MANAGERIAL CHARACTERISTICS AND EARNINGS QUALITY OF LISTED BANKS IN NIGERIA

By

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DECLARATION

I declare that the work in this Dissertation entitled "Managerial Characteristics and Earnings Quality of Listed Banks in Nigeria" has been carried out by me in the Department of Accounting. The information derived from literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other Institution. I take sole responsibility of all errors therein.

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CERTIFICATION

This dissertation entitled MANAGERIAL CHARACTERISTICS AND EARNINGS QUALITY OF LISTED BANKS IN NIGERIA by Taibat, Adebukola AHMED meets the regulations governing the award of the Degree of Doctor of Philosophy (Ph.D.) in Accounting and Finance of Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to Allah (SWT), the most beneficent, most merciful, the wise, the source of all good things, the latent and the everlasting; for his compassion and mercy on me. I will forever be grateful

To my love and children: Abdulhakeem, AbdulBarr, AbdulBatin and AbdulBaqi for their patience and understanding throughout the period of my study.

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ABSTRACT

Despite strict rules and regulations governing firms in the financial system, it is not clear whether managers use opportunistic behaviour to report earnings. This study investigates the relationship between managerial characteristics and earnings quality of listed banks in Nigeria. The managerial characteristics variables used are: performance, managerial ability, managerial ownership and managerial cash holding. This study utilises the Q test model to measure earnings quality of 17 listed banks in the Nigeria Stock Exchange between 2006 and 2010. The study also investigates the association between earnings quality and bank specific and economic specific characteristics; and whether these characteristics impacted significantly on the earnings quality-managerial characteristics relationship. Data for the study were obtained from secondary sources and analysed using logistic regression analysis. The results revealed that managerial characteristics have significant positive effect on the level of earnings quality. The results also revealed that bank specific characteristics have significant effect on the level of earnings quality while size and global financial crisis do not have significant effect on the level of earnings quality of listed banks in Nigeria. Based on these findings, the study recommends among others that regulatory bodies should take the issue of managerial characteristics seriously when taking decisions about management of banks. A situation where management is changed without recourse to these characteristics can lead to earnings management thereby reducing earnings quality. Also, CBN should adopt the use of Q Test model as used in this study to conduct earnings quality assessment test on financial reports delivered to it by banks. This will ensure that signs of low earnings quality are detected early and warning signals could be sent to bank management and other government agencies.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

In response to globalization and liberalization, CBN in 2004 embarked on a banking sector reform through the increase in share capital of banks from two billion naira to twenty five billion naira with effect from 31st Dec 2005. The reform sparked up consolidation processes through mergers and acquisitions in the Nigeria banking sector during and after the window period. The reform was intended to ensure a diversified, strong and steadfast banking sector which will safeguard the depositors' money. The reform tried to diffuse the level of managerial ownership in the banks by reducing the problems of insider abuse and corporate governance. The need to increase their capital base as required by the reform lead many banks to the capital market through initial public offers (IPOs), private placement and the issue of more shares. With virtually all banks being publicly quoted, the regulatory bodies for banks now include the Securities and Exchange Commission (SEC) and the Nigerian Stock Exchange (NSE). The gain of the reform was essentially for banks to enjoy economies of scale and in turn a reduction in the cost of banking transactions thereby leading to better post consolidation performance.

The performance of a bank can be considered as one of the most significant factors that affect its quality of earnings. The need to maintain a level of performance and beat earnings forecast makes managers tend towards earnings management. Burgstahler and Dichev (1997) argue that because large firms are more closely monitored by financial analysts in the market than small firms, they may be tempted to take earnings

management steps to beat analysts' forecasts. Listed banks in Nigeria are big firms by virtue of their post consolidation total asset base and their managers are not immune to earnings management temptation because they are humans. Such temptations may manifest around corporate events like reforms, consolidation, financial distress or deteriorating performance, management change and economic crisis or boom. When these events occur, management uses their opportunistic ideas in estimating the loan loss reserve, asset profile and mapping earnings into accruals and cash earnings.

The financial and economic crisis around the globe has revealed unethical practices by bank executives and board members. It has also raised many questions about the ethical standards of the accounting profession and about the integrity of financial reports issued by professional accountants (Otusanya & Lauwo, 2010). CBN and Nigeria Deposit Insurance Corporation (NDIC) conducted a joint audit of Nigeria banks in 2009. The result of the joint audit indicted eight banks with issues relating to earnings management (Afolabi, 2011). The quality of earnings of Nigerian banks came under scrutiny because prior to the joint audit, most banks were declaring profits with fantastic Earnings per Share (EPS) and paying good dividends to their shareholders and superb bonuses to their management and employees. The management teams of the indicted banks were sacked and new ones appointed. The destructive creation nature of conventional banking business means it is going to be business as usual for the new management teams, which brings to fore managerial characteristics of the management teams. Managerial characteristics are the qualities, features, attributes and decisions that make management team of a bank recognisable. The managerial characteristics that can fundamentally distinguish management teams of banks are their performance, managerial ability, managerial ownership and their attitude towards cash holdings (Fodio & Atoyebi, 2012).

The role of management is essential to the survival of a bank. One of the greatest challenges of bank management is coping with increasing uncertainties caused by the global economy. These challenges range from risk management, exposure to capital market, fluctuation in oil prices to technological trends. Management factors explain why one bank survives while another fails when facing almost identical circumstances (Bovenzi & Nejezchleb, 1985). While many bank managers were unable to predict and identify the condition of the latest global financial crisis, it is unclear if high ability bank managers demonstrated a differential understanding relative to lower ability bank managers. Due to the inherent complexities that were associated with the global financial crisis, the ability of bank managers to make accurate or good estimates was more difficult. It was an issue of survival of the fittest. For example, in Nigeria, the stock prices of banks plummeted and then picked up for some time during the crisis period (Fodio & Atoyebi, 2012). Notably, this goes to show that there is the probability that there exist a relationship between managerial characteristics and the earnings quality of listed banks in Nigeria.

Bellovary, Giacomino, and Akers, (2005) maintain that earnings quality is an important aspect of evaluating an entity's financial health, yet investors, creditors and other financial statement users often overlook it. Consequently, they view earnings quality as the ability of reported earnings to reflect the company's actual earnings, as well as the usefulness of reported earnings to predict future earnings. When the guiding principles of conservatism and objectivity are overstretched, ignored or impaired, earnings quality is compromised.

Empirical studies have been carried out to measure earnings quality, but there is no consensus as to the best or most comprehensive approach. These studies can be classified as those which tried to strictly measure earnings quality (Penman, 2001; Barton & Simko, 2002; Leuz, Nanda & Wysocki, 2003; Putman, Griffin & Kilgore, 2005; Bellovary et al. 2005); and those which measured earnings quality in relation to earnings management that is accruals (Healy, 1985; DeAngelo, 1986; McNicholas & Wilson, 1988; Jones, 1991; Sloan, 1996; Dechow & Dichev, 2002). These studies excluded banks from their sample; this is partly because financial statements of banks are different and cannot be interpreted alongside the financial statements of non-financial firms.

It is against the backdrop of the preceding discussion that the focus of this study is to ascertain the association between the aforementioned managerial characteristics and earnings quality of listed banks in Nigeria.

1.2 Statement of the Problem

The role of managers in the success or otherwise of a corporate firm cannot be overemphasised. Managerial decisions have a direct bearing on the goals and future of the firm. Managers exercise opportunistic behaviour in decision making and this goes a long way in influencing the overall objectives of the firm. The motivation for opportunistic behaviour ranges from higher share prices, performance stimulation to tunnelling opportunities. Certainly, the role of managers cannot be diffused from a corporate firm. Dichev, Graham, Harvey, and Rajgopal (2012) recommend more

research that investigates the human element to provide a deeper analysis of the character of the managers running the firm.

Earnings quality decreases if managers act opportunistically and take actions that disguise the true underlying economic performance of the bank in an effort to enhance their own welfare at the expense of investors (Kanagaretnam, Lim & Lobo, 2011). The need to maintain their place in the industry and also maintain market price drives managers of banks to manage their earnings there by impairing the quality of earnings reported by such banks. In Nigeria, the influx of capital after the 2004 consolidation era put managers under pressure to record high performance thus leading to increased returns to the shareholders (and managers inclusive in terms of managerial ownership and managerial bonuses). Such pressure, have resulted in highly risky behaviour on the part of the management leading to recent near collapse of some banks in Nigeria. Certainly, there is a need to check if this pressure has not affected the quality of earnings reported by the bank managers at the end of the year.

Legally, the provisions contained in the CBN prudential guidelines, BOFIA, CAMA, Accounting standards (SAS 10, IAS 30 and IFRS) and NDIC Act provide significant framework within which management can formulate accounting policies that will enhance the quality of earnings in banks. To buttress this point Ball, Robin, and Wu (2003) suggest that higher quality of earnings is influenced by the incentives of financial statement preparers, not by legal or accounting regimes. Rather, managers' interpretation of these rules and estimations determine the quality of earnings. The most obscure component of earnings and income statements revolves around estimation of assets held in the books of financial institutions. Bank managers are saddled with

estimations such as loan loss provision, trading security, asset impairment and portfolio management. This provokes the question as to how the likely collapse of a bank caused by poor earnings quality be anticipated and prevented through managerial characteristics.

A bank's performance measured in terms of profitability, efficiency, capital adequacy, asset quality, liquidity and growth mainly affect the earnings quality of the bank. DeAngelo, De Angelo and Skinner (1994) and Keating and Zimmerman (1999) have associate weak firm performance with poor earnings quality. The need to maintain their place in the industry and also maintain market price drives managers of banks to manage their earnings there by impairing the quality of earnings reported by such bank. In Nigeria, the influx of capital after the 2004 consolidation era put managers under pressure to record high performance thus leading to increased returns to the shareholders (and managers inclusive in terms of managerial ownership and managerial bonuses). Such pressure, have resulted in highly risky behaviour on the part of the management leading to recent near collapse of some banks in Nigeria. Certainly, there is a need to check if this pressure has not affected the quality of earnings reported by the bank managers at the end of the year.

The managerial ownership structure also affects the psyche of managers and can lead to management of earnings to meet yearnings of the owners. LaFond and Roychowdhury (2008) find that high managerial ownership indicated less conservative accounting principles being followed in practice. Once the principles of conservatism and objectivity are compromised, earnings quality will be impaired. This brings to fore the

fact that ownership structure is a managerial characteristic that determines the magnitude of earnings quality of a firm. In most Nigerian banks, management has a stake in the bank and this could either be directly or indirectly. What is not clear is the likelihood of this managerial ownership affecting the quality of their reported earnings.

Sequel to managerial ownership is the problem of managerial ability in determining the earnings quality of firms. In an extensive study, Demerjian, Lewis, Lev & McVay (2012) suggest that earnings quality is positively associated with managerial ability. However, Francis, Huang, Rajgopal, & Zang (2008), document that earnings quality varies inversely with CEO reputation. The choice of accounting policies is the prerogative of managers, who use their knowhow to determine which policies are best for the firm. During the recent global financial crisis, many banks incurred material losses which affected their financial position (Sanusi, 2011). Bank managers were widely criticized for not having the ability to foresee the imminent crisis.

Another important factor which is worthy of note in banks is the management attitude towards liquidity (as proxy by managerial cash holding). The need to strike a balance between liquidity and profitability is essential for managerial success. Managerial cash holding also affects earnings quality, and its policies have been branded as one of the most important financial policies in the process of managing companies (Mohammadi, Maharlouie & Mansouri, 2012). One of the secondary effects of the global financial crisis is the liquidity problems faced by banks and other financial institutions. The CBN/NDIC joint audit reveals that banks had serious liquidity problems due to bad

loans that were not properly disclosed in the books. In essence, this links cash holding and earnings quality in listed bank but to what extent is this association?

The 2004 banking reform in Nigeria led to an increase in the industry shareholders fund from N227billion in 2004 to N887.4billion and N2.7trillion in 2006 and 2008 respectively. This large volume of fund (capital) put an increasing pressure on bank managers to grow returns from an industry pre- consolidation returns on equity of about 40%. Studies have been conducted to assess the post consolidation performance of banks in order to ascertain if this synergy translates to increased financial performance. Studies such as Cornett & Tehranian (1992); Altunbas and Ibanez, (2004); Umoren and Olokoyo (2007); Adegbaju and Olokoyo, (2008); Appah and John (2011); Okpanachi (2011); Onikoyi (2012) used accounting-based financial ratios. They yielded inconsistent results about changes in performance following mergers and acquisitions. Some of them reported gains (Cornett & Tehranian, 1992; Altunbas & Ibáñez, 2004; Umoren & Olokoyo, 2007; Okpanachi 2011; Onikoyi, 2012), and some no significant difference (Adegbaju & Olokoyo, 2008; Sanni, 2009; Appah & John, 2011).

These studies have been conducted using accounting data as contained in the financial reports. These reports are better understood in terms of accounting ratios as earnings per share, price/earnings ratio which are based on earnings. In most cases, these earnings figures are used without recourse to their quality. The post consolidation studies only checked for performance and not the quality of reported earnings of the banks. Earnings are the main input to investors' and analysts' valuation models, and firms with poor

earnings quality tend to have higher cost of capital (Francis, Lafond, Olsson & Schipper, 2004).

Abdelghayn (2005); Altamuro & Beatty (2008); Kanagaretnam, Lim & Lobo (2009), Lawal (2011) and Cantrell (2012) used modified versions of earlier stated approaches to measuring earnings quality and included banks in their samples but to the best of our knowledge, their researches did not include Nigeria banks, and did not reflect managerial characteristics as stated in this study. Hence, there is a need to investigate the association between managerial characteristics (performance; managerial ownership; cash holdings; and managerial ability) and earnings quality of listed banks in Nigeria. Size, liquidity risk, deposit growth and global financial crisis are included as control variables to check for the effect of bank specific characteristics and economically related characteristic on the likely relationships. This study addresses the following research questions:

i. What is the association between earnings quality and managerial characteristics of listed banks in Nigeria during the post consolidation period?
ii. To what extent does performance affect earnings quality of listed banks in Nigeria?
iii. Does managerial ownership influence earnings quality of listed banks in Nigeria?
iv. To what extent is the association between managerial cash holding and level of earnings quality of listed banks in Nigeria?
v. What is the effect of managerial ability on the level of earnings quality of listed banks in Nigeria?

1.3 Objectives of the Study

This study primarily investigates the association between earnings quality and managerial characteristics of listed banks in Nigeria. The specific objectives of the study are to:

i. Determine the effect of performance on the earnings quality of listed banks in Nigeria.
ii. Establish the effect of managerial ownership on the earnings quality of listed banks in Nigeria.
iii. Identify the effect of managerial cash holding on the earnings quality of listed banks in Nigeria.
iv. Examine the effect of managerial ability on the earnings quality of listed banks in Nigeria.

1.5 Research Hypotheses

The hypotheses of this study in the null form are as follows:

i. Managerial characteristics are less likely to have a significant effect on level of earnings quality.
ii. The likelihood of high earnings quality will be lower in banks with poor performance.
iii. The likelihood of high earnings quality will be lower in banks with low managerial ability.
iv. The likelihood of high earnings quality will be lower in banks with low managerial ownership.
v. The likelihood of high earnings quality will be lower in banks with negative net operating cash flow.

The study controlled for bank specific characteristics and economically related characteristics. The remaining two hypotheses are based on these control factors.

vi. Managerial characteristics are less likely to have a significant effect on level of earnings quality taking bank specific characteristics as factors.

vii. Managerial characteristics are less likely to have a significant effect on level of earnings quality taking global financial crisis as factor.

1.6 Significance of the Study

This study will contribute to accounting literature with respect to measurement of earnings quality in banks. This study uniquely modified the Putman et al. (2005) Q Test model to suit measuring earnings quality of banks and this serves as a contribution to the literature on measurement of earnings quality especially for banks.

In relating earnings quality of firms to managerial characteristics; this study will bring to fore the likely relationship between earnings characteristics and managerial ability, managerial ownership, cash holding and performance. The combination of these factors showing their effect is another contribution to the literature on earnings quality. And it will go a long way in helping to solve the riddle surrounding issues of bank distress linking to managers.

This study will be of assistance to bank regulators and policy makers. The rationale for this is that the recent banking crisis has placed particular emphasis on earnings quality of banks, especially in relation to loan write-offs and adequacy of loan loss provisions. It has in turn made some people argue for increased control, while others argue that the

failure of existing regulation to avert these events indicates that an additional regulation is pointless.

The study will be of importance to the management of the banks and their employees by showing the effect of their contribution to the overall efficiency of the bank. The depositors, creditors and shareholders of banks will also find the results of this study useful in analysing the financial statements of their banks for safety of their deposits and investments. The earnings quality calculated in this study may well be used alongside other ratios to verify the well being of the bank. The results of this study are expected to assist depositors and investors who are among the badly affected parties in the event of bank distress and eventual liquidation by providing them with information about the quality of reported bank earnings.

1.7 Scope of the Study

This study is restricted to all banks quoted on the Nigerian Stock Exchange as at 31st December 2010. The study covers a period of five years from 2006 to 2010. The time frame starts from 2006 because it marks the beginning of the post reform period. The time frame also ended in 2010 because post 2010 has some events that could affect the result of the study. Examples of such events are consolidation (recently between Ecobank and Oceanic bank; Access and Intercontinental bank; FCMB and Fin bank), International Financial Reporting Standard (IFRS) compliance and nationalization which could affect banks in the population. In line with these, the study does not include other forms of reforms (such as 2001 recapitalization; universal banking principle) that have taken place in the Nigerian banking sector outside the 2004/2005 CBN reform

programme. Systematic elimination (filtering) was used to get seventeen banks that are most suitable for the study.

The study does not include the political aspect of bank managers and their relationship with the government. The study uses Return on Assets (ROA) as a performance yardstick and does not analyse any other performance ratio. The other performance ratios like Return on Equity (ROE) and Yield on Earning Assets (YEA) were excluded because, for ROE, the value of equity is quite low when compared to the total asset of the company due to leverage in banks. Also, the YEA is excluded because it excludes non earning assets in its computation.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter deals with a review of the literature relevant and related to earnings quality and managerial characteristics of listed banks. Areas that are covered in this chapter include an overview of the Nigerian banking sector, the concept of earnings quality and measures of earnings quality and a review of literature on the relationship between the managerial characteristics and earnings quality are also covered.

2.2 An Overview of the Nigerian Banking Sector

The banking sector in Nigeria has gone through different reforms since the enactment of the first banking ordinance of 1952.These reforms are driven by the need to deepen the financial sector and reposition the Nigerian economy for growth; to become integrated into the global financial, structural design and evolve a banking sector that is consistent with regional integration requirements and international best practices. Furthermore, the reform agenda is aimed at addressing issues such as governance, risk management and operational inefficiencies; the centre of the reforms is around firming up capitalization (Ajayi, 2005).

Prior to the reform initiated by the Central Bank of Nigeria (CBN) in 2004, the Nigerian banking sector boosted of eighty nine banks which were operating either as weak, medium, regional or big banks. Many banks were family-owned and existed only because of their close connections to Nigeria's political elite. Some of these banks were barely surviving and have been losing depositors' money. Adeyemi (2006) reveals that the statistics of the banking system as at June, 2004, showed that marginal and unsound

banks accounted for 19.2% of the total assets, 17.2% of total deposit liabilities, while industry non-performing assets was 19.5% of the total loans and advances.

Soludo (2004) reveals that the public sector accounted for over 20% of aggregate deposits in the industry. For some banks, the dependency ratio was as high as 50%. This was not a healthy development from the perspective of long term planning, given the volatile nature of these deposits. With the huge deposits from the public sector, Nigerian banks were not under pressure to aggressively exploit the retail end of the market to source for more stable funds that would have been channelled to support the real sector. With these statistics, Lemo (2005) notes that there existed a threat of systemic distress judging by the trigger points in the CBN Contingency Planning Framework of December 2002. The trigger points stipulated a threshold of 20% of the industry assets, 15% of deposits being held by distressed banks and 35% of industry credits being classified as nonperforming. Nigeria then, had 89 banks with many having capital base of less than US$10 million (₦1.5billion, approximately) and about 3,300 branches. The South African bank, Absa, for instance, had larger assets than all Nigerian banks put together (Soludo, 2004).

Over the past years, Nigerian banking industry was fully regulated, but in recent years, it became increasingly competitive due to the effect of globalization and liberalization of financial markets. Intense competition and financial deregulation have prompted a wave of mergers and acquisitions (M&As) in the banking industry throughout the world, starting from United States of America (USA) and reaching other parts. Banking sector consolidation has become prominent in most of the emerging markets, as financial institutions strive to become more competitive and resilient to shocks (Anyanwu, 2010).

The increase in share capital of banks from two billion naira to twenty five billion naira by the Central Bank of Nigeria in 2004 with effect from 31st Dec 2005 sparked up mergers and acquisitions in the Nigeria banking sector during that window period and beyond. The reform resulted in the compression of 74 banks, which accounted for about 93 per cent of the industry's total deposit liabilities, into 25 new banks as at 31st December 2005 through mergers and acquisitions and others were liquidated. According to Adam (2005) and Adegbaju and Olokoyo (2008), bank or corporate consolidation could be achieved by way of mergers and/or acquisition, recapitalisation and proactive regulation. The bank consolidation is more than mere shrinking of the number of banks in any banking industry. It is expected to enhance synergy, improve efficiency, induce investor focus and trigger productivity and welfare gains (Nnanna, 2004).

Ningi and Dutse (2008) discover that the consolidation of the banking system has transformed Nigeria's financial system and created opportunities for financial institutions and market participants. Umorem and Olokoyo, (2007) analyse the performance ratio of seven (7) mega banks in Nigeria using descriptive analysis of the performance ratios and Correlation Analysis to test the impact of the consolidation on the performance measurement parameters. They discover that, on average, bank consolidation led to improved performance. It is important to note that their period of study was two years pre-merger and one year post merger. This uneven time frame is a factor that may affect the result posted. Also, economies of scale need longer time to materialise (Focarelli & Panetta, 2003).

Okpanachi (2011) carries out an analysis of the impact of mergers and acquisitions on financial efficiency of banks in Nigeria. Using a t-test statistics, he compares the pre-mergers and acquisitions' indices with the post- mergers and acquisitions' indices from 2002 to 2008. His result shows that the post-mergers and acquisitions' period was more financially efficient than the pre-mergers and acquisitions period. This result was obtained by using gross earnings, profit after tax and net assets of the three banks without subjecting these figures to ratio analysis or lagging them with the total assets of the banks. To buttress this, Boyd & Runkle (1993) find that larger banks are more highly leveraged and less profitable in terms of asset returns.

