score the third and fourth highest scores, whilst FBN has the worst overall corporate governance score.

4.4.1.2 Market share

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Market Share	Per Total Assets	0.59	0.45	0.07	0.63	0.21
	Per Total Deposits	0.32	0.43	0.85	0.75	0.12

Market share calculation was not as easy as with the Kenyan banks who all have the same year end. In Nigeria, most of the banks have different year ends and this makes the assessment a lot more complicated. Thus

the Bank Supervision Annual Report published by the CNB has been used to extract the relevant data. However this data is provided as at the end of December each year and provides information relating to total assets and total deposits by each bank. Thus this data have been input into a spreadsheet to obtain the total banking sectors assets and deposits. From here each bank's market share is calculated by using a two year average for each bank divided by the two year average for the whole banking sector.

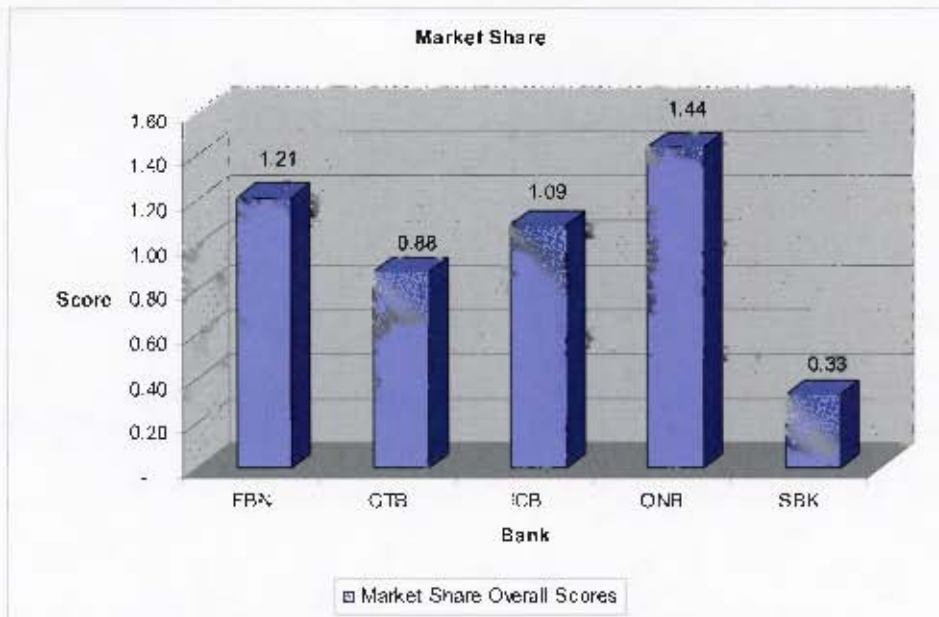
i. Market share as per total assets

- FBN scored the second highest in this sub-set with solid seven and a half percent of total banking assets.
- GTB's market share of six percent has remained stable over the assessment period and is the second worst amongst its selected peers.
- ICB increased its market share slightly and is the third best bank in this sub-set with six and a half percent.
- ONB showed strong growth in its market share and is the best performing bank in this sub-set with eight and a half percent.
- SBK has the smallest market share amongst its peers and actually lost some ground in 2007 when their market share declined by one percent to a low level of two percent of total assets.

ii. Market share as per total deposits

- FBN scored the second highest in this sub-set with solid percentages of total banking deposits.
- GTB's market share has remained stable over the assessment period and is the second worst amongst its selected peers.
- ICB increased its market share slightly and is the third best bank in this sub-set.
- ONB showed strong growth in its market share and is the best performing bank in this sub-set.

- SBK has the smallest market share amongst its peers however in this sub-set they managed to increase their market share by one percent to a still very low level of two percent of total deposits.



ONR scored the highest overall market share score, followed by FBN and ICB. GTB had the fourth highest score and SBK had the worst overall market share score.

4.4.1.3 Financial Reporting

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Financial Reporting	Financial Information Timeliness	4.00	4.00	4.00	4.00	4.00

- All the banks scored four points here as they are regulated to produce their annual report within three months of their respective year ends in terms of statute. All the banks complied with statute and published their results within the three month period.

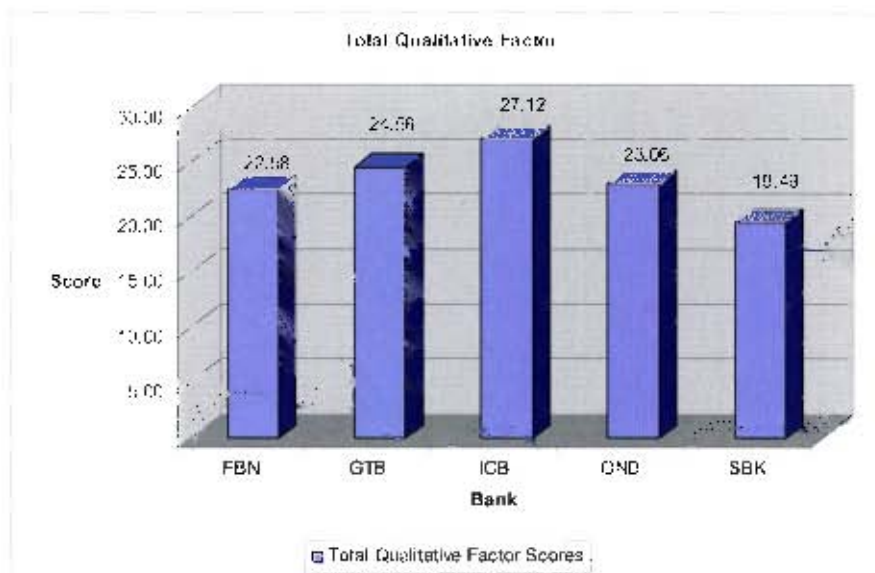
4.4.1.4 Regulatory Environment

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Regulatory Environment	Support from Central Bank	3.50	4.50	3.50	1.50	0.00

This aspect is highly subjective and was considered after taking into account the role that the respective bank plays in the economy and from reading various credit rating agency reports.

- FBN and ICB scored the highest scores due to the size of their franchises and the significant role that they play in the greater economy in general.
- GTB and ONB have increased their percentage of perceived support from the CBN since the first year of assessment. ONB has a much better chance of continuing this trend as they now account for ten percent of the banking sectors' total assets and total deposits.
- SBK would have to rely on support from their majority owner, SBG.

4.4.1.5 Overall Qualitative Scores



- ICB scored the highest in terms of the qualitative factors given that they scored the highest in the corporate governance sector and also the greater chance of Central Bank support.
- GTB was the second strongest bank based on the qualitative factors with the second highest score for corporate governance.
- ONB was ranked third in terms of qualitative factors and its best performance was in the market share segment.
- FBN was fourth followed by SBK. SBK was adversely affected in the corporate governance sector due to its majority ownership by the South African banking group, SBG and thus no perceived support would be forthcoming from the CBN.

4.4.2 Quantitative Factors

4.4.2.1 Profitability

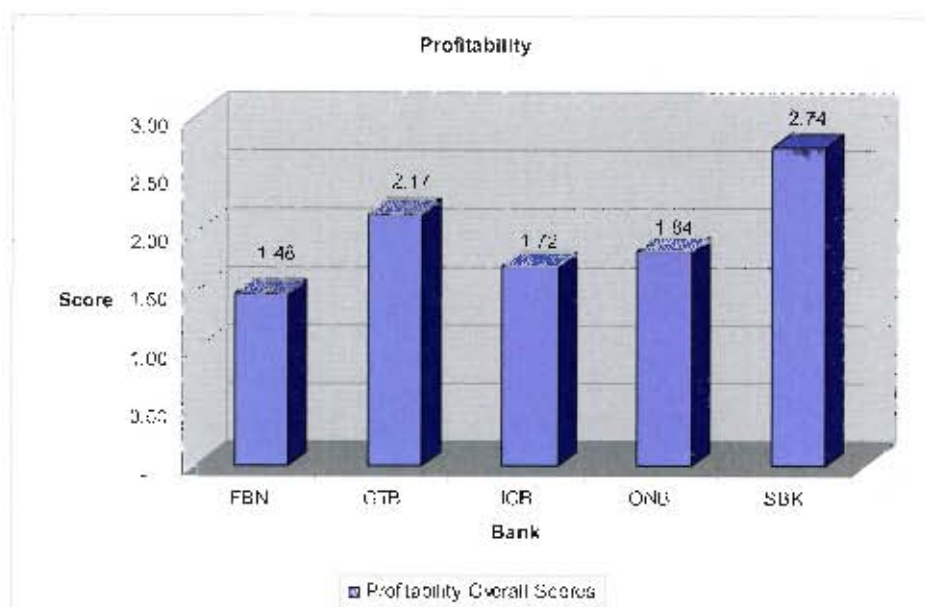
Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Profitability	Operating profit prior to impairments/total assets	0.15	0.17	0.17	0.14	0.24
	Net income before tax/total income	1.33	2.00	1.54	1.70	2.49

i. *Operating profit prior to impairments divided by total assets*

- FBN increased its operating profit before impairments to total assets ratio from three to three and a half percent. This was the second worst overall score for this sub-set amongst its selected peer group.
- GTB's ratio decreased from four percent to 3.4 percent.
- ICB's ratio remained relatively constant at approximately four percent.
- ONB's ratio decreased from three and a half percent to 2.7 percent and it scored the worst overall score for this sub-set.
- SBK increased its ratio from just over five percent to close to six percent and scored the best amongst its selected peer group.

ii. *Net income before tax margin*

- FBN increased its net income margin from 28 percent to 31 percent but this was the lowest amongst its selected peer group.
- GTB's net income margin increased by a marginal one percent to 45 percent. GTB scored the second highest in this sub-set due to its stable and high ratio.
- ICB increased its net income margin from 32 percent to 36 percent.
- ONB reflected an increased net income ratio from 35 percent to 40 percent.
- SBK scored the highest score in this sub-set and this was despite a decrease in their net income margin from 64 percent to 47 percent.



On an overall basis for profitability, SBK was the top ranked bank, followed by GTB and ONB. The fourth ranked bank was ICB and then FBN Bank was ranked in fifth place.

4.4.2.2 Liquidity

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBIC Bank
		Score	Score	Score	Score	Score
Liquidity	Total Deposits / Total Loans	33.22	34.53	27.58	34.91	16.63

- FBN's ratio of total deposits to total loans reflects a declining trend from three times cover to below two percent cover in the last assessment period.
- GTB has maintained a stable ratio of total deposits to total loans at two and a half times cover. Thus GTB has scored the highest score in this sub-set.
- ICB increased its total deposits to total loans cover from 1.7 times to 2.4 times. However this was not enough and in this sub-set ICB has the second worst cover after SBK.
- ONB scored the second highest liquidity variable however its total loans cover did decrease from three times to two times. This was largely due to the large increase in loans advanced.
- SBK scored the lowest score for this sub-set and their total deposits to total loans was well below those of its selected peer group. SBK's cover increased marginally from 1.1 times cover to 1.3 cover.

4.4.2.3 Capital adequacy

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Capital Adequacy	Tier 1 Ratio (%)	1.91	1.32	2.06	1.84	3.08
	Shareholders Equity/Total Assets	1.10	0.79	1.24	1.06	1.98

i. Tier 1 ratio

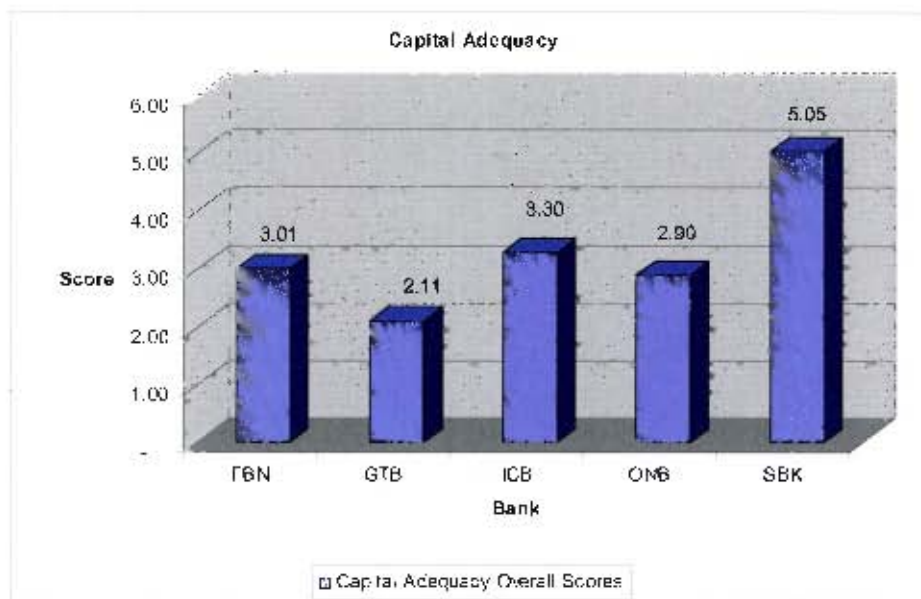
The Central Bank of Nigeria minimum requirement for the tier 1 ratio is ten percent.

- FBN increased its tier 1 ratio substantially from 17 percent to 39 percent. This was due to the issue of additional ordinary shares which increased share capital and premium substantially. The offer was so over subscribed that four and a half billion shares were issued.
- GTB's tier 1 ratio decreased from 22 percent to 17 percent. This was due to the larger increase in risk weighted assets than compared to the increase in capital.
- The tier 1 ratio of ICB decreased from 36 percent to 25 percent and was due to the larger increase in risk weighted assets as the balance sheet grew strong during the reporting period. The ratio is still well above the regulatory minimum.
- ONB almost doubled their tier 1 ratio from 18.5 percent to 36 percent. This was due to a public offering that was hugely oversubscribed and the banks raised N175 billion when they intended to only raise N54 billion. This capital is required to support the strong growth in the balance sheet of the bank.
- SBK has the highest tier 1 ratio amongst its selected peer group. The ratio has remained relatively stable at around the 45 percent level. This extremely high but also provides comfort as the non-performing loans percentage is also high.

ii. Shareholders equity divided by total assets

- FBN increased their shareholders equity to total assets ratio from nine percent to 23 percent, through the large increase in their capital base.

- GTB's shareholders equity to total assets ratio decreased marginally from 13 percent to ten percent.
- ICB reflected a decrease in their ratio from 22 percent to 14 percent and was due to the larger increase in total assets during the reporting period.
- ONB doubled its shareholders equity to total assets ratio from ten percent to 21 percent due to the large capital raising that was undertaken during the last reporting period.
- SBK's ratio declined from 31 percent to 27 percent due to a 33 percent increase in total assets as opposed to a 17 percent increase in shareholders equity.



SBK has the highest capital adequacy ratio but this would be expected as their non performing loans ratio is also the highest. The high level of capital would provide some comfort to investors. ICB and FBN have the next highest level of capital adequacy scores respectively. ONB follows closely behind FBN, whilst GTB has the lowest overall capital adequacy score.

4.4.2.4 Efficiency

Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Efficiency	Cost/Income Ratio	-2.79	-3.33	-3.55	-3.31	-2.39

- FBN has managed to decrease its cost to income ratio from 49 percent to 44 percent. This is now the lowest cost to income ratio amongst its selected peers.
- GTB's cost to income ratio only declined marginally from 56 percent to 55 percent.
- ICB managed to decrease its cost to income ratio from 61 percent to 58 percent but this ratio still remains stubbornly high.
- ONB showed a sound reduction their cost to income ratio from 59 percent to 51 percent.
- SBK's cost to income ratio increased from a low level of 34 percent to 46 percent. This was due to a 241 percent increase in operating costs, which was largely attributable to a 286 percent increase in other operating expenses. No further detailed information is provided in the annual report.