Onikoyi (2012) evaluates the effect of mergers and acquisitions on performance of banks in Nigeria using regression analysis on accounting data. His findings show that mergers and acquisitions increased shareholders' funds, investor's confidence as well as financial stability and operational efficiency of the consolidated banks. This study is also similar to Okpanachi (2011) in terms of variables used in determining the results. Appah & John (2011) study the efficiency effect of mergers and acquisition in Nigeria banks using paired sample t-test statistics on accounting ratios collected from ten banks for a period of 2003 to 2008. Their findings reveal that there is no significant difference between the Return on Equity (ROE) of banks pre and post mergers and acquisition. They used return on equity as the performance ratio and did not make industry adjustments to the individual bank ratios in order to improve the reliability of the performance ratio (Akben-Selcuk & Altiok-Yilmaz, 2011; Healy, Krishna & Ruback, 1992; Cornett & Tehranian, 1992). The statement of financial position of banks is

known to have low equity value when compared to some other assets like loans and advances, the use of return on assets could have given a better picture of the situation.

Elumilade (2010) investigates the impact of mergers and acquisitions on the efficiency of financial intermediation in the Nigerian banking sector using a model that regresses interest rates on key financial variables. He estimates two models: one for the lending activity and the other for the deposit activities. The model for lending activity has interest rate on loan as the dependent variable and deposit rate as the dependent variable in the deposit model. His findings provide evidence in support of the view that the 2004 consolidation programme the banking industry had improved competitiveness and efficiency of the borrowing and lending operations of the Nigerian banking industry.

The studies on performance of mergers and acquisition in Nigeria have used accounting data around the consolidation period. These data were not harmonized with the quality of earnings of the financial reports. The increased capital base which led to more funds at the disposal of banks' management placed pressure on them to deliver high returns to their shareholders. More so, this could have resulted in highly risky behaviour on the part of the management leading to recent collapse of some banks in Nigeria. Jensen (2005) maintains that the recent rise in corporate scandals may be linked with agency costs of overvalued equity: when a firm's equity is overvalued, managers are forced to take value-destroying actions (some perhaps fraudulent) to satisfy the market's unrealistic growth expectations. One action that firms often take is to acquire other companies using their overvalued equity. Consequently, it is evident in the study of Aharony, Wang & Yuan (2010); they posit that the parent companies use tunnelling opportunities in exploiting economic resources from minority shareholders for the benefit of the parent company.

This study aligns with the position of Appah & John (2011) that there could be no significant difference between pre consolidation and post consolidation performance as used in the context of this study with regards to overvalued assets. How then can overvalued equity be recognised or can quality earnings be identified?

The effect of global financial crisis was felt in the Nigerian banking sector despite the assurances of the apex body. The exposure of the banks to the capital market put some banks in grave condition coupled with liquidity problems. Their margin trading loans stood at about N900 billion as at end of December 2008, which represented about 12 percent of the total credit of the industry or 31.9 percent of the shareholders' fund. Additionally, excessive exposure to oil and gas sector also resulted into erosion of funds in some banks. As at end of December 2008, the banks' total exposure to the oil industry stood at over N754 billion, representing over 10 percent of the total credit of the banking sector or 27 percent of the shareholders' fund (Sanusi, 2010).

According to Afolabi (2011), the challenges posed by the banking consolidation programme that was concluded in 2005 and other developments within the economy, made the nation to experience another round of financial crisis in 2008/2009, as revealed by the CBN/NDIC joint Special Examination carried out in 2009. The Examination results revealed among others, that 10 of the 24 deposit money banks were in grave financial condition. These banks, in aggregate, represented significant systemic risk as they held approximately 30 per cent of the deposits in the Nigerian banking system. The findings from the examination led to the removal of eight (8) CEOs of the distressed banks and members of their executive management teams and their replacement with

new executive managements appointed by the CBN. The CBN also injected N620 billion in the affected banks as tier 2 capital. Out of the 10 banks, owners of Wema Bank and Unity Bank Plc were able to adequately re-capitalize their banks. The efforts of the Regulatory Authorities to ensure that the remaining eight banks were recapitalized were stalled by various court injunctions obtained by the shareholders of the banks. In order to address that challenge, the CBN gave the banks a deadline of 30th September, 2011 to recapitalize or have their licences revoked. Prior to the deadline, five (5) banks had executed Transaction Implementation Agreements (TIAs) and held court-ordered Extra Ordinary General Meetings where the shareholders approved the recapitalization/merger transactions. The banks and their preferred investors were: Intercontinental Bank Plc (Access Bank Plc); Oceanic Bank Plc (Ecobank Plc); Union Bank Plc (Shareholders and African Capital Alliance Group); Finbank Plc (First City Monument Bank Plc); and Equitorial Trust Bank Plc (Sterling Bank).

However, the three (3) banks that could not find a preferred investor/merger partner had 3 bridge banks established for them by NDIC to assume their assets and liabilities on a going concern basis. The bridge banks were Mainstreet, Keystone and Enterprise Banks for former Afribank Plc, BankPHB Plc and Springbank Plc respectively. The Bridge banks were immediately sold to AMCON through share subscription, while the banking licence of Afribank Plc, BankPHB Plc and Springbank Plc were revoked by the CBN.

2.3 Conceptual Issues

This section covers three conceptual issues namely: managerial characteristics, earnings quality and earnings management.

2.3.1 Conceptualization of Managerial Characteristics

The place of management in the survival of a firm cannot be over looked. The role of managers in shaping corporate practices has been virtually ignored in the economics and finance literature, however, there is a large body of work in the management science literature analysing the determinants of decision-making among CEOs (Bertrand & Schoar, 2003). They maintained that manager special effects matter both economically and statistically for the policy decisions of firms. Accordingly, Hambrick (2007) and Kinuu, Murgor, Walter, Letting & Aosa (2012) posit that top executives certainly matter to company outcomes as they make decisions and engage in acts that affect the health, wealth, and welfare of firms; but they do so as imperfect human beings. The downturn in global economy has turned the beam on accountability of management and their strategy on policy formulation. Strategic management theory has become increasingly concern with top level managers and their effect on strategy formulation and performance (Hambrick & Mason, 1984 and Waldman, Ramirez, House & Puranama, 2001). One of the paramount challenges of management is coping with increasing uncertainties caused by the global economy downturn and challenges of risk management. Managerial characteristics come to fore when managers are faced with these challenges coupled with exposure to the capital market, technological trends and fluctuation in oil prices.

Managerial characteristics are the qualities, features, attributes and decisions that make management team of a firm recognisable. Bovenzi and Nejezchleb (1985) maintain that what essentially differentiate firm managers are the managerial factors which explain why one firm fails and another survives when faced with identical circumstances. A common attribute that distinguishes management is performance. As establish by Mackey (2008), the management effect on corporate performance is substantially more important than that of industry or firm effects. In a typical management accounting setting, performance measurement is based on controllability principle that is, managers are assessed based on the factors that they control (see Choudhury, 1986; Atkinson, Banker, Kaplan & Young, 1997; and Horngren, Foster & Datar, 1997). The top management in a firm is taken as an investment centre which means that return on investment will be an appropriate measurement yardstick. One major yardstick of assessing a bank management is taken as the return on asset (ROA). ROA is a useful measure of how well a firm's management is doing because it indicates how well the firm's assets are being used to generate profits. Managerial performance is an important managerial characteristic that is used to distinguish one management team from another due to the risk taking ability attached to it (Kimball, 1998).

The ability of management to identify and manage risk in periods of unending uncertainties is also an important managerial characteristic. Managerial ability is the inherent attribute which management use to turn over resources of a firm. The choice of accounting policies is the prerogative of managers, who use their knowhow to determine which policies are best for the firm. During the recent global financial crisis, many banks incurred material losses which affected their financial position (Sannusi, 2011). Bank managers were widely criticized for not having the ability to foresee the imminent

crisis. Managerial ability is an important managerial characteristic because a firm is perceived by the image of its management team and by extension can have profound effect on corporate economic benefit. Managerial ability has been measured in different ways- as residual of efficiency after controlling for stakeholders variables (Barr &Siems, 1997; Grace & Leverty, 2011; Demerjian, Lewis, Lev & McVay, 2012 and Cantrel, 2012), CEO reputation with the number of articles mentioning the executive (Francis, Huang, Rajgopal, & Zang, 2008), and the educational qualification of the executive managers (Bertarnd & Schoar, 2003 and Switzer and Bourdon, 2011). These studies have predicted that managerial ability has an a direct relationship with firm performance. Managerial ability is an intangible asset which is a latent important managerial characteristic in any firm especially in banking business where a lot of estimation, forecasting and risking is involved.

Hu & Zhou (2008) identifies managerial ownership as an important managerial characteristic, they posit that managers holding less equity of their banks take less risk According to them, the relationship between managerial ownership and firm performance is non-linear and the turning point at which the relation turns negative occurs at ownership above 50%. LaFond and Roychowdhury (2008) find that high managerial ownership indicated less conservative accounting principles being followed in practice. According to agency theory, the conflict of interest occurs when both parties involved in the agency contract (the owner and manager) want to maximize their own wealth, thus; creates agency conflict. Managerial ownership provides incentives that can have serous effect on agency problem (Ariff, 2012). Managerial ownership could be in form of family ownership, direct ownership and indirect ownership due to nomination on the board through institutional ownership or government. It is an important

managerial characteristic, and the relationship it has with firm performance is unclear (Simoneti & Gregoric, 2004).

Chen (2008) affirms that cash holding policies are controlled by management and the motivation to keep cash is bore out of managers' personal interests. The management attitude towards liquidity is an important managerial characteristic. This attribute is essential because investment in short time securities is one of the functions of bank manager. Maintaining an investment portfolio has some element of risk attached to it and it is essential in periods of uncertainty, hence management policy towards cash holding is an vital managerial characteristic. Dittmar and Duchin (2012), suggest that there is a relationship between professional experience of managers and cash holding policy of the firm. They maintain that professional experiences have an effect on managerial appointments and corporate policies which varies throughout their career. Jensen (1986) develop the free cash flow hypothesis, predicting that shareholders (including managerial ownership) will choose to limit managers' access to free cash flow to mitigate agency conflicts. Shareholders will want cash to come to them in form of dividend and retained earnings while management will also want to invest such cash. Free cash makes it easier for managers to invest in risky businesses or ventures but management must have the ability to take risk and operate in period of increasing uncertainty. There has to be a trade-off to stick to any cash holding policy (Bhat & Bachhawat) and this is an important managerial characteristics.

Bertrand & Schoar (2003) considered managerial characteristics as observable traits in the form of birth cohort and MBA graduation. They analyse the extent to which corporate decisions are affected by these two characteristics, after controlling for fixed

differences across firms and other time varying firm factors. They discover that older generations of CEOs appear overall more conservative in their decision-making while managers who hold an MBA degree appear overall to follow more aggressive strategies. But we are considering managerial characteristics based on attributes which can easily be gotten from the financial statements and are calculated with less estimation. These characteristics are managerial performance, managerial ability, managerial ownership and managerial cash holdings.

2.3.2 The Concept of Earnings Quality

The theory of earnings quality was first propounded by financial analysts and Stock Exchange agents (Samadiyan & Rezaei, 2012). Analysts discover that the reported profits do not show the firms' profitability as it is imagined due to the salient points inherent in analyzing accounting information. Several authors have explained earnings quality in different forms depending on the angle from which these authors have viewed earnings in whole or in parts. According to Dechow, Ge and Schrand (2009), earnings quality is worthless without specifying the decision context, because the pertinent features of the firm’s fundamental earnings process differ across decisions and decision makers.

According to Yee (2006), earnings quality can be seen as having two guises- a fundamental attribute and financial reporting attribute. The fundamental attribute is the accounting profitability measure that estimates a firm’s ability to make future dividend payments and, on the other hand, the financial reporting attribute is the imperfect signal of fundamental earnings that a firm announces. He further viewed earnings quality as the speed and degree of exactness with which reported earnings divulge fundamental

earnings, the higher the earnings, the more quickly and precisely reported earnings convey shocks to the present value of expected dividends. Mc Clure (2010) identifies the three characteristics of quality earnings as those earnings that are repeatable, controllable, and bankable. Sales growth and cost cutting are the best routes to high quality earnings, both are repeatable. Earnings figures that closely resemble cash (cash sales is controllable) that is left after expenses is deducted from revenues are said to be of high quality. Also, the fact that customers can call off or refuse to pay after the arrival of receivables creates large uncertainties, which lower earnings quality. When earnings reported can be verified as cash in the bank, then, it can be said to be bankable.

Kamp (2002) observes that three elements encompass aspects of quality earnings; a clear indication of recurrent costs and revenues, clear indication of performance of the firm's core business, and a direct link of cash flow with earnings. The quality of earnings can be potted as the degree to which earnings are cash or noncash, recurring or nonrecurring, and based on clear-cut measurement or estimates that are subject to change. Evaluating earnings quality helps the financial statement users to make judgments about the sureness of current earnings and forecast future earnings (Deloitte & Touche, 2002).

From literature, earnings quality has four main attributes, persistence, predictability, value relevance and earnings management. High persistence is positively related with high earnings quality, since it will indicate that earnings are stable, sustainable and less volatile (Perotti & Wagenhofer, 2011). The predictability attributes increases the precision of earnings forecasts, the higher the earnings quality, the more useful earnings are in predicting future earnings. For value relevance, earnings are of high quality if they are able to explain the firm’s market price or returns. Earnings management essentially

reduces the quality of reported earnings when managers use opportunistic behaviour to report earnings based on information available to them. Bhattacharya, Daouk and Welker (2003) and Barth and Schipper (2008) propose transparency as a desired attribute of high earnings equality.

Many studies use accruals as proxy for earnings quality (Healy, 1985; DeAngelo, 1986; McNicholas & Wilson, 1988; Jones, 1991; Sloan, 1996; Dechow & Dichev, 2002; Aboody, Hughes and Liu, 2005; Francis, Lafond, Olsson and Shipper, 2005); and they all measure accruals from reported earnings. Earnings quality is being used in numerous empirical studies to show trends over time (Putman et al. 2005); to evaluate changes in financial accounting standards and corporate governance (Xie, Davidson & DoDalt, 2003; Larcker, Richardson & Tuna, 2007; Mahmoud, Vaghfi, Soltani & Esmaeli, 2012); to compare financial reporting systems in different countries (Leuz, Nanda & Wysocki, 2003) and to study its effect on the cost of capital (Francis, LaFond, Olsson & Schipper, 2005; Lawal, 2011).

According to Bellovary et al. (2005, p.32), "earnings quality refers to the ability of reported earnings to reflect the company's true earnings, as well as the usefulness of reported earnings to predict future earnings." Earnings quality may also refer to the stability, persistence, and sustainability of reported earnings. High quality earnings accurately reflect the company's current and past operating performance, and are indicative of future operating performance. Companies with poor earnings quality are not necessarily engaging in earnings manipulation; in most cases, low earnings quality reflects a likelihood of deteriorating fundamentals relative to the past operating performance. (StarMine, n.d.).

It is necessary to understand that low earnings quality are not automatically indicative of poor financial reporting or the misapplication of accounting policies, procedures, and estimates. In some cases, low earnings quality is due to transactions that by their nature are more biased or have a higher level of risk or uncertainty. Dechow and Dichev (2002) note that the determinants of earnings quality are size, proportion of losses, sales volatility, cash flow volatility, and operating cycle. Stickney, Brown and Wahlen (2004) note that quality accounting information should be a fair and complete representation of the firm's economic performance, position, and risk. Further, quality accounting information should provide relevant information to forecast the firm's expected future earnings and cash flows.

The quality of accounting information is influenced by a range of factors, most of which stalk from the demand for such information for use in contractual arrangements and the incentives and opportunities of management to manage the reported numbers. The need to unnecessarily maintain high earnings leads many managers into trying to manage their earnings. These earnings management usually take place around events such as business combinations. Studies have shown that acquirers tend to overstate earnings before announcements of their business combinations. Erickson and Wang (1999); Rahman and Bakar (2002) and Louis (2004) suggest that the stock for stock acquirers manage earnings upward in the period prior to the acquisition.

In line with the above discussions, this study views earnings quality as the ability of reported earnings to be suitable for decision making. This study supports the view of Mc Clure (2010) that earnings are of high quality when they are repeatable, controllable and

are bankable. When earnings have these features then it is very easy for other attributes to be inherent in such earnings. For these attributes to be in place, managers need to put resources to proper use so that the determinants of earnings quality as noted by Dechow and Dichev (2002) can easily be measured and assessed. The issue of earnings quality surrounding business combinations as highlighted by Erickson and Wang (1999); Rahman and Bakar (2002) and Louis (2004) is also alluded to by this study despite other events that can cause distortion in earnings quality.

2.3.2.1 Measuring Earnings Quality

There is no agreed method for measuring earnings quality in literature. However the standard setters are moving from performance evaluation towards balance sheet focus that is, measuring assets and liabilities. Balance sheet items are items that reoccur and are carried over or brought forward year in year out. In essence, a good earnings quality measure must incorporate statement of financial position items as part of its variables. Some of these various methods used for measuring earnings quality are briefly discussed below

2.3.2.1.1 Penman's Measure of Earnings Quality

Penman (2001) indicates that the aim of accounting quality analysis is to differentiate the hard amount resulting from cash flow, from the soft amount resulting from accruals accounting. This measure views earnings quality from the degree to which earnings can be efficient cash generators. He measured earnings quality as the ratio of cash flow from operation divided by the net income. The decision rule is that the smaller the ratio, the higher the quality of earnings. This is measured as follows:

$$\text{Earnings Quality} = \frac{\text{Cash flow from operation}}{\text{Net Income}}$$

2.3.2.1.2 Barton and Simko's Measure of Earnings Quality

Barton and Simko (2002) investigate the extent to which Generally Accepted Accounting Principles (GAAP) and their implementation guidelines constrain managers from optimistically biasing earnings. They examine the likelihood of reporting various earnings surprises for 3,649 firms during 1993–1999. They use the opening balance of net operating assets scaled by sales as a proxy for managers' previous biased reporting choices. This proxy is consistent with overstated net assets being less efficient at producing a given level of sales, all other things being equal. The proxy is used to depict earnings quality and when valid, firms with greater levels of net operating assets scaled by sales will have reported bigger cumulative levels of income-increasing accruals in the past. Therefore, this method measure earnings quality as a surprise indicator, which is calculated as the ratio of the beginning balance of net operating assets relative to sales. The decision rule is that the smaller the ratio the higher the quality of earnings. This is measured as follows:

$$\text{Earnings Quality} = \frac{\text{Net Operating Asset at beginning}}{\text{Sales}}$$

2.3.2.1.3 Leuz, Nanda and Wysocki's Measure of Earnings Quality

Based on the definition of earnings management as the alteration of firms' reported economic performance by management to either mislead some stakeholders or to affect contractual outcomes, they argue that incentives to misrepresent firms' performance through earnings management occur, to a certain extent, from a conflict of interest between firms' insiders and outsiders. They provide evidence that earnings management is positively associated with the level of private control benefits enjoyed by insiders across thirty-one countries with varying institutional and legal factors which affect the reporting process. They measured earnings quality around inconsistency that may occur due to the misrepresentation of earnings figures by managements. They measured this

inconsistency as the standard deviation of operating income divided by the standard deviation of cash flow from operation. The decision rule is that the smaller the ratio, the lower the quality of earnings and it is because a higher ratio signifies presence of more earnings management. This is measured as follows:

$$\text{Earnings Quality} = \frac{\text{Standard Deviation of Operating Income}}{\text{Standard Deviation of cash flow from operation}}$$

2.3.2.1.4 Bellovary, Giacomino and Akers's Measure of Earnings Quality

Bellovary et al. (2005) propose an Earnings Quality Assessment (EQA) model for measuring earnings quality. The EQA recognizes the weakness of GAAP and takes into account factors that are expected to affect future earnings but that are not clearly disclosed in the financial statements. The EQA is a combination of eight models of measuring earnings quality, of which only one has been empirically tested for evidence of usefulness related to quality of earnings. The EQA is like a report and it contains twenty criteria with the evaluator assigning a point value ranging from 1 to 5 for each of the twenty criteria, which means a possible total range from 20 to 100 points. A score of 1 indicates a negative effect on earnings quality and a score of 5 indicates a very positive effect on earnings quality. The total points are graded based on the following scale:

85-100 points = A,
69-84 points = AB,
53-68 points = B,
35- 51 points = BC, and
20--34 points = C.

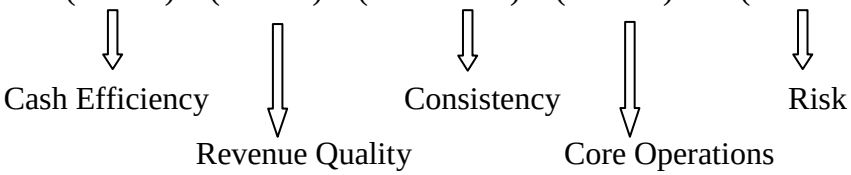
Given management's inherent bias, they recommend that auditors should complete the EQA, generate a report, and communicate the findings to management and the audit committee. The EQA report should be attached to the financial statements with

the audit report, in order to improve the reliability of the financial report when it gets to the public domain.

2.3.2.1.5 Putman, Griffin and Kilgore's Measure of Earnings Quality

Putman et al. (2005) propose a model that could be used to measure earnings quality of corporate firms called the Q Test. The model consists of variables from the three major financial statements required by generally accepted accounting principles (GAAP) – profit and loss account, balance sheet and cash flow statement. This Q Test model is designed along the same line as Altman's Z score.

Q Test = 10(CFO/S) + (IS/IAR) + (CFO/EBIT) + (COI/NI) + 10(CFO/TL)



Variable Definitions

Symbol	Description	Financial Statement
CFO	Cash flow from operating activities	Cash Flow Statement
S	Sales	Income Statement
IS	Increase in sales from previous year	Income Statement
IAR	Increase in accounts receivables	Balance Sheet
EBIT	Earnings before interest and taxes	Income Statement
COI	Income from continuing operations	Income Statement
NI	Net Income	Income Statement
TL	Total liabilities	Balance Sheet

Source: Putman, Griffin and Kilgore (2005)

Each variable is calculated in a way to place equal weight (1/5) on it in the total mix. Cash flow from operating activities (CFO) divided by sales is used to measure efficiency

of cash collections from sales. They considered ten percent as a good return of cash on sales in a given year, so the annually computed ratio is multiplied by ten. In the same vein, they assumed that if a company pays all of its liabilities in 10 years from the current stream of CFO, it is considered financially healthy. Accordingly, to give equal weight to the measurement they multiplied the calculated ratio by ten.

The other three ratios are premeditated towards a target of one. The ratio of annual percentage increase in sales divided by percentage increase in accounts receivable is used to evaluate the quality of reported revenue. A larger increase in accounts receivable than sales indicates poor quality earnings. In the case of a decline in sales, the ratio must be inverted. Thus, if sales decrease and accounts receivable decrease by a lesser amount (an unfavourable trend), the ratio will be less than one because of the inversion process. Cash flow from operating activities divided by earnings before interest and taxes compares convergence of cash provided by operations to reported operating earnings before interest and taxes. Net income from continuing operations is used in the equation for comparison to the bottom line net income figure, which often includes discontinued operations and other charges that detract from predictability and persistency of reported earnings.

The results of the Q Test measurements are to be read as follows. First, anything below 5.0 indicates suspect quality of earnings. When one obtains a measurement at this level, it should lead to further investigation of the company involved in determining the quality of other reported financial information such as asset values and liabilities. Next,

if the Q Test falls between 5.0 and 9.99, the reported earnings is accepted as better than average quality. Finally, any Q Test over 10.00 (double digit) indicates superior quality earnings and, therefore, reported earnings can be relied upon as an indication of true earnings and consequently true corporate growth.

2.3.3 Earnings Management

Lev (1999) investigates the usefulness of financial information to investors and finds that this usefulness has been deteriorating over the past years because the current reporting system adopted by the accounting profession does not reflect the fast changes in firms' operations and economic conditions. Earnings management is closely related to earnings quality because earnings management decreases earnings quality (Dechow & Schrand 2004).

According to Healy and Wahlen (1999,p368) "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers." Scott (1997) identifies earnings management as one of the factors that can affect the quality of reported earnings of a firm. Earnings management is a concept which is also referred to as income smoothing, creative accounting, earnings smoothing and cosmetic accounting depending on the literature used and the geographical location of the writer.

Merchant and Rockness (1994) view earnings management as any action on the part of management which affects reported income, provides no true economic advantage to the

organization and may in fact, in the long-term, be detrimental. Scott (1997) defines earnings management as the choice of accounting policies so as to achieve some specific managers' objective. Similarly, Schipper (1989, p.92) describes earnings management as "a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain".

Dechow and Skinner (2000) are of the view that there is no clear definition of earnings management but they made a clear distinction between fraud and earnings management. They maintained that the target of the firm (performance in the capital market) determines if earnings management will be practiced or otherwise. The choices open to management may be acceptable practices or otherwise, which makes any chosen one to either be fraudulent or just mere earnings management within the confines of GAAP. This difference between fraud and earnings management is depicted in figure 1.

Figure 1, shows distinction between fraud and earnings management as coined by Dechow and Skinner (2000)**.** In line with the figure, Ortega and Grant (2003) posit that earnings management uses the flexibility in financial reporting to modify results of a firm. Earnings management usually consists of one or a combination of

The Distinction between Fraud and Earnings Management

	Accounting Choices	"Real" Cash Flow Choices
	Within GAAP	
"Conservative" Accounting	Overly aggressive recognition of provisions or reserves Overvaluation of acquired in-process R&D in purchase acquisitions Overstatement of restructuring charges and asset write-offs	Delaying sales Accelerating R&D or advertising expenditure
"Neutral" Earnings	Earnings that result from a neutral operation of the process	
	Understatement of the provision for bad debt	Postponing R&D or advertising expenditure
"Aggressive" Accounting	Drawing down provisions or reserves in an overly aggressive manner	Accelerating sales
	Violates GAAP	
"Fraudulent" Accounting	Recording sales before they are "realizable" Recording fictitious sales Backdating sales invoices Overstating inventory by recording fictitious inventory	

Source: *A comparative study of models to reveal earnings management by Anders Hedström och Shekou Tounkara (2011, p7).*

over-statement of revenue, understatement of expenses, and misrepresentation of accruals. Such earnings management practices typically cause long-term disastrous results (Putman et al. 2005). Earnings management can also become very dicey, which with time can be more and more aggressive until they create material misstatements in financial statements (Clikeman, 2003). Accordingly, Rath & Sun (2008) maintain that earnings management directly affects the overall integrity of financial reporting and

significantly influences resource allocation in the economy. Many studies have identified several forms of motivations that can lead managers to want to manage their reported earnings.

2.3.3.1 Earnings Management Techniques

There are different techniques used by managers of corporate firms to manage their earnings. Flexibility in accounting choices is essentially one of the major sources for earnings management. The measurement of accruals is based on the management's objective and informed judgement which could be misleading, and used to create or smooth earnings. Examples of earnings management techniques are underestimation of insurance liabilities, creation of special purpose entities to hide debt (Eron), franchisees revenue (Boston Chicken) cash balance overstated, capitalization of expenses, disclosure of loans, network capacity swaps, long term lease and cookie jar reserves.

The loan loss provision could be used as a cookie jar to increase earnings. Under providing for loan losses enhances earnings in the short run, which could lead to the collapse of the bank in the long run. By under providing, banks are overstating the actual earnings while simultaneously postponing the losses and provisions associated with loans that will continue to default. Through estimations, the bank management team can manage its reported earnings in order to improve performance. There are incentives that could make them want to either over or under estimate in financial reporting. These incentives arise from litigation costs, market competition, cost of capital concerns, prominence concerns, political pressure and concerns for their own wealth (Cantrell, 2012). In periods of reforms, bank managers are also saddled with survival strategies in form of raising capital through initial public offer (IPO) and consolidation strategies

adopted by Nigerian banks in the 2004/2005 CBN's reform period which could have effect on their earnings quality.

2.3.3.2 Motivation for Earnings Management

The motivations for managers to manage their reported earnings are as enumerated below

2.3.3.2.1 *Analysts' Forecast*

In a bid to beat analyst forecast, managers tend to manage earnings. Managers indulge in earnings management because the market rewards firms that consistently meet up or beat analyst earnings forecasts (Bartov, Givoly & Hayn (2002) and Kasznik & McNichols (2002) and penalizes those firms that do not, particularly when they are priced at relatively high multiples (Skinner and Sloan, 2002). Burgstahler and Dichev (1997) argued that because large firms are more closely monitored by financial analysts in the stock market than small firms, large firms may be lured to take income smoothing steps to beat analysts' forecasts. Barton and Simko (2002) suggest that incentives to meet targets are an important determinant of earnings management but that opportunities constrain the firm's choice.

Robb (1998) suggest that bank managers make greater use of the loan loss provision to manipulate earnings when analysts have reached a consensus in their earnings forecasts. This study has included loan loss provision in the analysis so as to get the actual earnings quality of the banks under study.

2.3.3.2.2 *To smooth earnings toward a long-term sustainable trend*

According to DeAngelo, De Angelo & Skinner (1994), in order to improve the opportunities of a firm with sustained poor performance, the firm might indulge in earnings management which can be inferred as poor earnings quality. Burgstahler and Dichev (1997) also conclude that managers engage in earnings management to avoid reporting losses or profits decline. The need to maintain an annual obtainable profit makes managers pick accounting choices that will keep profits figures intact and show that the firm is growing consistently. Managers may store profit in good years so that such profits are recorded in years where the realised profit does not meet up with the trend of profit.

2.3.3.2.3 *Contractual Incentives*

The need to meet bonus plan requirements, avoid debt-covenant violations and minimize political costs could make managers want manage their earnings. Managers seek to manage reported earnings as a result of bonus plans motivations (Healy 1985 and Guidry, Leone & Rock (1999). When earnings are likely to fall below the minimum level required to earn a bonus, then earnings are managed upward so that the minimum is attained and a bonus is received. On the other hand, when expected earnings will be above the maximum level at which no extra bonus is earned, then such earnings are managed downward. The extra earnings are saved to be used to earn a bonus in the future. When earnings are between the minimum and the maximum levels, then earnings are managed upward in order to increase the bonus earned in the current period (Abdelgahny, 2005).

However, Holthausen, Larcker, and Sloan (1995) and Gaver, Gaver, and Austin (1995) find no evidence that managers manipulate earnings downwards when earnings are below the lower bound of the bonus plan. Gaver, Gaver, & Austin (1995) examine the relationship between discretionary accruals and bonus plans bounds for a sample of 102 firms over the 1980-1990 period. Their results show that when earnings before discretionary accruals fall below the lower bounds, managers select income-increasing discretionary accruals and vice versa. Bergstresse and Philippo (2006) find that earnings management is more prominent in firms where the compensation of top management is closely tied to the performance of companies' stock. Murphy and Jensen (2011) assert that almost all CEO and executive bonus plans have serious design flaws that limit their benefits dramatically. These bonus plans destroy value by providing incentive to influence the timing of earnings, mislead the board about organizational capabilities, take on excessive risk, forgo profitable projects, and ignore the cost of capital.

According to Shalev, Zhang and Zhang (2010), CEO compensation structure is a determinant of managers' fair value measurement. They maintained that the part of purchase price recorded as goodwill, which affects subsequently reported earnings and therefore managers' bonuses, is positively associated with the relative importance of bonuses in the compensation package. Maheshwari (2004) uses logistic regression to test if managers manipulate earnings when executive stock options (ESOs) are part of their compensation. The results provide evidence that executives are not more likely to manipulate earnings when in-the-money exercisable ESOs are a large part of their compensation package.

The motivations to satisfy the debt covenants can also be an incentive for managers to manage their earnings (Sweeny, 1994; Defond & Jiambalvo, 1994). Defond and Jiambalvo (1993) report that firms that replace their auditor after a client-auditor dispute are highly leveraged and more likely to have debt covenant violation. These firms also are more likely to have a decline in reported earnings. Their results also show that if the questionable accounting procedures are applied, this would result in managed earnings figures or flat earnings growth.

2.3.3.2.4 *Changing Management*

The motivation for earnings management may also exist around the time of CEO change. This change could either be routine (a planned change) or non routine (unplanned change). For a routine change, the incoming and the outgoing CEO may be on the board at the same time and need for earnings management may not arise as it is a mere continuation of policy. In a non-routine change, the CEO is forced to leave his position for various reasons such as being dismissed because of poor performance and health reasons or death.

Latif, Strickland and Yang (2011) study 52 firms using a modified Jones model with regression analysis, and discover that incoming CEOs who take over after the sudden death of their predecessor display accounting big bath behaviour in the early period of taking control. This phenomenon they notice is absent among new CEOs in non-sudden death event cases, and is consistent with the findings of DeAngelo, De Angelo & Skinner (1994) and Murphy and Zimmerman (1992). A new CEO may also try to shift part of the present income to future years around the time when his performance will be evaluated and blame the low earning at the beginning of his contract on the acts of the

previous CEO (Abdelgahny, 2005; DeAngelo, De Angelo & Skinner, 1994 and Murphy & Zimmerman, 1993). The preceding discussions can be related to the accusations and counter accusations that are hovering around events in Wema bank with regards to the joint CBN/NDIC audit of 2009. An outgoing CEO may manage earnings in order to increase his take away bonus if such bonus is attached to earnings.

In another vain, Francis, Huang, Rajgopal and Zang (2008) show evidence that earnings quality varies inversely with CEO reputation. They measured CEO reputation with the number of articles mentioning the executive. They find that the number of news articles pertaining to the company's CEO and earnings quality is significantly negatively associated. The cases of the glamorous Nigeria bankers like Cecilia Ibru and Erastus Akingbola of Oceanic and Intercontinental banks respectively tends to go in line with their findings.

2.3.3.2.5 *Boost Stock Price – Initial Public Offer*

The fixation of the share price of a company at the point it is first launched into the market is usually based on the financial statements of the company. Financial statements contained in the prospectus have a substantial impact on the offering price of shares (DeAngelo, 1988; Titman & Trueman, 1986; Krinsky & Rotenberg, 1989; Friedlan, 1994). There is little public information about small and young IPO firms and thus severe information asymmetry exists (Titman & Trueman, 1986; Rao, 1993; Friedlan, 1994; Teoh, Wong & Rao, 1998 and DuCharme, Malatesta & Sefcik, 2004). Managers tend to manage earnings around IPOs as studies have shown such evidence. Friedlan (1994) using a modified DeAngelo (1986) model which adjusts for increases in accruals that are associated with growth of IPO firms, finds evidence that IPO issuers

report income-increasing discretionary accruals in the financial statements released before the offering.

The incentive for this upward management of earnings could be to get higher offering price for equity. Aharony, Lee and Wong (2000) measured earnings performance and accruals for a sample of 83 newly listed companies, and they provide similar evidence of earnings manipulation by Chinese managers during the IPO period. These upward manipulations of earnings around IPO dates temporarily inflate stock prices and usually tend to reverse when less favourable earnings are reported after the offer. Teoh, Wong and Rao (1998) using the modified Jones (1991) discretionary accrual model on 1649 IPO firms provide evidence of income-increasing accruals around IPOs that abnormal accruals during the year of IPOs are significantly negatively related to post-offer stock returns. It is in tandem with the findings of Roosenboom, Goot, & Mertens (2003) and DuCharme, Malatesta & Sefcik (2004). Another incentive for earnings management around IPOs is the need to need to make more cash from the IPO process.

Using a sample of 185 Chinese IPO firms listed on the Shanghai Stock Exchange during the period 1999–2001, Aharony, Wang & Yuan (2010) show that related-party (RP) sales of goods and services could be used opportunistically to manage earnings upwards in the pre-IPO period. They also provide evidence that such behaviour may be motivated by the prospect of tunnelling opportunities in the post-IPO period, i.e., exploiting economic resources from minority shareholders for the benefit of the parent company. In Finland, Spohr (2004) studies the presence of earnings management in initial public offerings (IPOs) of Finnish firms by observing time-series profiles of accruals in fifty six (56) firms that went public in the years 1994 to 2000 on the Helsinki Stock

Exchange. His results suggest that IPO firms where the largest owners are physical persons (entrepreneurs) are more likely to use earnings management than firms that are institutionally owned.

The need to boost stock prices may drive managers to earnings management. Share prices will be affected positively by companies that have good earnings, so managers tend to manage their earnings in order to get better share-price (Elwakiel, 2005). Cantrell (2012) maintains that bank managers could report lower loan loss reserves or higher fair values to shore up the stock price of their bank. Some other studies (Teoh, Welch & Wong, 1998; Rangan, 1998; Shivakumar, 2000; Marquardt & Wiedman, 2004; Kim & Park, 2005) have shown evidence that corporate firms used income-increasing accruals before equity offering to inflate earnings numbers. Managers of corporate firms in the process of acquisition also tend to manage earnings when they need to finance such acquisition with stock. Erickson and Wang (1998); Heron and Lie (2002); AbdulRahman and AbuBakar (2002) and Louis (2004) suggest that the stock for stock acquirers manage earnings upward in the period prior to the acquisition. Many Nigerian banks were involved in the equity offering and acquisition during the 2004 reform period. Though there is no study to the best of our knowledge which shows evidence that supports the fact that earnings management could have taken place around the time frame of the CBN reform programme. However, this study seeks to establish the association between managerial characteristics (performance, managerial ownership, managerial ability and managerial cash holding) and earnings quality of listed banks in Nigeria.

2.4 Performance and Earnings Quality

The performance of a corporate firm is one of the significant factors that affect its earnings quality. Several studies have been carried out to establish a relationship between earning quality and firm performance. Notable among such studies are Sloan (1996); Keating & Zimmerman (1999); Penman & Zhang (2002); Chan, Chan, Jegadeesh & Lakonishok (2006); Lee, Li, & Yue (2006); Mahmud, Ibrahim & Pok (2010) and Madhumathi & Ranganatham (2011).

Chan, Chan, Jegadeesh & Lakonishok, (2006) suggest that there may be an association between earnings quality and future performance. In the same vein, Keating and Zimmerman (1999) associate weak firm performance with poor earnings quality. Sloan (1996) also posits that firms with relatively high earnings quality experience high performance. Lee, Li & Yue, (2006) study the relationship between the amount of managed earnings and firms' earnings performance under the assumption that managers manipulate earnings to influence the valuation of firms' equity. Their study reveals that earnings quality (defined as the proportion of true economic earnings in total reported earnings) increases with firms' earnings performance but decreases with earnings growth. Building on this finding, Charitou, Lambertides & Trigereorgis (2007) examine earnings quality of firms with different financial health characteristics and growth prospects. Their results from a two stage regression show that the relationship between earnings quality and financial health is not monotonic. They discover that distressed firms show evidence of high level of earnings timeliness for bad news, and high level of earnings timeliness for good news but the reverse is the case for healthy firms. Since their data were categorical in nature, tools like logistic regression could give better direction to the results.

Hejazi, Ansari, Sarikhani and Ebrahimi (2011) study ninety six nonfinancial companies listed on the Tehran Stock Exchange from 1999 to 2003 using a t-test for analysis. They measure earnings quality in line with Sloan (1996) that is when the cash from operating activities (CFO) is more than the accruals, the company has high earnings quality else, earnings quality is low. Price earnings ratio (P/E) is use as a proxy for performance. Their study shows evidence of no significant difference between the performance mean of companies with high earnings quality and those with low earnings quality. Their study could have produced a different result if the tool of analysis is substituted with logistic regression due to the nature of their measure for earnings quality.

Mahmud, Ibrahim and Pok (2010) examine the association between earnings quality and firm performance of two hundred and fifty eight (258) Malaysian public listed firms from 2000 to 2007. The study use three attributes of earnings quality namely predictive value of earnings, feedback value of earnings and timeliness of earnings; and two common financial performance measures, returns on assets (ROA) and Tobin's Q. After controlling for size, leverage and growth, their results, from both OLS and 2SLS show that earnings quality of Malaysian firms has positive and significant association with firm performance. The study further included in the analysis managerial ownership and the result suggests that both earnings quality and managerial ownership have association with firm performance. The study excluded financial institutions and used performance as dependent variable rather than independent.

2.5 Managerial Ownership and Earnings Quality

The institutional and managerial ownership structures affect the psyche of managers and can lead to management of earnings to meet yearns of the owners. Managers may become very domineering in the firm and use their opportunistic powers to manipulate

earnings. Investigating family owned and controlled firms, Fan and Wong (2002) maintain that the controlling family shareholders in East Asian countries tend to take advantage of flexibility and discretion over accounting choice and auditor selection to distort the firm's actual earnings performance.

The agency theory stipulates that a conflict of interest occurs when the owners and managers want to maximize their own wealth, thus; creating agency problem. One of the ways of mitigating this problem is the offering of stock-based compensation to managers. This compensation will result to increase of managerial ownership or equity stake in the firm. However, in line with the agency theory managerial ownership in a firm induces managers to improve firm value, since managers will be entitled to a proportion of the wealth as a shareholder. It influences managers' pursuance of wealth maximization objective conscientiously, since the benefit will also accrue to them. Essentially, with this managerial ownership it is expected that the incentive to manage earnings will decrease because any misrepresentation will also be borne by the management.

It is, therefore, a possibility that the level of managerial ownership will have a significant relationship with earnings quality. Studies like Dhaliwal, Salamon &Smith 1982; Warfield, Wild & Wild 1995; Klein 2002; Ebrahim 2007; Ali, Salleh and Hassan 2008; Banderlipe 2009; and Alves 2012 find that there exist a relationship between managerial ownership and lower levels of earnings management.

Madhumathi and Ranganatham (2011) find evidence that Indian firms with a high managerial holding tend to exhibit high discretionary accruals thus resulting in poor

earnings quality. Alves (2012) examines the relationship between corporate ownership structure (managerial ownership, ownership concentration and institutional ownership) and earnings management in Portugal. Using OLS on data collected from a sample of 34 non-financial listed Portuguese firms for the years from 2002 to 2007 (204 firm-year observations), the study finds that discretionary accruals as a proxy for earnings management is negatively related both to managerial ownership and to ownership concentration. This result suggests that both managerial ownership and ownership concentration improve the quality of annual earnings by reducing the levels of earnings management. The study included performance (average stock return) as a control variable, however, if a more comprehensive yardstick such as return on assets is applied, it could have improved the work. Also if the assumption of normality in OLS is relaxed, perhaps the result of their study could be different.

An and Naughton (2009) investigate how family ownership (family ownership, pure family ownership, and ownership-control) disparity affects earnings quality and firm value of five hundred and nine (509) firms listed on the Korean Stock Exchange (KSE) in the post crisis period 2000 to 2005. The study finds that the family ownership and pure family ownership is positively associated with firm value and earnings quality, while high ownership-control has an insignificant effect on firm value and earnings quality through a pairwise correlation. Some Nigerian banks like FCMB, Oceanic and Diamond banks have family and managerial ownership (Famakinwa, Oduniyi, Aminu, Obike & Ugwu 2004). According to the literature, their ownership structure would have impact on their earnings quality. Interestingly, Oceanic bank is one of the banks that failed the 2009 audit test.

2.6 Managerial Ability and Earnings Quality

Managers have impact on the firm they manage; the decisions they make reflect their management styles. It is management's prerogative to pick and apply accounting principles, as well as the fundamental estimates and judgments used in applying such principles. They use these principles to form their own accounting policies, which become a manual for their financial reporting. Hence, management is ultimately responsible for the quality of earnings reported in the financial reports. Ebrahim (2005, p.2) maintains that "Because part of the financial reporting process depends on the judgment of managers, they have the opportunity to manage reported earnings to achieve their own goals."

Bertrand and Schoar (2003), find that managers have an effect on firm decision such as acquisitions or research and development expenditures, and these choices affect the quality of earnings reported by them. As discussed earlier, Francis, Huang, Rajgopal and Zang (2008) document that earnings quality varies inversely with CEO reputation. The management to a certain level can predict the future outcome of the firm. The competence of the management will determine the choices made and decisions taken about the activities of the firm. They maintain that more reputable managers are associated with low earnings quality. Managerial ability comes to the fore in how management can use accounting principles to measure and predict outcome of certain transactions or situations.

Cantrell (2012) posits that skills associated with managing a bank transform well into developing accurate accounting estimates. For example, some decisions like amount to be transferred to loan loss reserve of the bank, is based on the objective judgement of the management. This, the management can measure either conservatively or aggressively.

If this management judgement is faulty, automatically the result reported there from will be misleading, and be of low quality. An experience and competent management should have better knowledge of their customers, the economy, industry trend, the firm and the volatility of their transactions for informed decision making.

Demerijan, Lewis, Lev and McVay (2013) examine the relationship between managerial ability and earnings quality using a data envelopment analysis (DEA) or frontier analysis within non financial firms. They estimate total firm efficiency using data envelopment analysis, a frontier analysis that measures the relative efficiency. They then remove identifiable firm characteristics, such as size, which affect the firm's relative efficiency, but are not necessarily reflective of the quality of the management team. They attribute the unexplained portion of total firm efficiency to the management team. They document that their measure outperforms existing measures of managerial ability such as historical stock returns and media citations. They also find evidence that managerial ability affects not only the operations of the firm, but also the quality of its reported earnings, and in turn, its share-price attributes and litigation exposure. Using a t-statistic, they find that earnings quality is positively associated with managerial ability. Their results are in agreement with the basis that managers can and do impact the quality of judgments and estimates used to form earnings.