4.4.2.5 Asset quality

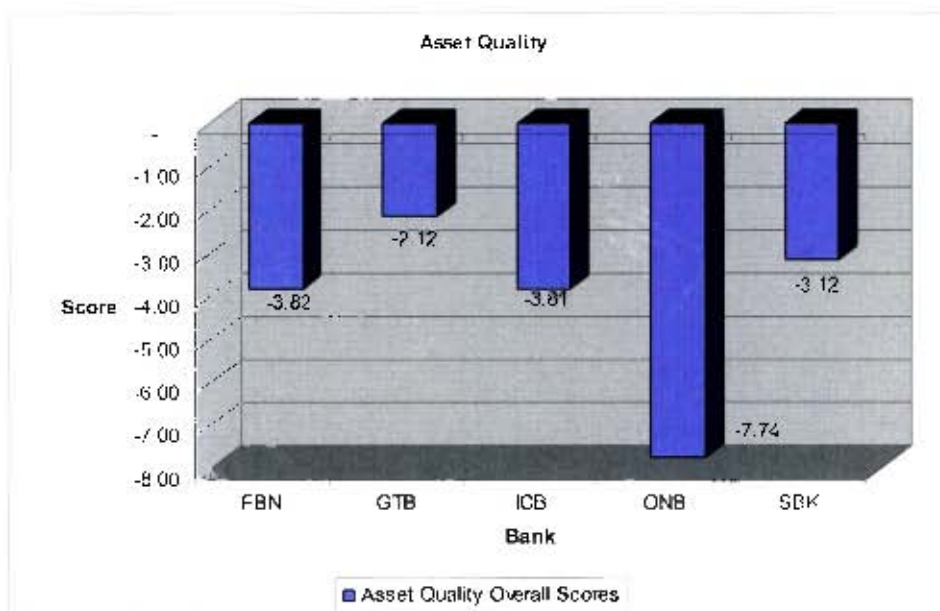
Frontier Country Bank Assessment - Nigeria		First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
		Score	Score	Score	Score	Score
Asset Quality	NPLs/Gross Loans	-0.24	-0.34	-0.34	-0.46	-2.24
	% Change in Loan Growth	-3.58	-1.78	-3.47	-7.27	-0.89

i. *Non-performing loans to gross loans*

- FBN's non-performing loans to total loans ratio decreased marginally from 2.2 percent to 1.6 percent.
- GTB ratio showed an improvement from 3.3 percent to two percent.
- ICB has to maintain their non-performing loans ratio at a constant three percent.
- ONB decreased their non-performing loans ratio from four percent to three percent, however this could just be the "denominator effect" due the massive increase in total loans. Only the future will determine if their asset quality has indeed improved and thus the second sub-set of the asset quality category is important.
- SBK decreased their non performing loans from a high of 22 percent to 14 percent, which still remains high especially when compared to its selected peer base.

ii. *Percentage change in the growth of loans*

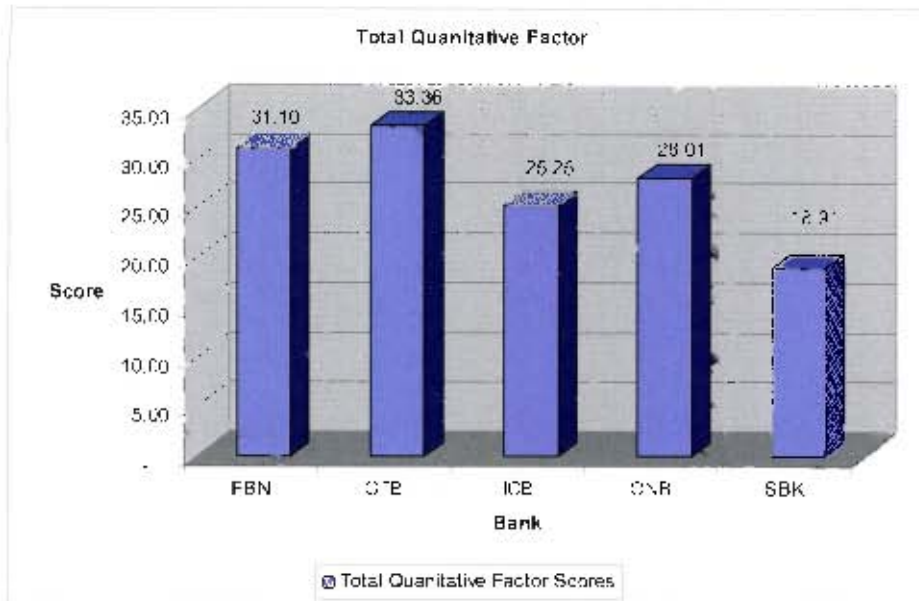
- FBN's increase in loan growth was subdued at an initial rate of 22 percent however this increased dramatically in the last reporting period to a high level of 110 percent.
- GTB has had a more stable loan growth of 29 and 37 percent in 2006 and 2007 respectively. Thus the bank scores the best overall in the asset quality sector.
- ICB increase in their loan growth was relatively stable but still high at 63 and 66 percent for the two reporting periods.
- ONB has had the largest increase in their loan growth from 27 percent to a massive 242 percent. This impacts negatively on their overall asset quality score and thus leaves the bank in the last place amongst its selected peer group.
- SBK's growth in loans increased from 13 percent to 20 percent and is the lowest amongst its selected peer group.



GTB has the best overall asset quality score and is followed by SBK. SBK has the worst non-performing loans to gross loans score but also the lowest level of growth in their loan book over the past three years. This enables SBK to score somewhat higher than expected in this segment. ICB and FBN follow SBK. ONB has the worst overall asset quality score as their percentage change in loan growth has been huge and the potential exists for many

future impaired loans if the huge growth is not tightly controlled and managed.

4.4.2.6 Overall quantitative scores



- GTB scored the highest points for the quantitative factors as it scored the best in the liquidity factor and the asset quality factor.
- FBN then followed as the second best quantitatively ranked bank due to scoring in the top two for efficiency and in the top three for liquidity and capital adequacy.
- ONB was the third best ranked bank quantitatively and was ranked in the top two for liquidity and in the top three for profitability and also efficiency. These two categories have the lowest percentage weightings of all the categories.
- ICB was the fourth best ranked quantitative bank and performed the second best in the capital adequacy factor.
- SBK was the last ranked bank according to the quantitative factors despite performing the best in profitability, capital adequacy and efficiency. Profitability and efficiency carry the lowest weights for the various criteria and SBK was negatively affected due to the very low score that it attained for the liquidity factor, compared to its selected peer group.

4.4.3 Nigerian Bank Rankings

After inputting all the variables the banks relative scores and ranking is as follows:

Bank Rankings	Score	Ranking
Guaranty Trust Bank	57.92	1
First Bank of Nigeria	53.68	2
Intercontinental Bank	52.36	3
Oceanic Bank	51.07	4
Stanbic IBTC Bank	38.40	5

The results from Nigerian bank assessment showed a less concentrated distribution of scores when compared with the Kenyan bank assessment.

The results from the qualitative factors indicated that ICB scored the highest score. GTB and ONB scored the second and third highest scores respectively. SBK scored the lowest qualitative score. ICB scored well in the qualitative factors due to scoring the highest in the corporate governance and regulatory sectors. SBK scored worst in the market share sector and second worst in the corporate governance sector.

The results from the quantitative factors indicated that GTB was the best performing bank and was followed closely by FBN. ONB was the third best performing bank followed by ICB and SBK respectively. GTB scored the highest points as it was the best performing bank in both the liquidity and asset quality factors. SBK scored the lowest score as it was heavily penalised in the liquidity sub-set as its total deposit to total loans ratio was much lower than its peers.

Therefore on an overall basis GTB was the best ranked bank in Nigeria and was followed by FBN, who scored 4.23 less points than GTB. ICB was the third best ranked bank. The difference in score between FBN and ICB amounted to 1.32. OCB and SBK were the fourth and fifth ranked banks respectively. SBK's overall score was much lower than its peers. GTB was the most consistent performer over both the qualitative and quantitative factors and deserved to be ranked as number one. SBK scored the worst

scores for both the qualitative and quantitative factors and the differential between GTB and SBK's scores was a large 19.52.

4.4.4 Comparison of Nigerian Banks to Capitec Bank Limited

The comparison of the Nigerian banks to Capitec based on solely the quantitative factors yielded the following interesting outcome:

Bank Quantitative Rankings	Fin Score	Ranking
Guaranty Trust Bank	33.36	1
First Bank of Nigeria	31.10	2
Oceanic Bank	28.01	3
Intercontinental Bank	25.25	4
Capitec Bank	18.95	5
Stanbic IBTC Bank	18.91	6

All the Nigerian banks with the exception of SBK scored higher than Capitec. The relative higher scores for the majority of the Nigerian banks are due to the fact that the structure of the Nigerian banking industry differs from that of the South African and Kenyan banking industry. In Nigeria the amount of total deposits far exceeds the level of total loans whereas in South Africa and Kenya the value of loans usually exceeds that of deposits. As the liquidity factor has such a large category weight in the quantitative sector and then also the largest overall weight in the model, it would be prudent to do a comparison excluding this variable which causes a material distortion in comparing banks from other countries and differing industry characteristics.

The comparison of the Nigerian banks to Capitec based on the quantitative factors excluding the liquidity factor yielded the following results:

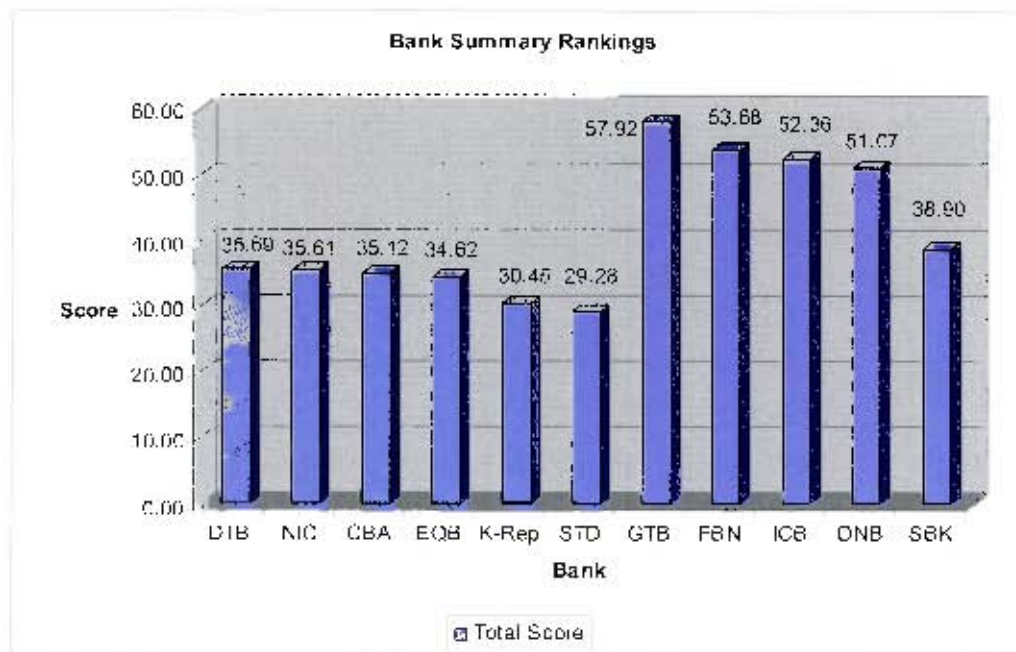
Bank Quantitative Rankings excl. liquidity	Fin Score	Ranking
Stanbic IBTC Bank	2.28	1
Capitec Bank	1.96	2
Guaranty Trust Bank	-1.18	3
First Bank of Nigeria	-2.12	4
Intercontinental Bank	-2.35	5
Oceanic Bank	-6.30	6

SBK scored the highest score and is followed closely by Capitec who only scores 0.32 points less than SBK . The rest of the Nigerian banks yielded negative scores for the quantitative factors excluding the liquidity factor. The main reasons for the better performance of SBK was that it had a much better

cost to income ratio and also its loan growth has been most subdued in comparison with its peers who have shown dramatic loan growth and thus lowered their asset quality factor scores.

The assessments above pose a question of are the Nigerian banks less riskier investments in comparison to their Kenyan counterparts and the lower tier banks in South Africa. The Nigerian banks have as their only real risk of default a run on the bank. Whilst this may be true it has to be acknowledged that banking is largely based on confidence and sentiment does not always only react to core fundamentals and can be driven by fear and panic. Thus whilst Nigeria has a simplistic banking model at present, the extremely rapid growth in their banking industry does create and pose additional risks and until the industry has matured and is directly comparable, the belief is that the Nigerian banks do not pose less risk than Kenyan banks nor lower tier South African banks.

4.5 Summary



The first six banks in the above graph are the Kenyan banks assessed and the next five banks are the Nigerian banks that were assessed.

The Nigerian banks scored higher scores than the Kenyan banks due to the fact that the structure of the Nigerian banking industry has a fundamental difference from both the Kenyan and South African banking industries. The difference is that Nigeria has a banking industry that is most cash flush and as such the amount of total deposits held in the banks currently exceeds the amount of total loans advanced. Thus the Nigerian banks scored especially high in the liquidity category and this has boosted their quantitative and overall scores substantially.

The first four Kenyan banks are quite evenly rated and ranked whilst K-Rep Bank and Stanbic Bank Kenya are the lower ranked banks. K-Rep Bank is ranked lower as its quantitative scores are much lower as it is engaged in the higher risk segment of the Kenyan banking market providing essentially microfinance loans to clients. K-Rep Bank did score the highest in the qualitative section, however this section only accounts for 40 percent of the overall score and it was not sufficient to counteract the low score in the quantitative section. Stanbic Bank Kenya scored so poorly in the qualitative section that even though the bank had the second highest quantitative section score, it was only able to finish last in the rankings.

Amongst the Nigerian banks the differential between the scores was more pronounced and GTB finished the assessment as the best ranked bank with the top score achieved in the quantitative section and the second highest score in the qualitative section. The following three ranked banks were relatively closely ranked with the overall score differential of less than three points. The bottom ranked bank was SBK and was due to the worst performance in both the qualitative and quantitative sections.

4.6 Spread Comparison

To conclude, a comparison was envisaged between the spreads yielded by the Kenyan and Nigerian banks debt issuance. Ultimately the aim would be to compare these spreads with Capitec's debt issuance spread levels.

The banks in Kenya largely have an inefficient banking model and the usage of debt is not widespread, with the exception of K-Rep Bank and Equity Bank. The table below sets out the Kenyan Banks' debt issuance to total assets as at 31st December 2007:

	CBA	Diamond Trust	Equity Bank	K-Rep Bank	NIC Bank	Stanbic Bank
Debt / Total Assets	0%	0%	9%	15%	1%	2%

K-Rep Bank has the highest percentage of debt to total assets and this is largely due to the legacy that it was historically a non governmental organisation that concentrated on the upliftment of the people. Thus K-Rep Bank when it was still a non governmental organisation was funded largely by loans from development agencies and the government. The bulk of K-Rep Bank debt currently relates to shareholders of the bank in line with the mission of the bank.

Equity Bank has increased its footprint and operations in Kenya and has borrowed funds. However the detail relating to the said borrowings is lacking. Needless to say the utilisation of debt to finance assets in the other banks is low or even non-existent.

The Kenyan banking industry is thus reminiscent of the developed world banking industry of 50 years ago when assets were funded solely by deposits and capital.

The banks in Nigeria largely have an inefficient banking model as well and the usage of debt is not widespread, with the exception of GTB.

The table below sets out the Nigerian Banks' debt issuance to total assets as at the respective year ends:

	First Bank of Nigeria	Guaranty Trust Bank	Intercontinental Bank	Oceanic Bank	Stanbic IBTC Bank
Debt / Total Assets	2%	12%	1%	2%	4%

GTB's debt issuance is made up largely of loans from development institutions namely the International Finance Corporation ("IFC"), European Investment Bank ("EIB"), African Development Bank ("ADB"), GTB Finance BV ("GTBF") and FMO. FMO is the development bank of the Netherlands.

The Nigerian banking industry is thus reminiscent of the developed world banking industry of 50 years ago when assets were funded solely by deposits and capital.

In both the case of Kenya and Nigeria the majority of debt incurred is from development banks and or agencies and thus a comparison of the spread yields will not be directly comparable.

For interest sake, Capitec has a listed floating rate bond issue of R110 million and a fixed rate bond issue of R380 million. These three year bond are listed on the Bond Exchange of South Africa and were issued on the 6th May 2008. The redemption date is the 6th May 2011. The United States Government Bond equivalent yield is 14.71%.