Consequently, Barr and Siems (1997) measure managerial ability using DEA as a management quality metric. They used six inputs and three outputs to calculate efficiency scores which were used to predict early warnings of bank failure. Leverty and Grace (2011) using DEA to measure managerial ability (in line with Demerijan, et al.) in insurance firms discover that managerial ability is inversely related to the amount of

time a firm spends in distress, the odds of a firm's failure, and the cost of the failure. Cantrell (2012) examines how bank managerial ability impacts the quality of accounting information related to unique bank accounting issues. The study uses Data Envelopment Analysis (DEA) to construct a measure of bank efficiency as used by Demerijan, et al. (2012) in one hundred banks and then rid bank-specific factors from this DEA-based bank efficiency measure to arrive at efficiency attributed to managerial ability. From the analysis of data obtained from the one hundred sampled banks using OLS, the study finds evidence that higher ability managers report more predictive accounting estimates for the allowance for loan losses and fair values of securities. It also identifies that Financial Crisis affects the strength of the relationship between bank managerial ability and accounting quality, it makes the relationship stronger while capital ratios attenuate the relationship.

This study goes in line with the calculations of Demerijan et al. (2012) and Cantrell (2012). Earnings quality will also be regressed against these managerial characteristics with logistic regression rather than OLS using data collected from Nigerian banks.

2.7 Managerial Cash Holdings and Earnings Quality

Cash holding is usually allied with three theories on why firms hold high levels of cash in literature. These theories are Trade-off theory, pecking order or financing hierarchy theory, and free cash flow theory. In trade-off theory, managers consider the opportunity cost and value contribution of holding cash and its equivalent (Bhat & Bachhawat, 2005). Pecking order theory reveals that financing comes from basically three sources; first retain earnings followed by debt then equity as last resort (Myers & Majluf, 1984). Free cash flow, a schism of cash flow, signifies the amount of cash left over after the

firm has paid all its current expenses and capital expenditures. This study is skewed towards the free cash flow theory which according to Jensen (1986) is associated with agency cost. He opines that managers with considerable free cash flow can increase dividends or acquire stock and thereby pay out current cash that would otherwise be invested in low-return projects or wasted. He maintains that debt reduces the agency costs of free cash flow by reducing the cash flow available for expending at the discretion of managers. With cash available to invest, the manager does not need to raise external funds and expose detailed information about the firm's investment projects. Free cash makes it easier for managers to invest in risky businesses or ventures.

When free cash flow is positive, it indicates the company is generating more cash than it is used for operating the company and plough to grow the business. The negative free cash flow number indicates the company is not able to generate sufficient cash to support the business. The free cash available to the bank manager is a reflection of the cash policy of the manager and the attitude towards portfolio management. It is also a reflection of the risk averseness of the managers. Sticking to the liquidity profitability balance is essential for maximum safety of the bank as a going concern, protection of depositors' withdrawal demands and meeting shareholders' dividend needs. Despite these numerous needs, the different stakeholders will want to have accurate information about their bank. Earnings quality is being used as a proxy for accuracy of financial reporting in literature (Ball & Shivakumar, 2008).

Mohammadi, Maharlouie and Mansouri (2012) studied the impact of income smoothing on cash holdings in 76 companies listed on the Tehran Stock Exchange over a period of six years from 2005 and 2010. They measured income smoothing in line with Leuz *et*

al.(2003) measure of earnings quality. Using the OLS for analysis, their result shows that indicate that there is a significant positive relationship between cash holdings and income smoothing. Acharya, Davydenko, and Strebulaev (2012) suggest that managers bump up cash balances when they foresee poor outcomes in the future. Jensen (1986) suggests that managers have an incentive to build up cash to increase the amount of assets under their control and to gain discretionary power over the firm investment decision. Sun, Yung and Rahman (2012) study the relationship between cash holding and earnings quality in 8621 US publicly traded firms from 1980 to 2005. They measured cash holdings in line with Opler model (cash holding as the ratio of cash and marketable securities to the book value of assets). They measured earnings quality based on four accounting measured namely - accrual quality (AQ), discretionary AQ, absolute abnormal accruals, and earning variability in line with Dechow and Dichev (2002) model and Jones (1991). Using the OLS, their results show that poor earnings quality has a negative impact on the value of corporate cash holdings. They provide evidence to show that the negative effect of poor earnings quality either neutralizes or more than offsets the positive effect of excess cash on firm value. Though their results are robust to several measures of earnings quality and model specifications, their sample did not include financial firms and it is tilted towards large and successful firms.

Hasanzadeh, Kangarluei and Soleimani (2012) investigate the association between cash holding and earnings quality in 92 companies listed on the Tehran stock exchange over a period of 8 years from 2003 to 2010. They measured earnings quality as profit stability and measured cash holdings in accordance with the Ozhan and Opler models. Using multivariate regression, their results indicate that earnings quality has a negative effect on cash holding after controlling for size, sales growth, leverage and cash flow from

operations. Their study did not include financial firms and their measure of earnings quality did not consider the cash flow in the firms, though cash flow from operations was controlled. Furthermore, if another tool of analysis is used, the results of the study could be different.

Mokhtari, Kangarlonei and Motavassel (2012) study the relationship between accruals quality and corporate cash holdings, using 76 firms' data listed in Tehran stock exchange during the period of 2003 to 2009. Their results from a multivariate linear regression show that accruals quality has a significant impact on corporate cash holdings. Their findings also show that managers should consider earnings quality in cash holdings management, this will enable them reduce freeze cash in the firm.

2.8 Theoretical Framework

Earnings quality is one of the most important characteristics of any financial reporting system (Ewert and Wagenhofer, 2011). Earnings quality is being use in several empirical studies to show trends over time; to assess changes in financial accounting standards and corporate governance; to compare institutional factors in different countries; and to study the effect of earnings quality on the cost of capital. The theory that has a bearing with this study is the agency theory.

Agency theory essentially describes the relationship between two parties: owner as a principal and management as an agent (Jensen & Meckling, 1976). According to agency theory, the conflict of interest occurs when both parties involved in the agency contract (the owner and manager) want to maximize their own wealth, thus; creates agency conflict. This agency conflict raises agency cost. In the wake of large corporate scandals that have occurred worldwide, interest in the accounting choices made by managers in

pursuing financial reporting has grown. Managers can use their opportunistic behaviours to alter the quality of earnings that they report.

Managerial opportunistic behaviour can be traced to Ball & Brown (1968) and Beaver (1968) who popularised positive research in accounting. Their works hover around the impact of accounting choices on capital market (stock prices) based on the assumption of information cost and zero contracting costs. The Mechanistic Hypothesis and the Efficient Market Hypothesis are use in testing the impact of accounting choices on the capital markets (Kaplan & Roll, 1972; Sunder, 1975; Ricks, 1982; Biddle & Lindahl, 1982). However, they have different implications.

The Mechanistic Hypothesis maintains that investors can be misled by firms' accounting discretions since they do not utilize information sources other than firms' financial reports. While the Efficient Market Hypothesis maintains that investors cannot be misled by accounting discretions as stock prices already incorporate all available information (Rath & Sun 2008). This ambiguity and the need to move away from zero contracting cost in accounting brought about the development of Positive Accounting Theory (PAT) by Watts and Zimmerman in 1978 as an approach to researches on accounting choices and managerial behaviour.

Positive Accounting Theory as developed by Watts and Zimmerman in 1986 (an updated version of 1978) centres around the economic-based assumption that all individuals' actions are derived by self interest and that individuals will act in an opportunistic manner to the extent that the actions will increase their wealth. There was a shift from the capital market to the individuals related to the firm. Given an assumption that 'self-interest' drives all individual actions, PAT predicts that a firm will

strive to put in place mechanisms that align the interests of the agent (managers of the firm) with the interests of the principal (owners of the firm). Managers have privilege information about the future earnings and will take the opportunity to express their confidence in the level of those future earnings (Scott, 1997).

In line with this, Jensen (1986) opined that due to self-interest, managers would maximize their own wealth at the expense of other related parties' wealth and interests. This is an agency problem created as a result of separation between ownership and control. Agency theory advocates that corporate controls align managers' interests with shareholders' interests and thus can mitigate agency conflicts between them (Fama and Jensen, 1983). Recent researches have shown that the survivability of a firm in a competitive environment may be determined through the contracting cost. Contracting costs arise and comprise of market transaction cost, internal transaction cost, political cost, renegotiation cost and bankruptcy cost. The underlining assumptions in PAT are

i. Managers are rational.

ii. Managers will choose accounting policies in their own best interests (not necessarily profit maximization) – opportunistic.

iii. Managers will choose accounting policies to attain corporate governance objectives of the firm – efficient contracting.

Findings of positive accounting researches have informed debate about reporting fair values (Holthausen & Watts, 2001; Landsman, 2007) and have recognised the relevance of these fair values. However, these values are made based on the judgement of the managers (opportunistic). Managers can manipulate fair values by adopting accounting

policies that report earnings to suit their interest. Three hypothetical perspectives have been identified to influence managerial decisions on accounting choices:

i. The Bonus plan Hypothesis: Managers of firms with bonus plans are more likely to choose accounting methods that shift reported earnings from future periods to the current period. It implies that they will increase their bonuses for the current year. This bonus plan views is shared by Healy (1985); Guidry, Leone & Rock (1999); Holthausen, Larcker, and Sloan (1995); Gaver, Gaver, and Austin (1995); Murphy and Jensen (2011). PAT predicts that if a manager is compensated in terms of a measure of performance such as accounting profits, the manager will try to increase profits. Murphy and Jensen (2011) maintain that bonus plans damage value by providing incentives to manoeuvre the timing of earnings.

ii. The Debt /Equity Hypothesis (Debt covenant): The closer a firm is to breaching accounting-based debt covenants, the more likely the firm manager is to choose accounting methods that shift reported earnings from future periods to the current period. According to Dichev & Skinner (2002), managers choose accounting policies to maintain covenant ratios; managers work harder to avoid first covenant violation. The firm is less likely to violate debt covenants by increasing current earnings, and management will reduce its constraints in running the company.

iii. The Size Hypothesis (Political cost): As postulated by Watts and Zimmerman (1986), the greater the political cost faced by the firm, the more likely the

manager is to choose accounting methods that reschedule reported earnings from current to future periods.

Lev (1989) popularizes the use of "quality" as a descriptive attribute of earnings for academic researchers when he observes that no serious effort is being made to question the quality of the reported earnings prior to correlating them with returns. The accounting profession is under pressure to differentiate quality earnings from traditionally reported earnings (Brown, 1999; Branner, 2001). Kamp (2002) observes that three elements encompasses aspects of quality earnings; a clear indication of ongoing costs and revenues, clear indication of performance of the company's core business and a direct correlation of cash flow with earnings.

There has been a considerable increase over the years in the number of factors that have been associated with earnings quality. Although these factors are numerous, some of them like the managerial characteristic factors have emerged as consistently important. However, since managers have unlimited wants, limited choices and behave opportunistically, there is a constant need to revisit their peculiar characteristics in relation to the quality of earnings that they report.

2.10 Summary

Studies around earnings quality centre on agency theory. The need to articulate financial statements prepared by managers; and make proper judgement based on the content is of utmost importance. From literature, it could be seen that there are no accepted definition and no unique measure of earnings quality. However, all measures used were geared towards definition adapted by the studies. This study adopts the definition and

measurements proffered by Putman et al (2005). This is because it incorporates cash efficiency, revenue quality, consistency in earnings, income from core operations and risk associated with the cash flow. The Quality test takes into consideration the three important financial statements that is – statement of cash flow, statement of financial position and statement of comprehensive income. The calculated earnings quality is regressed against managerial characteristics using logistic regression analysis and the effect of size, deposit growth, liquidity risk and global financial crisis are controlled.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides details on the design and methodology applied in this study. It discusses the methods adopted in carrying out this research. It also discusses the various sources and methods through which the data for this research study are collected, the techniques used in the analysis of such data, and the justification for the selection of the methods and techniques.

3.2 Research Design

This study uses ex- post facto and correlation descriptive research approaches for the purpose of addressing the research problem. Ex post facto research method is a form descriptive research technique in which pre existing groups are compared on some dependent variable. It is a research where the independent variables have already occurred and the researcher starts with the observation of the dependent variable or variables. In retrospect, the independent variable or variables are studied for their possible relationship to, and effects on, the dependent variable or variables. It is commonly used in studies that investigate possible cause-and-effect relationships by observing a condition and searching back in time for plausible causal factors. In the case of this study, the earnings quality of previous years is being tested against managerial characteristics of those years. Earnings quality for 2006-2010 of each sampled bank forms the dependent variable while managerial ownership, performance, bank managerial ability, and managerial cash holding of these banks form the independent variables.

The study also adopts the correlation descriptive research approach, which describes the relationship between variables under study. It is considered appropriate for this study

because it examines the earnings quality pattern of listed banks in Nigeria. The study investigates the association between earnings quality and performance of banks, the banks' managerial ability, managerial ownership and managerial cash holding. The study further examines the effect of control variables (total asset, loan, deposit growth and Global financial crisis) on earnings quality.

3.3 Population and Sample of the Study

The population of this study comprises all banks in Nigeria that survived the 2004 /2005 CBN reform period. A list of the surviving banks and their constituent members are shown in Appendix. Hence the population consist of twenty five (25) banks. The number of banks that make up the sample of this study is seventeen (17). Hence, the sample size for the purpose of this study is seventeen (17). These seventeen banks are chosen through a 4-point filter (systematic elimination). Thus for any bank to be part of the sample, it must satisfy all the criteria set below.

i. The bank must be listed on the Nigerian Stock Exchange as at 31st December, 2010. The reason for this is that the data of listed banks will be easy to gather from the banks and the regulatory bodies. Also these listed banks are corporate Nigerian citizens.

ii. The shares of the bank must be actively traded on the floor of the market. When the shares of the bank are active, it means that information about the bank is readily available for users and the market price can be obtained.

iii. The financial statements of the bank for all the years of study (2006-2010) must be readily available. The rationale for this is to eliminate the issue of missing

data and minimise error in computation as this study needs full annual report and accounts for every bank (year) under study.

iv. The bank must not be involved in any form of a business combination within the study period. It is essential for uniform data to be collected from the banks under study.

3.4 Methods of Data Collection

The data for this study are obtained from secondary sources. The variables involved in this study are accounting data obtained from secondary sources. The instrument used for collecting these data is the annual reports and accounts of the chosen banks for the period of covered by the study.

3.5 Model Specification

The model in the study is structured using the logistic regression method. The model has four explanatory variables namely, performance, cash holding, managerial ownership and managerial ability, and four control variables size (represented by total assets), loan (represented by liquidity risk), deposit growth and global financial crisis (represented by a dummy variable of 1 and 0). QUALTEST represents earnings quality in the equation. QUALTEST is arrived at through a model known as the Q Test, which provides a mathematical approach to earnings quality determination. The logistics regression equations are as follows

$$P(QUALTEST_{it}) = \frac{e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \mu...}}{1 + e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \mu...}} \quad \ldots (1)$$

$$P(QUALTEST_{it}) = \frac{e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 SIZE + \mu ...}}{1 + e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 SIZE + \mu ...}} \quad \ldots (2)$$

$$P(QUALTEST_{it}) = \frac{e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 LIQUIDRISK + \mu ...}}{1 + e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 LIQUIDRISK + \mu ...}} \quad \ldots (3)$$

$$P(QUALTEST_{it}) = \frac{e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 DEPOSITGRO + \mu ...}}{1 + e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 DEPOSITGRO + \mu ...}} \quad \ldots (4)$$

$$P(QUALTEST_{it}) = \frac{e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 SIZE + \beta 6 LIQUIDRISK + \beta 7 DEPOSITGRO + \mu ..}}{1 + e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 SIZE + \beta 6 LIQUIDRISK + \beta 7 DEPOSITGRO + \mu ..}} \quad \ldots (5)$$

$$P(QUALTEST_{it}) = \frac{e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 GFINCRISIS + \mu ...}}{1 + e^{\beta 0 + \beta 1 PERit + \beta 2 MANABILITYit + \beta 3 MANOWNERit + \beta 4 MANCASHit + \beta 5 GFINCRISIS + \mu ...}} \quad \ldots (6)$$

Where:

P (QUALTEST) = Probability of having high earnings quality

QUALTEST = Quality Test (Q Test) Dummy

PER = Performance

MANABILITY = Managerial Ability

MANOWNER = Managerial Ownership

MANCASH = Managerial Cash Holding

LIQUIDRISK = Liquidity Risk

DEPOSITGRO = Deposit Growth

GFINCRISIS = Global Financial Crisis

$e = 2.71828$

β_0 = Intercept term

$\beta_1 - \beta_7$ = regression Coefficients

μ = error term

3.6 Measurement of Variables

The variables contained in the models specified earlier are measured as follows

3.6.1 Quality Test (QUALTEST)

Putman et al (2005) designed the Q Test model along the same line with Altman's Z score. The model consists of variables from the major financial statements required by GAAP which include the profit and loss account, balance sheet and cash flow statement. The model is stated as follows:

$$Q\ Test = 10(CFO/GE)+(\Delta GE/\Delta PLL)+(CFO/EBIT)+(COI/NI)+10(CFO/TL) \quad ... \quad (7)$$

Table 3.2: Q Test Variable Definition

Symbol	Description	Financial Statement
CFO	Cash flow from operating activities	Cash Flow Statement
GE	Gross earnings	Income Statement
ΔGE	Change in Gross earnings from previous year	Income Statement
ΔPLL	Change in Loans Loss Reserve	Balance Sheet
EBIT	Earnings before interest and taxes	Income Statement
COI	Income from continuing operations	Income Statement
NI	Net Income	Income Statement
TL	Total Liabilities	Balance Sheet

Source: Q Test Model

CFO = CG – T, where CFO is Net cash from operating activities, CG is cash generated or used in operations, T is the tax paid.

GE = ISI + FCI + OI, where S is Gross Earnings, ISI is interest and other similar income, FCI is fees and commission income and OI is other income (foreign exchange, investment, trading securities)

$\Delta GE = GE_t - GE_{t-1}$, where ΔGE represents changes in gross earnings, GE_t is the gross earnings of the current year and GE_{t-1} is the gross earnings of the previous year.

$\Delta PLL = PLL_t - PLL_{t-1}$, where ΔPLL is changes in Loans loss reserve, PLL_t is the Loans loss reserve of the current year and PLL_{t-1} is the Loan loss reserve for the previous year. Loan loss reserve is included because it represents the amount necessary to cover the

intrinsic losses in the loan portfolio of the bank. It contains the provision made for both performing and non performing loans.

EBIT = profit before exceptional items and tax.

COI = ISI – ISE, where COI is income from continuous operations (net interest income), ISI is interest and other similar income and ISE is income and other similar expenses. Net interest income is used because interest forms a source of continuous income for banks through loans and advances.

NI = earnings after tax but before extraordinary items.

TL = TA – E, where TL is total Liabilities, TA is total Asset and E is equity

The results of the Q Test measurements are to be read as follows. Q Test value below 5.0 indicates suspect quality of earnings and is taken as low quality and is represented as 0 in the logistic regression. If the Q Test value is equal or greater than 5.0, it indicates better than average quality or superior earnings quality and is taken as high quality and is represented as 1 in the logistic regression.

3.6.2 Performance

The performance variable is measured as the return on asset employed (ROA). It is the worth of operating income before interest and taxes divided by assets of the bank. ROA is used because it shows the profit earned per naira of assets and also reflects the management capability in utilizing a bank's financial and real investment resources to generate profits.

3.6.3 Managerial Ability (MANABILITY)

Bank Managerial Ability is measured using the Data Envelopment Analysis (DEA). The DEA is adopted because it can be calculated for each bank and each year without requiring the management (CEO) specific data. DEA is a form of frontier analysis that calculates efficiency as the ratio of weighted outputs to weighted inputs.

DEA uses an optimization program to determine the firm-specific optimal weights (termed "implicit weights") on the inputs and outputs. The result will produce an efficiency figure which shows how management uses its ability in utilising assets to generate earnings. To get the bank efficiency, we use the operating approach along the same line with Barr & Siems (1997) and Nenovsky, Chobanov, Mihaylova & Koleva (2008).

$$\text{Max}_{u,\,v}\,\theta = (u_1\text{Interest Expense}_{i,t} + u_2\text{Non-interest Expense}_{i,t}) / (v_1\text{Interest Income}_{i,t} + v_2\text{Non Interest Income}_{i,t})... \quad (8)$$

The bank efficiency figure is converted into the managerial ability along the same line with Cantrell (2012) and Demerijan et al. (2012). After regressing bank specific characteristics (bank size, age, employees, leverage, operational cash, auditor type and pressure group) together on bank efficiency, the error term from the regression is considered as the bank managerial ability. The equation is as follows:

$$\text{Bank Efficiency}_{it} = \alpha + \beta_1\text{Total Assets}_{it} + \beta_2\ln(\text{Employees})_{it} + \beta_3\text{Free Cash Flow Indicator}_{it} + \beta_4\ln(\text{Bank Age})_{it} + \beta_5\text{Leverage}_{it} + \beta_6\text{BigAuditor}_{it} + \text{IO}_{it} + \text{MANABILITY}_{it} \quad \ldots(9)$$

In equation 13 above, the effect of total asset to earnings of the bank is used for a size advantage. The natural log of the number of employees is used to represent the contribution of the employees. Free cash flow for amount of cash available to managers which could influence available investment opportunities and leverage is introduced because a high leverage will restrain the manager's ability. The auditor indictor will serve as governance or scrutiny constraint which contributes to the overall bank efficiency and institutional ownership is presented to serve as the contribution of shareholder's pressure group. After removing these bank specific characteristics which are beyond the control of the management, the residual is expected to be elements within the control of the management (managerial ability).

3.6.4 Managerial Ownership

The managerial ownership variable is derived using a simple mathematical operation. It is calculated as the portion of shares controlled by the management team.

3.6.5 Managerial Cash Holding

Managerial cash holding is a dummy variable which is represented by 1 in the year where there exists a non negative change in the cash movement in the cash flow statement and 0 in the year where there was a negative change. It is used to see how the management mixes liquidity in a given year. This measurement is taken in line with the free cash flow approach to cash holding.

3.6.6 Size

Size is represented as the natural logarithm of the total assets of the bank at the beginning of the financial year or period. It is generally used to capture potential economies or diseconomies of scale in the banking sector. It controls for cost differences in product and risk diversification according to the size of the bank

3.6.7 Liquidity Risk

Liquidity risk is measured as the ratio between loans and advances and the total assets as shown in the balance sheet of the bank at the end of the year. It is used in order to determine the effect of Loan on earnings quality. A bank that can maintain a good relationship between liquidity and profitability will not need to compromise on earnings quality.