Chapter 5 Conclusion

Frontier markets have attracted the attention of South African companies in an attempt to diversify their earnings base away from sole reliance on South Africa. The frontier markets appear to be a more viable and long term option for South African companies as these frontier countries have shown remarkable growth over recent times. Setting up a competitive operation in a frontier country is regarded as being easier than establishing operations in the developed world. The developed world poses the additional problem of distance whereas the frontier markets bring their own unique problems and challenges, especially in the corporate governance area. However the risk and return from the frontier markets would in all likelihood provide much greater net returns.

Thus the ability to be able to generate a model through which the banks in the frontier countries can be critically assessed is regarded as an essential component for future frontier market penetration. The bank questionnaire's framework was based on the Fitch bank questionnaire, which was adjusted to make it more relevant to the pressing issues of corporate governance and operational management that the frontier markets would have to manage. The response from the frontier banks was extremely poor. The information to be obtained from the questionnaire was supposed to form the base from which to begin to assess the frontier market banks. However due to the poor response this was no longer possible and full reliance was placed on the information gained from the financial statements of the banks and also the annual reports of the various Central Banks. Thus the model becomes the overall assessment tool. The model itself has as its framework the Moody's bank assessment methodology with both qualitative and quantitative factors being considered, and this was adjusted to ensure that the factors considered were relevant to frontier market countries.

This paper has indicated that further research is required into the assessment of banks in frontier markets, however a well considered methodology to critically assess the strengths and weaknesses of banks is possible.

The model has produced consistent results that would have been expected from the various interactions with stakeholders and of the information obtained.

The greatest insight from the research has been how inefficient the banking systems in these countries are and that banking in these countries remain at the level of taking deposits and then granting loans whilst maintaining a core capital component. This is inefficient and is dilutive to shareholders as if the banks used increased debt then they would be able to generate an increased return for shareholders by optimising their capital structures. It will still take many years in the opinion of the writer to integrate these frontier banking systems within the global banking system to achieve the same levels of products offered and the use of instruments to optimise the returns generated from the assets and capital.

The risk and reward consideration for the frontier banks is not regarded at this stage to be equitable for a large foreign investor. Although a methodology is in place to rank the relative strengths of the frontier banks the investment decision is constrained by the unsophisticated banking industry in the Kenya and Nigeria and the undeveloped state of the capital markets in these countries. The process of price discovery is limited at best as the number of banks issuing debt is limited and when debt is issued it is usually to development banks and agencies. A positive investment decision would only become a possibility once the banks start gearing their balance sheets to maximise returns and the debt capital markets have become fully operational and efficient leading to the correct pricing of the risks incurred.

Bibliography

Journals:

1. Anon 2005. Banking Sector Reforms and Bank Consolidation in Nigeria. *Central Bank of Nigeria*. 29(2):26 - 46.
2. Anon 2005. Internal and External Governance Mechanisms: Evidence from the Nigerian Banking Industry. *Corporate Ownership & Control*. 2(3):62-67.
3. Anon 2007. Untapped Potential in Africa: Banking reform and a bounty of natural resources have investors paying attention. *Investment Dealers' Digest*.
4. Arun, T.G. & Turner, J.D. 2004. *Corporate Governance of Banks in Developing Economies: concepts and issues*. Blackwell Publishing Limited.
5. Barako, D.G. & Tower, G. 2007. Corporate Governance and Bank Performance: does Ownership Matter? Evidence from the Kenyan Banking Sector. *Corporate Ownership & Control*. 4(2):133-144.
6. Berger, A.N. & DeYoung, R. 1997. Problem loans and cost efficiency in commercial banks. *Journal of Banking & Finance*. 21(6):849-870.
7. Caprio, G. & Klingebiel, D. 2003. Episodes of Systemic and Borderline Financial Crises. *World Bank Research Dataset*.
8. Das, A. & Ghosh, S. 2007. Determinants of Credit Risk in Indian State-owned Banks: An Empirical Investigation. *Economic Issues*. 12(2):27-46.
9. Domanski, 2005. Foreign Banks in Emerging Market Economies: Changing Players, Changing Issues. *BIS Quarterly Review*. :69-81.
10. Ezeoha, A. 2007. Structural effects of banking industry consolidation in Nigeria: A review. *Journal of Banking Regulation*. 8(2):159-176.
11. Ezeoha, A. 2007. Structural Effects of Banking Industry Consolidation in Nigeria: A Review. *Journal of Banking Regulation*. 8(2):159 - 176.
12. Gelos, R.G. & Roldós, J. 2004. Consolidation and market structure in emerging market banking systems. *Emerging Markets Review*. 5(1):39.

13. Godlewski, C. 2005. Bank capital and credit risk taking in emerging market economies. *Journal of Banking Regulation*. 6(2):128-145.
14. Godlewski, C. 2007. Are Ratings Consistent with Default Probabilities? Empirical Evidence on Banks in Emerging Market Economies. *Emerging Markets Finance and Trade*. 43(4):5-23.
15. González-Hermosillo, B. and others. 1997. *Determinants of banking system fragility: A case study of Mexico*.
16. Gorton, G. & Huang, L. 2004. Liquidity, Efficiency, and Bank Bailouts. *The American Economic Review*. 94(3):455-483.
17. Harrison, 2005. The World Bank, Governance and Theories of Political Action in Africa. *British Journal of Politics & International Relations*. 7(2):240-260.
18. Hassan, M.K., Wolfe, D.R. & Maroney, N.C. 2004. Corporate Control and Governance in Banking. *Corporate Ownership & Control*. 1(4):94 - 107.
19. Himmerlberg, C.P., Hubbard, R.G. & Palia, D. 1999. Understanding the determinants of managerial ownership and link between ownership and performance. *Journal of Financial Economics*. 53(3):353-384.
20. Kwan, S. & Eisenbeis, R.A. 1997. Bank risk, capitalization, and operating efficiency. *Journal of Financial Services Research*. 12(2):117.
21. Levine, R. 1999. Foreign Bank Entry and Capital Control Liberalisation: Effects on Growth and Stability. *University of Minnesota*.
22. Lindgren, C., Garcia, G. & Saal M.I 1996. Bank Soundness and Macroeconomic Policy. *IMF Staff Papers*.
23. Mhango, Y. 2008. Blueprint, Kenya. *Stanbic Bank Research Economics*.
24. Munyama, V. 2008. Nigeria Blueprint. *Stanbic Bank Research Economics*.
25. Reyes A, 2001, The Philippine Banking Industry: Competition, Consolidation and Systemic Stability, Bank for International Settlements Papers, No.4
26. Stomper, A. 2006. A Theory of Banks' Industry Expertise, Market Power, and Credit Risk. *Management Science*. 52(10):1618-1633.
27. Talwar, S.P. 2001. Competition, Consolidation and Systemic Stability in the Nigerian Banking Industry. *Bank for International Settlements*. August(4):75-79.

28. Toby, 2006. Empirical Study of the Liquidity Management Practices of Nigerian Banks. *Journal of Financial Management & Analysis*. 19(1):57-70.
29. Trichet, J. 2007. Charting a new global landscape - the growing impact of emerging markets on the world economy. *BIS Review*. 57.

Credit Rating Agency Reports:

1. Bank Financial Strength ratings: Revised Methodology. 2006. *Moody's Investors Service - Global Credit Research*.
2. Financial Institutions Criteria. 2006. *Standard & Poor's*.
3. Claerhout, T. & Walker, A. 2008. First Bank of Nigeria Plc. *Fitch Ratings Nigeria Credit Analysis*.
4. de Bie, D. & Walker, A. 2007. Kenyan Banking Sector: Annual Review and Outlook. *FitchRatings Special Report - Premium*.
5. de Bie, D. & Walker, A. 2008. Commercial Bank of Africa. *Fitch Ratings Credit Update*.
6. de Bie, D. & Walker, A. 2008. Kenyan Banking Sector: Annual Review and Outlook. *FitchRatings Special Report*.
7. de Bie, D. & Walker, A. 2008. NIC Bank Limited. *Fitch Ratings Credit Update*.
8. de Bie, D. & Walker, A. 2008. Oceanic Bank International Plc. *Fitch Ratings Nigeria Credit Analysis*.
9. de Bie, D. & Walker, A. 2008. Stanbic IBTC Bank Plc. *Fitch Ratings Nigeria Credit Analysis*.
10. de Bie, D., Walker, A. & Malahay, B. 2008. Nigerian Banking Sector: Annual Review and Outlook. *Fitch Ratings Nigeria Special Report*.
11. de Bie, D., Walker, A. & Thompson, E. 2006. Kenyan Banking System and Prudential Regulations. *FitchRatings Country Report*.
12. de Bie, D., Walker, A. & Young, M. 2008. Intercontinental Bank Plc. *Fitch Ratings Nigeria Credit Analysis*.
13. Fox, R. & Kalema, V. Republic of Kenya. *Fitch Ratings Kenya Credit Analysis*.
14. Gandy, B., Young, M., Tebbutt, P. and others. 2006. Corporate Governance in Emerging Market Banks. *FitchRatings Special Report*.

15. Kalema, V. & Fox, R. 2007. Federal Republic of Nigeria. *FitchRatings International Credit Analysis - Sovereigns*.
16. Le Bras, A. & Andrews, D. 2004. Bank Rating Methodology. *FitchRatings Criteria Report*.
17. Pirnie, M., Chui, J. & Gibling, J. 2008. Bank Industry Risk Analysis: Boosted by Strong Oil Prices, Nigeria's Economy Buys Risky Banks. *Standard & Poor's Ratings Direct*.
18. Walker, A. & Claerhout, T. 2008. Guaranty Trust Bank Plc. *Fitch Ratings Nigeria Credit Analysis*.

Annual Reports and Financial Statements:

1. Central Bank of Kenya. Annual Report 2007.
2. Central Bank of Nigeria. Banking Supervision Annual Report 2007.
3. Commercial Bank of Africa 2006 Annual Report & Financial Statements.2006.
4. Commercial Bank of Africa 2007 Annual Report & Financial Statements.2007.
5. Diamond Trust Bank Kenya Limited 2006 Annual Report & Financial Statements.2006.
6. Diamond Trust Bank Kenya Limited 2007 Annual Report & Financial Statements.2007.
7. First Bank of Nigeria Plc 2008 Annual Report & Accounts. 2008.
8. Guaranty Trust Bank Plc 2007 Annual Report & Accounts. 2007.
9. IBTC Chartered Bank Plc 2007 Annual Report. 2007.
10. Intercontinental Bank Plc 2008 Annual Report & Accounts. 2008.
11. K-Rep Bank Limited 2006 Annual Report & Accounts.2006.
12. K-Rep Bank Limited 2007 Annual Report & Accounts.2007.
13. NIC Bank Limited 2006 Annual Report & Financial Statements.2006.
14. NIC Bank Limited 2007 Annual Report & Financial Statements. 2007.
15. Oceanic Bank International Plc 2007 Annual Report & Accounts. 2007.

Annexure – Ranking Methodology Results

Kenyan Banks

Commercial Bank of Africa

Frontier Country Bank Assessment		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	CBA							
							2005	2006	2007	2008	2009	3 yr Ave	Score	
Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%	-	-	-	-	-	-	-
					Non-Executive > Executive	25.00%	4.00%	66.67	66.67	66.67	66.67	66.67	2.67	
					Audit Committees	25.00%	4.00%	200.00	200.00	200.00	200.00	200.00	8.00	
					Related Party Transactions	25.00%	4.00%	75.00	100.00	75.00	83.33	3.33		
		Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%	4.97	5.50	5.27	5.24	0.42		
					Per Total Deposits	50.00%	8.00%	6.82	7.14	6.46	6.81	0.54		
					Financial Reporting	10.00%	4.00%	100.00	100.00	100.00	100.00	4.00		
Regulatory Environment	10.00%	4.00%	Financial Information Timeliness	100.00%	4.00%	100.00	100.00	100.00	100.00	4.00				
			Support from Central Bank	100.00%	4.00%	25.00	25.00	25.00	25.00	1.00				
Quantitative Factors	60%	Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	1.54	3.09	3.55	2.72	0.12		
					Net income before tax/total income	50.00%	4.50%	19.94	54.42	46.98	40.45	1.82		
		Liquidity	22.50%	13.50%	Total Deposits / Total Loans	100.00%	13.50%	149.56	139.61	128.87	139.35	18.81		
					Tier 1 Ratio (%)	50.00%	6.75%	12.20	14.84	13.47	13.50	0.91		
		Capital Adequacy	22.50%	13.50%	Shareholders Equity/Total Assets	50.00%	6.75%	7.74	9.93	11.23	9.63	0.65		
					Efficiency	10.00%	6.00%	-65.43	-54.29	-52.15	-57.29	-3.44		
		Asset Quality	30.00%	18.00%	NPLs/Gross Loans	70.00%	12.60%	-7.65	-5.32	-4.99	-5.99	-0.75		
% Change in Loan Growth	30.00%				5.40%	-116.89	-23.46	-24.32	-54.89	-2.96				
Total Score													35.12	

Diamond Trust Bank

Frontier Country Bank Assessment		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Diamond Trust						
							2005	2006	2007	2008	2009	3 yr Ave	Score
Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%	50.00	50.00	50.00	50.00	50.00	2.00
					Non-Executive > Executive	25.00%	4.00%	70.00	70.00	70.00	70.00	70.00	2.80
					Audit Committees	25.00%	4.00%	200.00	200.00	200.00	200.00	200.00	8.00
					Related Party Transactions	25.00%	4.00%	100.00	100.00	100.00	100.00	4.00	
		Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%	2.76	3.19	4.52	3.49	0.28	
					Per Total Deposits	50.00%	8.00%	3.56	3.71	5.25	4.17	0.33	
					Financial Reporting	10.00%	4.00%	100.00	100.00	100.00	100.00	4.00	
Regulatory Environment	10.00%	4.00%	Financial Information Timeliness	100.00%	4.00%	100.00	100.00	100.00	100.00	4.00			
			Support from Central Bank	100.00%	4.00%	25.00	25.00	50.00	33.33	1.33			
Quantitative Factors	60%	Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	2.87	3.40	3.17	3.15	0.14	
					Net income before tax/total income	50.00%	4.50%	37.15	46.75	44.82	42.91	1.93	
		Liquidity	22.50%	13.50%	Total Deposits / Total Loans	100.00%	13.50%	113.21	110.38	111.91	111.83	15.10	
					Tier 1 Ratio (%)	50.00%	6.75%	11.10	16.50	19.10	15.57	1.05	
		Capital Adequacy	22.50%	13.50%	Shareholders Equity/Total Assets	50.00%	6.75%	10.08	13.19	15.22	12.83	0.87	
					Efficiency	10.00%	6.00%	-59.09	-50.99	-51.47	-53.85	-3.23	
		Asset Quality	30.00%	18.00%	NPLs/Gross Loans	70.00%	12.60%	-2.53	-2.30	-1.73	-2.19	-0.28	
% Change in Loan Growth	30.00%				5.40%	-44.57	-34.06	-67.59	-48.74	-2.63			
Total Score													35.69

Equity Bank

Frontier Country Bank Assessment		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Equity Bank							
							2005	2006	2007	2008	2009	3 yr Ave	Score	
							Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%
Non-Executive > Executive	25.00%	4.00%	89.00	89.00	89.00								89.00	3.56
Audit Committees	25.00%	4.00%	200.00	200.00	200.00								200.00	8.00
Related Party Transactions	25.00%	4.00%	75.00	100.00	100.00								91.67	3.67
Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%	1.93		2.94	6.68			3.84	0.31	
			Per Total Deposits	50.00%	8.00%	2.33		3.57	5.65			3.85	0.31	
			Financial Reporting	10.00%	4.00%	100.00%		100.00%	100.00%			100.00	4.00	
Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%	25.00	25.00	50.00			33.33	1.33		
Quantitative Factors	60%	Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	5.45	6.17	4.50			5.37	0.24
					Net income before tax/total income	50.00%	4.50%	27.77	32.71	40.85			33.78	1.52
		Liquidity	22.50%	13.50%	Total Deposits / Total Loans	100.00%	13.50%	118.76	126.13	109.96			118.28	15.97
					Capital Adequacy	22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%	0.00	14.00	46.00	
		Efficiency	10.00%	6.00%	Shareholders Equity/Total Assets	50.00%	6.75%	13.91	10.99	28.06			17.66	1.19
					Cost/Income Ratio	100.00%	6.00%	-65.34	-63.34	-59.40			-62.89	-3.78
					Asset Quality	30.00%	18.00%	NPLs/Gross Loans	70.00%	12.60%	-8.83	-4.97	-4.45	
					% Change in Loan Growth	30.00%	5.40%	-78.26	-97.84	-99.79			-91.97	-4.97
Total Score							34.62							