3.6.8 Deposit Growth

Deposit growth is measured as the percentage change in the deposit of the bank as shown in the balance sheet from the beginning of the year to the end of the year. The volume of deposit enables the bank manager to loan out more and this variable will check the effect of growth on earnings quality.

3.6.9 Global Financial Crisis

Global financial crisis is a dummy variable; it is represented by 1 for years in which the crisis was experienced in the Nigerian stock market and 0 for the years in which the crisis was not experienced. On the average, share prices on the NSE witnessed a downward trend from early 2008 and started picking up by the end of 2010 (see CBN,

2010). Years 2006, 2007 and 2010 were represented as 0 and years 2008 and 2009 were represented as 1. This variable is introduced in order to check if the bank management were able to understand their exposure during the crisis.

3.7 Techniques of Data Analysis

This study utilizes both univariate and multivariate techniques for analysing the data collected for the study. The univariate tools are mean, median, ratios, and percentages, and test for multicollinearity (Tolerance, Variance Inflation Factor and Pearson). The multivariate technique is logistic regression.

3.7.1 Logistic Regression

Logistic regression is concerned with the probability that the occurrence of a successful outcome depends upon or change based on each explanatory variable in the model. It utilises binomial probability theory in which there are only two values to predict- that probability (p) is 1 rather than 0. Logistic regression develops a best fitting function using the maximum likelihood method, which maximizes the probability of classifying the observed data into the appropriate category given the regression coefficients. A test for multicollinearity is conducted for the variables within the logistic regression. The regression equations for testing are as stated in equations one to five. The log-likelihood statistic and the associated chi-square statistic are used to check for significance of the data in the model. A simple logistic model comes in the form:

Logit (Y) = log (natural odds) = $\ln\left[\frac{\pi}{1-\pi}\right] = \alpha + \beta_1 X_1 + \beta_2 X_2 \ldots$ (10)

π = Probability(Y = outcome of interest | $X_1 = x_1$, $X_2 = x_2$) =

$$\frac{e^{\alpha+\beta_1 X_1+\beta_2 X_2}}{1+e^{\alpha+\beta_1 X_1+\beta_2 X_2}} \cdots \quad (11)$$

Where π is the probability of the outcome of interest such as a favourable earnings quality, α is the Y intercept, β is the regression coefficient, and Xs are a set of predictors (α and βs are typically estimated by the maximum likelihood (ML) method), and e = 2.71828 is the base of the system of natural logarithms. X can be categorical or continuous, but Y is must be categorical. The value of β determines the direction of the relationship between X and the logit of Y. The null hypothesis underlying the overall model states that all βs equal zero. A rejection of this null hypothesis implies that at least one β does not equal zero in the population, which means that the logistic regression equation predicts the probability of the outcome better than the mean of the dependent variable Y. The interpretation of results is rendered using the odds ratio for both categorical and continuous predictors.

Logistic regression is used because it establishes the impact of multiple independent variables presented simultaneously to predict membership of the dependent variable categories. The independent variables in use for logistic regression need not be interval, nor normally distributed, nor linearly related, nor of equal variance within each group. Earnings quality (QUALITEST variable in the model is binary) as used in this study is categorical and suits perfectly into the assumptions of logistic regression. Logistic regression predicts membership of a group and provides knowledge of the association and strength among the variables. The variables in this study are earnings quality, performance, managerial ability, managerial ownership, cash holding, size, liquidity risk, deposit growth and global financial crises. The events in the banking sector are not constant (linear) and the financial system is so dynamic in this era of global economic

uncertainties. The non-linear changes mean that the variables used in this study fit perfectly into a logistic regression model.

3.8 Summary

This chapter has examined the relevant research tools that are used in the study. It shows that the study is of descriptive and ex post factor in view of the nature and purpose of the study. Similarly, the chapter showed that the population and sample of the study consist of seventeen (17) listed banks which met the criteria for selection as part of the study. The chapter also discusses the methods and sources of data used. The data for this study are sourced from the annual reports and accounts of the selected banks for the period under study. The next chapter covers the data presentation, analysis and the results of the test of hypotheses.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter deals with the presentation and analysis of data as well as and interpretation of result. Logistic regressions have been used to estimate the influence of the explanatory variables (Performance, Managerial Ability, Managerial Ownership and Managerial Cash Holding) on the criterion variable (earnings quality). This influence is regarded as the base model in this chapter. The effect of bank specific variables (Size, Loan and Deposit Growth) and economic specific variable (global financial crisis) as control variables on base model is also analysed.

The results are presented in four sections. Section one presents the descriptive statistics of the variables used. The second section presents the logistic regression results for the sampled banks. Section three presents and discusses the findings of the study with their policy implication. Section four provides a summary of the findings.

4.2 Data Presentation

The data collected from the seventeen sampled banks were processed to form the different variables required for this study. This section gives an indebt analysis on the behavior of the variables bank and year wide. Other details of all the variables used in the study are provided in Appendix A.

4.2.1 Quality Test (QUALTEST)

As was earlier discussed in chapter three, QUALTEST is used to denote the earnings quality of the banks. Table 4.1 gives details of the calculated QUALTEST for all the sample banks. The table shows that nine banks reported earnings of high quality in 2006 while the remaining eight banks reported earnings of suspect quality with four of them

(Wema, Finbank, FCMB and Unity) reporting earnings of extremely low quality having QUALTEST figures less than 1.000. In 2007, ten banks reported earnings of high quality, three of them (Eco, GTB and Zenith) reported earnings of superior quality and seven reported earnings with above average quality. The remaining seven banks reported earnings of suspect quality with only Finbank reporting earnings of extreme low quality in that year with a less than 1.000 QUALTEST figure of -31.11.

Table 4.1 Computed Quality Test Figures

BANK	2006	2007	2008	2009	2010
ACCESS	4.23	9.17	8.46	6.38	-8.31
DIAMOND	39.11	8.54	3.95	2.07	-0.9
ECO	40.25	10.86	1.8	0.16	-0.06
FCMB	-5.17	9.32	8.39	-8.07	-32.15
FIDELITY	23	4.19	15.13	1.33	-3.85
FINBANK	-0.1	-31.11	1.24	0.29	-1.41
FIRST	3.25	8.36	8.82	4.38	0.99
GTB	4.61	20.75	7.27	2.16	-1.78
INTER	30.22	7.98	10.98	-0.22	0.44
OCEANIC	11.77	6.21	0.11	0.61	-2.15
SKYE	10.84	9.11	8.85	1.66	-11.81
STERLING	53.15	2.45	5.19	0.82	-6.58
UBA	11.73	4.75	34.23	2.15	-4.14
UNION	1.62	2.56	3.9	-0.02	1.58
UNITY	-4.46	2.55	0.61	0.21	2.41
WEMA	-0.07	1.43	-22.7	15.02	1.96
ZENITH	17.83	17.37	16.6	1.77	-30.09

Source: Researcher's computations based on Annual reports and Accounts of the Banks**.**

For 2008, ten banks reported earnings of high quality, four of them (Fidelity, Inter, UBA and Zenith) reported earnings of superior quality and six reported earnings with above average quality. The remaining seven banks reported earnings of suspect quality with only Wema reporting earnings of extreme low quality in that year with a less than one QUALTEST figure of (22.7). In 2009, all the banks reported earnings of suspect quality except Access bank which had a QUALTEST of 6.38 which is slightly above average. Eight of them reported earnings of extreme low quality in that year with less than one

QUALTEST figures. This could be attributed to combination of factors amongst which are the global financial crisis and the CBN/NDIC joint audit which classified some banks as being on the verge of collapse.

Table 4.1 also shows that all the banks reported earnings of suspect quality in 2010. This is because loans which were earlier misclassified were reversed due to the increased CBN supervision in that year. Another reason attributable to this suspect quality is the issue of change in management for some banks as necessitated by the new CBN tenure rule of maximum of ten years for bank CEOs. Change in CEO may cause earnings management thereby leading to suspect earnings quality.

4.2.2 Performance (ROA)

The managerial performance used in this study is measured using return on asset. The performance figures as calculated are presented in Table 4.2. The table shows that Eco and First bank posted the highest ROA of 4% in 2006. Four banks (FCMB, Fidelity, Intercontinental and GTB) posted ROA of 3% while five banks (Diamond, Oceanic, Union, Unity and Zenith) posted ROA of 2% in 2006. Access, Skye and UBA bank each posted ROA of 1% while Sterling bank posted ROA that is slightly above 0%. Fin and Wema bank posted negative ROA of -10% and -6% respectively in 2006.

Table 4.2 Computed Returns on Assets (ROA)

BANK	2006	2007	2008	2009	2010	AVG
ACCESS	0.01	0.02	0.02	0.04	0.02	0.02
DIAMOND	0.02	0.03	0.02	0.01	0.02	0.02
ECO	0.04	0.03	0	-0.02	0	0.01
FCMB	0.03	0.03	0.04	0	0.01	0.02
FIDELITY	0.03	0.02	0.03	0.01	0.02	0.02
FINBANK	-0.1	0.02	0	-0.93	0.08	-0.19
FIRST	0.04	0.03	0.03	0.03	0.02	0.03
GTB	0.03	0.03	0.04	0.03	0.04	0.03
INTER	0.03	0.03	0.03	-0.35	-0.07	-0.07

OCEANIC	0.02	0.02	0.01	-0.14	-0.01	-0.02
SKYE	0.01	0.02	0.03	0	0.02	0.02
STERLING	0	0	0.03	-0.04	0.01	0.00
UBA	0.01	0.03	0.04	0.02	0.01	0.02
UNION	0.02	0.02	0.03	-0.07	-0.01	0.00
UNITY	0.02	0.01	-0.06	-0.08	0.04	-0.01
WEMA	-0.06	0.01	-0.62	-0.02	0.06	-0.13
ZENITH	0.02	0.03	0.03	0.02	0.02	0.02

Source: Researcher's computations based on Annual reports and Accounts of the Banks

In 2007, eight banks (Diamond, Eco, FCMB, First, GTB, Intercontinental, UBA and Zenith) posted ROA of 3%, six banks (Access, Fidelity, Fin, Oceanic, Skye and Union) posted ROA of 2%, two banks posted ROA of 1% while sterling bank reported the lowest ROA which is slightly above 0%. Three banks (FCMB, GTB and UBA) posted the highest ROA in 2008 at 4%. Seven other banks (Fidelity, First, Inter, Skye, Sterling, Union and Zenith) posted ROA of 3% while Access and Diamond bank posted ROA of 2% in 2008. Of the remaining five banks, oceanic posted ROA of 1%, Fin and Eco bank both posted ROA which is slightly above 0% while Unity and Wema bank posted negative ROA of -6% and -62% in 2008.

Access bank posted the highest returns on assets in 2009 at 4% while First and GTB bank both posted ROA of 3% in the same year. UBA and Zenith posted 2% ROA, Diamond and Fidelity posted 1% ROA while Skye and FCMB posted low ROA which is slightly above 0% in 2009. The remaining eight banks posted negative ROA as follows: Eco (-2%), Fin (-95%), Intercontinental (-35%), Oceanic (-14%), Sterling (-4%), Union (-7%), Unity (-8%) and Wema (-7%). These negative figures may be as a result of increase supervision by CBN which improved the loan classification and in some cases the loan provision became so huge that it eroded the earnings for the year. In

2009, the banks also suffered extreme exposure to oil and gas sector and the capital market, this contributed to the negative ROA posted by some banks.

The number of banks which posted negative ROA reduced from eight in 2009 to four in 2010. The remaining thirteen banks posted ROA which fall between 1% and 8% with the exception of Eco bank which posted a slightly above 0% ROA. This is an indication that the banks' exposure to the volatile sectors of the economy had reduced significantly. Another reason is the takeover of nonperforming loans and toxic assets by the Asset Management Corporation of Nigeria (AMCON).

From Table 4.2, it could be seen that seven banks (Access, Diamond, FCMB, Fidelity, Skye, UBA and Zenith bank) posted an average returns on assets of 2% over the period of study while First and GTB banks posted an average returns on assets of 3% during the period of study. Eco and Sterling banks posted average returns on assets of 1% and slightly above 0% respectively during the period of study. Five banks (Inter, Fin, Oceanic, Unity and Wema) reported negative average returns on assets during the period of study. However, Table 4.2 shows that Intercontinental bank maintained ROA of 3% in 2006, 2007 and 2008. But this ROA of 3% plummeted in 2009 to -35% and picked up in 2010 to -7%. This shows that Intercontinental bank started recording negative returns on asset after the CBN/NDIC joint audit exercise. In the same vein, Oceanic bank also reported impressive ROA of 2% in 2006 and 2007, with a fall to about 1% in 2008. Oceanic banks ROA also plummeted in 2009 to -14% and rose to -1% in 2010.

4.2.3 Managerial Ability (MANABILITY)

As discussed in chapter three, managerial ability is computed as the error term derived from the regression of bank efficiency against other bank specific factors. Bank efficiency was measured using DEA and the result is presented in Table 4.3.

Table 4.3 Bank Efficiency

BANK	2006	2007	2008	2009	2010
ACCESS	0.832	0.936	0.990	1.000	0.940
DIAMOND	0.980	0.914	0.932	0.790	1.026
ECOBANK	1.000	1.000	0.791	0.748	1.086
FCMB	1.000	0.949	1.020	1.000	0.998
FIDELITY	1.000	0.874	1.000	1.000	1.099
FINBANK	0.453	0.822	0.712	0.992	0.656
FIRST	1.000	1.130	1.194	1.085	1.070
GTB	1.000	1.000	1.000	0.909	1.000
INTER	1.090	0.886	0.866	0.557	0.521
OCEANIC	0.977	0.995	0.908	0.972	0.936
SKYE	0.835	1.295	0.912	0.804	0.876
STERLING	0.776	0.709	0.858	0.548	0.953
UBA	0.809	1.133	1.157	1.109	1.060
UNION	1.815	1.150	1.142	1.111	1.121
UNITY	1.000	0.950	1.000	0.534	1.000
WEMA	0.555	1.000	0.620	0.519	0.506
ZENITH	0.997	1.000	0.983	1.115	1.125

Source: Researcher's computations using DEA based on Annual reports and Accounts of the Banks

From Table 4.3, it could be deduced that all the banks were close to the optimal efficiency with bank efficiency figures above 50% except Fin bank in 2006 which had an efficiency figure of about 45%. Union bank recorded highest efficiency figure in 2006 which is abnormally higher than 100%. This is not surprising but calls for further investigation because Union bank is the only bank that reported earnings of suspect quality in that year as shown by the QUALTEST figures presented in Table 4.1. Sterling bank recorded the lowest efficiency in 2007 while Wema bank reported the lowest efficiency in 2008, 2009 and 2010. Skye bank had the optimal efficiency figure in 2007 with First bank having the optimal efficiency in 2008; and Zenith bank had the optimal efficiency in 2009 and 2010. Table 4.4 shows the managerial ability figures derived from the efficiency in Table 4.3.

Table 4.4 Managerial Ability (MANABILITY)

BANK	2006	2007	2008	2009	2010
ACCESS	0.07	0.18	0.18	0.04	0.01
DIAMOND	0.12	0.01	0.01	-0.11	0.09
ECO	0	0.05	-0.16	-0.29	0.08
FCMB	0.08	0.07	0.02	0.05	0.04
FIDELITY	0.08	-0.03	0	-0.06	0.03
FINBANK	-0.28	-0.08	-0.18	0.23	-0.23
FIRST	0.03	0.08	0.04	-0.09	-0.1
GTB	0.09	0.09	0.14	-0.08	0.01
INTER	0.1	-0.19	-0.2	-0.01	-0.18
OCEANIC	0.07	0.14	0.04	0.17	0.08
SKYE	-0.02	0.48	0.02	-0.13	-0.04
STERLING	-0.1	-0.14	0.03	-0.31	0.14
UBA	-0.19	0.09	0.1	-0.08	-0.11
UNION	0.66	-0.01	0.01	0.19	0.18
UNITY	-0.01	0.03	0.1	-0.36	0.05
WEMA	-0.37	0.05	-0.02	-0.17	-0.39
ZENITH	0.01	0	-0.09	0.06	0.1

Source: SPSS Regression Residuals using bank efficiency in Table 4.3

Table 4.4 shows that Union bank has the highest managerial contribution to bank efficiency in 2006 at about 66% while Wema bank recorded the lowest managerial contribution of -37%. Skye bank had the highest managerial contribution to bank efficiency in 2007 at about 48% while intercontinental recorded the lowest managerial ability of -19% in that same year. Access bank recorded the highest managerial ability in 2008 of 18% while Fin bank recorded the lowest managerial ability in that at -18%.

For 2009, despite the replacement of its management team by CBN midyear, Fin bank recorded the highest managerial ability at about 23% while Unity bank recorded the lowest at -36%. Eleven bank managers did not contribute enough to the efficiency of their bank in 2009 with all of them posting negative figures. This could be attributed to the exposure of the banks to volatile sectors of the economy and the effect of global economic crisis experienced in Nigeria in that year. Managerial ability improved in 2010 with a fall in the number of negative figures from eleven banks to six banks. Wema bank

recorded the lowest managerial ability in 2010 at -39% while Union bank recorded the highest at 18%.

4.2.4 Managerial Ownership (MANOWNER)

The pattern of managerial direct and indirect ownership in the sampled banks over the period of study is depicted in Table 4.5.

Table 4.5 Managerial Ownership (MANOWNER)

BANK	2006	2007	2008	2009	2010
ACCESS	0.11	0.18	0.11	0.09	0.11
DIAMOND	0.13	0.13	0.13	0.13	0.13
ECO	0	0	0	0	0
FCMB	0.05	0.05	0.05	0.05	0.05
FIDELITY	0.08	0.08	0.08	0.04	0.04
FINBANK	0.16	0.16	0.16	0.12	0.12
FIRST	0.06	0.22	0.22	0.12	0.04
GTB	0.07	0.07	0.07	0.07	0.07
INTER	0.2	0.2	0.2	0.1	0.1
OCEANIC	0.38	0.38	0.38	0.28	0
SKYE	0.18	0.18	0.18	0.18	0.18
STERLING	0.4	0.4	0.4	0.3	0.4
UBA	0.08	0.07	0.07	0.07	0.06
UNION	0.01	0.01	0.01	0	0
UNITY	0.12	0.12	0.12	0.12	0.12
WEMA	0	0	0	0	0
ZENITH	0.08	0.08	0.12	0.12	0.11

Source: Researcher's computations based on Annual reports and Accounts of the Banks

Table 4.5 shows that managers in Eco and Wema bank have very insignificant amount of shareholding in their banks at about 0%. Managerial ownership in Union bank is also very insignificant at about 1% in 2006, 2007 and 2008; and at about 0% in 2009 and 2010. Oceanic bank had the highest managerial interest in the sampled banks at 38% in 2006, 2007 and 2008. The interest reduced to 28% in 2009 partly due to two reasons. First because of the CBN rule of relationship between chairman and CEO which made the chairman to step down and secondly because of the change of the CEO and executive directors by the CBN in 2009. Intercontinental bank is also affected by the second reason as their managerial ownership changed from a constant 2% to 1% after the sack of the CEO and the executive directors. Seven banks (FCMB, Skye Wema, Eco, Diamond, GTB and Unity) maintained the same managerial ownership throughout the period of study.

4.2.6 Managerial Cash Holding (MANCASH)

The managerial policy on free cash flow is depicted as a dummy in this study. Where the net cash flow from operations is positive one (1) is recorded and when it is negative, zero (0) is recorded. The distribution of the dummy variables in the study is depicted by Table 4.6.

Table 4.6 Managerial Cash Holding (MANCASH)

BANK	2006	2007	2008	2009	2010
ACCESS	1	1	1	1	0
DIAMOND	1	1	1	0	0
ECO	1	1	1	0	1
FCMB	1	1	1	0	0
FIDELITY	1	1	1	0	1
FINBANK	1	1	1	0	1
FIRST	1	1	1	1	1
GTB	1	1	0	0	1
INTER	1	1	1	0	1
OCEANIC	1	1	0	0	1
SKYE	1	1	1	0	0
STERLING	1	1	1	0	0
UBA	1	1	1	0	0
UNION	0	1	1	1	0
UNITY	1	1	1	0	1
WEMA	1	1	0	0	0
ZENITH	1	1	1	0	1

Source: Researcher's computations based on Annual reports and Accounts of the Banks

All the sampled banks maintained mixed policy on cash flow (i.e some years negative, some positive) with the exception of First bank which maintained positive net operating cash flow throughout the period of study.

4.3 Basic Sample Statistics

Table 4.7 shows the descriptive statistics of the sample. Table 4.8 presents the correlation matrix while the tolerance and variance inflation factor are presented in Table 4.9.

4.3.1 Sample Descriptive Statistics

The mean, standard deviation, minimum and maximum values of the variables used in the study are presented in Table 4.7. The full results are contained in Appendix B.

Table 4.7 Descriptive Statistics of Variables

Variables*	N	Mean	Median	Std. Dev	Minimum	Maximum
QUALDUM	85	.3412	0.0000	.47692	0.00	1.00
PER	85	-.0108	.0202	.13245	-.93	.08
MANABILITY	85	.0000	.0183	.16105	-.39	.66
MANOWNER	85	.1184	.1000	.10614	0.00	.40
MANCASH	85	.6941	1.0000	.46351	0.00	1.00
SIZE	85	17.5858	19.0200	3.00189	11.97	21.24
DEPOSITGRO	85	.6053	.3950	1.03528	-1.00	5.06
LIQUIDRISK	85	.3036	.3180	.16516	.00	.61
GFINCRISIS	85	.4000	0.0000	.49281	0.00	1.00

Source: SPSS Regression Results using Data from Annual Reports and Accounts
**QUALTEST= Quality Test (Earnings Quality), QUALDUM= QT dummy, PER= performance, MANABILITY= Managerial Ability, MO= Managerial Ownership, MANCASH= Managerial Cash Holding, DEPOSITGRO= Deposit Growth, LIQUIDRISK= Liquidity Risk and GFINCRISIS = Global Financial Crisis*

Table 4.7 shows that while performance of sampled banks range between about -93% and 8%, the mean and median are about -1.08% and 2.02%. The difference between the mean and median reveals that though the sampled banks had more positive return on assets, the weight of the negative return on assets was quite high to influence the mean as it is shown in the minimum value of -93%. The negative performance was more evident in the period just after the global financial crisis. The mean (median) bank managerial ability is 0% (1.83%), with a minimum of -39% and maximum of 66%.

These indicate preponderance of low managerial ability in the sampled banks. The mean (median) managerial ownership is 11.84% (10%), with a minimum of about 0% and maximum of 40%. The difference between the mean and the median reveals a slightly skewed nature, suggesting the existence of reasonable percentages of shares held by managers in some banks (as can be confirmed by the maximum value of the variable).

Table 4.7 also shows that about 69% of the sampled banks have positive free cash flow. The table indicates that 34.12% of the sampled banks have good earnings quality. This may be due to existence of toxic loans in the financial statement of banks and management's inadequate estimation of loan loss provision as was noted in the results of the CBN/NDIC joint audit of banks in 2009. The sampled banks grew their deposit at an average of about 61%. The difference between the mean and the median (34%) coupled with a large standard deviation indicate that many banks grew their deposits. The maximum value of 506% and minimum -100% shows that there exist outliers in the distribution. This is evident in the one trillion naira deposit mark attained by some banks (e.g. Intercontinental Bank in 2008) and can be attributed to the gains of consolidation reform process.

Liquidity risk as shown in Table 4.7 has a mean of 30.36% and median of 31.8%. The liquidity risk ranges from about 0% to about 61%. This shows that the banks attract quite a number of loans per naira of asset which contribute to their profitability. This means that the banks make use of their lending capacity, which comes at a liquidity cost. When the expected return from risky assets is low, the banks cannot afford decreases in their liabilities (deposit).Global financial crisis affected 40% of the sample period as indicated by the mean in Table 4.7. Size as presented in Table 4.7 denotes the natural

logarithm of the total asset of the sampled banks. The mean is about 17.59 while the median is 19.02. Size ranges from 11.97 to 21.24. This is a reflected in the total assets of the sampled banks. Total assets lies between N106.252billion and N1.957trillion during the period of study, a reflection of N25billion minimum capital balance for deposit banks.

4.3.2 Correlation Matrix

Table 4.8 presents the correlation matrix for the sample observation. The full results are contained in Appendix C.

Table 4.8 Correlation Matrix of the Dependent and Independent Variables

Variable^	QUALTEST	QUALDUM	PER	MANABILITY	MANOWNER	MANCASH	SIZE	DEPOSITGRO	LIQUIDRISK	GFINCRISIS
QUALTEST	1									
QUALDUM	.649**	1								
PER	.197	.207	1							
MANABILITY	.060	.190	.066	1						
MANOWNER	.135	.256*	.049	.012	1					
MANCASH	.339**	.424**	.314**	.058	.026	1				
SIZE	.105	.179	.179	-.078	.186	.044	1			
DEPOSITGRO	.357**	.349**	.155	-.098	.181	.433**	.253*	1		
LIQUIDRISK	-.301**	-.331**	-.048**	.078	-.014	-.449**	-.089	-.339**	1	
GFINCRISIS	-.019	-.081	-.262*	-.137	.015	-.344**	-.003	-.252*	.227*	1

Source: SPSS Correlation result using Data obtained from Annual Reports and Accounts

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

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

^For an explanation of the variables, see Table 4.7.

Table 4.8 shows that with the exception of liquidity risk (LIQUIDRISK), earnings quality has a positive relationship with all the other explanatory variables (performance, managerial ability, managerial ownership, managerial cash holding, size and deposit growth). Liquidity risk shows a significant negative correlation with earnings quality. The overall correlations among the explanatory variables were relatively low and fall below 0.5. The correlation matrix provides preliminary evidence that multicollinearity is

not a problem in this study. The global financial crisis is negatively correlated with all variables except managerial ownership and liquidity risk.

4.3.3 Tolerance and Variance Inflation Factors

In order to further test for multicollinearity, two advanced measures of assessing multicollinearity are employed. These are the tolerance value and the variance inflation factor (VIF). The summary of the results of these tests are presented in Table 4.9 while the full results are provided in Appendix D.

Table 4.9 Tolerance Value and Variance Inflation Factor (VIF)

Variable*	N	TOLERANCE	VIF
PER	85	.815	1.227
MANABILITY	85	.929	1.077
MANOWNER	85	.938	1.066
MANCASH	85	.608	1.646
SIZE	85	.877	1.141
DEPOSITGRO	85	.696	1.436
LIQUIDRISK	85	.742	1.347
GFINCRISIS	85	.804	1.244

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

**For an explanation of the variables see Table 4.7*

Although there is the presence of correlation among the independent variable, from Table 4.9, it could be seen that the tolerance values were consistently higher than 0.1, indicating absence of multicollinearity problems (eg. Menard, 1995 as cited in Field, 2005). In addition, the variance inflation factors were substantially lower than 10, also indicating complete absence of multicollinearity in this study (see Hair, Anderson, Tatham and Black, 1995:125). This shows that the seven independent variables are appropriate and fit well into the model.

4.4 The Association between Level of Earnings Quality and Managerial Characteristics of Listed Banks in Nigeria

The regression results dealing with the variables that determine the likelihood of high or low earnings quality as well as the relationship between earnings quality and managerial characteristics of listed banks in Nigeria are presented in two sections. The first section deals with results based on the base model while the second section deals with results based on the introduction of the control variables.

4.4.1 Logistic Results for Predictors of Level of Earnings Quality

The study used four predictor variables for the purpose of determining the association between management specific variables of listed banks in Nigeria and the level of earnings quality. The four predictor variables are performance, managerial ability, managerial ownership and managerial cash holding. The study hypothesised a significant association between these predictor variables and the level of earnings quality (high or low), which is the dependent variable of the study. The analysis starts by showing the effect of constant in the base model as shown in tables 4.10 and 4.11.

Table 4.10 Classification Table[a,b] (constant only)

	Observed		Predicted		
			Quality Test		Percentage Correct
			Low	High	
Step 0	Quality Test	Low	56	0	100
		High	29	0	0
	Overall Percentage				65.9

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

Table 4.10 shows the classification of the level of earnings quality (high or low quality) when only the constant is included in the model. Table 4.10 indicates that low quality has 56 cases while high quality has 29 cases of the sample. The predicted column shows zeros all through because the model is still in its basic state and so the percentage (100%) is skewed to low quality because it occurred more than high quality. The table also indicates that the model in its basic state on the overall correctly classifies about 66 percent of the banks in the sample. This means that the model predicts that 56 out of the 85 (65.9%) cases observed will have low quality.

Table 4.11 Model Summary (constant only)

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	**Constant**	-.658	.229	8.274	1	.004	.518

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

The summary of the model in Table 4.11 indicates that the constant has a coefficient of -0.658 and it is statistically significant. Furthermore, Table 4.12 shows that the predicting variables not included in the analysis of the constant are all statistically significant.

Table 4.12 Variables not in the Equation

			Score	Df	Sig.
Step 0	**Variables***	**PER**	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
	Overall Statistics		23.195	4	.000

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

**For an explanation of the variables see Table 4.7.*

Table 4.12 also shows that the overall statistics has a residual chi square of 23.195 which is significant at 1% level of significance. This statistics indicates that the coefficients for variables not included in the constant model (performance, managerial ability, managerial ownership and managerial cash holding) are significantly different from zero which means that the addition of one or more of these variables into the model will make significant contribution to its predictive power. The Roa's efficient score for all the four variables are also significant, this further shows that all four variables could potentially make contribution to the model.

In order to explicitly ascertain if the independent variables influence the dependent variable, and know if the regression is worth explaining, the study presents the results of Omnibus Tests of Model Coefficients in Table 4.13.

Table 4.13 The Summary of Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	**Step**	38.609	4	.000
	Block	38.609	4	.000
	Model	38.609	4	.000

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

Note: R^2= .354 (Hosmer & Lemeshow), .37 (Cox & Snell), .51 (Nagelkerke)

All independent variables were entered simultaneously. The results of Omnibus Tests of Model Coefficients test indicate that independent variables influence the dependent variable, significantly and regression result can be analysed. This means performance, managerial ability, managerial ownership and cash holding significantly improve our ability to predict whether earnings quality is high or low. The results of Hosmer & Lemeshow R Square, Cox & Snell R Square and Nagelkerke R Square are 0.35, 0.37 and 0.51 respectively. These R squares show that the model significantly predict the level of earnings quality substantively. The Hosmer & Lemeshow goodness-of-fit statistic is not significant which shows that the model fits the data appropriately and is predicting the real world data fairly well.

The classification of sampled banks with respect to level of earnings quality and the four managerial characteristics variables is shown in table 4.14 below.

Table 4.14 Classification Table (Base model)

			Predicted		
	Observed		Quality Test		Percentage Correct
			Low	High	
Step 1	Quality Test	Low	45	11	80.4
		High	10	19	65.5
	Overall Percentage				75.3

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

Table 4.14 shows the classification where the constant and all four predictor variables are present in the model. The model classifies banks with low earnings quality with a greater accuracy (80%) than high quality ones (66%) and the overall percentage classification of cases in the sample moved to about 75percent. These results show that the study can continue with the interpretation of the regression analysis and the results are summarized in Table 4.15. The full results are presented in Appendix E.

Table 4.15 Summary of Logistic Regression Analysis for Base Model

Variable*	B	S.E.	Wald	Df	Sig.	*Exp*(B)
Constant	-5.372	1.515	12.578	1	.000	.005
PER	42.236	20.581	4.212	1	.040	2.202E+18
MANABILITY	4.710	2.554	3.399	1	.065	111.017
MANOWNER	8.170	3.196	6.529	1	.011	3533.342
MANCASH	3.329	1.280	6.766	1	.009	27.917

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

**For an explanation of the variables see Table 4.7.*

Table 4.15 shows that performance has a coefficient (B) of 42.236 with a standard error of 20.581. The Wald statistic (4.212) is significant at 5% level of significance with an Exp B which is greater than one. This means that as performance increases, the odds of having high earnings quality also increases. Table 4.15 also shows that managerial ability has a coefficient (B) of 4.71 with a standard error of 2.554. The Wald statistic for

managerial ability is significant at 10% level of significance. Managerial ability has an Exp B (111.017) which is greater than 1. This shows that for any unit increase in managerial ability, the odds of having high earnings quality also increases by the same unit.

Managerial ownership has a B coefficient of 8.170 with a standard error of 3.196. The Wald statistic for managerial ownership is significant at 5% level of significance. The Exp B has shown in Table 4.15 is greater than 1, meaning that any unit increase in managerial ownership will increase the likelihoods of having high earnings quality. Table 4.15 indicates that cash holding has a B coefficient of 3.329 and a standard error of 1.280. The Wald statistic for cash holding is significant at 1% level of significance. The Exp B is greater than 1, which also means that positive cash movement in bank is likely to increase the odds of having high earnings quality.

The results presented in Table 4.15 indicate that all the four independent variables (performance, managerial ability, managerial ownership and managerial cash holding) positively relate, and significantly predict level of earnings quality. All the four variables have Exp (B) greater than 1; which signifies that for an increase in any of these variables, the odds of having high earnings quality also increases.

The results as presented in Tables 4.10, 4.11, 4.12, 4.13, 4.14 and 4.15 can be linked to the first hypothesis. These results as presented in these tables and specifically, the chi square and step significance in Table 4.13 provide evidence for the rejection of null hypothesis one. The overall statistics is significant at 1% level according to the model chi square statistics. The model predicts 75.3% of the quality of earnings correctly. This

means that managerial characteristics are more likely to have significant effect on the level of earnings quality of listed banks in Nigeria.

4.4.1.1 Association between Performance and Level of Earnings Quality

Table 4.15 shows that performance has a significant effect on the level of earnings quality in the regression model. The results of the regression provide evidence for the rejection of null hypothesis two. The result reveals that the likelihood of high earnings quality will be higher with banks with high performance. This implies that good performance can be an indication of high earnings quality. This result confirms the findings of De Angelo, De Angelo and Skinner (1994), Sloan (1996), Keating and Zimmerman (1999), Lee, Li and Yue (2006) and Mahmud, Ibrahim and Pok (2010).

4.4.1.2 Association between Managerial Ability and Level of Earnings Quality

Table 4.15 shows that managerial ability has a significant effect on the level of earnings quality in the regression model. The regression results indicate that the likelihood of high earnings quality will be higher in banks with high managerial ability. Therefore, null hypothesis three is rejected. This is in consonance with the findings of Demerijan et al. (2012) and Cantrell (2012).

The results of this study have shown that there exist an association between managerial ability and earnings quality which is in concordance with literature. Managers use their ability, expertise and experience in valuing the earnings asset of the bank, classifying loans and advances (either in terms of maturity, security or performance), estimating loan loss provision and choosing accounting methods for calculating their earnings.

When these are carried out properly and conservatively using the best informed judgement, earnings quality will be high.

4.4.1.3 Association between Managerial Ownership and Level of Earnings Quality

The results in Table 4.15 indicate that the Wald statistics figure of 6.529 is significant at 95% confidence level. The value of *Exp* B (3533.342) lies between the confidence interval values range. This implies that if the percentage of managerial ownership increases, then the odds of having high earnings quality also increases and the result can be generalised for our population of banks. This is consistent with the findings of Alves (2012) and Prempanichnukul and Sangboon (2012). Consequently, null hypothesis four that the likelihood of high earnings quality will be lower in banks with low managerial ownership is rejected

4.4.1.4 Association between Managerial Cash Holding and Level of Earnings Quality

The results as shown in Table 4.15 indicate that cash flow effect is significant at 1% with a B of 3.329 and Exp B of 27.917 which lies between the confidence interval ranges, implying that the result can be generalised for all banks in the population. These values point to a significant positive association between earnings quality and managerial cash holding.

This is consistent with the findings of Mohammadi, Maharlouie and Mansouri (2012). The results of the study show that when a bank has positive movement in cash flow during the financial year, it is likely to have high earnings quality. The results certainly provide evidence for the rejection of the null hypothesis five. This means that the likelihood of high earnings quality will be lower in banks with negative managerial cash holding.

4.4.2 Logistic Results for Effects of Bank Specific and Economic Related Variables on the Level of Earnings Quality

Bank specific and economic related variables were included one at a time with replacement so that the contribution of each variable on the base model can be assessed. A simultaneous inclusion of all the bank specific variables is also carried out so that the aggregate effect of the bank specific variables can be analysed. The effect of the control variables on the managerial characteristics – earnings quality relationship can be deduced from Table 4.16.

Table 4.16 Summary of Logistic Regression Analysis[a]

Variable[b]	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6
Constant	-5.372 (1.515)	-8.735 (2.708)	-4.156 (1.801)	-6.441 (1.885)	-7.805 (3.119)	-5.864 (1.584)
PER	42.236** (20.581)	47.819** (21.342)	49.991** (23.410)	61.125** (26.794)	71.603** (29.289)	42.040** (18.968)
MANABILITY	4.710* (2.554)	5.049* (2.618)	5.712** (2.733)	6.247** (2.591)	7.156** (2.763)	5.363** (2.662)
MANOWNER	8.170** (3.196)	7.914** (3.269)	9.211*** (3.489)	8.982** (3.786)	9.518** (4.150)	8.354** (3.234)
MANCASH	3.329*** (1.280)	3.404*** (1.259)	3.042** (2.158)	2.948** (1.390)	2.727* (1.493)	3.571*** (1.295)
SIZE		.178 (.110)			.133 (.116)	
LIQUIDRISK			-4.911** (2.150)		-4.155* (2.245)	
DEPOSITGRO				.944** (.439)	.827* (.471)	
GFINCRISIS						.812 (.677)
Hosmer & Lemeshow R^2	0.35	.379	.408	.414	.536	.368
Cox & Snell R^2	0.37	.385	.408	.412	.449	.376
Nagelkerke R^2	0.51	.533	.564	.570	.621	.520
-2log likelihood	70.499	67.731	63.952	64.561	58.476	69.006
Model χ^2	38.609***	41.377***	44.547***	45.156***	50.632***	40.102***
Overall % Classification	.753	.812	.847	.788	.824	.765
N	85	85	85	85	85	85

Source: SPSS Regression Results using Data obtained from Annual Reports and Accounts

[a]*SE values are shown in parenthesis. ***, **, and * indicate significance at 1%, 5%, and 10% respectively.*

[b]EQ1 = base model, EQ2 = model with size, EQ3 = model with liquidity risk, EQ4 = model with deposit growth, EQ5 = model with all three bank specific variables and EQ6= model with global financial crisis

Table 4.16 indicates that size does not have statistically significant effect on the likelihood of having high earnings quality. This means the size of the sampled banks does not have statistically significant association with the level of earnings quality. This

is also consistent with the findings of Prempanichnukul and Sangboon (2012). The findings of this study can be attributed to the fact that all the banks used in the study are mega banks which met up with the N25billion minimum paid up capital floor fixed by the CBN. An indication of this is that all the banks in the sample can be categorised as the same in terms of size, hence, the insignificant effect of size.

Despite the insignificance, the model improved with the introduction of size. The model significance is maintained at 1% level but with an improved chi square of 41.377 and the overall percentage of classification moved from about 75 percent to about 81 percent with the Nagelkerke R^2 increasing from about 51 percent to 53percent.

The introduction of liquidity risk into the model also improved the model and all other variables in the model except the cash flow variable. This is expected because loan is supposed to reduce cash level in the bank. Managers need to strike a balance between profitability and liquidity. If this balance is not met, they may resort to borrowings from other banks to meet up with their short term cash demands. The model maintained a significant chi square at 1% level of significance and the Nagelkerke R^2 moved to 56percent with an overall classification of about 85percent. Looking at the B (-4.911) as presented in Table 4.16, it can be deduced that as liquidity risk increases the odds of having high earnings quality reduces. The results imply that high earnings quality will be lower in banks with high liquidity risk.

Table 4.16 also shows that with the introduction of deposit growth, the model chi square maintained significance at 1% level of significance and an improved Nagelkerke R^2 of 57percent. The overall percentage of classification is 79percent and the B is 0.944. This

means that the likelihood of high earnings quality will be higher in banks with high deposit growth. Deposit growth also improved the significant level of managerial ability from 10% to 5%. This means that the presence of deposit growth increase the predictability of managerial ability in the model.

Overall, when all three bank specific variables are introduced into the equation simultaneously, Table 4.20 indicates that the model now correctly predicts about 82.4% of the earnings quality with the lowest -2log likelihood of 58.476. This means that the data as analysed best fits the model that this point. The Nagelkerke R^2 stood at about 62% while the model chi square statistics of 50.632 is significant at 1% level. From these statistics, it can be deduced that the bank specific variables significantly affect the level of earnings quality – managerial characteristic association. We therefore fail to accept null hypothesis six. This is because the overall significance level improved with the inclusion of bank specific variables. The implication of this is that earnings quality is not mainly affected by the opportunistic behaviour of management but in conjunction with the bank specific variables.

The introduction of global financial crisis as an economic variable into the base model as shown in Table 4.20 indicate that the model maintained significance at 1% level and a slightly improved Nagelkerke R^2 of 52percent. The model predicts 76.5percent of the quality of earnings correctly. The interesting aspect of the introduction of GFINCRISIS into the model is that managerial ability had an improved B which is significant at 5% level of significance. The implication of this is that during the period when the global financial crisis hit the Nigerian banking sector, bank management in all the banks in the population made efforts to meet up with the exposures during economic crisis. Banks

without good managerial ability to combat the crisis found themselves in grave conditions as was discovered by CBN (see Anyanwu, 2010). The global economic crisis has brought to the fore the intellectual and ideological failure with respect to destructive creation nature of banking business. Managerial ability is necessary for banks to maintain survive during the global economic crisis.

Despite increasing the strength of managerial ability in the model, the results show that there is no significant association between global financial crisis and the level of earnings quality. It also shows that global financial crisis significantly affect the level of earnings quality – managerial characteristic relationship. We therefore fail to accept null hypothesis seven.

4.5 Policy Implication of the Findings

Managerial factors and Earnings quality no doubt influence the articulation of financial reports of banks either by the public or regulatory bodies. The result of this study has provided insight into the management related variables that can help in predicting the level of earnings quality in the bank.

Possible public implications exist regarding the use of these management related variables and model depicted in this study. Financial analyst, depositors, creditors and shareholders of banks can utilise the results of this study in making a good analysis of predicting the level of reliability of the financial statements presented by their bank. The model in this study can be used to predict the probability of high earnings quality in the bank, and can easily be carried out by calculating the necessary variables from the published financial statements. The result along with the auditor's report can be used for

proper articulation of the financial statement and assessing safety of deposits and investments in the bank. In addition, earnings quality figures can be used alongside other ratios to determine the well being of the bank by giving an insight about the quality of the reported earnings.

The outcome of the analysis in this study has provided insight into the predictor variables that have an important impact in explaining the level of earnings quality of listed banks in Nigeria. From the perspective of users of financial statements (especially financial analysts), these variables should help in establishing the level of earnings quality in the bank. The results of the study indicate that cash holding (cash flow management) is an important managerial factor in predicting earnings quality. It consistently maintained a positive relationship with earnings quality despite the introduction of bank specific variables. The interesting features of this variable are that it is very easy to detect in the cash flow statement and indicates an overall cash movement in the financial year.

Another point to note is that any manipulation of this variable by the bank management destabilizes the whole cash flow statement. The results also indicate that managerial ownership is another important explanatory variable in the model. It is a variable that maintained positive relationship with earnings quality despite the introduction of bank specific variables as shown in table 4.10. The implication of this is that other shareholders can be rest assured that as long as the managerial ownership is effective, probability of high earnings quality will definitely be high. Another implication of this is that, in an event where the CBN needs to exercise the right to change erring management team, there is a need for the apex body to take the issue of managerial

ownership seriously. It is expedient in order to avert the type of Intercontinental bank situation, where all indicators plummeted after the introduction of new managers who do not have high shareholding stake in the bank.

The results of the study also indicate that managers with higher ability have the higher probability of presenting financial statements with high earnings quality. The implication of this is that the managerial expertise should be considered when ratifying appointment of management in the annual general meeting. This finding is also important for the board of directors in considering the costs and benefits of managers as managerial ability affects the quality of earnings reported, and with a ripple effect on the share-price attributes and litigation exposure. Another implication of this is that stakeholders and the regulatory bodies need to be proactive in monitoring the activities of management because expertise can be used negatively to conceal the true financial position of the bank. Management and bank employees will find the result of this study useful in assessing their contributions to the bank and the likely effect on the overall well being of the bank.

Performance is another important factor in predicting earnings quality of banks. Performance maintained its level of significance throughout the analysis even upon the addition of bank specific variables. The implication of this is that a bank that is actually performing well will certainly present earnings of high quality. The need to conceal poor performance may lead to the presentation of earnings of low quality. Once earnings quality is low, the user of such financial statement needs to probe further to get the rationale for such low earnings quality.