K-Rep Bank

Frontier Country Bank Assessment		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	K-Rep Bank							
							2005	2006	2007	2008	2009	3 yr Ave	Score	
							Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%
Non-Executive > Executive	25.00%	4.00%	92.00	92.00	92.00								92.00	3.68
Audit Committees	25.00%	4.00%	200.00	200.00	200.00								200.00	8.00
Related Party Transactions	25.00%	4.00%	100.00	100.00	100.00								100.00	4.00
Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%	0.84		0.77	0.88			0.76	0.06	
			Per Total Deposits	50.00%	8.00%	0.50		0.72	0.81			0.68	0.05	
			Financial Reporting	10.00%	4.00%	Financial Information Timeliness		100.00%	4.00%	100.00	100.00	100.00		
Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%	50.00	50.00	50.00			50.00	2.00		
Quantitative Factors	60%	Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	1.68	3.34	3.63			2.88	0.13
					Net income before tax/total income	50.00%	4.50%	10.77	19.37	17.21			15.78	0.71
		Liquidity	22.50%	13.50%	Total Deposits / Total Loans	100.00%	13.50%	66.97	80.79	80.89			76.22	10.29
					Capital Adequacy	22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%	0.00	20.53	17.50	
		Efficiency	10.00%	6.00%	Shareholders Equity/Total Assets	50.00%	6.75%	21.14	17.20	14.46			17.60	1.19
					Cost/Income Ratio	100.00%	6.00%	-86.99	-77.78	-76.86			-80.54	-4.83
					Asset Quality	30.00%	18.00%	NPLs/Gross Loans	70.00%	12.60%	-4.47	-4.30	-8.30	
					% Change in Loan Growth	30.00%	5.40%	-20.06	-53.03	-36.12			-36.40	-1.97
Total Score							30.45							

NIC Bank

		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	NIC Bank																							
							2005	2006	2007	2008	2009	3 yr Ave	Score																	
Frontier Country Bank Assessment	Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%	75.00	75.00	75.00			75.00	3.00															
						Non-Executive > Executive	25.00%	4.00%	80.00	80.00	80.00			80.00	3.20															
						Audit Committees	25.00%	4.00%	200.00	200.00	200.00			200.00	6.00															
						Related Party Transactions	25.00%	4.00%	75.00	75.00	100.00			83.33	3.33															
						Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%	3.48	3.83	3.92			3.74	0.30												
	Quantitative Factors	60%	Financial Reporting	10.00%	4.00%	Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%	25.00	25.00	25.00		25.00	1.00													
																		Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	2.95	3.11	3.68			3.25	0.15
																		Liquidity	22.50%	13.50%	Net income before tax/total income	50.00%	4.50%	27.80	34.15	44.16			35.31	1.59
																					Total Deposits / Total Loans	100.00%	13.50%	109.19	108.97	99.85			105.94	14.30
																		Capital Adequacy	22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%	0.00	13.30	15.84			9.71	0.66
Shareholders Equity/Total Assets																					50.00%	6.75%	13.49	11.65	15.15			13.43	0.91	
Efficiency																		10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%	-60.34	-58.12	-51.61			-57.03	-3.42	
																				NPLs/Gross Loans	70.00%	12.60%	-3.90	-4.06	-2.36			-3.44	-0.43	
Asset Quality																		30.00%	18.00%	% Change in Loan Growth	30.00%	5.40%	-23.55	-16.21	-34.03			-24.80	-1.33	
																				Total Score										

Stanbic Bank

		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Stanbic Bank																							
							2005	2006	2007	2008	2009	3 yr Ave	Score																	
Frontier Country Bank Assessment	Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%	25.00	25.00	25.00			25.00	1.00															
						Non-Executive > Executive	25.00%	4.00%	63.00	63.00	63.00			63.00	2.52															
						Audit Committees	25.00%	4.00%	200.00	200.00	200.00			200.00	6.00															
						Related Party Transactions	25.00%	4.00%	-	-	-			-	-															
						Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%	2.52	3.79	4.32			3.55	0.28												
	Quantitative Factors	60%	Financial Reporting	10.00%	4.00%	Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%	-	-	-		-	-													
																		Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%	3.18	4.16	3.83			3.72	0.17
																		Liquidity	22.50%	13.50%	Net income before tax/total income	50.00%	4.50%	32.07	42.06	45.41			39.85	1.79
																					Total Deposits / Total Loans	100.00%	13.50%	111.30	110.52	116.58			112.60	15.23
																		Capital Adequacy	22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%	15.62	16.69	13.28			15.20	1.03
Shareholders Equity/Total Assets																					50.00%	6.75%	13.53	10.61	9.75			11.30	0.76	
Efficiency																		10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%	-65.84	-51.19	-50.16			-55.73	-3.34	
																				NPLs/Gross Loans	70.00%	12.60%	-1.44	-2.02	-1.44			-1.63	-0.21	
Asset Quality																		30.00%	18.00%	% Change in Loan Growth	30.00%	5.40%	-21.56	-33.53	-73.28			-42.79	-2.31	
																				Total Score										

Nigerian Banks

First Bank of Nigeria

Frontier Country Bank Assessment - Nigeria		Category Weight	Overall Weight	Sub-Factor Weight	Overall Weight	First Bank of Nigeria															
						2005	2006	2007	2008	2009	2 yr Ave	Score									
Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%			100.00	100.00	100.00	4.00								
					Non-Executive > Executive	25.00%	4.00%			46.67	46.67	46.67	1.87								
					Audit Committees	25.00%	4.00%			200.00	200.00	200.00	8.00								
					Related Party Transactions	25.00%	4.00%			-	-	-	-								
	Market Share	40.00%	16.00%	40.00%	16.00%	Per Total Assets	50.00%	8.00%			10.79	3.92	7.35	0.59							
						Per Total Deposits	50.00%	8.00%			11.50	4.09	7.80	0.62							
						Financial Reporting	10.00%	4.00%			100.00	100.00	100.00	4.00							
						Regulatory Environment	10.00%	4.00%					87.50	3.50							
Quantitative Factors	60%	Profitability	15.00%	9.00%	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%			3.06	3.52	3.29	0.15						
							Net income before tax/total income	50.00%	4.50%			28.36	30.71	29.54	1.33						
							Liquidity	22.50%	13.50%					310.06	182.11	246.08	33.22				
							Capital Adequacy	22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%			17.40	39.20	28.30	1.91			
										Shareholders Equity/Total Assets	50.00%	6.75%			9.18	23.28	16.23	1.10			
							Efficiency	10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%			-49.29	-43.60	-46.44	-2.79			
										Asset Quality	30.00%	18.00%					70.00%	12.60%			-2.23
							% Change in Loan Growth	30.00%	18.00%						30.00%	5.40%			-21.78	-110.73	-66.25
100%						100%						Total Score	53.68								

Guaranty Trust Bank

Frontier Country Bank Assessment - Nigeria		Category Weight	Overall Weight	Sub-Factor Weight	Overall Weight	Guaranty Trust Bank															
						2005	2006	2007	2008	2009	2 yr Ave	Score									
Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%			100.00	100.00	100.00	4.00								
					Non-Executive > Executive	25.00%	4.00%			54.55	54.55	54.55	2.18								
					Audit Committees	25.00%	4.00%			200.00	200.00	200.00	8.00								
					Related Party Transactions	25.00%	4.00%			100.00	100.00	100.00	4.00								
	Market Share	40.00%	16.00%	40.00%	16.00%	Per Total Assets	50.00%	8.00%			5.57	5.70	5.64	0.45							
						Per Total Deposits	50.00%	8.00%			5.40	5.27	5.34	0.43							
						Financial Reporting	10.00%	4.00%			100.00	100.00	100.00	4.00							
						Regulatory Environment	10.00%	4.00%					25.00	50.00	37.50	1.50					
Quantitative Factors	60%	Profitability	15.00%	9.00%	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%			3.98	3.38	3.68	0.17						
							Net income before tax/total income	50.00%	4.50%			44.09	44.85	44.47	2.00						
							Liquidity	22.50%	13.50%					256.26	255.34	255.80	34.53				
							Capital Adequacy	22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%			22.40	16.60	19.50	1.32			
										Shareholders Equity/Total Assets	50.00%	6.75%			13.22	10.27	11.75	0.79			
							Efficiency	10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%			-55.91	-55.15	-55.53	-3.33			
										Asset Quality	30.00%	18.00%					70.00%	12.60%			-3.37
							% Change in Loan Growth	30.00%	18.00%						30.00%	5.40%			-28.52	-37.47	-32.99
100%						100%						Total Score	57.92								