The effect of bank specific variables on the base model also shows their importance. Size has no statistically significant effect on earnings quality of banks. The implication of this is that big banks can also report earnings of low quality and the notion that the big banks cannot fail is of the past. In continuation, if due diligence is not considered in appointing the right management team, the notion of "banks too big to fail" will be eroded and a "union bank situation" can arise. Deposit growth also shows a significant effect on the earnings quality managerial characteristic relationship. The probability of high earnings quality is higher when there is the high presence of deposit growth. The implication of this is that the fewer leakages in the economy, the better the quality of earnings to be expected in the banking industry. How can these leakages be reduced? The results of this study show that improved managerial characteristics can help by mobilising more deposits. Management will find the results of this useful in making policies that will enhance their ability to attract more deposits. There is probably a need for banks to start thinking of "flight to quality" rather than being too big to fail.

Liquidity risk also improved the earnings quality-managerial characteristics relationship. The likelihood of high earnings quality will be low in an event of high liquidity risk in a bank listed in Nigeria. The implication of this is that when loans are given out without due diligence, they may eventually lead to non performing loans. If loans are not properly classified by the management in accordance with the prudential guidelines, liquidity risk increases and earnings quality decreases. The secondary implication of this is that banks will experience grave liquidity problems as was notice in 2008 due to exposure to the capital market and oil and gas sector. These liquidity problems may be so grave that expanded discount window or money market instruments will fail to resolve as was noticed by CBN in 2008 (see Anyanwu, 2010). An obvious solution is

analysing the earnings quality in relation to the managerial variables and the bank specific variables as was used in this study.

4.6 Summary

This chapter presented and analyzed the regression results on the impact of managerial characteristics on earnings quality of listed banks in Nigeria. The analyses have been carried out in three sections.

In section one, descriptive statistics, correlation, tolerance and variance inflation factor results were presented and analyzed. In section two, the regression results dealing with the association between earnings quality and managerial characteristics of listed banks in Nigeria were presented and analyzed using data collected from the cross- section of the sampled banks used in the study.

The results reveal that all managerial characteristics variables: performance, managerial ability, managerial ownership and cash holding are significant in predicting the earnings quality of banks used in the study, and resulted in the rejection of all the null hypotheses. The chapter finally discussed the findings from the research and the policy implications of the findings.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study examines the managerial factors that predict earnings quality of listed banks in Nigeria. Distinctively, the study examined the following: i) the predictability of earnings quality by managerial performance; ii) the predictability of earnings quality by managerial ability; iii) the predictability of earnings quality by managerial ownership and; iv) the predictability of earnings quality by cash holding in listed banks, in Nigeria. Three bank specific variables were also added separately to the base model. These variables are bank size, deposit growth and loan (liquidity risk). These objectives are transformed into testable hypotheses for the study as stated in chapter one. The period 2006 – 2010, was chosen as the time frame of the study because 2006 marked the beginning of the post consolidation reform era. The time frame also ended in 2010 because post 2010 has some events that could affect the sample and result of the study. Examples of such events are consolidation (between Ecobank and Oceanic bank; Access and Intercontinental bank; FCMB and Fin bank), International Financial Reporting Standard (IFRS) compliance and nationalization of some banks (BankPHB, Afri and Spring bank) which could affect banks in the population.

The pivotal position taken by the banking sector in the financial system of any economy warranted its continual reforms. The banking sector is highly regulated and this makes studies around it unique and conspicuously necessary. The consolidation reform exercise embarked upon in 2004 was intended to guarantee a diversified, strong and reliable Nigerian banking sector which can compete globally. The results recorded from this reform was overwhelming in terms of capitalization, ownership structure, depositor

confidence, wider regulatory oversight (virtually all banks are publicly quoted) and a perceived stable microeconomic environment in Nigeria.

However, the advent of the global financial and economic crisis, and the significant exposure of the banks to the capital market and oil and gas sector reduced and in some cases eroded the gains from consolidation. It led to crisis of deep rooted liquidity problems in the Nigerian banking sector. Investigation by the CBN revealed among other things inadequate disclosure and lack of transparency with poor managerial character failure as part of the main origin of the crises. Earnings quality and managerial factors no doubt influence the articulation of financial reports of banks either by the public or regulatory bodies. The result of this study has provided insight into the management related variables that can help in predicting the level of earnings quality in the bank.

The results of the study revealed that the managerial characteristic variables have significant positive effect in predicting the earnings quality of listed banks in Nigeria. The study revealed that a unit increase in these variables (performance, managerial ability, managerial ownership, cash flow management) will likely lead to higher earnings quality in the banks. The introduction of bank specific variables revealed mixed results. Size does not show statistical significance effect in predicting the likelihood of high earnings quality though it has a positive association with earnings quality. Deposit growth shows positive statistical significant (at 5 percent level) likelihood in predicting the level of earnings quality. Loan variable shows negative significant (at 5 percent level) odds in predicting the level of earnings quality.

5.2 Conclusions

Based on the findings of the research, the study concludes as follows:

(i) The study establishes that the four managerial variables have a significant aggregate positive association with earnings quality. This association indicates that disclosing earnings of high quality is more likely in banks whose managerial characteristic variables are favourable. The higher the values of managerial characteristics, the higher the likelihood of disclosing earnings quality. Invariably, the more the managerial stake in the bank, the more likely it is to report earnings of high quality.

(ii) The study confirms the importance of management in the earnings reporting process. Bank managers have the responsibility of making decision with regards to loan loss estimation, portfolio management, financial risk and liquidity risk. The effect of managerial characteristics variables is important because the most opaque component of earnings and income statements revolves around managerial valuations of assets held on the financial institution's books.

(iii) The study affirms that there is a positive association between earnings quality and performance of listed banks in Nigeria, which indicates that the higher the performance of these banks, the higher the likelihood of reporting earnings with high quality.

(iv) The study establishes that managerial ability (expertise) is an important variable in earnings reporting process of banks. When "managers" are changed and bailout funds are rolled out, it is a new set of "managers" that will still manage

these funds. Their ability to manage depositors' or bailout funds play an important role in the quality of earnings they report.

(v) The study attests that managerial ownership has a significant positive association with earnings quality. The higher the percentage of managerial ownership, the more likely it is for such managers to report earnings of quality.

(vi) The study establishes that size is not a statistically important variable in assessing earnings quality of banks. Despite the bank consolidation reform in Nigeria, size has no statistical significant association with earnings quality of listed banks in Nigeria. This means that banks are neither too big nor too small to report earnings of low quality.

(vii) The study also ascertains that liquidity risk is negatively association with earnings quality. This means that the banks' lending capacity come at the expense of low earnings quality in most cases.

(viii) The study affirms that deposit growth rate has a significant positive association with earnings quality of listed banks in Nigeria. The volume of deposit available to the bank manager determines to the extent to which the managers can create credits or loans. When the ability to create more money is high in a bank, then the probability of high earnings quality is ascertained.

5.3 Limitations of the Study

The possible limitations of this study that could hinder generalisation of the results include: nature of data, survivorship bias and measurement of variables.

The *nature of data* used in this study poses by way of a limitation. The study relied primarily on accounting data as contained in the banks' annual reports which have not been adjusted for inflation. To the extent that financial information is distorted in a period of inflation, the results of the study may not give an accurate representation of the growth rates used in the study. As much as possible, this possible distortion has been minimised by lagging affected data with the total assets of the bank.

Another limitation of this study is the issue of *survivorship bias* related to the period of study. The study only considered listed banks in Nigeria that survived the CBN consolidation reform era. The total number of listed banks that survived the reform is twenty one. In addition, the dearth of data hindered the use of all the banks as sample for the study.

Measurement of variables also posed by way of a limitation to this study. There are differences in the valuation of earnings quality and there is no accepted one in literature. As for earnings quality, there is no agreed valuation in literature, however, this study considered necessary factors peculiar to banks (loan loss provision, operational cash flow, total asset, gross earnings, earnings from core banking business and leverage) in the valuation of earnings quality. Similarly, studies vary in their measurement of bank efficiency and managerial ability. The operational definitions of variables as used in this research work are thus peculiar to the study. The findings of the study should be

interpreted within the context of the operational definition of the variables used in this study.

5.4 Recommendations

The recommendations of this study are directed at different parties that use annual reports and accounts of banks. It is also directed to regulatory bodies and policy makers in the banking sector. Based on the findings of this study, the following recommendations are made:

5.4.1 The Central Bank of Nigeria

The CBN needs to take the issue of managerial factors seriously when taking decisions about management of banks. The findings of this study reveal that there exist an association between managerial characteristics and level of earnings quality. Managerial ownership and cash holding are imperative factors alongside the ability and performance of management. In a situation where management is changed without recourse to these factors as was obtainable in some banks in 2009, it can lead to low performance. Low performance in turn can necessitate earnings management thereby reducing earnings quality. Once earnings quality is low the financial statements could be misleading and the decisions made based on them would be erroneous.

The change in management if needed in any bank by CBN should be wholly and not partial. The result of this study shows that management team other than the executive management can also have impact on the quality of earnings in their bank through their ownership and ability. It also showed that some banks maintained low quality despite the change in management; this can partially be alluded to the effect of managerial

characteristics of non-executive management team. Bailouts to banks from taxpayers' money should be rolled out with conditions, so that mismanagement of such funds are guarded. It is needed so as to avoid situations where management pay bonuses from bailout funds.

The CBN also needs to adopt the use of Q Test model in conducting earnings quality assessment test on financial reports delivered to it by banks. The findings of this study show that the model predicts the real world data very well. The quality test could either be quarterly, half yearly or yearly. Early signs of low earnings quality can be detected and warning signals could be sent to bank management and other government agencies. If quality assessment test is carried out regularly, major disturbances in the banking sector can be averted.

The problem of uneven supervision and enforcement as noted by Anyanwu (2010) should be revisited and all banks should be treated equally so that the issue of "banks too big to fail" would not be taken as an excuse for negligence for improper supervision and monitoring. Equal footing for all banks is ensured and all bank management teams will be aware of the sledge hammer in case of any indictment in financial mishap. The results of this study and the CBN/NDIC joint audit in 2009 indicate that big banks can report earnings of low quality and at the same time, big banks can go distress if regulatory authorities do not make timely intervention. Proper enforcement of the provisions of BOFIA is necessary to keep the banks in check.

The global economic crisis has brought to the fore the intellectual and ideological failure with respect to destructive creation. It is evident in the low earnings quality recorded by

some banks due to a fall in income from continuous operation. This study recommends the full implementation of non interest based banking and Islamic banking to ameliorate the banking business, eliminate illegal non continuous businesses in banks and reduce exposure to volatile industries like the oil and gas, and the capital market.

5.4.2 The Government

Legislation should be made to ban the issue of government guarantees to banks that post earnings of low quality; this will help discourage false disclosure of earnings in the financial statements. This is because the findings of this study reveal that there is an association between the performance and the level of earnings quality of listed banks in Nigeria. Such legislation, will also make the symptoms of distress in banks to be noticed easily and early, for proper and prompt intervention which will avoid distress and possibly the eventual failure of such banks. Legislation backing non interest banking and Islamic banking should be made more affirmative and popularised.

5.4.3 Other Regulatory Bodies

Other regulatory bodies in the financial system like the SEC, NDIC and NSE need to perform quality test on reports of banks. For the SEC and NSE, this will help in the securitization of the bank shares. When the information about the quality of earnings of a bank is reflected in the share price of that bank (see Sloan, 1996 and Richardson, 2003), it will help reduce erroneous judgement while trading in the shares of the bank and prevent loss of investment.

For the NDIC, in order to safeguard the deposits' interest, the study recommends that NDIC should carry out quality assessment for the financial reports. It will help give

early warning signals which could assist in taking prompt steps in alleviating stress or failure of banks. It will also help in the determining the premium payable by banks.

5.4.4 Other Recommendations

Other recommendations of this study are enumerated as follows

(i) The Central Bank of Nigeria

The change in management if needed in any bank by CBN should be wholly and not partial. The result of this study shows that management team other than the executive management can also have impact on the quality of earnings in their bank through their ownership and ability. It also showed that some banks maintained low quality despite the change in management; this can partially be alluded to the effect of managerial characteristics of non-executive management team. Bailouts to banks from taxpayers' money should be rolled out with conditions, so that mismanagement of such funds are guarded. It is needed so as to avoid situations where management pay bonuses from bailout funds.

(ii) The Government

Human nature is difficult to change, but a restructure of rules of the banking business can be carried out. This study recommends that the federal lawmakers should amend the Banks and other Financial Institutions Act (BOFIA) to reflect that bank executives should deposit all their assets as collateral in case of failure of banks managed by them. The business of banking is a form of destructive creation that if not put to proper checks

can be abused by executives who may eventually be limited to shares held by them in the banks.

The amendment of BOFIA is to be targeted towards putting a ceiling on the bonuses of bank executives. Yearn for excessive bonuses could lead bank management team to manage earnings which in turn lead to low earnings quality (see Healy, 1985 and Guidry, Leone & Rock, 1999). The amount of bonus paid to bank executives at the moment outweighs the premium paid to shareholders. The ceiling on bank executives' bonuses could be that the amount of bonus for any particular financial year should not exceed the amount paid to shareholders as dividend in the same year. If this is implement along with other provisions of BOFIA which stipulate when, where and how to pay dividend will be reduce the contractual incentives of management to report managed earnings. In a situation where earnings quality is low or bailout funds are injected into banks, bank executives should be denied bonuses. This is because it is not morally right for bonuses to be paid out of taxpayers' money and not the earnings of the bank.

The social system should be designed such that ex bank executives of failed banks are not allowed to hold any post in the financial sector and other sensitive sectors of the economy. There is the likelihood that they will repeat or exhibit the failure tendencies in the new organizations because their performance and ability are related to the quality of results they turn in. Distresses and failures in the financial sector are dangerous and can in turn cripple the economy as was witnessed in the US, Greece, Spain and some other European countries.

(iii) Shareholders

Based on the findings of this study, it is recommended that shareholders should demand earnings quality report from their auditors alongside the auditor's report. It will help shareholders make informed judgement about their bank. Shareholders are also advised to always take into account the ability and ownership structure of their management team. Stock based compensation could be explored instead of cash when determining the bonus of management.

(iv) Board of Directors

In addition to the recommendation for shareholders, the study also recommends that incoming CEOs should be allowed to be in the management team prior the assumption of office (parallel change), it will go a long way in reducing earnings management (see Latif, Strickland and Yang, 2011; DeAngelo, DeAngelo and Skinner, 1994; Murphy and Zimmerman, 1992) as the change will not be sudden, and there will be no need for an accounting big bath behaviour. The parallel change should be implemented in line with the CBN directive of maximum of ten years tenure for CEO of banks.

The board of directors is advised to form credit policies that ameliorate their liquidity risk, and this is achievable by following the CBN prudential guidelines in conjunction with the IFRS. The credit policies should be designed in such a way that it will favour production and small scale enterprises. When loans are given for production, the companies will make gains that are in turn returned to the banks and thus increases the level of loanable funds in the banking system.

5.5 SUGGESTED AREAS FOR FURTHER RESEARCH

The findings of this study and the generalisation of the conclusions of the study are limited by some factors that future researchers should attempt to overcome.

i. This study recommends that future researchers in this field should replicate the same research using firms listed in other financial institutions in the economy such as insurance and discount houses by examining the association between their managerial characteristics and earnings quality.

ii. It is also recommended that this study be replicated using different measures of earnings quality. However, these measures should be used in compliance with the components of financial statements of banks.

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Appendices

Appendix A

Appendix A0

List of Banks in Nigeria as at January 1, 2006

Source: cuddled from CBN Annual Reports 2005: 45

	Bank	Constituent member
1	^Access Bank Nigeria Plc	Access Bank, Marina Int'l Bank & Capital Bank International
2	Afribank Nigeria Plc	Afribank Plc and Afribank Int'l (Merchant Bankers)
3	Bank PHB Plc	Platinum Bank Limited and Habib Nigeria Bank Limited
4	^Diamond Bank Plc	Diamond Bank , Lion Bank and African International Bank
5	^EcoBank Nigeria Plc	EcoBank Plc
6	Equitorial Trust Bank Plc	Equitorial Trust Bank Ltd and Devcom Bank Ltd
7	^Fidelity Bank Plc	Fidelity Bank, FSB International Bank and Manny Bank
8	^First Bank of Nigeria Plc	First Bank Plc, MBC International Bank & FBN (Merchant Bankers)
9	^First City Monument Bank Plc	First City Monument Bank, Coop Development Bank, Nigeria-American Bank and Midas Bank
10	^First Inland Bank Plc	First Atlantic Bank, Inland Bank (Nigeria) Plc, IMB International Bank Plc and NUB International Bank Limited
11	^GT Bank Plc	GT Bank Plc
12	IBTC-Chartered Bank Plc	IBTC, Chartered Bank Plc and Regent Bank Plc
13	^Intercontinental Bank Plc	Intercontinental Bank Plc, Global Bank Plc, Equity Bank of Nigeria Limited and Gateway Bank of Nigeria Plc
14	**Nigeria International Bank Limited (Citi Group)	Nigeria International Bank limited
15	^Oceanic Bank International Plc	Oceanic Bank International Plc and International Trust Bank
16	^Skye Bank Plc	Prudent Bank Plc, Bond Bank Limited, Reliance Bank Limited, Cooperative Bank Plc and EIB International bank Plc
17	Spring Bank Plc	Citizens International Bank , ACB International Bank, Guardian Express Bank, Omega Bank, Trans International Bank and Fountain Trust Bank
18	**Stanbic Bank of Nigeria Ltd	Stanbic Bank of Nigeria Limited
19	**Standard Chartered Bank Ltd	Standard Chartered Bank Limited
20	^Sterling Bank Plc	Trust Bank of Africa Limited, NBM Bank Limited, Magnum Trust Bank, NAL Bank Plc and Indo-Nigeria Bank
21	^United Bank for Africa Plc	United Bank for Africa Plc, Standard Trust Bank Plc and Continental Trust Bank
22	^Union Bank of Nigeria Plc	Union Bank of Nigeria Plc, Union Merchant Bank Limited, Broad Bank of Nigeria Limited and Universal Trust Bank Nigeria Plc
23	^Unity Bank Plc	Intercity Bank Plc, First Interstate Bank Plc, Tropical Commercial Bank Plc, Centre-point Bank Plc, Bank of the North, New African Bank, Societe Bancaire, Pacific Bank and New Nigerian Bank
24	^Wema Bank Plc	Wema Bank Plc and National Bank of Nigeria Limited
25	^Zenith Bank Plc	Zenith Bank Plc

** Foreign owned banks

^ Banks that met up with the criteria specified for inclusion in the sample

Appendix A1
Correlations Results for Bank Managerial Ability Variables

		BANKEFF	ASSETS	EM	CASH	AGE	LEV	AUDITOR	IO
BANKEFF	Pearson Correlation	1	-0.057	.363**	-.286**	.271*	-.339**	0.088	-0.144
	Sig. (2-tailed)		0.605	0.001	0.008	0.012	0.002	0.423	0.188
	N	85	85	85	85	85	85	85	85
ASSETS	Pearson Correlation	-0.057	1	-0.195	-0.032	-0.07	-.265*	0.159	-0.047
	Sig. (2-tailed)	0.605		0.074	0.771	0.525	0.014	0.146	0.666
	N	85	85	85	85	85	85	85	85
EM	Pearson Correlation	.363**	-0.195	1	-.335**	.458**	0.088	0.053	-0.119
	Sig. (2-tailed)	0.001	0.074		0.002	0	0.422	0.631	0.279
	N	85	85	85	85	85	85	85	85
CASH	Pearson Correlation	-.286**	-0.032	-.335**	1	-0.123	0.044	0.075	.252*
	Sig. (2-tailed)	0.008	0.771	0.002		0.263	0.691	0.495	0.02
	N	85	85	85	85	85	85	85	85
AGE	Pearson Correlation	.271*	-0.07	.458**	-0.123	1	0.107	-0.035	-0.139
	Sig. (2-tailed)	0.012	0.525	0	0.263		0.329	0.749	0.205
	N	85	85	85	85	85	85	85	85
LEV	Pearson Correlation	-.339**	-.265*	0.088	0.044	0.107	1	-.585**	-0.057
	Sig. (2-tailed)	0.002	0.014	0.422	0.691	0.329		0	0.603
	N	85	85	85	85	85	85	85	85
AUDITOR	Pearson Correlation	0.088	0.159	0.053	0.075	-0.035	-.585**	1	-0.126
	Sig. (2-tailed)	0.423	0.146	0.631	0.495	0.749	0		0.251
	N	85	85	85	85	85	85	85	85
IO	Pearson Correlation	-0.144	-0.047	-0.119	.252*	-0.139	-0.057	-0.126	1
	Sig. (2-tailed)	0.188	0.666	0.279	0.02	0.205	0.603	0.251	
	N	85	85	85	85	85	85	85	85

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

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

Appendix A2

Descriptive Statistics

	Mean	Std. Dev.	N
BANKEFF	0.9378	0.20194	85
ASSETS	9.0811	3.74319	85
EM	7.9759	0.6698	85
CASH	0.7176	0.45282	85
AGE	29.5294	24.2853	85
LEV	0.9025	0.20126	85
AUDITOR	0.9765	0.15248	85
IO	0.1322	0.12117	85

Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.247	7	0.178	6.296	.000[b]
	Residual	2.179	77	0.028		
	Total	3.426	84			

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603[a]	.364	.306	.16821

a. Predictors: (Constant), IO, ASSETS, AGE, AUDITOR, CASH, EM, LEV

b. Dependent Variable: BANKEFF

Appendix A3

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.134	0.338		3.352	0.001
	ASSETS	-0.006	0.005	-0.109	-1.13	0.264
	EM	0.085	0.034	0.283	2.521	0.014
	CASH	-0.045	0.046	-0.101	-0.99	0.327
	AGE	0.001	0.001	0.154	1.487	0.141
	LEV	-0.551	0.12	-0.549	-4.61	0
	AUDITOR	-0.31	0.157	-0.234	-1.98	0.052
	IO	-0.216	0.163	-0.13	-1.33	0.188

a. Dependent Variable: BANKEFF

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	0.5687	1.1939	0.9378	0.12184	85
Residual	-0.38655	0.65557	0	0.16105	85
Std. Predicted Value	-3.029	2.102	0	1	85
Std. Residual	-2.298	3.897	0	0.957	85

a. Dependent Variable: BANKEFF

Appendix A4

Computation of Bank Managerial Ability for the first five Banks

BANK	YEAR	BANKEFF	ASSETS	CASH	IO	LEV	AUDITOR	AGE	EM	BMA
	2006	0.83	13.07	1	0.11	0.83	1	16	6.18	0.06567
	2007	0.94	11.79	1	0.18	0.91	1	18	6.59	0.18343
	2008	0.99	17.91	1	0.13	0.83	1	20	6.97	0.18314
	2009	1	7.97	1	0.09	0.73	1	22	7.25	0.04077
	2010	0.94	9.19	1	0.11	0.75	1	24	7.18	0.00816
	2006	0.98	10.34	1	0.13	0.84	1	2	7.39	0.12129
	2007	0.91	8.11	1	0.16	0.83	1	4	7.73	0.00873
	2008	0.93	10.66	1	0.11	0.81	1	6	7.83	0.00801
	2009	0.79	6.4	1	0.38	0.82	1	8	8.01	-0.10977
	2010	1.03	6.4	1	0.24	0.79	1	10	7.87	0.08607
	2006	1	7.65	1	0	0.78	1	34	7.64	-0.00001
	2007	1	9.52	1	0	0.89	1	36	7.8	0.05477
	2008	0.79	7.84	1	0	0.93	1	38	7.96	-0.15894
	2009	0.75	5.94	1	0	0.79	1	40	8.02	-0.29447
	2010	1.09	7.79	1	0	0.84	1	42	7.93	0.08371
	2006	1	9.72	1	0.05	0.75	1	4	7.21	0.08359
	2007	0.95	10.65	1	0.05	0.88	1	6	7.65	0.06949
	2008	1.02	9.29	1	0.03	0.72	1	8	7.76	0.02408
	2009	1	13.78	1	0.08	0.72	1	10	7.66	0.05036
	2010	1	9.17	1	0.08	0.75	1	12	7.61	0.03649
	2006	1	10.37	0	0.06	0.79	1	2	7.06	0.07882
	2007	0.87	9.19	0	0.07	0.86	1	4	7.24	-0.02823
	2008	1	13.17	0	0.04	0.75	1	6	7.84	-0.00375
	2009	1	7.14	0	0.05	0.74	1	8	8.09	-0.0617
	2010	1.1	8.59	0	0.05	0.72	1	10	8.07	0.03086

Appendix A5

Computation of Bank Managerial Ability for the next Seven Banks

BANK	YEAR	BANKEFF	ASSETS	CASH	IO	LEV	AUDITOR	AGE	EM	BMA
	2006	0.45	35.65	1	0.16	0.83	1	28	7.3	-0.28412
	2007	0.82	6.6	1	0.16	0.88	1	30	7.56	-0.08317
	2008	0.71	12.09	0	0.16	0.98	1	32	7.9	-0.18275
	2009	0.99	2.27	1	0.23	1.76	0	34	7.79	0.22954
	2010	0.66	8.27	0	0.23	1.55	0	36	7.71	-0.22954
	2006	1	8.79	1	0.53	0.89	1	72	8.86	0.03015
	2007	1.13	9.62	1	0.16	0.9	1	74	8.91	0.0828
	2008	1.19	8.92	1	0.23	0.71	1	76	9.05	0.03869
	2009	1.09	9	0	0.13	0.79	1	78	9.01	-0.09154
	2010	1.07	9.43	0	0.04	0.83	1	80	8.94	-0.09955
	2006	1	9.54	0	0.07	0.87	1	20	7.14	0.09043
	2007	1	10.21	0	0.07	0.9	1	22	7.39	0.08897
	2008	1	9.6	0	0.05	1.03	1	24	7.55	0.13564
	2009	0.91	6.72	1	0.04	0.82	1	26	7.85	-0.0754
	2010	1	7.71	1	0.04	0.81	1	28	7.86	0.01394
	2006	1.09	8.79	0	0.2	0.85	1	6	8.51	0.09579
	2007	0.89	8.05	0	0.2	0.77	1	8	8.84	-0.19018
	2008	0.87	8.59	0	0.14	0.85	1	10	9.13	-0.19987
	2009	0.56	4.97	1	0.09	1.61	1	12	8.34	-0.01175
	2010	0.52	8.64	1	0.09	1.48	1	14	9.26	-0.17909
	2006	0.98	10.44	1	0.38	0.72	1	4	7.73	0.07183
	2007	1	13.97	1	0.36	0.78	1	6	7.75	0.13931
	2008	0.91	6.81	1	0.16	1.03	1	8	8.49	0.03538
	2009	0.97	4.56	1	0.28	1.14	1	10	8.5	0.17317
	2010	0.94	8.74	1	0	1.11	1	12	8.54	0.07648
	2006	0.84	8.25	1	0.3	0.85	1	12	7.6	-0.02399
	2007	1.3	11.33	1	0.21	0.93	1	14	7.61	0.4757
	2008	0.91	10.52	1	0.15	0.88	1	16	7.9	0.0183
	2009	0.8	4.91	1	0.18	0.86	1	18	7.84	-0.12577
	2010	0.88	8.41	1	0.2	0.84	1	20	7.79	-0.03736
	2006	0.78	8.94	1	0.4	0.76	1	28	7.23	-0.09562
	2007	0.71	6.93	1	0.41	0.82	1	30	7.22	-0.14498
	2008	0.86	7.22	1	0.43	0.87	1	32	7.28	0.03338
	2009	0.55	4.73	1	0.34	0.89	1	34	7.35	-0.30789
	2010	0.95	8.54	1	0.43	0.9	1	36	7.34	0.14045

Appendix A6

Computation of Bank Managerial Ability the remaining Five Banks

BANK	YEAR	BANKEFF	ASSETS	CASH	IO	LEV	AUDITOR	AGE	EM	BMA
	2006	0.81	9.89	1	0.08	0.94	1	72	8.43	-0.18515
	2007	1.13	10.9	1	0.07	0.85	1	74	8.44	0.08715
	2008	1.16	9.86	1	0.07	0.88	1	76	8.63	0.10039
	2009	1.11	6.35	0	0.07	0.87	1	78	9.37	-0.08486
	2010	1.06	9.09	0	0.06	0.87	1	80	9.27	-0.11224
	2006	1.82	10.2	0	0.01	0.82	1	72	8.84	0.65557
	2007	1.15	8.72	0	0.01	0.84	1	74	8.89	-0.00883
	2008	1.14	9.76	0	0.01	0.88	1	76	8.82	0.01142
	2009	1.11	7.13	0	0	1.28	1	78	8.72	0.18821
	2010	1.12	7.42	1	0	1.16	1	80	8.66	0.18455
	2006	1	10.93	1	0.15	0.77	1	28	8.39	-0.01236
	2007	0.95	8.49	1	0.15	0.84	1	30	7.65	0.02689
	2008	1	8.67	1	0.15	0.95	1	32	8	0.10365
	2009	0.53	5.71	1	0.15	0.97	1	34	7.93	-0.36351
	2010	1	4.97	1	0.25	0.86	1	36	7.93	0.05336
	2006	0.56	8.08	1	0.04	0.83	1	30	7.27	-0.36972
	2007	1	6.25	1	0	0.85	1	32	7.43	0.04972
	2008	0.62	5.13	1	0	1.4	1	34	7.25	-0.01824
	2009	0.52	8.77	1	0	1.32	1	36	7.52	-0.16884
	2010	0.51	10.19	1	0	0.93	1	38	7.45	-0.38655
	2006	1	10.45	0	0.08	0.85	1	4	8.27	0.00704
	2007	1	9.91	0	0.08	0.87	1	6	8.51	-0.00146
	2008	0.98	8.84	0	0.13	0.8	1	8	8.87	-0.08827
	2009	1.12	6.19	1	0.12	0.79	1	10	8.91	0.06187
	2010	1.13	10.57	1	0.11	0.8	1	12	8.88	0.10226

Appendix B

DESCRIPTIVE STATISTICS

		QTD	PER	MA	MO	CH	SIZE	DG	LG	GC
N	Valid	85	85	85	85	85	85	85	85	85
	Missing	0	0	0	0	0	0	0	0	0
Mean		.3412	-.0108	.0000	.1184	.6941	17.5858	.6053	.7015	.4000
Median		0.0000	.0202	.0183	.1000	1.0000	19.0200	.3950	.3660	0.0000
Std. Deviation		.47692	.13245	.16105	.10614	.46351	3.00189	1.03528	1.07291	.49281
Minimum		0.00	-.93	-.39	0.00	0.00	11.97	-1.00	-1.00	0.00
Maximum		1.00	.08	.66	.40	1.00	21.24	5.06	5.88	1.00

*QT= Quality Test (Earnings Quality), QTD= QT dummy, PER= performance, MA= Managerial Ability, MO= Managerial Ownership, CH= Managerial Cash Holding, DG= Deposit Growth, LR= Liquidity Risk and GC = Global Financial Crisis

Appendix C

Correlation Matrix

		QT	QTDUMMY	PER	MA	MO	CH	SIZE	DG	LR	GC
	Pearson Correlation	1	.649**	0.197	0.06	0.135	.339**	0.105	.357**	-.301**	-0.019
	Sig. (2-tailed)		0	0.071	0.588	0.218	0.002	0.338	0.001	0.005	0.865
QT	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	.649**	1	0.207	0.19	.256*	.424**	0.179	.349**	-.331**	-0.081
	Sig. (2-tailed)	0		0.058	0.082	0.018	0	0.102	0.001	0.002	0.461
QTDUMMY	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	0.197	0.207	1	-0.066	0.049	.314**	0.179	0.155	-0.048	-.262*
	Sig. (2-tailed)	0.071	0.058		0.547	0.653	0.003	0.101	0.156	0.663	0.015
PER	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	0.06	0.19	-0.066	1	0.012	0.058	-0.078	-0.098	0.078	-0.137
	Sig. (2-tailed)	0.588	0.082	0.547		0.915	0.601	0.475	0.373	0.477	0.212
MA	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	0.135	.256*	0.049	0.012	1	0.026	0.186	0.181	-0.014	0.015
	Sig. (2-tailed)	0.218	0.018	0.653	0.915		0.814	0.088	0.097	0.901	0.891
MO	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	.339**	.424**	.314**	0.058	0.026	1	0.044	.433**	-.449**	-.344**
	Sig. (2-tailed)	0.002	0	0.003	0.601	0.814		0.688	0	0	0.001
CH	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	0.105	0.179	0.179	-0.078	0.186	0.044	1	.253*	-0.089	-0.003
	Sig. (2-tailed)	0.338	0.102	0.101	0.475	0.088	0.688		0.02	0.419	0.98
SIZE	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	.357**	.349**	0.155	-0.098	0.181	.433**	.253*	1	-.339**	-.252*
	Sig. (2-tailed)	0.001	0.001	0.156	0.373	0.097	0	0.02		0.001	0.02
DG	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	-.301**	-.331**	-0.048	0.078	-0.014	-.449**	-0.089	-.339**	1	.227*
	Sig. (2-tailed)	0.005	0.002	0.663	0.477	0.901	0	0.419	0.001		0.037
LR	N	85	85	85	85	85	85	85	85	85	85
	Pearson Correlation	-0.019	-0.081	-.262*	-0.137	0.015	-.344**	-0.003	-.252*	.227*	1
	Sig. (2-tailed)	0.865	0.461	0.015	0.212	0.891	0.001	0.98	0.02	0.037	
GC	N	85	85	85	85	85	85	85	85	85	85

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

Appendix D

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.062	.321		-.194	.847		
	PER	.455	.368	.126	1.236	.220	.815	1.227
	MA	.708	.284	.239	2.497	.015	.929	1.077
	MO	.867	.428	.193	2.024	.046	.938	1.066
	CH	.264	.122	.256	2.163	.034	.608	1.646
	SIZE	.011	.016	.069	.704	.484	.877	1.141
	DG	.074	.051	.161	1.452	.151	.696	1.436
	LR	-.581	.309	-.201	-1.878	.064	.742	1.347
	GC	.151	.100	.156	1.519	.133	.804	1.244

a. Dependent Variable: QTDUMMY

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions								
				(Constant)	PER	MA	MO	CH	SIZE	DG	LR	GC
1	1	4.876	1.000	.00	.00	.00	.01	.01	.00	.01	.01	.01
	2	1.283	1.950	.00	.32	.01	.00	.01	.00	.08	.00	.07
	3	1.031	2.174	.00	.00	.84	.00	.00	.00	.00	.00	.03
	4	.741	2.565	.00	.48	.00	.00	.00	.00	.27	.02	.04
	5	.381	3.577	.00	.00	.00	.90	.05	.00	.01	.00	.02
	6	.361	3.676	.00	.10	.13	.00	.02	.00	.26	.03	.74
	7	.237	4.533	.00	.01	.00	.05	.32	.00	.33	.27	.07
	8	.079	7.844	.04	.03	.02	.04	.47	.11	.01	.57	.02
	9	.011	20.852	.96	.06	.00	.00	.12	.89	.04	.10	.00

a. Dependent Variable: QTDUMMY

Appendix E

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	64.561[a]	.408	.564

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	9.079	7	.247

Contingency Table for Hosmer and Lemeshow Test

		QTDUMMY = .00		QTDUMMY = 1.00		
		Observed	Expected	Observed	Expected	Total
Step 1	1	9	8.998	0	.002	9
	2	9	8.967	0	.033	9
	3	8	8.884	1	.116	9
	4	8	8.063	1	.937	9
	5	8	6.455	1	2.545	9
	6	6	5.390	3	3.610	9
	7	4	4.093	5	4.907	9
	8	3	2.988	6	6.012	9
	9	1	2.163	12	10.837	13

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	50	6	89.3
		1.00	7	22	75.9
	Overall Percentage				84.7

a. The cut value is .500

APPENDIX F

APPENDIX F1 EARNINGS QUALITY AND PERFORMANCE

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.
b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
	Overall Statistics		3.626	1	.057

Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	15.042	1	.000
	Block	15.042	1	.000
	Model	15.042	1	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	94.066[a]	.162	.224

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

APPENDIX F2

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	49	7	87.5
		1.00	25	4	13.8
	Overall Percentage				62.4

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	40.452	15.862	6.504	1	.011	########
	Constant	-1.358	.435	9.750	1	.002	.257

a. Variable(s) entered on step 1: PER.

APPENDIX F3

EARNINGS QUALITY AND MANAGERIAL ABILITY

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	Df	Sig.
Step 0	Variables	MANABILITY	3.056	1	.080
	Overall Statistics		3.056	1	.080

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	3.115	1	.078
	Block	3.115	1	.078
	Model	3.115	1	.078

Model Summary

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	105.993[a]	.036	.050

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

APPENDIX F4

Classification Table

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	55	1	98.2
		1.00	28	1	3.4
	Overall Percentage				65.9

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1[a]	MANABILITY	2.626	1.566	2.813	1	.093	13.815
	Constant	-.682	.234	8.463	1	.004	.506

a. Variable(s) entered on step 1: MA.

APPENDIX F5

EARNINGS QUALITY AND MANAGERIAL OWNERSHIP

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	5.425	1	.020
	Block	5.425	1	.020
	Model	5.425	1	.020

Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	MANOWNER	5.562	1	.018
	Overall Statistics		5.562	1	.018

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	5.425	1	.020
	Block	5.425	1	.020
	Model	5.425	1	.020

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	103.683[a]	.062	.086

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

APPENDIX F6

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	51	5	91.1
		1.00	25	4	13.8
	Overall Percentage				64.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	MANOWNER	5.045	2.243	5.057	1	.025	155.236
	Constant	-1.285	.371	12.025	1	.001	.277

a. Variable(s) entered on step 1: MO.

APPENDIX F7

EARNINGS QUALITY AND MANAGERIAL CASH HOLDING

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	MANCASH	15.271	1	.000
	Overall Statistics		15.271	1	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	18.992	1	.000
	Block	18.992	1	.000
	Model	18.992	1	.000

Model Summary

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	90.116[a]	.200	.277

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

APPENDIX F8

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	MANCASH	3.117	1.053	8.769	1	.003	22.581
	Constant	-3.219	1.020	9.963	1	.002	.040

a. Variable(s) entered on step 1: CH.

APPENDIX F9

EARNINGS QUALITY AND SIZE

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
		SIZE	2.710	1	.100
	Overall Statistics		24.402	5	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	41.377	5	.000
	Block	41.377	5	.000
	Model	41.377	5	.000

Model Summary

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	67.731[a]	.385	.533

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

APPENDIX F10

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	48	8	85.7
		1.00	8	21	72.4
	Overall Percentage				81.2

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	47.819	21.342	5.020	1	.025	##########
	MANABILITY	5.049	2.618	3.718	1	.054	155.794
	MANOWNER	7.914	3.269	5.861	1	.015	2736.111
	MANCASH	3.404	1.259	7.312	1	.007	30.075
	SIZE	.178	.110	2.613	1	.106	1.195
	Constant	-8.735	2.708	10.401	1	.001	.000

a. Variable(s) entered on step 1: PER, MANABILITY, MANOWNER, MANCASH, SIZE.

APPENDIX F11

EARNINGS QUALITY AND DEPOSIT GROWTH

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
		DEPOSITGRO	10.368	1	.001
	Overall Statistics		25.496	5	.000

Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	45.156	5	.000
	Block	45.156	5	.000
	Model	45.156	5	.000

Model Summary

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	63.952[a]	.412	.570

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

APPENDIX 12

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	48	8	85.7
		1.00	10	19	65.5
	Overall Percentage				78.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	61.125	26.794	5.204	1	.023	##########
	MANABILITY	6.247	2.591	5.813	1	.016	516.281
	MANOWNER	8.982	3.786	5.629	1	.018	7955.316
	MANCASH	2.948	1.390	4.496	1	.034	19.060
	DEPOSITGRO	.944	.439	4.623	1	.032	2.571
	Constant	-6.441	1.885	11.670	1	.001	.002

a. Variable(s) entered on step 1: PER, MANABILITY, MANOWNER, MANCASH, DEPOSITGRO.

APPENDIX F13

EARNINGS QUALITY AND LIQUIDITY RISK

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
		LUIQUIDRISK	9.335	1	.002
	Overall Statistics		26.230	5	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	44.547	5	.000
	Block	44.547	5	.000
	Model	44.547	5	.000

APPENDIX F14

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	64.561[a]	.408	.564

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	50	6	89.3
		1.00	7	22	75.9
	Overall Percentage				84.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	49.991	23.410	4.560	1	.033	########
	MANABILITY	5.712	2.733	4.370	1	.037	302.537
	MANOWNER	9.211	3.489	6.970	1	.008	10006.526
	MANCASH	3.042	1.498	4.126	1	.042	20.946
	LIQUIDRISK	-4.911	2.158	5.180	1	.023	.007
	Constant	-4.156	1.801	5.324	1	.021	.016

a. Variable(s) entered on step 1: PER, MANABILITY, MANOWNER, MANCASH, LIQUIDRISK.

APPENDIX F15
EARNINGS QUALITY AND GLOBAL FINANCIAL CRISIS

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.
b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
		GFINCRISIS	.558	1	.455
	Overall Statistics		24.061	5	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	40.102	5	.000
	Block	40.102	5	.000
	Model	40.102	5	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	69.006[a]	.376	.520

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

APPENDIX F16

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	45	11	80.4
		1.00	9	20	69.0
	Overall Percentage				76.5

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	42.040	18.968	4.912	1	.027	##########
	MANABILITY	5.363	2.662	4.057	1	.044	213.261
	MANOWNER	8.354	3.234	6.672	1	.010	4245.448
	MANCASH	3.571	1.295	7.599	1	.006	35.555
	GFINCRISIS	.812	.677	1.439	1	.230	2.252
	Constant	-5.864	1.584	13.710	1	.000	.003

a. Variable(s) entered on step 1: PER, MANABILITY, MANOWNER, MANCASH, GFINCRISIS.

APPENDIX F17

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
		SIZE	2.710	1	.100
		DEPOSITGRO	10.368	1	.001
		LIQUIDRISK	9.335	1	.002
	Overall Statistics		28.246	7	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	50.632	7	.000
	Block	50.632	7	.000
	Model	50.632	7	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	58.476[a]	.449	.621

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

APPENDIX F18

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	2.747	7	.907

Contingency Table for Hosmer and Lemeshow Test

		QTDUMMY = .00		QTDUMMY = 1.00		
		Observed	Expected	Observed	Expected	Total
Step 1	1	9	9.000	0	.000	9
	2	9	8.991	0	.009	9
	3	9	8.925	0	.075	9
	4	8	8.556	1	.444	9
	5	8	6.701	1	2.299	9
	6	6	5.488	3	3.512	9
	7	3	4.017	6	4.983	9
	8	2	2.697	7	6.303	9
	9	2	1.624	11	11.376	13

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	49	7	87.5
		1.00	8	21	72.4
	Overall Percentage				82.4

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	71.603	29.289	5.977	1	.014	#########
	MANABILITY	7.156	2.763	6.710	1	.010	1282.107
	MANOWNER	9.518	4.150	5.261	1	.022	13600.613
	MANCASH	2.727	1.493	3.337	1	.068	15.294
	SIZE	.133	.116	1.310	1	.252	1.142
	DEPOSITGRO	.827	.471	3.083	1	.079	2.286
	LIQUIDRISK	-4.155	2.245	3.425	1	.064	.016
	Constant	-7.805	3.119	6.260	1	.012	.000

a. Variable(s) entered on step 1: PER, MA, MO, CH, SIZE, DG, LOAN.

APPENDIX F19

Classification Table[a,b]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 0	QTDUMMY	.00	56	0	100.0
		1.00	29	0	0.0
	Overall Percentage				65.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.658	.229	8.274	1	.004	.518

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	PER	3.626	1	.057
		MANABILITY	3.056	1	.080
		MANOWNER	5.562	1	.018
		MANCASH	15.271	1	.000
		SIZE	2.710	1	.100
		DEPOSITGRO	10.368	1	.001
		LIQUIDRISK	9.335	1	.002
		GFINCRISIS	.558	1	.455
	Overall Statistics		29.919	8	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	56.856	8	.000
	Block	56.856	8	.000
	Model	56.856	8	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	52.253[a]	.488	.675

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

APPENDIX F20

Classification Table[a]

Observed			Predicted		
			QTDUMMY		Percentage Correct
			.00	1.00	
Step 1	QTDUMMY	.00	48	8	85.7
		1.00	3	26	89.7
	Overall Percentage				87.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	PER	87.403	31.657	7.623	1	.006	########
	MANABILITY	10.168	3.416	8.858	1	.003	26044.359
	MANOWNER	11.757	5.029	5.466	1	.019	########
	MANCASH	3.242	1.614	4.034	1	.045	25.585
	SIZE	.172	.131	1.738	1	.187	1.188
	DEPOSITGRO	1.097	.534	4.215	1	.040	2.994
	LIQUIDRISK	-6.523	2.692	5.871	1	.015	.001
	GFINCRISIS	2.069	.914	5.122	1	.024	7.920
	Constant	-10.058	3.768	7.126	1	.008	.000

a. Variable(s) entered on step 1: PER, MA, MO, CH, SIZE, DG, LOAN, GC.