Intercontinental Bank

		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Intercontinental Bank											
							2005	2006	2007	2008	2009	2 yr Ave	Score					
Frontier Country Bank Assessment - Nigeria	Qualitative Factors	40%	40.00%	16.00%	Ownership	25.00%	4.00%			100.00	100.00		100.00	4.00				
					Non-Executive > Executive	25.00%	4.00%			63.16	63.16		63.16	2.53				
					Audit Committees	25.00%	4.00%			200.00	200.00		200.00	8.00				
					Related Party Transactions	25.00%	4.00%			100.00	100.00		100.00	4.00				
					Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%			6.19	7.28		6.73	0.54	
				Per Total Deposits	50.00%	8.00%			6.35	7.41		6.88	0.55					
				Financial Reporting	10.00%	4.00%	Financial Information Timeliness	100.00%	4.00%			100.00	100.00		100.00	4.00		
				Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%			75.00	100.00		87.50	3.50		
	Quantitative Factors	60%	15.00%	9.00%	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%			3.91	3.82		3.87	0.17		
							Net income before tax/total income	50.00%	4.50%			32.17	36.34		34.25	1.54		
Liquidity							22.50%	13.50%	Total Deposits / Total Loans	100.00%	13.50%			169.24	239.57		204.40	27.59
Capital Adequacy							22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%			36.20	24.85		30.53	2.06
									Shareholders Equity/Total Assets	50.00%	6.75%			22.26	14.40		18.33	1.24
Efficiency							10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%			-60.68	-57.60		-59.14	-3.55
Asset Quality							30.00%	18.00%	NPLs/Gross Loans	70.00%	12.60%			-2.55	-2.86		-2.70	-0.34
	% Change in Loan Growth	30.00%	5.40%			-62.71			-65.67		-64.29	-3.47						
100%					100%					Total Score					52.36			

Oceanic Bank

		Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Oceanic Bank											
							2005	2006	2007	2008	2009	2 yr Ave	Score					
Frontier Country Bank Assessment - Nigeria	Qualitative Factors	40%	40.00%	16.00%	Ownership	25.00%	4.00%			50.00	75.00		62.50	2.50				
					Non-Executive > Executive	25.00%	4.00%			52.94	52.94		52.94	2.12				
					Audit Committees	25.00%	4.00%			200.00	200.00		200.00	6.00				
					Related Party Transactions	25.00%	4.00%			100.00	75.00		87.50	3.50				
					Market Share	40.00%	16.00%	Per Total Assets	50.00%	8.00%			6.95	10.21		8.58	0.69	
				Per Total Deposits	50.00%	8.00%			8.37	10.47		9.42	0.75					
				Financial Reporting	10.00%	4.00%	Financial Information Timeliness	100.00%	4.00%			100.00	100.00		100.00	4.00		
				Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%			25.00	50.00		37.50	1.50		
	Quantitative Factors	60%	15.00%	9.00%	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%			3.53	2.67		3.10	0.14		
							Net income before tax/total income	50.00%	4.50%			35.40	40.25		37.83	1.70		
Liquidity							22.50%	13.50%	Total Deposits / Total Loans	100.00%	13.50%			305.44	202.89		254.16	34.31
Capital Adequacy							22.50%	13.50%	Tier 1 Ratio (%)	50.00%	6.75%			18.50	36.00		27.25	1.84
									Shareholders Equity/Total Assets	50.00%	6.75%			10.10	21.45		15.78	1.06
Efficiency							10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%			-59.03	-51.40		-55.22	-3.31
Asset Quality							30.00%	18.00%	NPLs/Gross Loans	70.00%	12.60%			-4.11	-3.23		-3.67	-0.46
	% Change in Loan Growth	30.00%	5.40%			-27.10			-242.31		-134.71	-7.27						
100%					100%					Total Score					51.07			

Stanbic IBTC Bank

Frontier Country Bank Assessment - Nigeria			Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Stanbic IBTC Bank								
								2005	2006	2007	2008	2009	2 yr Ave	Score		
	Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%		0.00	25.00			12.50	0.50	
Non-Executive > Executive						25.00%	4.00%		66.67	66.67		66.67	2.67			
Audit Committees						25.00%	4.00%		200.00	200.00		200.00	8.00			
Related Party Transactions						25.00%	4.00%		100.00	100.00		100.00	4.00			
Market Share						40.00%	16.00%	Per Total Assets	50.00%	8.00%		2.89	2.35		2.62	0.21
						Per Total Deposits	50.00%	8.00%		1.45	1.51		1.48	0.12		
				Financial Reporting	10.00%	4.00%	Financial Information Timeliness	100.00%	4.00%		100.00	100.00		100.00	4.00	
				Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%		0.00	0.00		0.00	0.00	
Quantitative Factors			60%	Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%		5.18	5.71			5.44	0.24
							Net income before tax/total income	50.00%	4.50%		63.94	46.83		55.38	2.49	
	Liquidity	22.50%		13.50%	Total Deposits / Total Loans	100.00%	13.50%		112.95	133.37			123.16	16.63		
					Tier 1 Ratio (%)	50.00%	6.75%		44.70	46.50		45.60	3.08			
	Capital Adequacy	22.50%		13.50%	Shareholders Equity/Total Assets	50.00%	6.75%		31.12	27.43			29.28	1.98		
					Efficiency	10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%		-33.85	-45.78		-39.81	-2.39
	Asset Quality	30.00%		18.00%	NPLs/Gross Loans	70.00%	12.60%		-21.53	-14.00			-17.77	-2.24		
					% Change in Loan Growth	30.00%	5.40%		-13.09	-19.69		-16.39	-0.89			
100%					100%					Total Score		38.40				

Capitec Bank Limited [South African Bank]

Capitec Bank Assessment			Category Weight	Overall Weight		Sub-Factor Weight	Overall Weight	Capitec Bank								
								2005	2006	2007	2008	2009	3 yr Ave	Score		
	Qualitative Factors	40%	Corporate Governance	40.00%	16.00%	Ownership	25.00%	4.00%		-	-	-		-	-	
Non-Executive > Executive						25.00%	4.00%		-	-	-		-	-		
Audit Committees						25.00%	4.00%		-	-	-		-	-		
Related Party Transactions						25.00%	4.00%		-	-	-		-	-		
Market Share						40.00%	16.00%	Per Total Assets	50.00%	8.00%		-	-	-		-
						Per Total Deposits	50.00%	8.00%		-	-	-		-	-	
				Financial Reporting	10.00%	4.00%	Financial Information Timeliness	100.00%	4.00%		-	-	-		-	-
				Regulatory Environment	10.00%	4.00%	Support from Central Bank	100.00%	4.00%		-	-	-		-	-
Quantitative Factors			60%	Profitability	15.00%	9.00%	Operating profit prior to impairments/total assets	50.00%	4.50%		65.83	61.36	46.45		57.88	2.60
							Net income before tax/total income	50.00%	4.50%		20.18	24.71	28.39		24.43	1.10
	Liquidity	22.50%		13.50%	Total Deposits / Total Loans	100.00%	13.50%		135.02	130.87	111.61		125.83	16.99		
					Tier 1 Ratio (%)	50.00%	6.75%		84.00	78.90	83.40		82.10	5.54		
	Capital Adequacy	22.50%		13.50%	Shareholders Equity/Total Assets	50.00%	6.75%		58.79	45.06	50.99		51.61	3.48		
					Efficiency	10.00%	6.00%	Cost/Income Ratio	100.00%	6.00%		-79.82	-75.29	-71.61		-75.57
	Asset Quality	30.00%		18.00%	NPLs/Gross Loans	70.00%	12.60%		-12.86	-16.93	-11.68		-13.82	-1.74		
					% Change in Loan Growth	30.00%	5.40%		-54.14	-118.70	-76.67		-83.17	-4.49		
100%					100%					Total Score		18.95				